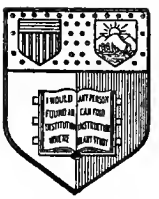


New York
State College of Agriculture
At Cornell University
Ithaca, N. Y.

Library

Gift of — Prof White.

Cornell University Library
HB 171.W2b
Political economy,
3 1924 013 754 647
mann

@
HB171
W2b

Edward A. White '95

Sept. 9, 1894.

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

http://www.archive.org/details/cu31924013754647

AMERICAN SCIENCE SERIES, BRIEFER COURSE

POLITICAL ECONOMY

BY

FRANCIS A. WALKER

AUTHOR OF

"THE WAGES QUESTION," "MONEY," "MONEY, TRADE AND INDUSTRY," "LAND AND ITS RENT," ETC.

NEW YORK

HENRY HOLT AND COMPANY

1892

hn W.

HB17
W2L

©97773

COPYRIGHT, 1884,

BY

HENRY HOLT & CO.

PRINTED BY
THE MERSHON COMPANY,
RAHWAY, N. J., U. S. A.

PREFACE.

This work has been abridged from the third edition of my Manual of Political Economy, published in 1883.

The object in view has been to present a text-book adapted to use in Colleges and Academies where but one Term is devoted to the study of Political Economy.

The work of abridgment has been effected mainly through excision, although some structural changes have been made, notably in the parts relating to Distribution and Consumption.

To teachers who may have occasion to use this Manual with their classes, I venture to suggest a frequent reference to my work on wages, published in 1876, in which will be found an extended discussion of many points relating to the production and distribution of wealth, which it has been necessary to treat here with painful conciseness.

FRANCIS A. WALKER.

INSTITUTE OF TECHNOLOGY,
BOSTON, April 30, 1884.

CONTENTS.

PART I.

PART II.

PRODUCTION.

PART III.

EXCHANGE.

PART IV.

DISTRIBUTION.

PART V.

CONSUMPTION.

PART VI.

SOME APPLICATIONS OF ECONOMIC PRINCIPLES.

POLITICAL ECONOMY.

PART I.

CHARACTER AND LOGICAL METHOD OF POLITICAL ECONOMY.

1. What Political Economy is.—Political Economy, or Economics, is the name of that body of knowledge which relates to wealth.

Political Economy has to do with no other subject, whatever, than wealth. The economist may also be a social philosopher, a moralist, or a statesman, just as the mathematician may also be a chemist or a mechanician; but not, on that account, should the several subjects be confounded. The more strictly the several branches of inquiry are kept apart, the better it will be for each and for all.

2. Political Economy does not inculcate Love of Wealth.—Because political economy confines itself to discovering the laws of wealth, it has by some been called, derisively, the Gospel of Mammon.

While wealth is not the sole interest of mankind, perhaps not the highest interest, it is yet of vital concern to individuals and to communities. As such, it deserves to be studied. Now, if it is to be studied at all, it will best be studied by itself.

But more may be said. Political Economy does

not inculcate love of wealth. It simply inquires how that passion, or propensity, in the degree in which it exists, does, in fact, influence the actions of men. Political Economy has no quarrel with passions or propensities which may, in a greater or less degree, supplant the love of wealth.

So far from Political Economy ministering to greed, it would be easy to show that the study of Political Economy has tended, by showing how wealth is really best gained and kept, to banish a ravening, ferocious greed which seeks to snatch its objects of desire by brutal violence, at whatever cost of misery to others, and to replace this by an enlightened sense of self-interest, which seeks its objects through exchanges that are mutually beneficial, and which supports social order and international peace as the conditions of general well-being.

3. What is Wealth?—Wealth comprises all articles of value and nothing else. If any thing have not value, it does not belong to this category. It may conceivably be better than wealth; but it certainly is other than wealth. It may become a means of acquiring wealth; but it is not wealth itself. In the language of Prof. N. W. Senior, "the words wealth and value differ as substance and attribute. All those things, and those only, which constitute wealth, are valuable."

4. What, then, is Value?—Value is the power which an article confers upon its possessor, irrespective of legal authority or personal sentiments, of commanding, in exchange for itself, the labor, or the products of the labor, of others. Briefly and somewhat elliptically speaking: Value is power in exchange.

We say: irrespective of legal authority. The Emperor of Germany can, by a word, call two millions of men from their homes and send them to distant lands, to watch, to march, to fight. Yet these services are not economic, because they are not voluntary. On the other hand, the services of a soldier in the British army are economic, as they are rendered under the terms of a voluntary enlistment, the result of a fair and open bargain between the crown and the subject.

We say also: irrespective of personal sentiments. The mother hangs over the sick bed, day and night, draining her very life blood to save her child. Her services are not economic, because they are dictated by a purely personal sentiment. On the other hand the work of the hired nurse and of the feed physician comes fairly within the view of the economist.

5. We note that exchange implies two exchangers. Value is, then, a social phenomenon.

But exchange implies, also, the capability of detaching from the present possessor the articles to be exchanged, and making them over to another.

Are health, strength, intelligence, skill, wealth? Have they value?

Not a little of the difficulty which has attended the use, in economics, of the word wealth, has arisen from attributing value to such properties or possessions as these, and including them in the sum of the wealth of individuals and communities.

But let us apply the test of our definition. Can these possessions or properties be exchanged? Can health, strength, intelligence, skill be detached and become the property of another? No; they can be

taken away from one, as by sickness or death ; but they cannot be made over to any one else. The gouty millionaire cannot, with all that he has, purchase the robust health of the laborer by the wayside, or buy for his empty-headed son the learning or the trained faculties of the humblest scholar. Hence, all that which some economists have called intellectual capital, and all that which by analogy might be called physical capital, are to be excluded from the category of wealth. These have seemed to be things so desirable in themselves, so much to be preferred, in any right view of human welfare, that excellent writers have not been able to bring themselves to leave them out of the field of economics. But Political Economy is the science, not of welfare, but of wealth.

There may be many things which are better than wealth, which are yet not to be called wealth. A good name is rather to be chosen than riches, and loving favor than silver and gold ; yet a good name is not riches, and loving favor is neither silver nor gold.

6. And it is to be noted that it does not matter whether the incapacity to detach and make over a possession to another, arises from the nature of things, as in the case of personal health and strength, skill and intelligence, or from the constraints of law or public opinion. In Circassia, a beautiful daughter is wealth. In Christian countries, a daughter is not wealth, though she is far better than wealth. The Proclamation of Emancipation, in the United States and in Russia, annihilated a vast mass of wealth ; it created what was better than much wealth —a body of free men.

But while strength, skill and intelligence cannot be detached, and transferred in an act of exchange, and thus cannot be said to be wealth, within our definition, the present use of them can be assigned to another than the possessor, and hence may become the subject of exchange. The rich valetudinarian may command the services of the robust laborer, in waiting on his person; he may hire the poor scholar to be tutor to his son. The usufruct of all such qualities and endowments, therefore, properly constitutes an item of wealth.

7. Relation of Value to Gratuity.—It will have been gathered from what has been said respecting value, that wealth and well-being are not synonymous; that much which is essential to the latter is no element of the former; that wealth may be increased at the expense of well-being, as in the case of the reduction of free laborers to chattel slavery; that wealth may be diminished temporarily by causes which minister to the advancement of the community, as in the case of inventions or of ameliorating changes in nature which allow costly contrivances to be dispensed with.

We are now called further to notice that there is a constant tendency to this diminution of the sum of wealth, and even to the annihilation of individual items in the schedule of wealth, from age to age.

8. The tendency which has been noted arises out of the progress of mankind in the chemical and mechanical arts, by which operations formerly difficult are made easy; by which materials naturally scarce are made plentiful; by which human necessities once urgently felt are wholly obviated, and, finally,

by which things once costing labor are made to produce themselves spontaneously.

In fact, however, while, in any community, this displacement of value by gratuity is continually in progress, the increase of population and the multiplication and diversification of human wants may be operating as steadily and strongly in the other direction. The labor that is made free by discoveries and inventions is applied to overcome the difficulties which withstand the gratification of newly-felt desires of the community. The hut is pulled down to make room for the cottage; the cottage gives way to the mansion; the mansion to the palace; the rude covering of skins is replaced by the comely garment of woven stuffs; and these, in the progress of luxury, by the most splendid fabrics of human skill; and in a thousand forms wealth is created by the whole energy of the community, quickened by a zeal even greater than that which animated the exertions of their rude forefathers to obtain a scanty and squalid subsistence.

9. What is the Distinction between Wealth and Property?—A further distinction, which requires to be made, is that between wealth and property. The neglect of this distinction has caused great confusion, especially in discussions of the principles and methods of taxation.

Indeed, we might say that "property" is not a word with which the political economist has any thing to do. It is legal, not economic, in its significance.

"The wealth," says Prof. Senior, "which consists merely of a right or credit, on the part of A., with a

corresponding duty or debt on the part of B., is not considered by the political economist. He deals with the things which are the subjects of the right, or the credit, not with the claims or liabilities which may affect them. In fact, the credit amounts merely to this: that B. has in his hands a part of the property of A."

10. The Premises of Political Economy.—What are the proper premises of Political Economy? that is, what facts and principles should the economist take to reason from? Are they many or few? Shall the economist take into account all the facts, mental or physical, which influence the phenomena of wealth; or shall he confine himself to certain principal facts?

Instead of taking man, for the purposes of economic reasoning, precisely as he is found to be, shall the economist create, for the purposes of his reasoning, an economic man, assumed to be impelled by certain motives in respect to wealth, from whose actions men in general, knowing themselves to be more or less fully controlled by similar motives, may derive instruction?

Instead of seeking to extend his knowledge of the actual conditions under which wealth is produced by man, shall the economist content himself with certain leading conditions, such as that food is produced without human labor only in small quantities and precariously; that the soils of every country vary widely in fertility; and that from no soil can the produce be increased indefinitely without a more than proportional expenditure of labor and capital?

Shall the economist take account of the various endowments in the way of soil and climate, mineral resources and water power of different countries; shall he study their institutions and the predominant traits of character manifested by their people, so far as these appear to influence their actions in respect to wealth; or, shall he, on the other hand, disregard all that makes one nation to differ from another, caring to learn nothing of any which would not hold good of all?

11. The best statement known to me of the true scope of economic inquiry is that given by Prof. Cairnes, from whose lectures I abridge the following paragraphs:

The desires, passions and propensities which influence mankind in the pursuit of wealth are almost infinite. Yet amongst these are some principles of a marked and paramount character. To possess himself of these is the first business of the political economist. He has then to take account of some leading physiological facts connected with human nature; and, lastly, to ascertain the principal physical characteristics of those natural agents of production on which human industry is exercised.

But it must not be thought that when these cardinal facts have been ascertained, and their consequences fully developed, the labors of the political economist are at an end. The next step in his investigations will be to endeavor to ascertain the character of those subordinate causes, whether mental or physical, political or social, which influence human conduct in the pursuit of wealth.

Thus, the political and social institutions of a

country, and, in particular, the laws affecting the tenure of land, will be included among such subordinate agencies. Again, any great discovery in the arts of production, such, *e. g.*, as the steam engine, will be a new fact for the consideration of the political economist. It will be like the discovery of a new planet, the attraction of which, operating on all the heavenly bodies within the sphere of its influence, will cause them more or less to deviate from the path which had been previously calculated for them.

Even moral and religious considerations are to be taken account of by the economist precisely in so far as they are found, in fact, to affect the conduct of men in the pursuit of wealth.

12. Distinction Between Political Economy as a Science and as an Art.—"If," says Prof. Senior, "Political Economy is to be treated as a science, it may be defined as the science which states the laws regulating the production and distribution of wealth, so far as they depend on the action of the human mind. If it be treated as an art, it may be defined as the art which points out the institutions and habits most conducive to the production and accumulation of wealth ; or, if the teacher ventures to take a wider view, as the art which points out the institutions and habits most conducive to that production, accumulation and distribution of wealth which is most favorable to the happiness of mankind."

Prof. Senior goes on to remark that in the 18th century Political Economy was treated as an art, a branch of statesmanship. Even with Adam Smith, "the scientific portion of his work is merely an introduction to that which is practical."

Prof Senior continues: "The English writers who have succeeded Adam Smith have generally set out by defining political economy as a science, and proceeded to treat it as an art. Mr. Ricardo is, however, an exception. The modern economists of France, Germany, Spain, Italy and America, so far as I am acquainted with their works, all treat political economy as an art."

13. The inveterate disposition, thus noted, to abandon the investigation of principles for the formulation of precepts, has doubtless retarded greatly the progress of political economy. It cannot be too strongly insisted on, that the economist, as such, has nothing to do with the questions, what men had better do; how nations should be governed; or what regulations should be made for their mutual intercourse. His business simply is to trace economic effects to their causes, leaving it to the philosopher of every-day life, to the moralist or the statesman, to teach how men and nations should act in view of the economic principles so established.

14. Relation of Political Economy to other Sciences.— Political Economy does not ascertain for itself a single one of the facts which form the premises of the economist. These are all derived from other sciences as data, *i. e.*, things given. From the physiologist, for instance, is obtained the fact of man's need of food to sustain life, from which is deduced the economic doctrine of necessary wages; and from the physiologist again, is obtained the fact of a strong disposition to carry population beyond the limits of decent or comfortable subsistence, from which is deduced the much-abused doctrine known

as Malthusianism. From the agricultural chemist is obtained the fact that, beyond a certain point, the application of capital and labor to land yields a continually diminishing return, from which is deduced the whole economic doctrine of Rent. None of these facts does the economist ascertain for himself. He takes them, as the realized results of other sciences, and makes them the premises, the starting point, of his own.

From all sciences, by turns, the economist takes all facts which bear upon the one subject, wealth; considers them only so far as they bear thereon; and puts them together and builds them up into a "body of knowledge" which he calls the Science of Wealth, or Political Economy.

15. Political Economy and Political Equity.—The boundary line between ethical and economic inquiry is perfectly clear, if one will but regard it. Great confusion has, however, been engendered by writers on economics wandering off into discussions of political equity. The economist, as such, has nothing to do with the question whether existing institutions, or laws, or customs, are right or wrong. His only concern with them is to ascertain how they do, in fact, affect the production and distribution of wealth.

The French writers, who have, in general, been singularly just in their apprehension of the character and logical method of political economy, have, perhaps, more than all others, erred on this side. They profess to be intent on the solution of economic problems, while directing their efforts towards the vindication of political arrangements.

16. Sentiment and Political Economy.—Holding rigidly to the same view of the nature and scope of economic inquiry, we see that those who allow their economic opinions to be in any degree shaped by what is called sentiment, are equally wrong with those who sneer at any recognition of sentiment by the economist. The economist's own sentiments should be put completely out of sight; he has only to do with the sentiments of others, and with these only so far as they affect the actions of men in respect to wealth.

We shall have occasion to observe that feelings of justice, of compassion, of respect, of kindly regard, may greatly influence the rents paid in any country, by tenants to landlords, or the wages paid by employers to workingmen or workingwomen. So far as such sentiments produce these effects, they require to be recognized as economic forces.

17. The Obstacles which Political Economy Encounters.—It is worth while to note the obstacles which the economist encounters in his efforts to secure the popular recognition and acceptance of the laws of wealth, as he discerns them in his study of man and society.

The first is well expressed by Prof. Cairnes: "Its close affinity to the moral sciences brings it constantly into collision with moral feelings and prepossessions, which cannot fail to make themselves felt in the discussion of its principles; while its conclusions, intimately connected as they are with the art of government, have a direct and visible bearing upon human conduct, in some of the most exciting pursuits of life." Archbishop Whately

had in view the same obstacles to the popular acceptance of economic truth, when he remarked that the demonstrations of Euclid would not have commanded universal assent if they had been applicable to the pursuits and fortunes of individuals.

18. Another of the obstacles referred to is found in the fact that political economy has to do with affairs so ordinary and familiar that men, in general, feel themselves competent, irrespective of study or of special experience, to form opinions on almost every subject which the economist is called to discuss.

Few men are presumptuous enough to dispute with the chemist or mechanician upon points connected with the studies and labors of his life; but almost any man who can read and write feels himself at liberty to form and maintain opinions of his own upon trade and money.

Now, this is not wholly of evil. The plain common sense of unlettered men has not infrequently served as a valuable corrective to economic doctrines too finely drawn for the purposes of practical legislation, perhaps based upon a partial and disparaging view of human nature. But while thus, in the application of political economy to the art of statesmanship, the self-assertion of the uninstructed mind has not been without its advantages, this disposition has certainly hindered the due development of political economy as a science. The economic literature of every succeeding year embraces works conceived in the true scientific spirit, and works exhibiting the most vulgar ignorance of economic history and the most flagrant contempt for the con-

ditions of economic investigation. It is much as if astrology were being pursued side by side with astronomy, or alchemy with chemistry.

19. A third obstacle which political economy encounters arises from the use of terms derived from the vocabulary of every-day life, such as value, exchange, wealth, rent, profits—with some of which are associated in the popular mind conceptions inconsistent with or, at times, perhaps, antagonistic to, those which are in the view of the writer on economics.

The chemist, the geologist, the botanist, on the other hand, invents terms for the classes of objects or the classes of phenomena which he is to discuss. The reader carries with him into the discussion only the idea of the thing which the author has created for the purpose; and, if the writer be clear, and the reader be careful, there is no danger of a failure of understanding between the two.

So strongly has this disadvantage pressed upon some economic writers, that they have been impelled to resort to strange and foreign terms to obviate the difficulty. Thus, Archbishop Whately, treating political economy as the science of exchange, introduced the Greek word, Catallactics, to express the scope of his inquiry; and Prof. Hearn has given to his admirable book the name Plutology, to escape the vagueness of meaning which he thought he saw in the popular use of the word wealth.

20. **The Department of Political Economy.**—All the questions of political economy are both conveniently and appropriately discussed under four titles: Production, Exchange, Distribution and Consumption.

PART II.

PRODUCTION.

CHAPTER I.

Land and Natural Agents.

21. What is the Production of Wealth?—By this term we signify all those acts and courses through which it comes about that an article confers upon its possessor the power, irrespective of legal authority or personal sentiments, to command in exchange for itself, the labor, or the products of the labor, of others. Briefly and somewhat elliptically, we may say, the production of wealth means the creation of values.

This, of course, does not imply the creation of matter; it does not, of necessity, imply even a change of form in the thing which before had not value but now becomes possessed of it.

22. Modes of Production.—A distinguished German professor has classified values, in respect of their origin, as time-value, place-value and form-value. Thus, a cake of ice, which has no value in the winter may acquire value through being kept over, into the following summer. The value thus created would be time-value. Again, a cake of ice

which has in summer a certain value in the country where it was first formed, say, Maine, would have a much higher value in a semi-tropical country, where water is seldom frozen at any season of the year, say, Louisiana. The transportation of the ice to such a country, and its protection from the melting heat of the climate would be a further production of wealth. The value thus created would be place-value.

In the creation of form-value, there is the widest possible range of operations, mechanical or chemical, from that of the agriculturist, by whose intervention the black earth of the prairie is transmuted into golden grain, to that of the lace-maker, whose whole industry is to arrange his gossamer into fantastic shapes. However little the material may be wrought, and by whatever agencies that little may be effected, we say that wealth is produced whenever value is added or acquired through any act or any process.

23. The Agents of Production.—The three primary agents in the production of wealth are Land, Labor and Capital.

24. Land.—The school of economists in France, prior to the revolution, who were known as the Physiocrats, insisted upon regarding land as the sole source of wealth. According to this school, of which the physician Quesnay was the founder, labor is incapable of creating value except as employed upon the soil. Agriculture is, therefore, the sole means of increasing the wealth of a nation.

There was this much truth in the physiocratic

theory, that the raw material of all manufactures, the subject matter of all trade and transportation, comes originally from the soil; and its value cannot escape the influence of the great comprehensive principle to which we give the name, "the law of diminishing returns in agriculture," the principle, namely, that after a certain stage of cultivation has been reached, the soil fails to yield a proportionally increased return to new applications of labor and capital.

Since, then, the law of diminishing returns is so far-reaching and all-embracing that even the operations of trade and manufacture do not escape its influence, it requires to be stated here with great precision and fullness of illustration. Prof. Cairnes has well said, if this principle did not exist, "the science of political economy would be as completely revolutionized as if human nature itself were altered."

25. The Law of Diminishing Returns in Agriculture. —In any given condition of the art of agriculture, there is a limit to the amount of labor and of capital which can advantageously be employed or expended upon a given area. If more labor be employed, each laborer will have to be content with a smaller quantity of produce at harvest. And in the same way, if more capital be expended, each dollar of capital—whether in the form of hoes or carts or oxen, will make a smaller addition to the crop of the year than a dollar expended before the point of diminishing returns was reached.

Let us suppose that ten laborers, with a certain outfit of tools and implements, are engaged in cul-

tivating, in common, a tract of land of a hundred acres, producing 2,000 bushels of wheat a year, being 20 bushels, per acre, and 200 bushels, per capita. Now, let it be supposed that two new laborers appear and join themselves to this company. What will be the crop of that year for the united twelve, assuming agricultural conditions constant? Will it be 2,400 bushels, or more, or less? The answer to this question will depend on whether the point of diminishing returns had been reached with the original ten laborers, or not. If not, the crop of the new year might be not merely 2,400 bushels, but even more, say, 2,500 bushels, since, the limit of the chemical capabilities of the soil not being reached, the mechanical advantages which result from the division of labor, to be explained under a subsequent title, would enable the twelve to raise more, per man, than the ten had done.

26. But if the point of diminishing returns had been reached when the ten were laboring together upon the land, the new crop will fall short, much or little, of 2,400 bushels; and consequently, each of the twelve laborers will have to be content with less than 200 bushels. Let us suppose the crop to amount to 2,280 bushels, each acre producing 22.8 bushels against 20 bushels the year before. Each man will, then, receive 190 bushels as his share at harvest.

On the latter assumption, let it be supposed that three additional laborers arrive, and are received on equal terms into the company. Will the crop now be 3,000 bushels, or 200 bushels per man of the fifteen? Clearly not. Will it prove to be

2,850 bushels, 28.5 bushels per acre, giving each man 190 bushels as his share, as before? Certainly not, if the industrial character of the laborers and the knowledge of the art of agriculture undergo no change. If the twelve laborers make the 100 acres yield but 22.8 bushels per acre, the 15 can not make the same amount of land yield 28.5 bushels per acre. The crop will be something less than that: say, 27 bushels per acre, which would give each man but 180 bushels as his share.

If, again, we suppose five additional laborers to join the company, the crop will not be 40 bushels per acre, as would be necessary in order to give each man 200 bushels a year, which the original ten received, or 38 bushels per acre, as would be necessary in order to give each man 190 bushels a year, which the first twelve received; or even 36 bushels per acre, as would be necessary in order to give each man 180 bushels a year, which the first fifteen received; but the crop could not be forced by the labor of twenty laborers above, say, 32 bushels per acre, which would give each of the laborers 160 bushels a year.

No. of laborers.	No of bushels per acre.	Total No. bushels on the whole tract.	Each laborer's share.
10	20	2000	200
12	22.8	2280	190
15	27	2700	180
20	32	3200	160

27. In like manner, it would be found, that however far the accession of new laborers were carried, each new arrival would result inevitably in reducing

the quantity of grain which each laborer of the entire body could obtain by a year's work. This reduction of the *per capita* produce would go forward, at first slowly and afterwards rapidly, until the result might be reached, that, whereas the original company of laborers lived comfortably, or even luxuriously, on the fruit of their labors, the forty or fifty who had come to work on the same limited area would be found living wretchedly, perhaps reduced to the verge of starvation.

28. Now, about the universal application of this condition to agricultural production there can be no intelligent question. There is not an acre of land on the face of the earth on which 60 and afterwards 120 bushels of wheat can be raised by the application, first of twice, and afterwards of four times the amount of labor needed to produce 30 bushels. At some time in the progressive cultivation of every field, sooner or later, according to the state of agriculture, a stage will be reached after which every successive increment of the product will be obtained only through a more than proportional expenditure of labor. And this condition applies, not only to the cultivated field, but to grazing lands, to the mine, the forest and the sea. It governs the cost of producing fish and whale oil; fuel and timber for manufactures; coal, iron and copper, for the furnace and the forge; wool for clothing, and the carcasses of cattle and sheep for food.

29. **The Law of Diminishing Returns in its Application to Manufactures.**—Such is the law of diminishing returns. But while no part of the field of production lies beyond the shade of this primary

condition, various classes of products are affected by it in very different degrees, according as they stand nearer to, or further from, agriculture or the purely "extractive" industries.

Thus, every product of iron is, in some measure, subject to the influence of this condition, for, if a greater and still greater quantity of iron ore is to be derived from a given number of known mines, this involves mining at a lower and still lower depths, which, in turn, involves a greater expenditure of labor in hoisting, ventilating, pumping, etc. But it is only the iron, as ore, or as an ore product, which is subject to this condition. If the iron be rendered by successive processes into fine screws, knife-blades or watch springs, the first cost of the material becomes so small, in comparison with the cost of the labor expended in working and perfecting it, that a very considerable proportional increase in the cost of raising the ore from the mine would have but a very slight effect upon the value of the finished product.

An increase of the difficulty of mining which should double the price of pig iron might not affect the price of fine scissors by so much as one per cent.

30. So far, then, as human wants can be met through the elaboration of the raw materials taken from the soil, there is a constant tendency to a greater and still greater satisfaction of those wants, through the perfection of mechanical and chemical processes in manufacture. But, after all, the chief concern of the masses of the people is with the cost of the raw materials of food, clothing and shelter. The bulk of the consumption of the work-

ing classes is of coarse forms of agricultural produce, very simply prepared.

31. The Soil, a Fund for the Endowment of the Human Race.—Subject always to the condition which has been described, the soil, consisting of rock pulverized at one period or another of the world's existence, constitutes the sole* original endowment of the human race. The different varieties of oil possess the capability of rewarding human labor in very different degrees; but every kind of decomposed rock known to agricultural chemistry, will, if treated with due quantities of water, yield vegetables, grains or fruits for man's food, fibers for his clothing, timber to construct his house, fuel to warm it.

It is wholly upon this natural endowment that the race have lived in the past; and it is the extent of this endowment which is absolutely to determine the maximum number which the race can reach, and the longest period of time through which the race can survive.

32. Exhaustion of the Soil.—Those writers who advocate what is known as the policy of protection, or, as they prefer to style it, the principle of national economy, have made great use of the fact that the soil is subject to exhaustion; that its productive capabilities are, in the strict sense of the word, a fund from which so much and no more can be taken. Besides the outright destruction of fertility due to

*It may be thought in speaking thus of the soil as the sole source of materials for the sustentation of man, we have overlooked the fact that the sea is capable of furnishing a vast quantity of food. In effect, however, the nutriment which supports these marine forms of life is derived from the soil which constitutes the bed of the ocean, or that which is brought down into it by the streams.

wanton abuse of nature, the ordinary use of the soil for the purposes of human sustentation tends to diminish the fund of productive essences from which future generations must draw their supplies of food, clothing and shelter. "For every fourteen tons of fodder carried off from the soil," says Prof. Johnston, "there are carried away two casks of potash, one of soda, a carboy of vitriol, a large demijohn of phosphoric acid and other essential ingredients."

But what becomes of the materials thus taken away? Surely, if the doctrines of modern physical science are true, no force can be lost out of nature; consumption must be followed by production in other forms; or, rather, consumption is nothing but the production of new forms.

It is true that no force can be lost out of nature; yet force may be transmuted from forms in which it ministers to human wants into forms in which it serves no purpose useful to man, as for example, when your house burns down and goes off into the air, in sudden heat and with a great smoke; or a certain amount of force may be so dissipated that men can no longer employ it for their advantage.

33. Free Trade and Exhaustion of the Soil.—It is upon this the protectionist bases his chief argument. He claims that local markets should be everywhere created to prevent what he calls "earth-butchery;" that the tendency to make new countries the magazines from which older countries draw their supplies of raw materials should be checked, and that, thus, every considerable community should be driven, against the impulses of immediate interest, to fashion

for its own consumption the materials produced from its own soil.

34. The liability to the exhaustion of the soil, through the exportation of its produce, upon which, as we have seen, one of the great arguments for protection is based, is a fact properly to be taken into account. I believe the protectionist writers generally give it vastly more weight than it deserves, chiefly through omitting two considerations. First, that even the building up of manufacturing and commercial towns would not prevent a large part of the waste of the ingredients of the soil. In nearly all such towns when of considerable size, the excreta of men and even of animals, and, also, to a great extent, the refuse of kitchens and of manufactures, are thrown into the streams, and carried out to sea. The utilization of sewage, on any large scale, has never yet been made profitable. Some waste of this kind seems inseparable from the human occupation of the earth.

35. Secondly, the protectionist's argument overlooks the consideration that, in addition to the progress of invention, postponing, though it may not avert, the exhaustion of the existing soil, a continuous addition is being made to the soil available for the raising of food, through the decomposition of rocks and the formation of rockdust (weathering). The mountain loses of its substance by the force of frost and floods, and the valleys are enriched with the material thus worn away. Moreover, the conversion of the nitrogen of the atmosphere into nitrates (nitrification), is continually going on, for the fertilization of the soil.

CHAPTER II.

Labor.

36. The Hunter State.—The second great agent in the production of wealth is human labor. Up to a certain low point, the grosser human wants are supplied by the bounty of nature. So long as this continues, value does not emerge; wealth is not produced. Man may live like the squirrels or the monkeys, from the spontaneous fruits of shrubs and trees; or, like other large and fierce animals, he may prey upon the smaller and weaker species, which, in their turn, are nourished, without care, by grasses or nuts. So long, however, as races of men subsist in this fashion, they are doomed to remain few in numbers, low in character, subject to occasional visitations of famine, the victims of ferocious enemies among the higher orders of animals, or of internecine war in the unceasing struggle for existence. Political economy has no more to do with men in such a state than with the monkeys who compete with each other for cocoanuts and bananas.

37. The Pastoral State.—Labor, in the economic sense, first clearly appears in the pastoral state. Here men no longer subsist on the bounty of nature, or perish miserably and helplessly when that bounty fails. They tame the cattle and sheep and goats and asses which once ran wild, and train them to be easily guided, handled and controlled; care for their

subsistence, driving them to fresh pastures, digging wells or diverting streams to give them a constant supply of water, even cutting the abundant food of summer and curing and storing it against the season of scarcity; protect the animals they have tamed against those that still remain savage, and fold or house them against severe storms and protracted cold; bleed and blister and physic them in sickness; superintend their breeding after their kind, and care for the young far beyond the power or the wisdom of the dam. By all these forms of labor, men in the pastoral condition make that to be wealth which in a state of savagery was no wealth.

38. And of this social condition we note two things: First, population increases largely. It requires many thousands of acres to support a family of hunters; as many hundreds will support a family of shepherds. The animal that in the one condition yielded, once for all, a carcass of three or four hundred pounds net, now returns, for the little care given her, five hundred gallons of milk every year, making, if the owner pleases to expend some additional labor, three hundred pounds of cheese. Another animal that once yielded a carcass of fifty pounds, covered with a pound of coarse stiff hair, now parts every year with four or five pounds of soft flexible wool, susceptible of being wrought into forms of the greatest beauty and usefulness.

Secondly, the subsistence derived by communities in the pastoral state is not only more ample, allowing a tenfold increase of numbers, it is also far more secure than in the hunter state. Men are no longer

subject to be swept by famine, as by a hurricane, from the face of the earth.

39. Agriculture.—The next economic state is reached in agriculture. Man no longer skims the surface of the land; he plows into the depths of the soil and brings up the vast productive energies that lay hidden far below the roots of the grass on which the cattle were wont to graze. And now, where hundreds of acres were required to support a family, as many score suffice. Population rapidly increases; man and beast no longer wander to seek their food; the food is brought to them; tribes cease to shift their place from season to season as the exigencies of pasture demand; the cottage replaces the tent; new wants are felt, now that men are not obliged to carry around with them all that they own; new and varied forms of wealth appear.

40. Of What Does Labor Power Consist?—The labor power of any community, whether in the pastoral or in the agricultural state, or in the higher state where manufactures and commerce enter to further diversify production and complicate the industrial system, is compounded of two factors, that derived from the efficiency of the individual laborer, and that derived from what we may call the organization of industry, which embraces the joint action of men in production, the differentiation of productive processes, the specialization of trades.

41. The Efficiency of the Individual Laborer.—The degree in which the labor of an individual shall be efficient in the creation of values, *i. e.*, the production of wealth, depends upon several causes.

First: his inherited strength, his original endow-

ment of physical force. This endowment varies greatly, not only as between individuals of the same community, but as between communities, nations and races. In the matter of sheer lifting-strength alone, the individuals of one race may, on the average, surpass those of other races by fifty or one hundred per cent.; while in the matter of the use of that strength, in operations at once difficult and delicate, the range of existing differences is very much wider.

42. Relation of Food to Industrial Efficiency.—A second reason for the higher industrial efficiency of the laborers of one class or nation than belongs to those of another, is found in the quantity and quality of the food consumed by the laborers of the two classes or nations, respectively. The human stomach bears much the same relation to the whole frame as the furnace to the steam engine. In the one, as in the other, must all the forces which are to drive the machine be generated. In the one, as in the other, the force generated will, within certain limits, increase with the material for combustion supplied. With more fuel, the engine will do more work. With more food, the man will do more work.

But not proportionally more. To a great extent the return made, in force, to the introduction of new fuel into the furnace, varies according to a principle which is strongly analogous to that which governs the returns made, in crops, to the application of new labor to land. Thus, if we suppose that, with a furnace of a given height of chimney, 3 lbs. of coal to the square foot of grate surface, are supplied, we should have, resulting from the consump-

tion, a certain amount of force available to do the engine's work. But that amount would be small. Now suppose that, instead of 3 lbs., 6 are consumed. Will the efficiency of the engine be doubled, merely? No, the engine will do easily three times as much work. If 9 lbs. are used, the power will be still further increased, not only positively but proportionally, that is, there will not only be more power, but more power for each pound of coal. If 12 lbs. are consumed, there may be a still further addition to the force generated, not only positively, but proportionally.

43. The economy of supplying food to the human machine is in a high degree analogous. If, for example, a laborer were supplied with only 100 ozs. per week, of a certain kind of food, the laboring power which would be generated by the digestion and assimilation of that food would be slight. After a course of such diet, the man would crawl feebly to his task; would work with a very slight degree of energy when he first started out, and would soon become exhausted, even at that rate. Were 125 ozs. given to the laborer, he would be able to accomplish an amount of work which would be not merely one quarter more, but largely in excess of it. He would perhaps be able to do half as much more. Were his subsistence to rise to 150 ozs. there would be a still further gain. His efficiency would be to his efficiency, when receiving 125 ozs., not as 6 to 5, but as 7, or perhaps 8, to 5. With 150 ozs., the laborer's diet might be regarded as sufficient for comfort, health and a reasonable development of muscular strength. Let the amount

of food be carried up to 200 ozs. and we should have a liberal, generous diet, ample to supply all the waste of the tissues, and to keep the fires of the body burning briskly, generating force enough to allow the laborer to put forth great muscular exertions through long periods of time, and to reach perhaps the highest degree of efficiency.

Up to a certain limit, then, with food as with fuel, the true economy of consumption is found in increasing the supply. Niggardliness is waste, and waste of the worst sort. But, just as there is a maximum limit with the fuel, so there is with food. After that limit is reached, the increase of food does not imply a proportional increase of force, if, indeed, any increase at all; and after a certain still higher point is reached, the increase of food brings mischief.

44. Under-fed Laborers.—The consideration here presented is of great importance in explaining the varying efficiency of labor. Probably the inhabitants of the United States constitute the only large population in the world who are thoroughly well-nourished; that is, who have enough of wholesome food to secure the greatest economy of consumption.

"Many a French factory hand," writes Lord Brabazon, "never has anything better for his breakfast than a large slice of common sour bread, rubbed over with an onion, so as to give it a flavor." "Meat," says a careful observer, "is rarely tasted by the working classes in Holland. It forms no part of the bill of fare, either for the man or his family." Of the laborers of Belgium, an official report

states: "Very many have for their entire subsistence but potatoes, with a little grease, brown or black bread, often bad; and for their drink a tincture of chicory." "To-day in the west of England," says Prof. Fawcett, "it is impossible for an agricultural laborer to eat meat more than once a week."

Now, as to the want of true economy in thus reducing the consumption of food among the working classes there cannot be a moment's question. The case may perhaps be best put by saying that if cattle were not kept better nourished than are the majority of laborers of the world, it would be better to do without them entirely. Barely to keep them alive would require a large expenditure of food; and to give them, in addition to this, only enough to secure a low grade of muscular strength and activity, would not make them worth their keep.

45 Influence of Sanitary Conditions on the Efficiency of Labor.—A third reason for the higher industrial efficiency of the laborers of one class or nation than of another is found in the differing sanitary conditions, especially those which concern the quality of the air. Human beings confined in small and unventilated rooms inevitably lose vigor; the process of the oxidation of the blood being checked, the process of making blood, through the digestion and assimilation of the food taken into the stomach, is also checked. With foul air, therefore, a smaller amount of muscular force is generated from the same amount of food. Moreover, in close rooms, unventilated and uncleaned, the germs of certain diseases, known as filth diseases, viz., typhus and

typhoid fevers, scarlet fever, diphtheria and others, are preserved and readily communicated.

46. The cause here adduced is not of slight importance in accounting for the differences in the labor power of different communities and nations of men.

As the people of the United States are the best nourished, so they are, by a long interval, the best sheltered people in the world. It is impossible for an American who has not traveled widely, to form an adequate conception of the manner in which the laborers of other countries are housed.

47. **The Laborer's Intelligence.**—A fourth reason for the superior efficiency of the laborers of one class or nation over those of another, is found in their higher intelligence. Intelligence is a most powerful factor in industrial efficiency. I speak not now of technical knowledge, but of clearness of mind, quickness of apprehension, strength of memory, and the power of consecutive thought, in the degree, for instance, in which they are found in New England, in Saxony, in parts of Scotland.

The intelligent is more useful than the unintelligent laborer:

(*a*) Because he requires a far shorter apprenticeship; he can learn his trade in a half, a third, or a quarter the time which the other requires. (*b*) Because he can do his work with little or no superintendence; he is able to carry instructions in his mind, and to apply them with discretion to the varying conditions of his work. (*c*) Because he is less wasteful of materials. (*d*) Because he readily learns to use machinery, however delicate or

intricate. It is only the intelligent workman who can freely avail himself of this great help. Brains are not alone required for the invention of machines; they are required for their adjustment, their ordinary use, and their occasional repair.

48. The capability of dealing with costly and delicate machines varies greatly between different races and nations of men. In some of the countries of Europe, as Turkey and Greece, the ordinary "mechanical powers," the screw, the lever, the inclined plane, etc., are used but little, or not at all, in mechanical operations, the lifting or pulling being done by direct physical force, at, of course, the expenditure of a vast amount of animal strength.

Even in highly civilized nations the application of agricultural machinery is limited by the inability of the peasantry to use it intelligently and judiciously. The Judges of the World's Fair, of 1852, reported that there was probably as much sound, practical labor-saving invention and machinery unused, at that time, as was used, "solely in consequence of the ignorance and incompetence of the work people."

The United States is the only country in the world, excepting some of the English colonies, in which it can be safely assumed of the average laborer that, after a reasonable period of experiment and trial, he will be able to use delicate and costly machinery to the advantage of his employer. In all other countries, even the most civilized, it is only picked laborers who can use intricate machinery without doing more damage than their labor is worth.

49. Cheerfulness and Hopefulness in Labor.—A fifth reason for the higher efficiency of the laborers of one class or nation than of another, is found in greater cheerfulness and hopefulness, growing out of higher self-respect and social ambition and a more direct and certain interest in the product of industry.

The importance of this cause is most conspicuously seen in the wastefulness and inefficiency of slave labor. Always and everywhere, that labor has been found to be vastly inferior to the labor of freemen. Even the stimulus of the lash fails to command the faculties which instantly spring into activity under the inspiration of an ample reward.

Even among free laborers, the degree in which the physical and intellectual powers may be engaged in the production of wealth depends greatly on the directness and certainty of the reward. This is proved by the difference every where observed between the exertions of wage laborers and those of men working on their own account. The wage laborer necessarily becomes, in a greater or less degree, a time server, an eye pleaser. On the other hand he who is working for himself, keeps no grudging account of his time or exertion. If the proprietor of land, he watches against waste with unfailing eagerness. His vines, his plants, his animals, his fences, his buildings, are borne upon his mind; and no care or pains are withheld to guard them against the almost infinite forms of injury which beset these species of wealth. He is early afield, for the day is not long enough for all he wishes to do; and when night falls, he still lingers,

tying up his vines, tinkering his sheds, tending his cattle, bringing home the harvest.

50.—Doubtless much of the indolence which we have been accustomed to regard as constitutional with certain races and nations of men, and as indicating lack of physical endurance or feebleness of will, is due simply to the absence of incentive, resulting from unjust laws or bad social institutions. It would be enough to make one laugh to hear the Scotch spoken of as lazy. The energy and perseverance of that people have been illustrated in every quarter of the globe. Yet, three or four generations ago, the Scottish people, says Prof. Hearn, "were conspicuous for their incorrigible indolence." The ample explanation was found in the almost universal system of short leases or of tenancy at will, which deprived the cultivator of all assurance that his labor in improving the land would profit himself. A single wise act of legislation cured this defect; and with the system of short leases and tenancies at will disappeared the laziness of the Scotch people.

Not half so long ago as that, the Irish were a proverb over Europe, for indolence and shiftlessness in labor. Arthur Young describes them as "lazy to an excess at work," but "spiritedly active at play." The Irishman of that day was spiritedly active at play, because the fun was sure to be his own. He was lazy to an excess at work, because laws, social proscription and customs relating to land, kept from him a large part of the natural fruits of his labor. Every country of the globe has witnessed, since 1850, the indomitable pluck and

energy of the Irish at work under equal laws and with a "fair chance."

51. The Varying Efficiency of Labor.—I have indicated the chief causes which influence the efficiency of the individual laborer in the production of wealth. The joint effect of all these causes is very considerable.

In comparing the cost of constructing railroads in India and in England, for instance, it was found that, though the Indian laborer received but 4½ to 6d. a day, and the English laborer, 3s. to 3s. and 6d., the sub-contracts in the two countries were let at the same prices. The English cotton spinner is paid as many shillings as the East India spinner gets pence; yet the cotton cloth of England undersells that of India in the Indian markets.

As between England and Russia, it is found that a weaver in the former country tends from two to three times as many looms, as in the latter, the English looms moving, moreover, at a higher rate of speed.

Mr. Brassey states that, in the construction of certain French railways, it was found that the working capacity of the Englishman was to that of the Frenchman as five to three.

Superior as are the workmen of England to those of other countries of Europe, they are, in turn, surpassed, on the average, by those of the United States, in the respects of strength, intelligent direction of force, and ability to use machinery to advantage.

52. The Organization of Industry.—The second factor of the labor power of a community is that

which is derived from the organization of industry.

53. Division of Labor.—In primitive society the division of labor does not exist, or it is found only in a rudimentary state. Each able-bodied man builds his own wigwam or hut, shapes his own bows and arrows; cares for his own horses, if he have any, and hunts or fishes for himself. Yet, even here, the division of labor as between the sexes is in some degree carried out. The women make the nets, weave the blankets and cook the food, as duties more suitable to their powers. Soon, however, emerges a division of labor founded on differences of capability less fundamental than those of sex. The smith appears, working at first alike in iron, wood and stone. He does all the work of this class which the community requires; and, in return, receives flesh and fish for his own use from the hunters and fishermen whose spears and hooks are sharpened and pointed at his forge. As the amount of this class of work to be done increases, three smiths, instead of one, come to be employed; one working in iron, one in wood, and one in stone, known respectively as the blacksmith, the carpenter and the mason. As the wants felt by the com munity are multiplied, as modes and fashions appear, new classes of artisans come into existence, each working on some one class of substances, or making some one class of articles. The cabinet-maker follows the carpenter; the jeweler the blacksmith; the sculptor, in time, the mason. Finally, the operations of each trade come to be distributed among distinct classes of laborers.

54. How the Division of Labor Increases Production.—It is difficult adequately to appreciate the increase of production which results from the application of this principle.

(*a*) It shortens apprenticeship.

(*b*) It develops dexterity.

(*c*) It obviates the loss of time and the distraction of thought which would be involved in passing from place to place, and in laying down the tools of one trade to take up those of another.

(*d*) It facilitates invention and leads to the discovery of improved processes and new materials.

(*e*) It allows women and children, as well as men who are suffering from some partial disability, to find places in the industrial order where they can labor to advantage; while among men of full powers, it assigns to each that work which is best suited to his individual capacity.

55. The Territorial Division of Labor.—This is a phrase devised by an English economist during the great popular agitation which preceded the repeal of the Corn Laws, to express the carrying out of the principle of the division of labor, which we have thus far contemplated in operation among the individuals of a community, to communities and nations. The phrase intimates that the vast industrial advantages which attend the application of that principle within the hamlet and throughout the county, will accompany that principle in its extension over the whole field of the world's production, both agricultural and mechanical. This is the main economic argument in favor of Free Trade, as opposed to what is called Protection.

56. The Organization of Industry.—But the advantages which are derived immediately from the division of labor, are but a part of the total advantage which is attributable to what we have termed the organization of industry. In addition to those already indicated, we find, under the larger title, a vast gain of productive power resulting from the introduction of the principle of competition, the creation of *esprit de corps*, and the direction given to the mass of unthinking and uninformed laborers by the few clear, strong spirits, who, under such a system, rule the entire industrial operations of the community.

(*a*) Competition can only be introduced as an active force where the opportunity for exact and easy comparison of results exists. Where each one of a number of persons is performing every day a large number of miscellaneous duties, now a little of this, then a little of that, it is difficult or impossible to measure the achievements of the several persons so employed, bring them to a scale, and assign credit or blame according as each is found to have done more or less in a given time.

(*b*) The creation of *esprit de corps* within trades and professions becomes a tremendous force in industry. Competition operates upon the laborer, through the employer's desire to get the most out of each workman, in return for his wages, and through the laborer's desire to obtain and retain employment. The principle now invoked operates on the laborer, perhaps not less powerfully, through the public sentiment of the craft, establishing standards of workmanship and laws of conduct which

tend to lift each workman to the level of the best.

57. (*c*) **Mastership in Industry.**—But the most important of the sources of gain in productive power, now under consideration, is found in that mastership of industry which is created by the division of labor. That division cannot proceed to its natural limits without giving rise to the subordination of the mass of the laboring population to a select and comparatively small body of employers, who assume the responsibilities and direct the agencies of production.

Whether this gain is accomplished at a certain social and political cost, is a question the economist is not called upon to discuss. That question belongs to the social philosopher or the statesman.

Looking at the matter in its purely economic aspect, it is clear that this gain is not realized without an initial loss, inasmuch as the laborer, under the wages system, necessarily has a less direct and certain interest in the product of his industry, than the man who labors on his own account. But this loss is compensated, many times over, by the gain to production which results from the impulse and direction given to industry by the thought-power and will-power of the best minds in the community.

CHAPTER III.

Capital: Its Origin and Office.

58. What is Capital?—The third great agent in the production of wealth is Capital. The capital of a community is that part of its wealth (excluding land and natural agents considered as unimproved*) which is devoted to the production of wealth.

Some writers, indeed, insist that the climate of a country, so far as it especially favors production, is to be reckoned as a part of the capital of that country. I prefer to say that the beneficent distribution of heat and moisture by the gratuitous action of nature, is a favorable condition of production, but is not capital. A sound system of jurisprudence, which secures the impartial administration of justice; a sound organization of the political body, which maintains peace and order, are most favorable conditions of production; they lead to a vast creation of values; they are better than much capital to the people enjoying them; but they are not capital.

59. Its Origin.—The origin of capital is so familiar that it need not be dwelt upon at length here. A very simple illustration may suffice. Let us take the case of a tribe dwelling along the shore, and subsisting upon fish caught from the rocks which

* The reason for this exception will appear when we come to treat of the rent and price of land.

jut into the sea. When the fish are plentiful, the people live freely, even gluttonously. When their luck is bad, they submit to privations which involve suffering, reaching sometimes the pitch of famine. Now let us suppose that one of these fishermen, moved by a strong desire to better his condition, undertakes to lay by a store of fish. Living as closely as will consist with health and strength, he denies himself all superfluity, even at the height of the season, and by little and little, accumulates in his hut a considerable quantity of dried food.

As the dull season approaches, our fisherman takes all the food he can carry, and goes into the hills, where he finds trees whose bark can be detached by sharp stones. Again and again he returns to his work in the hills, while his neighbors are painfully striving to keep themselves alive. At the end of the dull season, he brings down to the water a canoe, so light that it can be borne upon his shoulders, so buoyant that he can paddle in it out to the "banks" which lie two or three miles from shore, where in one day he can get as many fish as he could catch from off the rocks in a week.

60. Its Office.—The canoe is capital; the fisherman is a capitalist. He can now take his choice of three things. He may go out in his canoe and bring home supplies of fish which will allow him to marry and rear a family, and with his surplus hire some of his neighbors to build him a hut, their women to weave him blankets, and their children to bring water from the spring, or, secondly, he may let out the canoe to some one who will be glad to get the use of it on payment of all the fish which one family could fairly

consume, and himself stay at home in idleness, or, which is perhaps most likely, he may, thirdly, let out the canoe, and himself turn to advantage the knowledge and experience acquired in its construction, by making more canoes. Again and again he will re-appear upon the shore, bringing a new canoe, for the use of which a score of his neighbors will compete.

And later canoes, be it noted, are made at a smaller cost of effort and sacrifice on the part of the builder. He has become familiar with the groves where the trees are largest, and the trunks most clear of branches; he has acquired a knack which makes it almost a pleasure to strip off the vast rolls of tough, elastic bark; he never spoils his half-completed work, now, by a clumsy movement or an ill-directed blow. Moreover, his personal toil is reduced, for he has hired men to carry his burdens and do all the heavy labor.

61. The Increase of Capital.—But soon the canoe-builder's profits are threatened. Thus far, in the possession of exceptional skill and knowledge, he has been a monopolist, and has reaped a monopolist's gains. Now, however, stimulated by the sight of such great wealth gathered (that is, so great a *command of other persons' labor* acquired) by one man, others begin to enter the field. As an essential condition, each must save and accumulate enough food to support him while making his first boat, that is, must accumulate a certain amount of capital.

This, however, is less difficult than it was in the case of the original boat-builder, first, because fish

have come, through the multiplication of boats, to be much more easily obtained; secondly, because, with good models of boats before him, the new builder has fewer experiments to make; thirdly, because certainty and nearness of success will inspire the labors of ten men where any one will be moved to great sacrifice and exertion by a prospect that is distant and doubtful. Moreover, some of the shrewdest of the assistants of the old boat-builder, who have watched him at work, and whom he has trusted more and more to do even the nicer parts of his task, begin to desert him and to set up for themselves.

For a time, while the number of boats increases rapidly, the quality suffers deterioration; two fishermen are drowned upon the banks by the breaking-up of boats in a sudden squall. The boat-builders in fault are condemned by the general assembly of the tribe to support the widows and orphan children. The rage for mere cheapness is checked. Boats are now tested before they are used, and two or three ambitious builders find themselves driven out of the trade by the loss of patronage consequent on the failure of their work.

And it is to be noted that the profits of boat-building are rapidly reduced. The first boat built repaid the cost of its construction in a few weeks. The boats now made only repay the cost of their construction in the course of months. Yet, the men who make boats still get a better livelihood than those who use them; while those who use boats get a better livelihood, even after paying the rent, than those who still fish off the rocks.

62. What will they do with it?—Now let us suppose that the manufacture of boats has proceeded so far that there is one serviceable boat for every four adult males of the tribe. At this point, one of two widely divergent courses may be adopted, with very important results to the future of the community.

First, the multiplication of boats goes forward until each man is provided with a boat in which he can catch enough fish, in two or three hours, a day, to feed him and his family, summer and winter, good seasons and bad. The creation of capital has at least led to this good result: it has put famine out of the question. The rest of the time is spent by the members of the tribe in idleness or sport.

Secondly, the manufacture of boats stops at the point where fish for the whole tribe can be provided by one-fourth its members, toiling early and late upon the banks. The remaining members, those who, through youth or self-indulgence or vicious habits, have failed to provide themselves with boats, those who through misfortune have lost their boats and have become discouraged, those who, by physical weakness, or cowardice are least fitted to undertake the rugged duty of the fisherman, these all betake themselves, in one capacity or another, to the service of the fishermen, the capitalist employers of the tribe. Only so many boat-builders remain as are needed to repair and keep up the existing stock. The house-builder now takes the place of the boat-builder; no one is satisfied to live in the sort of hut which a generation ago would have been thought good enough for the chief. Menial servants become very numerous. The fashioning of orna-

ments and trinkets takes up a vast amount of labor.

63. New Economic Desires.—Soon a new want emerges. A plant with bright flowers is discovered among the hills and brought home as a curiosity. By cultivation it undergoes more or less change, particularly in the development of large tubers which are found to be highly palatable and nutritious. As affording a change from the everlasting sea-food of the fathers, these are relished greatly and soon a large number of persons are breaking up ground to plant and cultivate them.

The introduction of a vegetable diet marks the beginning of a revolution in the life of the community. After this, any thing is possible. The taste for a diversified diet, once felt, knows no limits. Agriculture has begun, involving the necessity of capital in a hundred forms. New foods are followed by new fibers; manufactures spring into being, and all the potentiality of the modern nation now resides in the tribe which a generation ago lived wholly on fish caught from rocks along the shore.

64. The Law of Capital.—It is not necessary to trace further the increase of capital. At every step of its progress, capital follows one law. It arises solely out of saving. It stands always for self-denial and abstinence. At the beginning, savings are made slowly and painfully; and the first items of capital have a power in exchange (an ability, that is, to command the labor of those who have not capital), corresponding to the difficulty with which they are secured. The bow, the spear, the canoe, the spade, much as they cost, pay for them-

selves in a few days. Subsequent increments of capital are gained at a constantly diminishing sacrifice, and receive a constantly diminishing remuneration, until, in the most advanced countries, buildings are erected and machines constructed which only pay for themselves in ten, twelve or even twenty years.

At every stage, we note, too, that capital releases labor power which was formerly occupied in providing for the wants of the community according to its then prevailing standard of living. At every stage, the members of the community make their choice, whether they will apply the labor power, thus released, to the production of wealth, in other branches, or will content themselves with living as well as before, upon easier terms, giving up the newly acquired leisure to idleness or sport.

65. Subsistence.—The office of capital has been perhaps abundantly shown in the account given of its origin. Capital, as we have seen, is that portion of wealth* which is employed in the production of new forms of wealth.

At first, capital is limited to the means of subsistence for the producer. It was not easy in the first stage of industrial progress, to lay by enough of the game or fish of one season to last until the next. But when once a tribe, by reason of exceptional good fortune, or through prudence and self-control in the use of its scanty resources, acquired a reserve sufficient for a full year's subsistence, it became in a degree master of its conditions. It could shift its seat to better hunting or fishing grounds, if such

*Excluding land and natural agents, considered as unimproved.

existed ; it could pursue its avocations systematically and economically, doing that which should be esteemed most productive in the long run, not, as before, hurriedly and wastefully, under the stress of immediate want; the physical strength of its members was kept at the highest point by ample and regular diet.

A full year's subsistence forms the most important advance which a people ever make in their progress towards industrial prosperity. Many peoples never find themselves able quite to accomplish this. The people of British India can hope for no more, in good years, than to be carried through into the next ; while once in every four or five years, a famine following a short crop sweeps away millions by sheer starvation, or by the fevers which feed upon half-famished populations.

66. Tools.—The next purpose, in logical, and generally, also, in historical order, for which capital is accumulated, is the acquisition of tools. I use the word tools here in its largest sense, including all apparatus, utensils and machinery. The knife, the bow, the spear, the canoe, the net, are the tools of a certain stage of industrial society ; the spade, the cart, the plow, the distaff, the forge, are the tools of a later stage ; the loom, the lathe, the printing press, the trip-hammer, the railroad and the ship, may, with equal propriety, be called the tools of to-day.

67. Materials.—The third form which capital takes is that of Materials. The word, as here used, covers all kinds of wealth which are devoted to the production of wealth in any other way than as subsist-

ence for the laborer while engaged in production, or as tools to increase his power in production. In a primitive state of industrial society, materials play a very small part. The bait for the hook among the tribe of fishermen; the corn which is saved for seed, in a planting community, are the most prominent materials of early industry. In a later age a large part of all the accumulated wealth of a community exists in this form.

68. The Three Forms of Capital.—In a certain sense these three may be resolved into one, Subsistence; as, indeed, all the forms of subsistence itself may be resolved into one, Food. Thus, the first simple tools of the barbarous community may be said to be exactly represented by the subsistence which was required by the laborers engaged in making the tools. The first materials which were produced by the aid of these tools may be said to be likewise represented by the subsistence of the laborers using the tools, added to that of the laborers who made the tools. And, in turn, all the forms of subsistence, food, clothing, shelter, and fuel, may, in theory, be reduced to one, food. The clothing of the laborer, for example, represents the food which he consumed while he was gathering the fibers or the wild grasses and weaving them into a blanket; the hut represents the food consumed during its erection; the fuel represents the food consumed while the laborer was gathering fagots in the forest.

CHAPTER IV.

The Productive Capability of a Community.

69. Productive Capability.—We have spoken, in succession, of land power, labor power and capital power. The productive capability of any community is determined by these three elements, in the degrees in which they are severally found to exist there.

While the land remains in the condition of increasing returns, as in the Eastern States of the American Union during their earlier history, production may be large, per head of population, with but a small amount of capital available. Even after cultivation has reached the condition of diminishing returns, the energy, intelligence and skill of the laboring class and the thorough organization of industry may wrest a comparatively high rate of produce from the reluctant soil; or, in spite of an ignorant, clumsy and spiritless population, as in the west of England, the concentration of a vast capital upon a naturally rich soil may yield large returns, long after the same stage of cultivation has been reached.

Where all three conditions are found favorable to production, *i. e.*, fertile lands not yet fully taken up by settlement, an intelligent and energetic laboring population, with abundant capital, as in the opening up of parts of our Western States within the last thirty years, the rate at which wealth grows appears almost fabulous. Surely, inevitably, how-

ever, the increase of population will bring about the condition when an increasing labor power and capital power must struggle with a decreasing capability of the soil. Mechanical inventions, chemical discoveries, may long postpone the diminution of the per-capita product; all improvements in the industrial character of the working classes, or in the organization of labor, enable a larger population to be supported without reduction in the quality of their subsistence; but not the less is the power of one of the factors of production steadily on the decline.

70. Such is the condition under which the earth is cultivated by human labor, for the supply of human wants. The production of wealth by mechanical processes is, however, as we have seen, subject to this condition only so far as relates to the materials employed in manufactures, all of which are derived from agriculture. The mechanical processes themselves are subject to no such drawback. On the contrary, the increase of population for a considerable period allows the division of labor to take place more fully, with the result of enlarged production; hence the multiplication and diversification of conveniences and refinements, so far as they involve no increase in the amount of material consumed, may be carried forward literally without limit.

71. **What limits Production?**—Productive capability being thus determined by the three elements which have been stated, the greatest question which the economist has to answer, the most difficult, the most important question in economics, is, why the actual production of wealth in any community falls so far short of its productive capability. But this is a

question which cannot be finally answered till the reader has been taken through all the departments, by turns, of economic science. Under each, we shall find something by which to explain the phenomenon that the actual production of every commercial and manufacturing country, taking a term of years together, falls far below the possible production.

72. Industrial Structure.—Under the present title, production, we have to note one liability which besets the productive power of a community, arising from what we may term its industrial structure. By this term is intended that organization of the capital power and the labor power of a community which makes the productive capability of the whole depend, in a greater or less degree, upon the character of individuals or classes of individuals, and, in consequence, upon accidents affecting the fortunes of such individuals or classes. This is a matter which is far too little regarded in reasoning about the wealth of nations and communities. Writers in economics are apt to speak of the labor power and the capital power of a community, as if they were aggregates of pure force. No reference is made to structural organization.

73. Partial Immobility of Capital and Labor.—In all advanced industrial societies, labor and capital become committed to certain courses, from which they can only depart after much delay, against great resistance and at heavy cost.

The artisan who has learned a trade becomes comparatively helpless if the opportunities for working at that trade are taken away ; the factory hand who has learned to perform only one operation out of the

multitude that go to the spinning of a single yard of cloth, can do little if he be thrown out of the place where that operation is to be performed in immediate connection with all the others. In theory, the artisan or the factory hand will turn to some other field of production; but the observation of large populations, through long periods, shows that such readjustments of specialized labor demand more energy and enterprise than are possessed by most laborers, occupy a great deal of time, at the best, and involve no small waste of labor power.

74. Misdirection of Labor and Capital.—Capital power, and, in perhaps a greater degree, labor power, are in the hands of individuals whose peculiarities of character, of habitude, of station, seriously modify the application of capital and labor to production; whose mistaken aims, whose erroneous impulses, may divert these forces from that object; whose accidents of fortune may impair the energy of the industrial movement, or paralyze it altogether.

The most familiar illustration we could use is that of a factory whose master has suddenly died. The labor power remains; the capital power remains; but the spring that set them in motion is broken. Perhaps the loss will never be made good; an incompetent person succeeds by right of relationship; bad management dissipates both the accumulated wealth and the reputation of the establishment; and, at last, after a dreary struggle, the stock and fixtures are sold, the factory is dismantled, and the operatives go forth in all directions to find employment elsewhere as they may.

So difficult is the control and direction of capital

and labor, that a distinct class is called into being, in all industrially advanced communities, to undertake that function. This class is known as the employing class, or, to adopt a word from the French, the *entrepreneur* class.

75. The Entrepreneur Class.—Mastership is essential to a large and varied production. In its first stages, the division of labor does not necessarily imply the introduction of the master-class. When the forms of production are few; when the materials are simple; when only hand-tools are used; when each artisan working at his bench makes the whole of the article to be marketed; when styles are standard, and the consumers of his product are found in the immediate neighborhood, perhaps within range of his personal acquaintance, the need of the master is not felt.

When, however, the hand-loom gives way to the power-loom; when the giant factory absorbs a thousand petty shops; when many persons, of all degrees of skill and strength, are joined in labor, all contributing to a result which perhaps not one of them comprehends perfectly or at all, when machinery is introduced which deals with the gauzy fabric more delicately than the human hand, and crushes stone and iron with more than the force of lightning; when costly materials require to be brought from the four quarters of the globe, and the products are distributed by the agencies of commerce through every land; when fashion enters demanding incessant changes in form or substance to meet the caprices of the market, the master becomes a necessity of the situation.

The work he is called to perform is not alone to enforce discipline through the body of laborers thus brought under one roof; not alone to organize these parts into a whole and keep every part in its place, at its proper work; not alone to furnish technical skill, and exercise a general care of the vast property involved; but beyond these and far more than these, to assume the responsibilities of production, to decide what shall be made, after what patterns, in what quantities, at what times; to whom the product shall be sold, at what prices, and on what terms of payment.

76. In a community where the division of labor has proceeded but a little way, the man of intellect moves but one pair of arms. In a highly organized industrial system, he moves a thousand. The vast difference in production which is wrought by the introduction of intelligence, forethought and skill, becomes multiplied just to the extent to which the principle of mastership is carried. One man who has the genius to plan may easily find a host of helpers, each of whom can execute his schemes nearly if not quite as well as he himself individually could, who yet would have been wholly helpless and amazed in the presence of the exigencies, the difficulties, the dangers, which only arouse the spirit of the master, stimulate his faculties, and afford him the keenest zest of enjoyment.

77. Whether we regard this as the ideal state or not, whether we rejoice or repine at the extension of the principle of mastership in industry, it is the most characteristic fact of the industrial system of

to-day; and is likely to gain rather than to lose importance in the years to come.

During the great moral and political fermentation, which brought on the Revolution of 1848, the attention of social reformers in France was called to the possible benefits of Co-operation, being an industrial system in which mastership should disappear, as the cure for a large part of the evils, having an economic origin, which afflict society.

Not a few of the English economists, and, following them, American economists generally, have been led to take up co-operation as a practicable scheme which only needs to be tried to work the most beneficent and far-reaching results. Doubtless this view is held honestly and sincerely. But it exhibits a great lack of practical knowledge concerning the organization of industry and the operations of commerce.

So far from it being true that the abolition of mastership is at present feasible, there never was a time when the distance between the man and the master was so wide as it is to-day and that distance tends continually to increase. The possibilities of gain or of loss were never so great as now; the choices and decisions essential to the conduct of business were never so frequent or so difficult; the difference in the product, which results from the difference between the able and the inferior management of affairs, was never so great; the toleration offered to the commonplace in industry, was never so small.

78. Possibilities of Industrial Damage Involved in the Entrepreneur System.—While the entrepreneur system becomes, thus, an agency of the highest efficiency

in increasing the productive power of a community it will be seen that it involves the possibility of industrial disasters commensurate with the forces it sets in motion. Just as the accidents of the railway are more destructive and fearful than those of the wagon road, so do the catastrophes of modern production exceed, in their wreck of fortune and waste of capital, all that is possible under the less ambitious organization of productive agencies characteristic of an earlier state of industrial society. The mistakes of the man who controls a thousand workmen are multiplied a thousand fold.

While the entrepreneur class consists generally of strong men, not only does that class contain many persons who by the accidents of fortune have come into the control of the agencies of production without the necessary qualifications, but the ablest men of business fall far short of the ideal standard. Not to speak of intellectual failings, the infirmities of the will, even among the bravest and best, are such as to make it a matter of course that no small part of the industrial power placed in the hands of the entrepreneur class will be misdirected. The perfect temper of business is found in few men: oscillations between recklessness, on the one hand, and overcautiousness, on the other, constitute the rule, while absolute self-poise is the rare exception.

79. Destruction of Wealth.—Another cause which requires to be mentioned, as in a degree accounting for the failure of industrial society to accumulate wealth and maintain a productive capability corresponding to the theoretical efficiency of the three primary agents of production, land, labor and capi-

tal, is the actual destruction of wealth by accident or by the convulsions of nature. The losses by fire alone in the United States probably exceed a hundred millions of dollars a year, if structures only are considered ; while, were we to add the damage to crops and forests, the sum of wealth consumed by this fearful agent would be greatly increased. Hurricanes and storms and floods annually waste and destroy no inconsiderable portion of the products of human skill and toil.

All these causes make the production of wealth in any community fall short, often very far short, of what it would become under the full and harmonious operation of its land power, its labor power and its capital power.

PART III.

EXCHANGE.

CHAPTER I.

The Theory of Value.

80. Exchange as a Department of Political Economy.— Under the title exchange, in a systematic treatise on political economy, we consider the Ratios of Exchange, the terms on which goods, commodities, articles possessing value, items in the sum of wealth, exchange for one another. We are here called to answer the question: "Why does so much of this commodity exchange for so much of that?"

81. Exchange Arises out of the Division of Labor.— The occasion for exchange clearly arises out of the division of labor. Were all persons engaged in the same productive avocations, there would be no inducement to exchange. To barter fish for fish, or bread for bread, would be simply a waste of time and energy.

Let, however, the production of the individuals of a community be varied by ever so little, the occasion for exchange may and probably will arise. If one agriculturist raise wheat, another rye, another potatoes; and if others raise, some cattle, some sheep, some swine, the products will soon begin to be exchanged, and the question will arise, how much

wheat shall be given for a bushel of rye or potatoes; how many sheep or swine for an ox? Let the principle of the division of labor be carried further, until a score or a hundred of mechanical arts and trades and half a dozen learned professions come to be recognized, and the occasions for exchange will rapidly extend to a large part of the entire production of the community. The farmer may still consume a half of his own corn and beef and potatoes, but the smith will scarcely consume the product of his own labor for three days in the year.

82. An Exchanging Class.—And it will result, either that these persons, having occasion to exchange their products for those of others, will have to give up an appreciable portion of their time to making those exchanges in person, or else, the work of making exchanges will become the subject matter of a new profession or avocation; and there will come to be persons known as peddlers, who, with horses and wagons, will go from farm to farm, and from house to house, fetching what is wanted and carrying what is not wanted, or, more properly, bringing what is more wanted and taking away what is less wanted.

If the smith can in one day make as many horseshoes as the farmer could in ten; and if the farmer can in one day do as much in raising wheat as the smith could in two or three, it is evident that the peddler, who enables the farmer to keep steadily at work raising wheat and yet have shoes for his horses, and the smith to keep making shoes and nothing else, and yet have bread to live upon, is a productive agent as truly as smith or farmer.

83. The Extension of Trade.—Just as the division of

labor between the individuals of a community gives rise to exchange, so the extension of the same principle to the communities of any land, or, still further, to the several countries of the world, creates new occasions for exchange and rapidly multiplies the objects to be exchanged. In all these successive cases the agencies by which exchanges are effected, the labor of the men engaged in trade or transportation, the horses and wagons, the steam-cars and ships, the services of the clerks who write the orders for goods and keep the accounts of sales and payments, and of the bankers who advance the requisite capital or remit the proceeds of commercial ventures, and even the services of the shipping reporters and financial editors who supply the information upon which merchants and bankers alike must act, all these agencies are as truly productive of wealth as the labor of mechanics or miners or agriculturists, and are to be treated under the title, production.

What alone we have to investigate under the title exchange, is the principle which determines that so many dozens of wood screws made in Providence or so many pounds of horseshoe nails made in Troy, shall exchange for so much of the wheat of Illinois, or of the tobacco of Kentucky, or of the sugar or molasses of Cuba, and not for more or for less.

84. Value. — Whence comes this power-in-exchange? What are its conditions, and what its limitations?

We have defined value as the power which an article confers upon its possessor, irrespective of legal authority or personal sentiments, of command-

ing, in exchange for itself, the labor, or the products of the labor, of others.

Let us go further, and inquire how it is that one article confers on its possessor such a power while another does not; why it is that, of two articles of value, one confers upon its possessor the power of commanding the labor of others for weeks or years, while another is parted with for the service of a day or an hour.

85. Value and Price.—But, first, let us introduce a term, the use of which is not absolutely necessary at this point of the discussion, which will, nevertheless, save much circumlocution, and perhaps avoid a liability to misunderstanding—that term is Price. Value and price are thus related: value is, briefly speaking, purchasing power, or power in exchange; price is purchasing power expressed in terms of some one article; power in-exchange-for-that-article, be the same wheat, or beef, or wool, or gold, or silver.

In common speech the word price brings up the idea of money-value, the purchasing power of an article expressed in terms of money. Yet it is equally correct to say that the price of a horse is seventy-five bushels of wheat, as to say that it is one hundred dollars. Inasmuch as we have not yet introduced money into our discussion, the word price, throughout the present chapter, will be understood in its more general sense, as the purchasing power of a commodity expressed in terms of some other article, it matters not what.

86. Distinction between Value and Utility.—In setting out upon our search for the law of value, a dis-

tinction of the greatest importance requires to be made. Value must be distinguished from utility. Many economists of merit have stumbled at this point. Even of those who have observed the distinction between the two conceptions, some have resorted to unfortunate terms for their characterization, and have written of value in use and value in exchange. Now, value in use is utility, and nothing else, and in political economy should be called by that name and no other.

Nor must it be thought that value and utility have any such necessary and constant relation to each other that one may be safely used for the other. On the contrary, an article may have the highest conceivable utility, yet no value.

The utility of atmospheric air is inexpressible. Atmospheric air, however, has usually no value, because it is supplied naturally, in such abundance that any one can have as much of it as he has occasion to use without giving for it either his labor or the products of his labor. Yet even atmospheric air may acquire value and be sold at a regular, definite price, so much per cubic foot, as when delivered through pipes to a diver beneath the surface of the ocean.

The utility of water is also beyond expression; yet ordinarily water has no value. In cities, however, water is delivered to householders at fixed rates, which are supposed to represent the cost of the service by which the fluid is stored, conducted and delivered as required. On the other hand, something may even be paid for merely getting rid of water. A party may enter into a contract for

pumping it out of a mine, or a swamp, or a cellar, at so much a gallon; and a much higher price is often thus paid for removing the fluid from the place where it is not wanted than is commonly paid for bringing it to the place where it is wanted.

But while utility and value must not, in economic reasoning, be used interchangeably, as they so often are in ordinary speech, utility is always and everywhere one of the elements of value. It is always present, where value is present, for it cannot be assumed that a man will give his labor or the products of his labor for that for which he has no use.

87. **Useful does not mean Beneficial.**—It needs to be observed that the utility of which the economist speaks is not always the utility recognized by the moral philosopher or the physiologist. By that term the economist signifies only that an article answers a felt human want; that men have a use for it. The appetite from which that sense of want arises may be vicious, the object itself may be prejudicial, even pernicious. Intoxicating liquors are in their main uses, injurious to body and to mind; but so long as men want them, they have utility, in the economic sense; and, so long as men want them and can only get them by giving something for them, they have also value.

88. **What is the Relation of Labor to Value?**—We have said that value is the power which an article confers upon its possessor, irrespective of legal authority or personal sentiments, to command in exchange for itself the labor, or the products of the labor, of others.

Does that power arise solely and necessarily from

the fact that labor has been bestowed upon the production of that article? No. It is true that men do not commonly give labor for that which has not cost labor; and that, on the whole, and in the long run, the respective values of a number of articles will be nearly according to the amounts of labor that have been expended upon them, severally. But it is not because an article has cost labor that it possesses value. It is only because it cannot now be obtained without labor. Prof. Senior well remarks: "Any other cause limiting supply, is just as efficient a cause of value in an article, as the necessity of labor to its production."

The essential conditions of value are that the thing to be exchanged shall be susceptible of being detached and transferred from its possessor to another, and that there shall be some person who desires it sufficiently to be ready to give for it his labor or the products of his labor.

89. Monopoly, or Scarcity-Value.—For example, here is an autograph of John Milton. The lines may have been written to a friend, or from a mere freak of fancy, or to occupy an idle moment. Labor, in the economic sense, there was none. Yet the autograph may be worth $20; that is, may command for its possessor the labor of a skilled workman for ten days, of ten working hours each. Here is a high degree of value (that is, command of the labor of others) where yet no labor has been. The explanation is found in the fact that Milton is dead, and his remaining autographs are few, while many people want them, and want them very much.

This is an instance of what may be called "mo-

nopoly-value," or as some prefer to call it, scarcity-value. The value here is altogether irrespective of the amount of labor expended upon the production of the article, simply because the article cannot be reproduced, or the stock of it replaced by labor.

90. Cost of Production or Cost of Reproduction?—Again, let us take the case of an article which has been produced by a certain expenditure of labor, but which, by reason of the discovery of new fields of the raw material, or of some mechanical invention, can now be produced with the expenditure of only half as much labor. Will the value of the stock of such goods on hand be influenced by the original cost of producing them? Not at all. They will exchange for other products on the same terms as the goods brought into the market under the new conditions.

In the same way it would seem that if the amount of labor required for the production of this kind of goods should suddenly increase, from the diminution of the supply of materials, or other cause, the stock on hand would acquire a higher value, corresponding to the cost of bringing in new goods of the same quality.

Hence, in respect to all goods which can be produced, or the supply of which can be replaced, within the time during which those who want them are willing to wait for them, we say that value is determined not so much by the cost of production, as by the cost of reproduction. They are exchanged for the products of others, not necessarily in proportion to the amount of labor which they actually re-

quired, but, rather, according to the amount of labor, whether greater or less, which would now be required to replace the stock.

91. Time an Element of Economic Demand.—I said, "within the time during which those who want them are willing to wait for them." The fact that goods cannot be reproduced, or the stock of them renewed, without a certain delay, may, for a time, confer a monopoly value on the existing stock, just as truly as if no more of them could ever again be produced. Thus, if the supply of food in a city had nearly failed, the fact that an abundance were certain to arrive in two weeks would have little or no effect on the value of the scanty store remaining.

92. Value does not always Correspond to the Cost of Reproduction.—But while, as between the cost of production and the cost of reproduction, it is the latter, and not the former, which determines the power which an article shall have in exchange, that is, its value, it is not true that value is always determined by the cost of reproduction. It may be, in regard to any given commodity, at any given time, that the cost of reproducing it would be greater, even far greater, than the price at which it sells. How can this be? I answer that this might occur through a diminution in the occasions for the use of that article.

Two generations ago, every decent family possessed a spinning-wheel, and spinning-wheels then bore a price, fairly proportioned, we may suppose, to the cost of their production with the tools and materials then available. A little later, when it ceased to be customary to wear homespun and handmade goods,

spinning-wheels may be said to have had no value at all. They were banished to attics, or turned into playthings for children, and quickly smashed to pieces. Antiquated machinery is sold, every year, in vast quantities, at its value as old iron, though it would cost ten times as much to reproduce it.

93. Demand and Supply.—If, then, neither the cost of production nor the cost of reproduction determines the power which an article shall have in exchange, is there any principle of universal application on which value rests? I reply, yes: Value depends wholly on the relation between demand and supply.

These terms require to be defined. It will not answer to trust to the ideas which the words of themselves call up to the mind of the reader. Demand and supply alike have reference (1) to a certain article, and (2) to a certain price. In the economic sense, demand means the quantity of a given article which would be taken at a given price. Supply means the quantity of that article which could be had at that price. Neither of these two elements of demand and supply must be omitted.

94. Competition.—This word signifies the unrestrained operation of individual self-interest, among the buyers and the sellers of any article in any market. It implies that each man is acting for himself solely, by himself solely, in exchange, to get the most he can from others, and to give the least he must himself.

The idea of competition is opposed to combination. Wherever, and in whatever degree, buyers or sellers act in concert for a supposed common good, whether by insisting upon a certain price, or

by regulating the amount to be bought or sold, there competition is, in so far, defeated. In competition every man is supposed to be active and alert to slip in ahead of every other man and sell his own product first, and sell it at a higher price if possible.

Competition is also opposed to custom. Whenever buyers or sellers do any thing because they have been used to do it, they depart from the rule of competition, which requires not only that each one shall do what he does with a view only to his own interest, but that he shall act in the view of what his interest, at the time and in the place, requires. If in any degree he buys or sells at a certain price, if he buys or sells in a certain place, if he buys or sells of or to a certain person, because he has done so in the past, he obeys the rule of custom.

Competition is opposed to sentiment, in exchange. Whenever any economic agent does or forbears any thing under the influence of any sentiment other than the desire of giving the least and gaining the most he can in exchange, be that sentiment patriotism, or gratitude, or charity, or vanity, leading him to do any otherwise than self interest would prompt, in that case, also, the rule of competition is departed from : another rule is for the time substituted.

95. Final Utility.—We have seen that utility, in the economic sense, is a condition of demand. Prof. Jevons thus illustrates the difference between the total utility of any commodity, and the utility belonging to a particular portion of it :

"A pound of bread, per day, supplied to a person saves him from starvation, and has the highest conceivable utility. A second pound, per day,

has, also, no slight utility; it keeps him in a state of comparative plenty, though it be not altogether indispensable. A third pound would begin to be superfluous. It is clear, then, that utility is not proportional to commodity; the very same articles vary in utility, according as we already possess more or less of them."

"Final utility" is the term proposed by Prof. Jevons to express the utility to the consumer of the last portion of the commodity purchased; its utility at the point reached just before buying ceases; the point after which any possible purchaser would rather keep his money in his pocket than pay the price for any more of this commodity.

96. But one Price for a Commodity.—If, in an open market, under full competition, any portion of a given commodity is to be sold at a certain price, then will all the portions of that commodity sold at the same time be sold at that price, whatever the degree of utility which may accompany each such portion.

If I buy a quantity of food for my own consumption, I do not pay for that part which would suffice to keep me alive, a price such as I would pay, were it necessary, to be saved from starving; for another part of the food, another price corresponding to the discomfort and dissatisfaction I should feel in being insufficiently nourished; and, for a third part a price corresponding to the pleasure of ample and generous sustenance. I pay one price for the whole, the same for every equal part; and that price measures *the final utility* of the food to me; that is, the utility of the portion at which I cease to buy,

after which I would as soon keep the price in my pocket as have more of the food.

97. Necessary Qualifications of this Statement.—It is manifest that the principle stated presupposes perfect competition. If that condition fails in any degree, the principle is violated.

The proposition we are considering further requires to be modified with regard to the obstacles to exchange, the ignorance or indifference of exchangers, etc. The consideration of these causes, as qualifying the principle that there can be but one price for any commodity, in the same market, at the same time, will be more conveniently postponed to the title "The Friction of Retail Trade."

98. What is a Market?—Many definitions have been given to the word Market. As I apprehend it, the term, in political economy, should always have reference, first, to a species of commodity; secondly, to a group of exchangers. In this view, there is no market which is a market indistinguishably for all or for several commodities, as for tea, iron, cotton and wheat; but there is a market for each commodity, by turns, as a market for tea, in which tea is bought and sold; a market for iron, in which iron is bought and sold, etc. Thus, there are as many markets as there are separate commodities.

Secondly, a market embraces all those who contribute to the supply of or the demand for a given commodity in any place. Hence, all those who are ready to buy of or sell to each other belong to the same market, no matter where they live. I say, who are ready to buy of or sell to each other. It does not follow from this that all who in the same place are

buying and selling the same article belong to the same market.

Thus, suppose there are in New York five importers of tea, fifteen wholesale dealers in that article, a hundred retailers, and a half million consumers. All these do not belong to the same market. The importers of tea and the wholesale dealers constitute one tea market, the wholesale dealers and the retailers constitute another tea market; the retailers and the domestic purchasers constitute still another tea market. There are as many markets as there are groups of exchangers. In the case supposed, there are three tea markets; each has its own group of buyers and sellers; and in each of the three, at any time, tea is sold at a price different from that at which it is sold in any of the others. Thus, the price for precisely the same sort of tea, in the market made up of importers and wholesale dealers, may be $1.00; in the market made up of wholesale dealers and retailers, $1.10, and in the market made up of retailers and domestic purchasers, $1.25.

Hence we see that, without such a definition of the word market, it would not do to say that there can at any time in any market be but one price for a given commodity. There is never a day, in any great mart, where tea, iron, wool, wheat, or what not, is not being sold at several different prices, it may be in the same street, though not, as herein explained, in the same "market."

99. Normal Price.—If there were a good market for any given commodity, *i.e.*, if competition were perfect; if there were no large stock of that commodity, but it could be produced freely and equably

throughout the year, as wanted; if the demand for it were uniform and strong, about the same quantity being required for use in every equal period of time; if no large "plant," or machinery, or great amount of capital in other forms, were required for its production; if the producers of that commodity had an easy resort to occupations in which other commodities were produced, and if, in turn, producers in other occupations could readily and successfully take up the production of the commodity in question, should occasion seem to require, then the price of that commodity would, at any time, be close to the cost of its production, by which we are to understand not the average cost of the whole supply, but the cost of that part which was produced at the greatest disadvantage.

That price would express the final utility of the commodity in question, that is, the utility of the portion which, at the price, it was just worth the consumer's while to purchase. That price would also express the sum of the efforts and abstinences of those individual producers who brought forth this commodity under the least favorable conditions, of all who contributed to the supply. Inasmuch as this price is to be paid alike by all purchasers of this commodity, it follows that those who have produced it under more favorable conditions will obtain a remuneration which will represent more than the sum of their individual efforts and abstinences.

A price which corresponds closely to the cost of production may be called the Normal Price.

100. Market Price.—Inasmuch as the conditions recited in the foregoing paragraph are never fully

realized, there is for every commodity, in every market, a market price which differs more or less widely from the normal price.

This market price always measures the final utility of the commodity, that is, the utility of it to the person to whom it is just worth while to buy of it, at that price; otherwise, that person would either not buy, which, by leaving a portion of the supply untaken would determine a new and lower price, at which he would buy; or, he would buy more of it, which, by adding to the demand, the supply remaining the same, would determine a new and higher price.

But while market price must always measure the utility of the commodity to the last purchaser, that is, the person to whom it is just worth while to buy of it at that price; market price does not always, like normal price, measure the efforts and abstinences of the last producer, that is, the person producing under the greatest disadvantage, to whom therefore, it is only just worth while to produce at that price. It is in this latter respect that market price differs from normal price.

101. Relation of Market Price to Normal Price.—The causes which make market price differ from normal price are various, and the illustration of them might be extended indefinitely. They may be grouped as follows:

I. The existence of a stock. In the case of most commodities a considerable stock always exists—a fact which profoundly influences market price.

102. Distinction between the Stock and the Supply.—The stock of any article in existence, at any time,

must not be confounded with the supply of that article, considered as a commodity in the market. By the word supply, we express the quantity of a commodity offered at any given price. At one price the supply may be but a small fraction of the stock—a phenomenon frequently observed in every market; at successively higher prices, larger and larger portions of the stock would be offered, that is, would come to constitute the supply—until a certain price would take off the entire stock.

Indeed, the supply may even become greater than the stock, under a highly speculative organization of trade. Thus, in the grain or cotton market, or in the market for railway shares or government bonds, brokers daily offer to sell and contract to deliver vast amounts of the several commodities in which they deal, but of which, perhaps, they possess little or none at all. Sometimes it happens that those who are offering such commodities are entrapped by a combination of purchasers, called a "corner," into contracts to deliver, on a certain day, more, perhaps many times more, than the entire quantity in existence. In such a case, the supply is still the amount offered at the price. This it is, and not the stock, which, taken in connection with the demand for the commodity, determines the price.

103. Fluctuations in Production.—The necessity in some cases, the usage in others, of meeting the demand from a stock, and not out of the amount of daily production, causes market price to diverge from normal price, through excess or deficiency of production. In order that there may be wheat,

three millions of persons, more or fewer, in the United States, plant the grain many months previous to the anticipated consumption of the wheat by the miller and the baker.

These persons break up the land and sow the seed without any mutual understanding as to the extent of their operations. Each is governed, for himself, by a notion more or less vague, as to the probable demand for wheat after his crop shall have been harvested. It is not at all a matter of certainty that the mistakes in calculation of one farmer will offset those of another. On the contrary, there is a very strong tendency in the errors of producers to accumulate all on one or the other side of the line of equable production.

If the price of wheat, for instance, has, owing to a deficient supply, been high, almost all producers will be found, the next year, largely planting wheat. This is likely to produce a surplus which will perhaps bring down the price below the average, whereupon farmers, with almost as much unanimity as in the former case, will, the next year, diminish their operations in this direction. The producers who are sagacious enough to look about them and say: Others are planting wheat freely; therefore, I will plant something besides wheat, any thing, indeed, but wheat, are highly exceptional. In productive industry it is the rule that men go in droves; act under common impulses, with the result of causing excess and deficiency to alternate with great rapidity and often great violence. This is almost equally true of merchants and manufacturers and bankers. The select few who have the coolness and the sense

to buy when others are most eager to sell, and to sell when others are most eager to buy, reap rich harvests of gain.

104. Substitution of one Commodity for Another in Use.—The influence upon price of an excess or deficiency in the stock of a commodity may be greatly diminished through the tendency to substitute one article for another in use. Thus, the cereals are, to a great extent, substituted for each other; one kind of meat for another, and even bread for meat, or meat for bread, in the case of a marked deficiency of one or the other. The result of such substitution of one commodity for another, is to raise the price of the substituted article, and to prevent the price of the article for which it is substituted from rising as high as it otherwise would. The two commodities are thus, for the time, and in a degree, joined together in price; a mutual dependency is established between them.

105. Liability to Deterioration.—The influence upon market price of an excess in the stock of any commodity is greatly controlled by its liability, or non-liability, to deterioration. In the case of some commodities, the variations in price due to this liability are such as to make it appear that price has cut itself wholly clear from the cost of production, or the cost of reproduction. Thus, in fish markets, the price of a fish might have been a shilling when the market opened at 5 o'clock in the morning, eightpence at 10 o'clock, sixpence by noon, while at three or four o'clock in the afternoon one could have it on his own terms. In the same way, strawberries and peaches are often sold on Saturday night

at one-half or one-third the price of the morning.

The necessity of storage, in the case of a postponed sale, has often the same influence on the price of a commodity as liability to deterioration.

106. II.—Organization of Industry and Existence of Plant.—A second cause which makes market price to differ from normal price is found in the organization of industry and the existence of machinery and "plant." Laborers and capitalists, in vast bodies, being committed to production in certain lines, may be compelled to go on producing, even though market price, measuring the final utility of their product to the consumer, has ceased to afford a proper remuneration for their efforts and abstinence.

107. III.—Customary Price.—Another cause which makes market to differ from normal price, is the force of custom. We owe the existence of a customary price, in some things to the power of public opinion, which determines that there shall be a stated, well-known price for certain services and certain commodities; and, in other things, to habit or the mental inertia of purchasers.

Thus, in the former case, public opinion would not tolerate varying and uncertain prices of admission to places of public amusement, varying and uncertain tolls over bridges or fares on public conveyances, varying and uncertain fees for the performance of certain necessary services, such as those connected with physical comfort, the preservation of life, or the burial of the dead.

Where public opinion cannot be trusted to establish a customary price, in cases like the above, the

law generally enters and fixes the rates at which commodities and services shall be sold. Of course, the prices paid must be sufficient to make it worth while to keep up the service, whether of the apothecary, the physician, the ferryman, the actor or the opera singer.

108. Influence of Habit and Mental Inertia upon Price.—Far beyond the range of customary price in the limited class of cases above referred to is the effect of habit and the mental inertia of the purchasing body, in restraining, or wholly repressing, the movements of price, where a sufficient economic reason for such movement exists. In the former class of cases, the seller consciously submits to a restraint upon his freedom of action imposed from without, viz., by public opinion or law. In the far wider field now in contemplation, buyers and sellers are left perfectly free, so far as outside influence is concerned, but are constrained, in a higher or lower degree, by the laws of their mental constitution.

No human being ever, for a moment, escapes from the force of habit, but the degrees in which men are thus bound differ widely. A capability of taking the initiative in action, mental courage and activity, freedom from fear and superstition, a readiness to meet new conditions and perhaps even a pleasure in encountering risks and odds, are among the fruits of culture ; they become an inheritance in families ; they even become a characteristic of nations and races.

109. The Moral and Intellectual Elements of Demand and Supply.—Our definitions of demand and supply,

as respectively the quantity of any given article which purchasers stand ready to take at a certain price, and the quantity which producers or holders stand ready to deliver at the same price, clearly recognize a moral and intellectual element in demand and in supply. "Stand ready" to take or to deliver. Any thing which affects that readiness, is, then, an element of demand or of supply.

In all the variations between normal and market price, the moral and intellectual elements are important factors. More or less, false apprehensions enter to affect the demand for and the supply of every article in every condition of the market; though the influence of this cause at one period will be greater than at others.

110. Retail Contrasted with Wholesale Trade.—The foregoing holds good even of the wholesale markets, where the parties who buy and sell commodities are all picked and skilled men, long familiar with the conditions of the articles in which they deal, with large opportunities, whether by price-currents, newspaper, post or telegraph, or by special and secret inquiry, to ascertain all the facts bearing on the question, at what price they should buy or sell. In retail trade, the moral and intellectual elements of demand and supply play a much more important part.

On one side is the merchant, a man of more than average intelligence and information, whose business it is to buy and sell; who by frequent resort to the wholesale dealer is kept advised of the conditions of the market: on the other is the customer, often ignorant in the widest sense of the word, always and

necessarily ignorant in the special sense of being unacquainted with the conditions at the time prevailing which should determine price. The merchant, again, is the possessor of capital, and can wait to dispose of his goods at the best time; the customer, on the other hand, is generally in urgent need of commodities for immediate use, and frequently poor, so that he must buy in small quantities.

111. The Friction of Retail Trade.—From the ignorance and inertness of the "customer" arises what may be called the Friction of Retail Trade. "Retail price," says Mr. Mill, "the price paid by the actual consumer, seems to feel slowly and imperfectly the effect of competition, and where competition does exist, it often, instead of lowering prices, merely divides the gain among a greater number of dealers. It is only in the great centers of business that retail transactions have been chiefly or even much determined by competition. Elsewhere it rather acts, when it acts at all, as an occasional disturbing influence. The habitual regulator is custom, modified from time to time, by notions existing in the minds of purchasers and sellers, of some kind of equity or justice."

112. Criticism of this View.—I am disposed to think that this eminent economist somewhat overrates the disability under which the customer suffers in retail trade; and, secondly, that the inference he draws from the undoubted fact of the general prevalence of a customary price, viz., that this shows that competition is not, in any proper sense, the regulator of such trade, is not fully justified.

To take an analogous case, let one look around

him, in any highly organized community, and he will see very little display of force in compelling proper things to be done, or in repressing acts injurious to society. He will see on every side men doing just and decent and even courteous and kindly things, respecting the rights of others and making use inoffensively of their own powers and privileges, just as if all this were natural and pleasant to them, as, indeed it has, to a great degree, become. These actions appear to be spontaneous and instinctive. Yet if that power which in every civilized state is always at hand, however veiled or disguised, to protect person and property, to repress lawlessness and to punish crime, were once withdrawn, society would speedily be transformed, and the occurrence of every form of rapine and violence would instruct the observer that, behind the fairest show of order, right dealing and courtesy, stands the armed force of the community.

So, while, within certain limits, competition seems to disappear wholly from retail trade, yet the economic forces always lie beneath, as the bed-rock below which the effects of moral forces cannot go. Let the cost of an article rise above the "customary price," and merchants will make an advance upon that price, in spite of custom. Let merchants demand an utterly exorbitant price, and competition will spring up, even among the least intelligent and least enterprising buyers.

CHAPTER II.

The Theory of International Exchanges.

113. Relation of Labor to Value.—We stated, in paragraph 88, that, on the whole and in the long run, the respective values of articles will be nearly according to the amounts of labor that have been expended upon them, severally. That this will be true throughout any small community is seen in the consideration that, if certain articles failed to have as much, or nearly as much, value, for the unit of labor, as other articles produced in that community, some of the laborers engaged in their production would set themselves to making some other article or articles more highly appreciated. Either this would raise the value of the disparaged articles, through reducing the supply; or, if the community cared so little for those articles as not to be willing to pay a higher price for them, production would cease.

The respective values of articles will be regulated in the way that has been indicated, within any small community. Is any modification of this conclusion required, as exchange is conceived to be carried on between distant communities?

We shall reach the essence of the matter if we assume the trading world to be confined to half a dozen islands, which interchange their products freely, but between which no movement of labor or

capital takes place. One of these might have a tropical climate and rich soil, producing tea and coffee, tobacco, sugar and molasses, silks, spices and dye-stuffs. Island No. 2 lies in some northern sea, producing hemp, wool, flax, and the cereal grains. Island No. 3 is the land of oil and wine. Island No. 4 is filled with mines of coal and the useful metals. Island No. 5 has a poor soil, a bleak climate, and a scanty population, whose production comprises only ice, lumber, fish and furs.

What, now, will be "the exchanging proportions" or terms of exchange, between these islands, at any given date? Will it still be true that the values of their respective products will be nearly according to the amounts of labor (omitting capital, for the time, from consideration) which have been involved in their production, severally? I answer, that, at any date which we may take for the purpose of our illustration, this would not necessarily be so. Assuming the strength, skill, intelligence and energy of all the laborers in all the islands to be equal, a given amount of labor in one island might command the product of two days' labor in another island, while commanding the product of only half a day's labor in still another.

114. Equation of International Demand.—What, then, would govern the exchanging proportions subsisting between the several islands? I answer that the only explanation which anywhere, at any time, can be offered for existing ratios of exchange, is found in the relation between supply and demand. Within each of the several islands, values would approximately be regulated by labor,

according to the principle first stated. But, as among themselves, each of these islands would constitute a unit, whose terms of exchange with the other islands would be determined by the Equation of International Demand, to use the language of Mr. J. S. Mill. What is meant by this formidable phrase? This: that values, in exchanges between these islands, will be governed by the demand of each island for the productions of all the other islands, as against the demand of all the other islands for those commodities which itself produces.

Thus, we might suppose the taste for olive oil and wine to be not widely spread among the other islands. In that case, there would be but little demand for the productions of island No. 3, as a whole. As between the producers of olive oil and the producers of wine, the force of competition would operate steadily to bring about the result that a day's labor in a vineyard would yield as much purchasing power as a day's labor in an olive grove. But, while the producers of olive oil and the producers of wine would thus be brought upon an equality as regards each other, both classes would be at a disadvantage in comparison with producers in the other islands, generally. We might say, with the producers of any other island; or we might suppose that, the mechanic arts being in a backward state, island No. 4 would experience a still smaller demand, relative to its laboring population; and the inhabitants of that island might be obliged to continue getting out iron ore, smelting it in their furnaces, working it up in their forges, only

to sell the product of a long day's labor for the product of eight hours' labor in island No. 5; seven hours' labor in island No. 3; six hours' labor in island No. 2; five hours' labor in island No. 1.

If, now, we assume a sudden development of the mechanic arts and a rapid and extensive use of iron in tools and machinery, island No 4, from being at the foot of the scale, might rise almost instantaneously to the top. What island No. 4 has to sell has become of supreme importance. The sugar planters of No. 1, the wheat growers of No. 2, the lumber operators and ice cutters of No. 5, find that they can greatly increase their production by implements and machines made of iron. The iron-workers, therefore, realize rich gains, and fare sumptuously upon the products of the other groups of laborers.

Now, upon the assumption that labor and capital do not flow from one island to another, but only products are imported or exported, each island would be left indefinitely to its own economic lot, be that a hard one or a fortunate one, according to the demands from all the other islands for its characteristic products.

115. Nationality and Values.—In the case of these communities, does the failure of values to correspond to amounts of labor depend upon nationality? I answer, no: the failure of correspondence between value and labor would occur just as fully between two islands subject to the same government as between islands under different flags. The condition noted is due entirely to the fact assumed at the beginning, *viz.*: that labor and capital do

not pass from one of these communities to another. It has nothing to do with nationality.

If, then, the failure of values to correspond to amounts of labor expended, has nothing to do with the fact of nationality, why should the economists have written of International Values, of International Trade, of the Equation of International Demand? I answer, because nations furnish convenient units for illustrating the operation of the forces concerned. Obstructions, physical, intellectual and moral, to the movements of labor and capital, tend to gather themselves along the boundary lines of nationality. This arises from differences of speech, of race, and perhaps, also, of religion, from prejudices against aliens, perhaps, also, laws putting them at a disadvantage; from reluctance at self-expatriation, from physical obstacles of a marked character, which often divide nations. Between any two all the causes above noted may enter to raise to a maximum the resistance to migration. Between other two, only a part of these causes may operate, and may operate with greatly diminished force.

Wherever the movements of labor and capital cease, there all the effects attributed to national differences are experienced. In just so far as those movements are reduced or retarded, the natural operation of competition, in restoring the normal relation of value to labor, is deferred or defeated. Even where movements of labor and capital actually take place, they may be so tardy and difficult that local causes may go on producing inequalities faster than competition can efface them.

116. Cost of Imported Articles.—It follows from what has been said, that, in the exchanges of two considerable communities, be they distinct countries or isolated portions of the same country, from one to the other of which movements of labor or capital do not take place, or take place so tardily that they fail to keep up with the tendencies to divergence, articles may be imported into one of these communities, notwithstanding the fact that it could there be produced at a lower cost than in the community from which it was exported; and this state of things may continue indefinitely.

This would scarcely happen between small contiguous communities. If in one of such communities, A, a certain kind of goods could be produced at lower cost than in communities B, C and D, all the labor and capital employed in the production of that article would pass over into A.; and the entire production of that article for that group would soon take place in that single community. As a result of this play of economic forces, no one of these communities would long import from any other any kind of goods which it could possibly itself produce at a lower cost.

Between communities or countries, however, experiencing no movements of labor and capital, exchanges of goods may, as we said, continue indefinitely to take place, notwithstanding the fact that the importing countries could, if they would, themselves produce many of the articles at a lower cost than that at which they are actually produced in the countries from which they are brought.

117. An Analogous Case.—That such would be the

normal operation of the principle of self-interest will readily appear if we take the case of a skilled mechanic, say a blacksmith, in an agricultural community. The smith may have been brought up on a farm, and he may be so strong, so quick, so handy with tools, that he could, to-day, do one-fourth more of farm work than any one in the neighborhood. Since, then, he can do farm work better than the farm hands, will he leave his forge? That will depend on the "Equation of Demand." If there be several blacksmiths in the community, so that the demand for the work of each blacksmith is small, and if the other blacksmiths are as well able to work at the forge as himself, but are not, like himself, able to turn advantageously to farming, his economic interest may impel him to agriculture. If, on the other hand, he is the only blacksmith, the demand for his work will certainly be great, perhaps so great as to enable one day's labor on his part to command two ordinary days' labor on the farm. In this case it would be the height of folly for him to leave his forge, since there he can acquire a value represented by 2, while on the farm the value of his product will be represented by only $1\frac{1}{4}$.

118.—Why Foreign Goods are Imported.—What we have seen the blacksmith doing, nations and smaller communities are continually doing. Many a country imports, generation after generation, commodities a, b and c, which it could produce more cheaply than those who made them. The reason is that there are still other branches of industry, x, y and z, in which it has an even higher relative advantage. So far as movements of labor and capital

take place, there will be a constant tendency for laborers and capitalists to come to the more favored country, and here set up industries *a*, *b* and *c*. But this will, at the best, go on slowly; and it may be altogether defeated by the discovery that commodities *m*, *n* and *o*, can be produced in the country in question, not, indeed, so advantageously as *x*, *y* and *z*, but far more advantageously than *a*, *b* and *c*. Consequently, all the additional labor and capital coming into this country, in this generation and perhaps in the next, may be directed toward building up industries *m*, *n* and *o*, and commodities *a*, *b* and *c* may continue to be imported.

Such being the conditions under which trade takes place between countries,* from one to the other of which movements of labor and capital do not occur, or occur so tardily as not to overtake the tendencies to local disturbance which have been dwelt upon, we have to note, in closing, that in any country the value of an imported article does not tend to be determined by what would be the cost of production of that article in that country. It does not even tend to be determined by its cost in the country in which it was actually produced. The normal value of such an article depends on *the cost of production of the article which is exported to pay for it*, transportation being taken into account.

* Prof. Cairnes has applied the same principle to exchanges between what he calls Non-Competing Groups of laborers, within the same country.

CHAPTER III.

MONEY AND ITS VALUE.

119. Exchange Arises out of the Division of Labor.— Men become the producers of that which they expect to consume but in part, if at all. Their choice as to what they shall produce, ceases to be determined by considerations affecting their own personal wants, and comes to be determined mainly, if not wholly, by considerations affecting their abilities and aptitudes as industrial agents. They no longer produce that which they desire to eat, drink or wear, or at least they no longer produce it for that reason alone; but they produce that one among many things known to the market which they can produce to the best advantage, let who will, in time, eat, drink or wear it. Their own wants they look to see, in turn, satisfied by the labor of others, each individual of the community working "after his kind," doing that which he can do best.

To the market all producers bring their several products, or such part thereof as they do not care individually to consume. From the market each late producer, now become a consumer, carries away that which he is to eat, drink, or wear, or otherwise enjoy. In the market is done that which we call exchange.

The economic function of exchange is to bring producers and consumers together, and thus allow

the division of labor to be carried as far as it will serve to increase production. The division of labor has no economic virtue except so far as it increases production. When that point has been reached, a further subdivision of occupations and employments would be useless, or of merely curious interest.

Exchange, in turn, has no economic virtue except as it allows the division of labor to be carried out. Its sole function is to enable each species of wealth, each article known to the market, to be produced in the place and by the person where and by whom it can be produced to the greatest advantage. To speak of exchange as itself productive of wealth, or, to put it concretely, to speak of trade and transportation as benefiting a community, involves a misconception.

120. The Economic Function of Money.—In its function of bringing producers and consumers together, exchange discovers the need of the great agent of which we are about to speak—Money.

Just as the occasion for exchange arises out of the fact of the division of labor, and as the economic efficiency of exchange is limited to that occasion, so the need of money arises solely out of the fact of exchange, and the economic efficiency of money is limited strictly to the occasion for exchange. The interests of a community require as much exchanging as will secure that division of labor which will achieve the highest productiveness of land, labor and capital, and they require no more exchanging than this. They require as much money as will enable that amount of exchanging to be effected with the least effort and with the greatest assurance

of a transfer of real equivalents; and they require no more money than this.

But how does money facilitate those exchanges which it is for the interest of society to have effected? Just what is the economic function of money?

121. How does Money facilitate Exchange?— Money facilitates exchanges by dispensing with that *double coincidence, of wants and of possessions*, which barter, or exchange without the use of money, involves. We have seen that, so far as the division of labor is carried out, men cease to produce all or even the greater part of what they wish to consume; but, producing that which they can produce to the best advantage, look to others for those particular articles which are required for the supply of their individual wants. The producer and the would-be consumer of each article, therefore, must get together, somehow.

That each producer for himself should find some person who has what he wants and, at the same time, wants what he has, would involve very roundabout exchanges, occupying a great deal of time, and occasioning much delay and frequent disappointments. The bootmaker who wanted a hat for his own use might find many persons who would be glad to get pairs of boots, but had no hats to give in exchange, and several persons who had hats, indeed, to sell, but were already supplied with boots, before he found one person who both had hats and lacked boots.

And, moreover, when that person were found, a further difficulty might arise from the failure

of an exact equivalency between the two articles to be exchanged. A pair of boots might be worth more than a hat: perhaps three pairs of boots might be worth four hats. Yet the bootmaker wants but one hat; the hatter wants but one pair of boots. It is evident that things would soon get into a fearful muddle, this way.

But if, by general consent, formal or implied, the producers of the community should hit upon one article which they would all agree to take in exchange for whatever they wished to sell, a vast saving of time and labor, of annoyance and disappointment, would be effected, especially if the article so taken should be one, say, wheat, susceptible of minute division, without loss of utility.

122. Money, the Medium of Exchange.—What shall we call the function which the wheat would in this case perform? Clearly it is something altogether beyond and in addition to its ordinary natural function, as wheat, which is simply to be made into flour, to be, in turn, made into bread. In the use proposed, the wheat would serve another purpose. What shall we call that purpose?

The function performed by the wheat, in the instance given, is that of a Medium of Exchange. The wheat is no longer an end, as when used for food, but a medium, or means to an end, which end may be boots, or hats, or groceries, or what not.

Now, this is the Money function. Money is the medium of exchange. Whatever performs this function, does this work, is money, no matter what it is made of, and no matter how it came to be a medium at first, or why it continues to be such. So long as,

in any community, there is an article which all producers take freely and as a matter of course, in exchange for whatever they have to sell, instead of looking about, at the time, for the particular things they themselves wish to consume, that article is money, be it white, yellow or black, hard or soft, animal, vegetable or mineral in its composition.

There is no other test of money than this. That which does the money-work is the money-thing. It may do this well; it may do this ill. It may be good money; it may be bad money—but it is money all the same.

123. Universal Acceptability of Money.—We said, all producers, since it is not enough that an article is extensively used in exchange, to constitute it money. Bank checks are used in very numerous and very important transactions, yet are not money, because only a comparatively small number of people take them for what they have to sell; and those who do take checks only take them from persons whose pecuniary responsibility they are assured of; and when they take checks, they know that they will not be able to "pass" them any where and every where, but only at banks or at stores where they are themselves personally known.

It is essential to money that its acceptability should be so nearly universal that practically every person in the community who has any product or service to dispose of will freely and of preference take this thing, money, instead of the particular products or services which he may individually require from others, being well assured that, with money, he will unfailingly obtain whatever he shall

desire, in form and amount, and at times to suit his wants. When any article, no matter what its substance or form, acquires this degree of acceptability, no matter how obtained or how retained, that article becomes money, and remains money while that condition continues.

124. Money and Civilization.—It is evident that the introduction of money, even in a very primitive state of industrial society, vastly facilitates exchanges, and renders it easy to carry out the division of labor. It is further evident that the use of money is absolutely a condition precedent to an advanced state of industrial society. The division of labor could not without it be carried as far as is involved in complicated manufactures and extended commerce.

"It has been wisely said," remarks M. Chevalier, "that no machine economizes labor like money, and its adoption has been likened to the discovery of letters."

125. Historical Forms of Money.—We have said that any article which acquires a certain degree of acceptability throughout the community, would thereby become money, whatever its material or form. Yet material and even form may have much to do with securing to any given article, at any given time, the requisite degree of acceptability. Rock salt long served the Abyssinians as money; rice, the dwellers on the Coromandel shore; cacoa, the aboriginal Mexicans; olive oil, the inhabitants of the Ionian islands; wampum, the early New Englanders; tobacco, the early Virginians and Marylanders; tea, compressed into small cakes, the Russians; dates,

the savages of the African oases; beaver and seal-skins, the peoples of many northern lands. Wheat, cattle and sheep have also been extensively employed as money, alike by the early Greeks, by the Romans who conquered the Greeks, and by the Teutons who conquered the Romans.

126. The Metals as Money.—But of all substances, the metals have enjoyed the widest use as money, from a very remote period.

From its numerous and important uses in the domestic arts, in the chase, and in warfare, iron was the subject of such wide and constant demand as to make its further use, as the general medium of exchange, *i.e.*, as money, very simple and natural. The art of mining being in early times very crude, small quantities of iron represented a large amount of labor, and thus contained a high purchasing power. Moreover, in comparison with wheat, cattle, and many other primitive forms of money, iron cost little or nothing to keep and was but little subject to waste, while a given mass could easily be divided into pieces of any required dimensions, which could again be reunited, by fusion, or by welding when heated. The money of Lacedemon was of iron; the Swedes used money of this metal during and after the exhausting wars of Charles XII.; and iron is still reported to be so used by the inhabitants of Senegambia.

Lead was extensively employed as money by the early Romans and the early English, and is still used in the same way by the Burmese. Tin was used by the Mexicans as money; was long so employed in Sweden, in long, flat blocks, and is even

now a medium of exchange among the Chinese and Malays and in the Prince of Wales Land.

But more than iron, tin or lead, has copper, in the later centuries, been used as money. Having, from its cost of production, a high value for its bulk, it came to supersede iron in this use, when the latter metal became too cheap to form a convenient money for the purposes of ordinary exchange.

Platinum was for a brief period, between 1828 and 1845, used as money in Russia, where that metal is produced; but the great difficulty of rendering platinum, now from ingots into coin, and again from coin into ingots, prevented the success of this experiment.

127. The Precious Metals.—All the other metals, however, pale before the light of two transcendent substances, the Precious Metals,* so-called, silver and gold. Having numerous important uses in the industrial arts; possessing the highest adaptation for the purposes of ornament and decoration, these metals have always and every where exerted, beyond all other objects of human desire, a strange, a mysterious fascination upon the minds of men, while their adaptation to the purposes of coinage, through their ductility and fusibility, and their adaptation to the purposes of circulation, in being nearly imperishable so far as accident or the action of the elements is concerned, have contributed to make them almost the perfect money.

* Not the most rare or costly of all. Several metals are more valuable even than gold; but these are metals found in extremely small quantities, too rare to meet the requirements of a general medium of exchange.

128. Coinage.—Under the title, coinage, we may take account of all methods of determining, for easy popular recognition, the quantity and quality of individual portions of that which is used as money. It is in their adaptations to the art of the coiner that the metals, and especially the precious metals, exhibit their most marked qualifications for use as money.

The metal is melted, and in that state is brought to the required degree of purity, or "fineness." It is then cast into ingots, and by successive mechanical processes, with machinery of great delicacy and power, drawn out to the required thickness, cut into planchets, "milled" around the edges, and stamped on both sides with devices expressive both of the sovereignty of the nation under whose authority the coins are struck, and of the quality and quantity of the metal contained.

Coinage has generally been regarded as an act of sovereignty, and the counterfeiting of the coin has widely been punished as treason. So important is the money-function, so strong is the tendency to abuse the privilege of coining, so helpless are the mass of the community, especially the poor and economically weak, under a corrupted coinage, that, even in free governments, where royal prerogative is not known, the private minting of money is punished by grave penalties. That coins shall fully perform their office as money, they must be taken readily, without suspicion, after, at most, a brief inspection such as even the ignorant and inexpert can give.

129. What Determines the Value of Money?—The

value of money, like the value of any thing else, is purely a question of demand and supply. The cost of producing money is only important as affecting the supply. Limit the supply,* and it does not matter whether there be any cost of production or not. The advantage of taking that for use as money which has an appreciable, definite, and, as far as may be, constant cost of production, is found in the fact that the supply of such money will be limited by natural causes, instead of being left to be regulated by law or convention or accident.

130. What is the Demand for Money?—The demand for money is the occasion for the use of money in effecting exchanges: in other words, it is the amount of money-work to be done.

This is not determined by the gross volume of the wealth of the community, since all that wealth is not to be, in fact, exchanged. For a similar reason, it is not determined by the amount of the annual production.

It is not determined even by the volume of products to be exchanged, inasmuch as some classes of these may require to be exchanged several times, and some but once.

131. The Money-Demand a Reality.—Not the less is the demand for money a reality. In every community, though in some more than others, goods are offered for money. Men seek money, having in their hands wherewithal to pay for it. Some of

* I have already quoted the remark of Prof. Senior that "any other cause limiting supply is just as efficient a cause of value in an article, as the necessity of labor to its production."

them must have money, whatever it cost to get it; with others any appreciable increase in the difficulty of getting money, or any appreciable doubt as to the "goodness" of that which is circulating in the community, does away with the disposition to obtain it, drives them to barter, and thus destroys a portion of the demand for money.

132. Effect of Discredit on the Money-Demand.— Thus, if the money of a country be openly discredited, as in France prior to and during the Hundred Years' War, and, again, during the Revolutionary Epoch; in England, under Henry VIII. and the Protector Somerset; in the United States, during the circulation of the so-called Continental currency; and in Italy, through many dreary periods of her history, men may not only resort increasingly to barter or to credit, as a means of avoiding the use of money, but such discredit of the coin or other circulating medium may become a force which will operate powerfully to modify and even to limit production, men producing fewer things and those different from what would have been produced under conditions more favorable to the division of labor and the consequent exchange of products.

We see, thus, that the demand for money has no definite relation to the total wealth, or the annual product of a community, or even to the volume of products to be exchanged. The demand for money varies with the amount of money-work to be done, which, in turn, varies with the industrial organization of communities, with seasons, and with circumstances innumerable. Not the less, however, as we

said, is the demand for money a real thing. Goods are offered for money; and, with a given supply, the more goods are so offered, the higher will be the value of money—that is, prices will fall; the fewer goods are offered, the lower will be the value of money—that is, prices will rise.

133. Value and Price.—It will have been noticed that, in the foregoing paragraph, I have used the word price as signifying the money-value of goods. As we stated in a previous chapter, value is the generic term which expresses power-in-exchange. Price is power-in-exchange-for-some-one-article. In a community where money is used, price commonly expresses power-in-exchange-for-money. Where nothing to the contrary is said or intimated, the price of an article is understood to be the value of that article in terms of money—the amount of money it will command in exchange.

134. What is the Supply of Money?—If such is the demand for money, what is the supply? It is the money-force available to do the money-work which the demand for money indicates as required to be done, in the given community, at the given time.

The money-force, or the supply of money, is not measured by what is usually called the amount of money, that is, the number of gold dollars or bits of paper used as money, but is composed of two factors—the amount of money and the rapidity of circulation. "The nimble sixpence does the work of the slow shilling."

The rapidity of circulation, of course, varies widely among different communities, according to

the density of settlement, the prevailing occupations of the people, the facilities for the transportation of freight and passengers, and other conditions. And the rapidity of circulation not only varies according to such conditions, but it varies from day to day, and hour to hour, with the state of trade and the temper of the public mind.

135. The Money Supply a Reality.—But while the money-supply varies thus incessantly, it is none the less a real thing; so real that, at any given time, an increase of the demand for money will enhance the value of money—that is, will lower prices; and a decrease in that demand will reduce the value of money—that is, will raise prices.

To enhance the value of money is, of course, to give a larger purchasing power to each integral part of the circulating money—that is, to each piece or coin, and to any given number of pieces or coins. But if money purchases more of other things, other things, conversely, purchase less of money—that is, bear lower prices.

136. International Distribution of Money.—We have seen that it is impossible to say what, at any time, in any community, is the demand for money, or the supply of money. We have now to see that, with money having a natural cost of production, no one has any need to know, with a view to securing his own interest or that of the community, either how much money there is, or how much is needed.

Let us suppose that, of two trading countries having the same kind of money, the amount in each, the number of pieces or coins, is such that, the rate of circulation being what it is, and the demand for

money what it is, the scale of prices in the two countries precisely corresponds, cost of transportation of goods being, for the purposes of the illustration, left out of account. Now let us suppose that, all other elements of the case remaining unchanged, the amount of money in one of these countries, A, is suddenly and largely increased, say, by the discovery of treasure or by the opening of new and remarkably productive mines.

The supply of money in A having thus been increased, the value of money, as we have seen, must decline, that is, prices must rise. A given amount of money will purchase less of other things than before, which is equivalent to saying that other things will purchase more of money.

Now, if goods will purchase more money in that country, the owners of goods of every description in the other trading country, B, will at once feel themselves impelled by self-interest to send goods thither, to secure the benefit of the higher prices.

137. And while every owner of goods in B is hurrying to get them to A, in order to take advantage of the higher prices prevailing there, every holder of money in A is equally impelled to get it as quickly as possible to B, in order to take advantage of the lower prices there. So it appears that the holders of goods in B are anxious to exchange goods for money in the markets of A, and the holders of money in A are equally anxious to exchange money for goods in the markets of B.

Where all parties are so fully agreed, the thing to be done is likely to be done quickly. Money

flows from A to B until the equilibrium which was disturbed has been restored, that is, until the general scale of prices is the same in both countries. After this, the two countries will continue to trade as before; but each will keep its own money. A will pay for the cotton, rice and sugar of B with its own wheat, lumber, coal and ice.

138. The Money Movement Automatic.—It will be observed that the movement of money which has been described was not due to any one discovering that A had more money than it needed, or than its proportional share. No statistician or banker announced this result after computing the demand for money and the supply of money in A; nor was the consent of any person, or any number of persons, obtained to the proposition to export money to B.

The exchanges which restored the equilibrium of prices were due wholly to the action of individuals, moved by a view of their own interest. Not one of them cared, perhaps not one of them knew, whether money was in excess in A, or not, but each, finding that by sending his goods from B to A, or his money from A to B, he could secure a profit, contributed to the result.

139. Picking or Selecting the Coin.—We have seen that any local excess of money, as between one country and another, immediately sets in motion forces which tend to restore the equilibrium.

In the case of exportation, or the melting of coined money, due to local excess, what determines the selection of the coins to be exported or melted? Is it purely a matter of chance, or does some dis-

tinct economic force enter to decide that certain coins shall go and others stay?

140. Irregularities in the Coin.—In the process of coining, it is inevitable that differences should exist between the coins which are the product of any one mint. A certain range of variation must be allowed, and this is generally formulated by law, and is known as the "tolerance" of the mint.

But even were all coins issued of exact uniformity, the wide difference in the usage to which coins are subjected would soon make a difference in their weight. Some coins go early into hordes or deposits; others are worn down by almost continuous circulation; others still are dealt with illegitimately by clipping, punching, and "sweating," till a considerable portion of their substance disappears.

If, now, with a body of coin of unequal value, a demand for the money metal arises, for export or for use in the arts, the process of picking or selecting coin will at once begin. All merchants and bankers dealing largely in coin will lay by those of full or nearly full weight, which come to their hands, and throw the lighter specimens back into circulation.

This process of picking or selecting coin for export or for melting, begins early in the history of such a demand as has been indicated, and proceeds steadily so long as that demand lasts. The operation costs practically nothing, and the profit, where great numbers of coin are daily handled, is large and certain. Clerks and cashiers become so expert that they can tell light coins by the touch, while, if doubt exists, a pair of adjusted scales will in

an instant decide the question of full or under weight.

141. Gresham's Law.—The observation of this process of picking or selecting coin has led to the statement of the economic theorem, known as Gresham's Law,* that "bad money always drives out good money."

Thus baldly stated, as in most treatises it is, the theorem is false. That effect will not be produced unless the body of money thus composed of heavy and of light coins, is itself in excess † of the needs of the community, as determined by the law of the territorial distribution of money, which has been stated and illustrated.

142. The Value Denominator, usually called the Measure of Value.—Thus far we have spoken of but one function of money, that of the Medium of Exchange, and we have written as if there were but one money function. This has been for the purpose of fixing the reader's attention strongly on the work of money, as the medium of exchange.

In addition to the function of money as the medium of exchange, nearly all economists are agreed in recognizing another independent and co-ordi-

---

*From Sir Thomas Gresham, founder of the Royal Exchange of London.

† Mr. Ricardo clearly expressed this necessary qualification of Gresham's Theorem. It is, he says, "a mistaken theory to suppose that guineas of 5 dwt. 8 grains, cannot circulate with guineas of 5 dwt., or less. As they might be in such limited quantities that both the one and the other might actually pass in currency for a value equal to 5 dwt. 10 grains, there would be no temptation to withdraw either from circulation ; there would be a real profit in retaining them."

nate function of money, viz., as a "Measure of Value."

"A second difficulty," says Professor Jevons, "arises in barter. *At what rate* is any exchange to be made? In a state of barter, *the price current* list would be a most complicated document, for each commodity would have to be quoted in terms of every other commodity, or else complicated rule-of-three sums would be necessary. Between 100 articles there must exist no less than 4950 possible ratios of exchange.

"All such trouble is avoided if any one commodity be chosen, and its ratio of exchange with each commodity be quoted. Knowing how much corn is to be bought for a pound of silver, and, also, how much flax for the same quantity of silver, we learn without further trouble how much corn exchanges for so much flax. *The chosen commodity becomes a common denominator or common measure of value*, in terms of which we estimate the value of all other goods, so that their values become capable of the most easy comparison.

143. An Incidental and Subordinate Function.—Admitting the importance of having a value-denominator in which the prices of all articles shall be expressed, we cannot admit that this constitutes a separate and independent function of money, since it is evident that gold or silver, or any other article, can only serve as a value-denominator by and through being used as the medium of exchange.

It is only because silver, for instance, is, in fact, successively exchanged against all the articles in the market, that the respective values of these articles,

in terms of silver, become known. Instead of this being an independent and co-ordinate function of money, therefore, it is merely an advantage resulting from the use of money as the medium of exchange. It is, at most, an incidental and subordinate function.

The better statement, still, would be that money serves as the medium of exchange:

(*a*) Dispensing with the double coincidence required in barter,

(*b*) Furnishing a value-denominator for the easy and just comparison of the values of all the articles in the market.

144. The Standard of Deferred Payments, usually Called the Standard of Value.—We have seen that it is of the essence of a sale for money, that the producer, or whoever at the time stands in the place of the producer, parts with his product, receiving therefor something which he does not expect personally to consume, something, perhaps, for which he has at no time a personal need. His reason for receiving this article in exchange for his product is that with it he expects to obtain, in time and place and amount most suitable to his convenience, that which he shall desire to consume.

It was in this view of money that Adam Smith said: "A guinea may be considered as a bill for a certain quantity of necessaries or conveniences upon all the tradesmen of the neighborhood."

145. Money a Pledge of Future Enjoyment.—It will appear that, looking towards the satisfaction of the producer's wants, a sale for money is only half a transaction. He sells his product for money, and must, in turn, sell, so to speak, his money for the

products of others, such as he may desire personally to consume.

But while, in the very act of a sale for money, the producer defers his acquisition of the products of others which he may wish ultimately to consume, the question, when that acquisition shall be realized, remains for himself alone to answer. He has the money, which constitutes what has been called an order-for-goods upon all tradesmen of the neighborhood; and whenever he chooses to step into a shop and lay the coin down upon the counter, he may take his equivalent then and there, whether in meat or flour or groceries or clothes or tools for his trade.

146. Sales on Credit.—We are now to contemplate exchange transactions of a different character, which give rise to a new function of money, viz., exchanges where the equivalent, money, is not, at the time, received by the seller of goods; but where future payment is promised. These transactions are known as sales on credit, because the willingness of the producer to part with his goods without at the time receiving an equivalent, depends upon the credit of the purchaser.

147. The vast extension of credit-sales under the modern organization of trade, makes a new and very important requirement upon that article which is to be used as money, viz., that, in addition to being conveniently portable, not liable to deterioration or accidental injury, easily subdivided, etc., etc., it shall be reasonably stable in value.

Where a man takes money in his hand as the equivalent of his product sold, which we call a sale

for cash, he has no anxiety on this account. He may exchange his money for goods the same day; if he does not, it is because he does not choose to do so. But if a man is to forbear payment for a considerable time, it becomes of great importance that he should know what that which he is to receive at a distant date will be worth to him when he gets it. On the day of the sale, the money which is stipulated is worth the goods; otherwise, the sale would not take place. On the day of payment, the money may be conceivably worth twice the goods, or only half the goods.

The risk of some undeserved loss, the chance of some unearned gain, are inherent in the nature of sales on credit. Whether that risk of loss or chance of gain shall be great or small, will depend on the degree of stability which attaches to the value (that is, the power to command the labor of others) of the article used in that community, during that period, as money.

It is evident that articles which might otherwise be equally well fitted for use as money in sales for cash, that is, which might be otherwise equally well fitted to serve as the medium of exchange, may be very differently qualified to serve as what we now, for the first time, call the Standard of Deferred Payments.

148. The Grains and the Metals.—Thus, if we compare the grains and the metals, we note that the former are quickly consumed, the greater part in first year, all within the second year; while the latter last, even in active use, many years. The average "life" of iron may perhaps be stated at fifteen

to twenty years; the life of copper is much longer, and that of gold or silver covers several human generations.

From these facts it results that, if the production of any grain, *e.g.*, corn or wheat, falls off considerably, in any year or two successive years, the value of that grain will rise rapidly, it may be to an inordinate height; while the production of gold or silver, and, in a lower degree, of copper or iron, might be sensibly diminished during several years without greatly affecting the quantity and, by consequence, the value, of the existing stock.

149. Fluctuations in the Value of the Precious Metals.—But while the precious metals are thus almost a perfect "standard of deferred payments," from one year to another, they are yet subject to great periodic variations from generation to generation and from century to century. The production of the precious metals is of the most spasmodic character. At times, a flood of gold, or of silver, or of both, has poured from newly-opened mines, as after the discovery of the mines of Potosi in 1545, and of the mines of California almost coincidently with those of Australia, in 1848–51; at times, on the other hand, mining industry has almost wholly ceased, either from the exhaustion of the known deposits, or as the result of war or civil disturbance. In agriculture, however, while incessant fluctuations in the supply of the grains, even those most largely and widely planted, result from the mutability of climate, the great changes from generation to generation, and from century to century, are not so far-reaching.

The vast breadth of arable land of reasonably uniform quality; the simplicity of the processes of agriculture, and the wide diffusion of the art of tillage; the comparative immunity of the soil amid ravages which greatly impair, perhaps permanently cripple, manufacturing, and in an even greater degree, mining industry; the limited applicability of the principle of the division of labor to agriculture and the relative inefficiency of machinery in its operations; these causes combine to render breadcorn, in truth, what Francis Horner pronounced it to be, "the real and paramount standard of all values."

150. Corn Rents.—The superior stability of value of the cereals, through long periods of time, has led to the suggestion that, in the case of contracts extending over considerable terms of years, grain should be adopted as the standard for determining the obligations of the debtor, the rights of the creditor. To a limited extent this has been done; but the tendency to express the consideration of all sales in terms of that which is the current money of daily use in the community is so strong that few persons, even of those who are acting as trustees for institutions of charity or of learning, or for persons incapable of doing any thing to repair losses that may be sustained by an adverse change in "the standard," take the trouble thus to guard the interests they represent; nor does any tendency appear to an increased resort to this mode of measuring indebtedness.

151. Multiple or Tabular Standard.—It has even been proposed to go further, in the effort to avoid those

undeserved losses which result to debtors or to creditors, as the case may be, from changes which take place in the value of even the precious metals through long periods of time. The scheme for a multiple standard or tabular standard, to form which a great number of articles should be joined together, in order that their individual value-variations may offset each other, with the result of substantial uniformity of value in the mass so composed, was, early in the century, suggested by writers in England and Germany.

CHAPTER IV.

MONEY AND ITS VALUE—*Continued*

DEBASED COIN: SEIGNIORAGE.

152. Debased Coin.—We now approach a question which should be decided entirely upon the principles regulating the value of money already laid down, yet which is the subject of so much misconception, which has been so covered over with false reasoning by authors who, in other departments of political economy, have done excellent work; and which is so sure to arouse prejudice and passion, that it is needful for the teacher to accompany the student of money over the ground, and, if possible, save him from the pitfalls and quagmires into which even trained logicians and practiced writers have fallen.

153. Seigniorage.—The most safe and convenient entrance to this subject is through seigniorage. That term has long been applied to the amount of metal abstracted by government, or the lord, the seignior, before coinage. Seigniorage may be of two kinds, or rather two degrees.

1. When the cost, either actual or approximate, of coinage is taken out, and thus the state or the lord is reimbursed for the expense.

2. When more metal than is necessary to repay the expense of coinage is abstracted, and thus the state or the lord makes a profit by the coinage.

154. Cost of Coinage.—Let us consider the first. Shall the value of the coin be computed according to the market value of the contained metal, viewed as so much bullion, or shall the cost of the mintage be added to the value of the metal? For instance, if the expense of making the coin called a dollar be one cent, shall the coin contain a hundred cents' worth of gold or silver, or shall it contain 99 cents' worth, and the cost of the coinage be added to make up 100 cents?

On this point the opinion of economists and the practice of governments differ. Although the question involved is not wholly economic in its nature, but is in part matter of political and fiscal expediency, we will here briefly state the arguments on the one side and the other.

On the one hand, it is said that gold and silver, being wanted in the form of coins, are, for that reason, worth more in coin than in bullion; that, serving an additional use as coined money, they are the subjects of a demand over and above what exists for uncoined bullion, a larger demand justifying a higher price; that, moreover, to fit them for this use, labor and capital are employed, the cost of which service should appear in the value of the product.

Iron is sold in the form of plates, rivets, rods, and chains, at more than the price of iron in the pig; in the same way, if gold in coin costs more, and is more useful than in ingots, those who want it in the form of coin, and not the whole community, should pay for the coinage.

155. Gratuitous Coinage.—Moreover, it is urged, if

such a charge be not made, a vast amount of metal will alternately be coined and melted down, recoined and again melted; whereas a seigniorage charge will put a premium upon the exportation of coin or its melting down for use in the arts, so that bullion, if it is to be found, will be taken instead, and coin will only be taken when sufficient bullion is not found to supply the demand.

It was in this view that Dudley North called gratuitous coinage,* "a perpetual motion found out, whereby to melt and coin, without ceasing, and so feed goldsmiths and coiners at the public charge."

In the face of these considerations, however, some of the greatest commercial nations, England foremost among them, have maintained gratuitous coinage. Nor is this course wholly without economic justification.

It is said that, while the expense of equipping, officering, and operating a mint is large, the difference in expense caused by minting more or fewer coins, is very small. For this, it is argued, the country establishing gratuitous coinage is compensated by the

* The distinction between gratuitous coinage and free coinage, is not sufficiently observed. Where no seigniorage charge is made, but the coin contains the full amount of bullion which corresponds to its mint value, *i. e.*, when the dollar contains one hundred cents' worth of metal, that is gratuitous coinage. Free coinage exists, where any owner of bullion has the right to have it coined on the same terms as the Government, or as any other citizen, whether with or without a seigniorage charge. Thus free coinage exists in England in regard to gold. Any subject can bring gold, in any amount, to the mint and have it made into gold coin; but free coinage does not exist with respect to silver, that metal being coined only in such amounts as the Government, through the Bank, deems necessary for supplying the people of the Kingdom with "change."

instantaneousness with which the export of gold follows the slightest accumulation in excess of the wants of trade.

156. Seigniorage in Excess of Cost of Coinage.—So much for seigniorage which only covers the cost of coinage. We have now to speak of mint charges which exceed that cost, and become a source of revenue to the state.

In the old days of high prerogative, kings frequently made their sole right of coinage a means of profit. In England, the seigniorage on gold during the reign of Henry VII., once rose to 16 per cent. In France, in Italy, and in most of the countries of continental Europe, before the great revival of modern commerce, debasement of the coin was a favorite resort of weak or profligate monarchs. Both in quantity and quality, in weight and in fineness, the circulating money was pinched and robbed, until the actual amount of pure metal bore sometimes a ludicrously small ratio to the original fine contents of the coin. The English "pound" was once a pound-weight of silver. The pound of standard silver is now coined into 66, instead of 20 shillings. The "pound scots," of which we read, had but $\frac{1}{36}$ of its original weight. The florin and the Spanish maravedi were once pieces of gold. The former is now a piece of silver; the latter a piece of copper.

157. What is the Effect of Seigniorage on the Purchasing Power of Coin?—On this subject I follow Mr. Ricardo without deviation.

Let us suppose that in a certain country are required for the purposes of domestic trade, 1,000,000 pieces, each containing 100 grains of fine gold. This

would involve the use of 100,000,000 grains of gold as money; and a certain average level of prices would result from the relation between this amount (its rate of circulation being assumed constant, for the purposes of the following illustration), and the demand for money arising from the exchanges actually requiring to be effected by the use of money.

Now, suppose the principle of seigniorage to be introduced, the sovereign, out of every hundred grains brought to the mint, taking one to repay the actual cost of coinage, putting into circulation 1,000,000 pieces of 99 grains each, and placing 1,000,000 grains in his storehouse as treasure, or causing it to be manufactured into plate or ornament. There are now only 99,000,000 grains of gold in circulation, but the same number of pieces, *i. e.* 1,000,000, each of the same "mint-value" *i. e.*, 100 grains.

Will each piece now purchase as much of other commodities as before, or less?

We answer, as much. There is the same demand for pieces for the purposes of exchange; there is the same supply; the same prices must result.

But suppose the sovereign proceeds further, and takes not one grain, but ten, from every hundred, issuing 1,000,000 pieces of only 90 grains each. Will the purchasing power of each piece be affected? Not in the least. There is the same demand for pieces, the same supply. People still want pieces of money; can only get them by giving commodities for them; have as many commodities and no fewer to give; and there are just as many pieces and no more to be obtained in this way.

158. Excessive Issues.—But let us take a step in a somewhat different direction. Let us suppose that the sovereign, instead of placing in his treasury the 10,000,000 grains which he took, under his right of seigniorage, coins this gold, also, into pieces of 90 grains each, and pays them out for personal or public expenses. What will be the result? Depreciation will at once begin. The 90,000,000 grains, when coined into the same number of pieces of the same official (mint) denomination as the 100,000,000 had been, retained the same purchasing power; but when the 100,000,000 are coined into a larger number of pieces, *i. e.*, 1,111,111, the purchasing power of each piece at once falls.

159. Ricardo's Statement.—"While the state alone coins," says Mr. Ricardo, "there can be no limit to this charge of seigniorage; for, by limiting the quantity of coin, it can be raised to any conceivable value."

Mr. Ricardo did not flinch from the assumption of a seigniorage of 50 per cent. "There can," he asserted, "exist no depreciation of money, but from excess; however debased a coinage may become, it will preserve its mint value; that is to say, it will pass in circulation for the intrinsic value of the bullion which it ought to contain, provided it be not in too great abundance."

This doctrine, which has proved "a hard saying" to many economists, a stumbling block and a rock of offense to many readers, is, it will be observed, merely the rigorous, courageous application of the principle that the value of money is determined solely by the relation between demand and supply.

160. The Omitted Proviso to Ricardo's Statement.—There is one proviso which should be attached to any statement of Mr. Ricardo's theorem regarding the value of debased coin.

If debasement of the coin be carried so far and carried on so long that a popular reluctance to receive the money pieces be generated, of a strength sufficient to cause men to modify or limit their production in order to avoid exchanges, or to cause them to encounter the inconveniences of barter, rather than handle the distrusted coin, then depreciation may result: that is, the supply of money will become excessive through the blow inflicted upon the demand for money.

161. Depreciation not a Necessary Result of Debasement.—Let us suppose the coin of a country, without being increased in amount, to be debased three per cent., and the fact to become known. The habit of accepting the coin is strong; the acquired momentum of the circulating mass is great; men must either take the coins in exchange for their products, or they must cease to produce; or they must change their industry and produce that which does not need to be exchanged, *i. e.*, that which they will themselves consume; or, lastly, they must resort to barter.

Now, any one of the latter courses involves a great initial loss, greater, doubtless much greater, than any possible loss in receiving coin debased three per cent. For this reason men continue to receive the coin, or, more properly, they continue to receive it without reasoning at all about the matter, having been accustomed from childhood to take it freely

and gladly. And if any man, more thoughtful than his fellows, hesitates to accept the money pieces, his hesitation vanishes on beholding all around him receiving them without demur. That is all he needs. If others will take the coins from him, his own occasions will, in turn, be answered. And so a full and free acceptance of a debased coinage might be established in spite of a momentary feeling of reluctance, or even without such a feeling arising at all.

162. And it is to be borne in mind that this coin circulates at its mint-value, not at a discount. Assuming, as we have done, that the habits of the people in regard to production and trade have not been, as yet, changed by the debasement of the coinage, there are just as many goods to be exchanged as before; just as many money-pieces are, therefore, needed, while no more money-pieces are to be had, since we have all along made the condition that the metal abstracted by the government should not be put into new coins.

163. Depreciation Results from Excessive Issues.— But now let us suppose that, when the debasement has proceeded to the extent of ten per cent., government takes the gold or silver it has abstracted from the coin, and issues it in the form of new coin debased like the other. Immediately depreciation will set in. The value of money, like the value of anything else, is determined by the relation between demand and supply. The goods to be exchanged for money-pieces remaining the same in amount, and the number of pieces having been increased, the purchasing power of each piece falls, irrespective of any popular distrust of the coin.

So far the effect is the same as in the case of an excess of full-metal coin; but, as depreciation proceeds, the essential difference between the two kinds of money appears. With an excess of full-metal coin, exportation begins at once. The country becomes a good market to sell in, a bad market to buy in, both for the same reason, viz., prices are higher there; and the course of exchange will speedily bring in the remedy. With debased coin, however, no outlet is afforded until the depreciation reaches the point when the 90 grains of fine metal in the coin will bring more, abroad, melted down, than the coin (though of the mint-value of 100 grains) will bring at home. Within this limit, depreciation may proceed without remedy.

164. Inflation.—A permanent excess of the circulating money of a country, over that country's distributive share of the money of the commercial world, is called Inflation. Its influence on industry and trade and on the distribution of wealth will be discussed hereafter.

CHAPTER V.

Inconvertible Paper Money.

165. In monetary science, the true entrance to paper money is through seigniorage. If we have rightly apprehended the relations of seigniorage to the circulation of coin, and the effects of seigniorage upon prices, we need have no difficulty in dealing with any question arising under the present title.

"The whole charge for paper money may be considered as seigniorage." This remark of Mr. Ricardo is true and very significant. We have seen that the State may withhold from the coin one per cent. of the pure metal, to cover the cost of coinage; that it may withhold ten per cent., as a means of securing revenue for the treasury, and that such pinching of the coin has been frequently practiced in the ages of high prerogative; that the State may go further and, by successive invasions of the coin, take out one-half or even two-thirds of the money metal, as in the case of the English pound sterling, or all but three per cent., as in the case of the pound Scots; that it may even go further still and substitute copper for gold, as in the case of the Spanish maravedi.

Now let the last step be taken in the same direction, and, instead of pieces of metal, let the public treasury issue pieces of paper bearing the names of

the superseded coins, and we have a body of money governed by precisely the same principles, alike as to circulation and as to the resulting prices of commodities, as a debased coinage, whether debased three per cent. or thirty. Paper money is money upon which the seigniorage charge is one hundred per cent.*

166. The Paper Money States.—Of the present States of Europe, the southern tier, Portugal, Spain, Italy, Greece, Austria, and Turkey, comprising every country that borders the Mediterranean, except France, have inconvertible paper money, issued by government. Russia, though both a northern and a southern State, casts in its lot with the Mediterranean nations in this respect. The northern tier of countries, Great Britain, France, Belgium, Holland, Germany, and Scandinavia, have paper money, indeed, but of that class which we shall describe, under a subsequent title, as Bank Money.

167. Characteristics of Inconvertible Paper Money.—The kind of money of which we are writing may either be issued originally by the State, out of the Treasury, as a fiscal measure, as in the case of the present paper money of most of the southern States of Europe already mentioned, as in the case of the "assignats" and "mandats" of the French revolutionary epoch; as in the case of the "Continental currency" of the American revolution, and of the "Greenbacks" and "Confederate notes" of the war of secession; or it may result from the degeneration of bank money, originally issued with the

* Minus the inconsiderable cost of paper and printing.

character of convertibility, but, by some exigency of government or stress of commercial misfortune, losing that character, as in the case of the English Bank money of the "Restriction" (1797–1821), as in the case of the notes of the Bank of France during the revolution of 1848, and again during the war of 1870–71, with Germany, and for several years thereafter.

Generally speaking, forced circulation is an attribute of this sort of money, though that character may be disguised, especially in the case of degenerated bank money, by one artifice or another, as for instance the money may not be made legal tender, but all remedy at law may be taken away from creditors who refuse to receive it.

Paper may be declared to be redeemable in coin; that promise may even be borne upon the face of the paper; but if provision be not made so that, in fact, every holder of a note can obtain therefor, at will, full-metal coined money, the paper is inconvertible in the economic sense. If any conditions to redemption are interposed, it is none the less inconvertible than if redemption were not even promised.

The pledge of public lands or stocks for ultimate payment, makes no difference, in this respect. No paper money is convertible, the full, immediate and unconditional redemption of which is not, at all times, within the choice of the holder.

168. May Paper Money Serve as the Common Medium of Exchange?—About this there can, I conceive, be no doubt whatever. Take the United States "Greenbacks" of 1862 to 1879. Did not producers accept

them readily in full payment for goods? Yes, with the utmost readiness. Did men resort to barter to avoid the use of this medium of exchange? No. Did men refuse to produce, or contract their production, or modify it, lest they should have to receive those circulating notes in payment for their commodities? Again, no.

169.—May Paper Money Serve as the Value Denominator?—It is at this point that the economists appear to me most deeply in error, insisting, as they do, that here is something that money does, but paper money cannot do.

It was said, in the last chapter, that money, in performing the function now in question, is commonly spoken of as the "Measure of Value."

It was shown that this function is not a separate and independent function of money, but a purely incidental and subordinate function; that not only is any thing which is competent to serve as the general medium of exchange, adequate also to serve as the common denominator of values; but that any thing which does, in fact, serve as the medium of exchange, must, in the very act and part of doing so, create the price-current, which is what is sought under this title.

If corn, beef, wool, potatoes, coal, and all other articles in the market are daily exchanged for that one article—money—no matter of what it consists, or why it became money, we have, as the direct result of those transactions, the means of comparing the values of corn, beef, wool, and all other articles: that is, we have our price current. If all those articles are exchanged against pieces of paper, we ob-

tain their exchanging proportions just as really, just as accurately, just as readily and intelligibly, as when they are exchanged against pieces of gold or silver or copper. If one article brings three pieces of paper, another ten, another eight, we learn the comparative value of those articles as quickly and easily as if the first brought three pieces of silver, the second ten and the third eight.

All that is needed for a value denominator is that each product in the market shall be in turn exchanged against some one article, in order that the value of each and all products shall be expressed in terms of that article, from which it will result directly that the exchanging proportions of the several products become known.

170. May Paper Money Serve as the Standard of Deferred Payments?—That paper money may serve as the standard of deferred payments (usually, but inappropriately, called "the standard of value") goes without saying. As was stated under a previous title, forced circulation is generally an attribute of this sort of money, and where that is the case, such money becomes, by definition, the standard of deferred payments. By it the obligation of the debtor, the claim of the creditor, is measured, as of course.

Even where paper money is not made legal tender, it is almost, if not quite, as likely to become the standard of deferred payments as a money of silver or gold. The tendency to express the consideration of all sales in terms of that which is the current money of daily use, is so strong that few persons, even of those who are acting as trustees, will

take the trouble to make leases, rents, annuities or interest upon loans payable in any thing but the ordinary circulating medium of the time.

During the circulation of the legal-tender greenbacks in the United States, every person who wished to make contracts for future payments in terms of gold or silver, was at liberty to do so; yet it is notorious that very few took advantage of their legal right in this respect. That which had become, no matter how, the current money of daily use became, for that reason alone, the almost universal standard of deferred payments.

It is quite another question whether paper money performs this function well, with justice to debtor and creditor, or with advantage to the general community. That question we shall meet further on.

171.—What Determines the Value of Paper Money? —What determines the value of any kind of money? What determines the value of any thing? Demand and supply. The demand for money is, as we saw, the amount of money-work to be done, the amount of exchanging requiring to be effected through the use of money. The supply of money is the money-force available to do the money-work, compounded of the volume of the circulating money, and the rate of circulation. Supposing the occasion for the use of money—the demand—to remain the same, and the rate of the circulation of paper to be the same as that of metal, the value of a body of paper money would be the same as that of a body of money consisting of as many pieces of metal as there were pieces of paper, the pieces being of the same "denom-

inations," whether stamped by the mint-press or the printing-press.

We said: "Supposing the occasion for the use of money—the demand—to remain the same." Will the demand for money be affected by the substitution of paper for metal? The popular opinion undoubtedly is, as often expressed by pamphleteers and uninformed writers on the subject of money, that the mere fact of the emission of inconvertible paper, of itself, produces discredit, so that such money, irrespective of any excess of issue, at once becomes distrusted and avoided, and, in consequence the demand is diminished and depreciation ensues.

172. Depreciation not a necessary consequence of Inconvertibility.—The opinion above stated is, however, unfounded. We saw (par. 161) that depreciation was not a necessary result of debasement of the coin. Not only will the same line of reasoning establish the proposition that depreciation is not a necessary result of the issue of inconvertible paper; but historical instances, not a few, exist of such paper money maintaining itself for a time in circulation without discredit and without depreciation.

173. Inconvertible Paper always issued as Cheap Money.—The moving cause in the issue of inconvertible paper money in any country where it has been known, has been its cheapness, as compared with the metal money which it has replaced. Whatever excellencies may have been reflectively discovered in such money after it had come into circulation, I am not aware that the institution of such money has been due, in any individual instance, to any

other virtual reason than that which has been expressed.

We saw that the sovereign first pinched the coin, say, one per cent., under the name of seigniorage, to meet the cost of coinage, and then, finding the opportunity too tempting, took out it might be five, it might be fifteen per cent., or even more, for his own benefit. The issue of paper money is, in effect, the exaction of a seigniorage of one hundred per cent. At times, that exaction has been made in cold blood, at the dictate of avarice; at times, and indeed, more often, the exaction has appeared to be justified, if not sanctified* by some great exigency of national life.

174. Without any such stress of fiscal necessities as those caused by war, paper money has been frequently issued by governments as a fiscal resource, to enable public works to be created, to meet an unexpected deficiency of revenue, or even, as in the case of some of the early American colonies, to set bounties on manufactures or the fisheries. There is always a great temptation, to statesmen and to people alike, in times of emergency, in the knowledge

* Hence the phrase "the blood-stained Greenbacks." Lest I should be misunderstood, let me say that it is my firm belief that the issue of inconvertible paper money is never a sound measure of finance, no matter what the stress of the national exigency may be. I believe it to be as surely a mistaken policy as the resort of an athlete to the brandy bottle. It means mischief always. If there is ever a time when a nation needs its full collected vigor, with a steady pulse, a calm outlook, a hand and a brain undisturbed by the fumes of this alcohol of commerce—paper money—it is when called to do battle for its life with superior force. It is to my mind the highest proof ever afforded of the supreme intellectual greatness of Napoleon, that during twenty years of continuous war, often single handed against half the powers of Europe, he never was once driven to this desperate and delusive resort.

that it is possible to replace a money of high cost by a money of low cost, of cost, indeed, so small that it may be called, no cost.

175. Is it Really Cheap Money?—That depends on whether it be good money or not. The money function is so important, so vital, in the industrial system, as we have seen it, and still more as we shall see it, that there can be no true economy in any money but the very best. If the first cost of money can, indeed, be saved, in whole or in part, without loss of efficiency or safety, that course is unmistakably dictated by the same law of the human mind which impels the individual to go to his object by the shortest path, or to buy in the cheapest and sell in the dearest market.

176. Is it, then, Good Money?—I know of nothing in the history of inconvertible paper money to indicate that such money, when issued, *e. g.*, of a denominative value not to exceed, at any rate not greatly to exceed, the mint-value of the coin which would have circulated in the community under the law for the territorial distribution of money which has been stated, may not serve as the general medium of exchange, so far as the internal trade of a country is concerned, in every way as satisfactorily as the coin itself.

Moreover, it has, I think, been sufficiently shown that whatever acts as the general medium of exchange in the very act of doing this performs the function of a common denominator of values, furnishing a price-current in which the values of all commodities are expressed in terms of that one article, thus enabling comparison of prices to be readily

and confidently made as between any two or more commodities.

177. Inconvertible Paper Money as the Standard of Deferred Payments.—In the fact that this money has no natural cost of production corresponding at all to its value, lies the possibility, not merely of gross injustice as between individuals and classes of the community, which is not an economic consideration, but also of grave industrial evils, and even of industrial disasters of the most appalling character.

The expense of printing a dollar bill is so small, in comparison with its denominational value, that, for purposes of economic reasoning, it may be disregarded altogether, while the expense of printing a ten-dollar bill or a hundred-dollar bill or a thousand-dollar bill is no greater. The limitation of supply in the case of such money, must, therefore, be left to law, convention or accident. The quantity may be trebled, decupled, or centupled by the operations of the printing press, faster even than the bills can be paid out over the counters of the treasury.

178.—Domestic Effects of Inflation.—The value of money depending, as has been shown, upon the relation of supply to demand, an increase of issues implies a loss of value in each given quantity of money. This involves a corresponding loss to creditors, and a corresponding gain to debtors. This result being brought about by legislation or by the act of the prince, is properly termed confiscation. Such a measure at once becomes a highly destructive force within the field of industry, dealing a grievous blow at the instincts of frugality in the individual,

and at the organization of the industrial body for the purposes of production and exchange.

A single injury like this might in time be recovered from; but if new fiscal exigencies of the government, or the wolfish howls of the debtor class around the doors of the legislature draw out other issues of inconvertible paper, not only will the value of the money continue to sink, through excess of supply, but another cause will begin to work in the same direction. The money demand will receive a shock such as has been described in par. 160, which may operate slowly and continuously, or may produce a sudden collapse of the circulation.

Such are the possibilities attending the issue of paper money by government. It may be asked what are the probabilities of the case? As we have here reached the limit of strictly economic inquiry, I prefer to postpone our answer to this inquiry to Part VI., where, under the title "Political Money," the subject will be briefly treated in its political and historical aspects.

179.—Inconvertible Paper Money and Foreign Exchanges.—But before we leave the topic of inconvertible paper money, we have to view another phase, viz., its relation to International Exchanges. Thus far we have spoken of the issue of paper money by government, only in its effects upon domestic trade and production.

By the mere fact of the adoption of this kind of money, a country loses all the advantages of an automatic regulation of the money supply through the normal movements of trade. Paper money finds no outlet in international commerce. It cannot be

exported and retain its value. Hence its regulation becomes purely mechanical. Having no natural cost of production, it will not, in excess in any country, flow away in obedience to the law which governs the distribution of a money having acceptance abroad equally as at home; but, if issued in excess, it can only be removed by being pumped out by the same force which originally issued it.

Even where the excess of such paper money, over what would have been that country's distributive share of the world's money, be not enough to produce grave disturbances of domestic industry, the effect on foreign trade will yet be momentous. The immediate result of any excess must be to establish a premium upon that metallic money in which alone foreign balances can be paid.

During the German war, and for some years after, viz., from 1871–1877, the notes of the bank of France were inconvertible; yet such was the sagacity and prudence of the directors of that institution that at no time was there any considerable discount on that money, the premium on gold being often but a small fraction of one per cent. Yet, slight as was the disturbance of the domestic circulation thereby produced, Mr. Bagehot in his standard work, Lombard Street, written during the period of suspension, attributes to it the most momentous consequences.

"The note of the bank of France," he says, "has not, indeed, been depreciated enough to disorder ordinary transactions. But any depreciation, however small, *even the liability to depreciation, without its reality*, is enough to disorder exchange transactions. They are calculated to such an ex-

tremity of fineness, that the change of a decimal may be fatal, may turn a profit into a loss. Accordingly London has become the sole great settling house of exchange transactions in Europe, instead of being, as formerly, one of two."

CHAPTER VI.

Bank Money.

180. The Characteristics of Bank Money.—To secure the superior convenience of paper money, and, in a degree, also, its cheapness, as contrasted with money of metal, while retaining the comparative stability of value which characterises the latter, and to keep the local circulation in such close communication with the general circulation of commerce as to insure the automatic regulation of the money supply, bank money has been invented.

The essential characteristic of such money is that the paper is instantly convertible, on the demand of the holder, into coined money. Whenever, by the unrebuked and unpunished lapse of the banks issuing paper money, as so frequently in the early history of the United States, or by the action of government, the money so issued fails to be convertible to the full extent indicated, even by only so much as the interposition of a condition to payment, or of delay in payment, it becomes inconvertible paper money. Nothing entitles paper money to be called bank money except full, instant, unconditional redemption in coin. There is no stopping place between this condition and that of inconvertibility.

Generally speaking, this sort of money is issued by institutions which, whether under State patronage or not, are so far disconnected from the government that their officers and agents can be sued in courts, and their assets and effects be attached for the recovery of the amount promised by the bank notes to be paid on demand.

181. The Origin of Bank Money.—Bank money was first issued in Sweden, in 1658. The Bank of Scotland issued £1 notes as early as 1704, while the Bank of England did not issue notes below £20 prior to 1759. The issue of bank money, proper, did not begin in America until after the Revolution, although nearly every colony had been, at one period or another, deluged with inconvertible paper money, under nearly every conceivable variety of form and of pretense. The great bank money countries of to-day are the United States and the States of North-western Europe.

182. The Coin Basis of Bank Money.—We have said that, in addition to the superior convenience of bank money over coin, the motive for issue is found in its comparative cheapness. Banking experience has shown that a much larger denominative amount of notes can be kept in circulation than is held of specie for redemption.

On all this excess, the issuer of the notes derives a profit which is measured by the rate of interest on his loans, after deduction is made of the expense of maintaining the service. The metal thus displaced from circulation is exported, or melted down for use in the arts.

The advantage to the community of this saving in the cost of the money used in effecting exchanges, is thus conceived by Adam Smith:

"The gold and silver money which circulates in any country may very properly be compared to a highway, which, while it circulates and carries to market all the grain and corn of the country, produces itself not a single pile of either. The judicious operations of banking, by providing, if I may be allowed so violent a metaphor, a sort of wagon-way through the air, enables the country to convert, as it were, a great part of its highways into good pastures and cornfields, and thereby to increase very considerably the annual produce of its land and labor."

183. The Proportion of Specie to Notes.—The amount of saving effected by the introduction of bank money varies, in the first instance, according to the proportion of coin, or "specie," as it is commonly called, which has to be reserved to meet demands for the redemption of the notes: to serve, that is, as the basis of the circulation.

That proportion is different in different countries, and often in different banks in the same country. The most common legal minimum reserve is one-third.

Before the war of secession, the banks of the United States held an absurdly small amount of specie, the proportion in some States falling to ten, five, or even three per cent. But the so-called bank money of many of the States of the American Union, during certain periods in the early history of the nation, was really nothing but inconvertible money,

hardly the pretense of redemption being maintained.*

184. The Theory of Bank Money.—The view of the operations of bank money which is held by the great majority of writers of repute, in nearly all countries, is that, when really and fully convertible into coin on demand; with all reasonable facilities existing for redemption, and with redemption actually taking place from time to time; with a public opinion which does not allow to be questioned the right of any man any where, for any reason or for no reason, to require coin, for any and all notes he may hold; and with exemplary penalties,† provided by law and enforced by the courts, for the first failure or the slightest delay on the part of banks to make good their promises, such money acts in

---

* Mr. Condy Raguet thus describes the action of American banks when in a state of suspension:

"Banks, when they default in their payments, not only never ask the indulgence of their creditors for any specified extension of time, but they do not even think themselves under obligation to pay interest to the creditors for the funds they forcibly detain from them; nay, they frequently, in the midst of their insolvency, *declare dividends* of the very profits which actually belong to their creditors."

† "By convertibility of the paper," says Mr. Tooke, "according to the ordinary signification of the term when applied to bank notes in this country (England), is meant that the holder of a promissory note—payable on demand—may require payment in coin of a certain weight and fineness, and in the event of refusal or demur, such payment is enforced by law against the issuer, to the utmost extent of his property. *The issuer, whether a private or joint stock banker, is considered to have failed.* The circulation of his notes is at an end, and he is subject to the process usual in cases of insolvency."—[History of Prices.] Compare this with the state of things disclosed by Mr. Raguet in the foot-note last preceding.

all respects precisely as would a body of money composed wholly of coin of full mint-value. It is held to be subject to the law which governs the territorial distribution of money consisting of the precious metals only; and to have every economic virtue which belongs to such money, with the added advantage of greater cheapness and greater convenience in use.

"We are willing," says Mr. Tooke, the great leader of the school of economists known as the advocates of the "Banking Principle," whose theory of bank money I have stated, "we are willing to consider a metallic currency as the type of that to which a mixed circulation of coin and paper ought to conform. But, further, we contend that it has so conformed, and must so conform, while the paper is strictly convertible."

185. An Opposing View of Bank Money.—The view of bank money which has been stated in the foregoing paragraph is undoubtedly that which is held by a decided majority of writers of reputation in monetary science. An opposite opinion was long maintained by a school of economists in England, comprising the advocates of the so-called "Currency Principle," the leader of the school being Lord Overstone.

In the view of this school, something more than sound banking is needed to give a country good bank-money. If numerous, competing banks are left free to issue notes in such quantity and of such denominations as their own interests may dictate, with such specie reserves as their own prudence alone may suggest, there will always be the prob-

ability and often an extreme danger of over-issue, a body of bank money so composed not being amenable wholly to the law of distribution which governs metal money, but possessing the capability of temporary and local inflation, producing for a time, and in a degree, the effects of inconvertible paper money.

In 1844 the economists of this school triumphed in the enactment of the Bank Act of that year,* which still governs the note-circulation of England.

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.

186. The Currency Principle vs. the Banking Principle.—The question whether a body of money composed partly of coin and partly of bank notes fully

---

* 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-fourth may be silver. [This, in consideration of the commercial and political relations of England with India, which has silver money.]

2d. 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.

3d. 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.

convertible into coin, with all which that implies, as stated in par. 184, 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 predicated on such excess, 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 and the severest penalties for a failure to redeem notes, upon demand, the capability of local and temporary inflation, as that term is defined in par. 164; but the arguments on the two sides of the question are so evenly balanced, and the statistical evidence adduced to support the one or the other 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 in Europe is against the view which I hold.

CHAPTER VII.

The Reaction of Exchange upon Production.

187. 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, which become more and more serious as production becomes more and more extended and complicated.

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

188.—It is evident that, were there no division of labor into separate occupations, the relation between production and consumption would be a very simple one. 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 development.

189. The First Stage.—The first is where distinction of trades is introduced, and men no longer con-

sume 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; or, if goods are produced in advance of an order, the kinds are few, the forms are simple, the styles standard, and there is generally 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, there is not much liability to a misunderstanding between producer and consumer.

190. The Intermediate 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.

Yet it is still true that production is mainly carried on by artisans working singly or in groups. Tools and implements are still simple and inexpensive; there is little of "plant" or fixed capital; while of the products we may say that 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 much higher degree than under the former conditions described; yet 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 and offered at fairly remunerative prices, will find a market.

191. The Final Stage.—The third stage is reached, when increasing facilities of communication make the whole world one trading community; when 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; when luxury and refinement of living are carried to the maximum, so that not only are the classes of goods produced almost indefinitely multiplied, but fashions and modes enter till standard styles almost disappear, each season bringing minute modifications of demand.

It will readily 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.

192. 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.

But the loss which we had chiefly in view in be-

ginning this chapter, 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, but 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.

193. So frequently during the past hundred years have trade and industry made this weary round, that writers on finance have undertaken to establish the law of the periodicity of panics and hard times; and many men of business entertain the notion, not only that such disasters must come, but that they must come about so often.

However this may be, 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 or of partially suspended activity, and a state of highly animated, excited, almost convulsive exertion.

194. It is evident that this is not an order of things under which the largest production of wealth takes place. Each extreme involves 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; while the long, dull spell of inactivity that succeeds is not given wholly to the recuperation of exhausted energies, the re-

newal of stocks of materials, the repair of machinery and plant; what is more than this, it is not even a waste of time, merely, involving a proportional loss of productive power; it becomes itself a cause of waste and 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.

195. "Hard Times."—There is one industrial phenomenon of very great significance in respect to our question, why the actual production of a community comes so far short of its productive capability, and that is, the long continuance of the periods of industrial depression and of restricted production.

It will readily appear that, after a so-called panic or crisis, the agencies of trade and industry will require time to refit; that the track must be cleared of the wreck, and 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 wreckage of a panic. "Hard Times" are protracted long after the capital power and the labor power of the community are, considered from a merely material point of view, in condition to resume their interrupted functions.

After the panic of 1873 in the United States industry did not revive, to reach any thing like its former proportions, until 1878 or 1879. During all that period vast amounts of labor power and capital power remained unproductive. Hundreds of thou-

sands of laborers were unemployed ; and even greater numbers were employed only on half or three-quarters time. Hundreds of furnaces were out of blast ; thousands of water wheels ceased to turn ; thousands of engines stood still.

Yet, during all this time, all 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, yes, heartily desirous to work. All this time all these owners of capital were ready to secure a return for their investments, if they could find opportunity ; all these 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, perhaps would say, could not work? What was the force that kept all these laboring men, all these water wheels and engines, all these capable conductors of business, idle during so long a time, so much against their interest and their wishes?

196. An Explanation Offered.—We have seen that, as society makes progress towards a minuter organization of industry, productive capability is enhanced, but that, coincidently, at each stage, the opportunities for misunderstanding between the body of pro ducers and the body of consumers are greatly multiplied, while labor power and capital power fall more and more under the control of men of exceptional abilities for the conduct of business, 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.

197. The Shock.—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 attack 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 power of the community, as a whole. At once the consumption of those articles which are least essential to comfort and decency is, in greater or less degree, checked.

198. The Necessary Effect.—It is evident that, were the community perfectly intelligent and self-possessed, the ultimate result of this would be the distribution of the whole initial shock over the entire producing body. No addition would be made to the force of the shock as the movement proceeded, and the effect upon each successive group of producers reached would be less and less. Those producing articles the most essential to life, health and social decency would suffer to hardly an appreciable extent, as the wave set in motion by the rock thrown into the center of the lake becomes the merest ripple against the shore.

This is all that is necessarily involved in the propagation, through economic media of perfect elas-

ticity, of an original blow like that assumed; and, in fact, industrial injuries are at times distributed in this way throughout the producing body, without panic, without apprehension, even without observation.

199. The Possible Effect.—Let, however, the shock but be sharp and severe, and communicated in some peculiarly startling form, and let it occur when the public mind is in an anxious, apprehensive mood, or when the commercial body is unstrung by political or social disturbances; and we may see the impulse propagated with ever-increasing force, from subject to subject, till the movement acquires fearful violence.

A manufacturer feels the demand for his goods fall off somewhat. In ordinary times, he would receive the fact as an intimation to reduce his production; but only to a corresponding extent. Indeed, in good times he would receive that intimation in a somewhat skeptical spirit. He would not be disposed to believe that any serious check was to be experienced. He would look to see trade start up again at the opening of the next season, and, in this mood, would reduce his production somewhat less than correspondingly. To that extent, he would speculate: that is, he would anticipate events and discount the future. For the moment, then, he would transmit the shock, not aggravated but mitigated.

But let the shock, as we said, be at first very severe, and let it come upon the public mind in a suspicious mood, and the matter will take another turn. The merchant feels the demand for his goods fall

off abruptly. He fears there is more to come. He is determined not to be caught with a large stock on his hands, and, therefore, in his orders to the manufacturer, he exaggerates the natural and proper effect of the change in the market. The manufacturer, on his part, knows nothing directly of the actual falling off in demand. He only learns it as it comes to him heightened by the apprehensions of the merchant. In his turn, he exaggerates the evil and reduces his production more than proportionally. His anxiety now is, not to make a profit; but to avoid loss. He knows he will be safe if he runs his mill on half or three-quarters time; he rightfully fears that he may suffer severely if he runs full-time.

200. How Far May This be Carried?—Two questions arise upon this view of the power of apprehension and suspicion to aggravate the force of any industrial or financial shock in checking production. The first: how far may it be carried? the second, how long may it last?

May the movement to check production proceed until all industry is locked fast in "a vicious circle": no one producing, because others will not consume, while no one is able to consume the products of others because he himself produces nothing with which to buy them?

I answer, no. The staple industries, especially those yielding the absolute necessaries of life, will never be suspended. The demand for their products is so constant and certain that panic has little power over them. These, therefore, continue to produce nearly as much as before; not, indeed, quite so

much, because there will be individuals thrown out of employment who are unable to find a new place where they can produce enough to purchase even the barest subsistence. Other groups, moreover, having to do with articles essential to comfort and social decency, will withstand the shock communicated to them sufficiently to maintain a production not very far below that of good times.

Now, so long as the former produce liberally, and the latter still produce considerably, all persons employed within those groups will have the means of purchasing freely the products of industries further down the list; and so production will be kept alive, though but just alive, it may be, in those industries which produce articles not essential to life, or health, or decency.

201. How Long May Such a Condition Last?—I answer: in theory, it may last indefinitely. Practically, it is liable to be terminated, after a longer or shorter period of suspense, by reviving courage and enterprise on the part of men of affairs, or through the stimulus to production administered from, it may be, some unexpected quarter. It may be so slowly as to be almost imperceptible; it may be so rapidly as to outrun calculation, that the expansion takes place. This will depend much on the natural temper of the community; much on the immediate cause provoking renewed enterprise; much on accident.

The one essential condition is that speculation be initiated, that is, that men begin to look ahead, to anticipate demand, and to discount the future.

One man begins to produce, no longer on orders,

no longer cautiously and fearfully, as if it were too much to believe that his goods will be taken off his hands, but in a more sanguine spirit, assuming the initiative in production and boldly encountering its risks.

Producing more largely, his workmen have more to offer for the products of other industries, which is of itself a reason for a larger production in these branches, whose managers and proprietors respond in the same spirit. Finding the demand increasing, they act as if they believed it was about to increase still further. They produce somewhat in anticipation, and thus give their hands more to offer in exchange for the products of still other industries; and so the movement proceeds, gathering force as it goes, and production swells continually under the contagious influence of hope and courage, just as before it shrank and shriveled under the breath of fear and panic.

PART IV.

DISTRIBUTION.

CHAPTER I.

The Parties to the Distribution of Wealth.

202. Distribution as a Department of Political Economy.—Under the title, Distribution, we inquire, what are the forces which divide wealth among the several persons, or classes of persons, who have taken part in its production?

In a primitive condition of society, the problem of distribution is a simple one. Three hunters join in an expedition, and at the conclusion of the day's or the week's chase, divide their game into three equal parts. If boys or cripples, or men of less than ordinary force or skill, are taken into the partnership, it is easily determined what portion of a full man's share each such person shall receive.

In a highly organized community, however, the division of the product of industry into shares corresponding to the number of persons who have taken part in production, is a very complicated problem.

203. The Division of the Web of Cloth.—For example, let us take the case of a cotton factory, at Lawrence, which produces in a given time a million yards of cloth. We may suppose that this is all woven in one piece, and that each person who has,

in any way, contributed to the making of this giant web, advances in a certain order to receive his share.

The agent for the water company first appears, and cuts off some thousands of yards. Then comes the owner of the land on which the mill is built, and carries off, perhaps, a piece five times as large ; next, the owner of the mill, who takes the largest piece of all ; next, the man who gave the use of the machinery and loaned the working capital, and now measures off so many miles of the cloth as his share.

So far, all has gone smoothly. Though the manufacturer has stood by and seen the fearful inroads made upon the web by the successive claimants, little has been said, and that, in a low tone and in a very business-like way. Some reason is known to him why each of these persons should receive so much and no less ; some calculation which he is able rapidly to make maintains a complete understanding between him and them.

Now, however, the scene changes ; there remain but two parties as claimants to the six or seven hundred thousand yards that are left. On the one side stand a crowd composed of persons engaged in the mill as overseers, as clerks, as mechanics, as laborers, as "operatives," in all, some hundreds of men, women and children, of varying degrees of strength, skill and intelligence ; on the other side, stands the manufacturer. All that these do not take, will be his ; and as piece after piece is rapidly cut off, he seems to fear that not enough will remain for him, while each of them appears disaffected that his own

share is not larger, deeming it especially a hardship that after he and his comrades are served, so much will be left to the manufacturer.

At last the manufacturer is left with his share. If it has been a good season, and all has gone well; if the cotton has turned out of good quality, well prepared and baled in Mississippi; if the weather has been propitious, with just enough of heat and of moisture for the quickest and most uniform spinning; if there have been no floods in the river, and no low water, the roll of cloth which the manufacturer will carry back into the warehouse will be large, and his face will wear a contented look. If, on the other hand, any one of a dozen untoward accidents, reasonably to be apprehended, has occurred, his share will be less, perhaps little.

204. Why is it?—It is under the present title that we are to inquire why it is that each of these claimants on the product of the cotton factory takes so much and takes no more. Of course, in the immediate instance that reason is found in the force of contract. All the other parties had agreed with the manufacturer to allow him the use of their property, or to render him their services, at certain rates. But why did they contract at those rates, and not at higher; and why will they, as they probably will, immediately proceed to make new contracts, at the same, perhaps lower rates?

Why, in particular, is it that the division of the product is effected with so little of friction or complaint, so quickly, and with so good a mutual understanding, as between the manufacturer and the water company, the owner of the ground, the owner

of the mill, the owner of the machinery and the working capital; while, between the manufacturer and the "hands" there is so much of dissatisfaction and jealousy, of complaint and irritation?

205. Distinction between the Exchange of Services and of Commodities.—Among those writers who have defined political economy as the Science of Exchanges, distribution is not recognized as a separate department of inquiry, involving principles peculiar to itself. These writers find that the subjects of exchange are, broadly speaking, two, viz., services and commodities, or, labor and the products of past labor. To carry forward this distinction is not consistent with the simplicity of the science which these writers have in contemplation. The difficulty is soon resolved. By analysis they discover that commodities are, after all, nothing but services which have taken-on a material form, and thereafter they speak only of services. This effected, it follows that the distinction between the Distribution and the Exchange of wealth falls to the ground. There is no longer any need for the former term in political economy.

206. This View a Mistake.—"During the present century," says the Duke of Argyle, in his Reign of Law, "two great discoveries have been made in the science of government: the one is the immense advantage of abolishing restrictions upon trade; the other is the absolute necessity of imposing restrictions upon labor."

I quote this passage, here, only to call attention to the clear, strong antithesis in which this eminent philosophical statesman places services and commod-

ities. His statement does not exaggerate the general and still growing consent of social philosophers and legislators, that the rendering of services differs so widely from the exchange of commodities that the two must stand in very different relations to legislation. More and more fully has this distinction come to be recognized.

Equally against the pressure of enormous vested interests, and against the protests of professional political economists, the legislation of almost every enlightened country has progressed by steady steps, through the last sixty, forty, and especially during the last twenty years, in the direction of discriminating vitally between commodities and services, allowing continually greater and greater freedom of contract in respect to the former, and bringing the contracts which involve the latter more and more completely under the authority and supervision of the State.

207. A Contest, though not a Destructive Contest.— It will be noted that the distribution of the product of industry involves what may be termed a perpetual contest between the parties to production. This contest is not a destructive one, since the interest of each of the participants requires the existence, and, by consequence, the sustentation, of all the others. Yet, within the limits which are consistent with this, there is opposition of interests, since what one gets the other cannot have ; and there is not unlikely to arise antagonism in the methods of action of any two or more parties, seeking their separate interests.

208. The Parties to the Distribution of Wealth.— This contest is, in the last analysis, between individ-

uals. The real or supposed common interests of a number of producers may create a supposed class interest which will lead them to act in concert; but, as a rule, the efforts of individuals are directed to a personal benefit. Inasmuch, however, as it would be impossible to work out the problem of distribution with reference to each man, woman and child of any considerable community, we may aggregate individuals, according to what they have in common, into classes, larger or smaller, and may seek for the general law which governs the efforts of the members of each class towards the acquisition of wealth.

209. Classes in Distribution.—Even if we disregard petty distinctions and inconsiderable exceptions, the prime classes appearing in distribution will vary in different countries. A classification which would fully meet the facts of industrial organization in India, would omit distinctions of prime importance in England.

We will consider for our present purpose the industrial organization of England. We take this, because it is the most highly developed organization known to industry; because it is largely reproduced in the United States and on the continent of Europe, and in Canada and Australia, and is every where, among progressive peoples, more and more widely extending from year to year; and also because it will be easier for the reader to work out for himself the problem of distribution in countries of lower organization, after considering how wealth is apportioned among its producers in England, than to go from the simpler to the more complex forms of industrial life.

Under the industrial system which we have taken for the purposes of the present discussion, we have four classes of claimants upon the product of industry, and that product is accordingly divided into four grand shares. These classes and the shares respectively received by them may be expressed as follows:

1. The landlord, receiving rent.
2. The capitalist, receiving interest.
3. The employer, or entrepreneur, receiving profits.
4. The employed laborer, receiving wages.

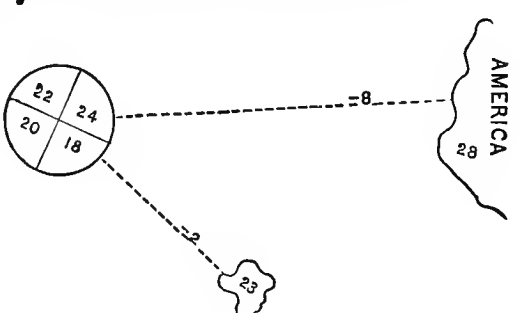
The reasons for naming these several claimants in the order just given, will appear as we make progress in the discussion of the forces which effect the distribution of wealth.

CHAPTER II.

RENT.

210. Definition of Rent.—Rent is the term applied to the remuneration received by the land-owning class for the use of the native and indestructible powers of the soil, or, as it might be expressed, for the use of natural agents.

The term land, or natural agents, must be understood to include not only arable land, but pasture, timber lands, mineral deposits, water privileges and building sites. For the present discussion, however, it will be best to take our illustrations from the occupancy and cultivation of arable land.



211. The Origin of Rent Illustrated.—Let us suppose a community, isolated from all others, to occupy a circular tract of land divided as in the above diagram, into four sectors equal in extent but so

differing in fertility that one piece will, with so many days' labor in the year given to plowing, cultivating and harvesting, yield 24 bushels of wheat per acre, while the second will yield, with the same amount of labor, but 22 bushels, the third but 20 bushels, and the fourth but 18. Now the assumption we have made as to differing degrees of fertility in the soil of the several tracts is not an extravagant one. "A quarter of wheat," says Mr. McCulloch, "may be raised in Kent, or Essex, or in the Carse of Gowrie, for a fourth or fifth part, perhaps, of the expense necessary to raise it on the worst soils under cultivation in the least fertile parts of the kingdom."

In order to further simplify the problem, we will suppose that all the inhabitants of this community reside in a village at the center.

212. The Ante-Rent Stage of Cultivation.—Let the first case taken be when the village is yet so small that all the wheat required for the subsistence of the population can be raised upon a portion only of what we will call the 24-bushel tract. If that tract be held by a number of competing owners, each acting for himself, seeking his individual interest, no rent will be paid, or only a rent so small that for purposes of economic reasoning we may disregard it wholly. Each owner of land in this tract will be desirous of securing for himself whatever compensation, if any, is to be paid for the use of land. But as the entire tract is not required for cultivation, and, as, consequently, only a part of the owners can receive any compensation for their land, an active competition will set in, each man offering the use of

his land for less and less, in order to get something, until rent falls to a minimum, or disappears altogether.

213. Relation of Waste to Rent.—And it is here we see the significance of the word, "indestructible," which we used, a page or so back, in speaking of the "native and indestructible powers of the soil." All scientific reasoning about rent is based on the assumption that the owner is to receive it back unimpaired as a productive agent. Now, it is always possible for a tenant to impair the fertility of land, first, by intentional abuse, or, secondly, by taking away its productive essences, in the crops of successive years, without returning anything to it in the shape of manures or other fertilizers.

It is only upon the above assumption that it would be true that each owner of land in the twenty-four bushel tract would prefer to lease it for a very small rent, approaching nothing, rather than not lease it at all. Unless he could be protected, by law or contract, against waste by the tenant, he might prefer to let his land go unoccupied.

214. Rent Emerges.—Let us now advance to the second stage. We will suppose that the population of the village has increased to such an extent that the whole of the twenty-four bushel tract will no longer raise, when cultivated as it has heretofore been, all the wheat required for the subsistence of the community. Cultivation will then be driven down to an inferior grade of soils. A part of the second tract, the twenty-two bushel tract, will be taken up.

Do you ask, why not increase the amount of labor upon the twenty-four bushel tract, and so raise more

wheat to the acre, until the wants of the community are satisfied? I answer, because of the great fact of Diminishing Returns in Agriculture. In every country of the world, and in every parish or township of every country, cultivation is seen descending to the grades of soils below the best, because the yield from the highest grades cannot be increased proportionally to an increase of labor expended thereon.

Cultivation having been driven down to the twenty-two bushel tract, rent will now be paid for the twenty-four bushel tract, and for each portion of it. Why? Because any person desiring to raise wheat may better pay something for cultivating a portion of that tract, than cultivate a portion of the new lands for nothing.

How much will he pay? Exactly the difference between the crops to be grown on the two soils, with the same application of labor, *i. e.*, two bushels, since he can afford to pay this rent rather than move to the less productive soil; and as some must so move, the landlord will be able to exact the maximum rent from the present cultivator: if not, from some other.

215. The Effect of Increasing Population.—Let us now advance another stage, and suppose the increase of population to require the cultivation of the twenty-bushel tract. The effect of this downward movement of the limit of cultivation will be twofold:

First, the twenty-two bushel tract will begin to bear a rent, since any cultivator can better afford to pay a certain rent for the privilege than occupy a

portion of the new land for nothing. The amount of that rent will be determined by the difference in productiveness between the two tracts, being, in the case supposed, two bushels, an acre.

Secondly, the tract first cultivated now brings its owner a rent (24—20=4), not of two bushels, but of four. It is no better land than it was before; it produces no more wheat under the same application of labor and capital; yet it yields its owner a rent twice as great as before cultivation descended to the third grade of soils; and that increase of rent takes place simply and solely because cultivation has so descended.

And if, again, we suppose that the increasing needs of the community require the cultivation of the eighteen-bushel tract, even the twenty-bushel tract will begin to bear a rent, viz., two bushels, an acre, while the rent of the next tract upon the scale of productiveness will rise to four bushels, and that of the most productive land to six bushels, or three times the original amount.

216. The Law of Rent.—If we have correctly traced the course of self-interest, in dealing with the occupation of land, under the necessity of a resort to inferior soils for the sustentation of the community we are prepared to state the law of rent:

1. Rent arises out of differences existing in the productiveness of different soils under cultivation at the same time, for the purpose of supplying the same market.

2. The amount of rent is determined by the degree of those differences. Specifically, the rent of any piece of land is determined by the difference between

its annual yield and that of the least productive land actually cultivated for the supply of the same market, under equal applications of labor and capital, it being assumed that the quality of the land as a productive agent is, in neither case, impaired or improved by such cultivation.

217. Cost of Transportation.—By productiveness throughout the foregoing discussion has been intended net productiveness, the cost of transportation to market being first deducted.

In the illustration as thus far given, the cost of transportation has been left out of account. Let us now, however, suppose a tract to be brought under cultivation for the purpose of supplying this market, situated at so great a distance as to make the cost of transportation a considerable element in the problem of rent.

If the reader will recur to the diagram he will see that we have marked out a tract, at some distance from our village, the path thereto bearing the legend—2, by which we have intended to signify that the cattle and men taking the grain to market will eat, going and returning, two bushels out of the produce of each acre. The net productiveness of the tract will then be, for the purpose of determining its rental, not 23 bushels, but 21. It will not be cultivated until after the first two tracts have been completely occupied. It will then be cultivated, but will bear no rent so long as its produce, combined with that of those two tracts, suffices for the sustentation of the community. But when the increasing needs of population drive cultivation down to the 20-bushel tract, the tract in question

will bear a rent of one bushel, which will rise to three, when cultivation seeks the 18-bushel tract.

218. A New Continent.—The reader will further note that we have connected the same community with the projecting edge of a continent, which we have named America, by a dotted line, to which we have attached the sign and figure—8, by which we intend to represent that portion of the crop of the year which is given to railway companies and the owners of vessels for transporting the grain to the English market. The net produce of these lands is, then, 20 bushels. Though they actually yield 28 bushels to the acre, with the given application of labor, they will bear no rent till the 18 bushel tract of English land is brought under cultivation, when they will yield two bushels rent an acre.

But suppose this American land is of vast extent, and upon it can be raised all the grain which this, or any, market requires, what will be the effect upon rents? Why this: no one will now cultivate the English 18-bushel tract. This lowest grade of soils, therefore, falls immediately out of cultivation. With what effect upon the rent of other parcels of land? The 24-bushel English tract has been bringing its owner 6 bushels, an acre, rent, because, and only because, the 18-bushel tract was necessarily brought under cultivation to subsist the community. Now, however, that American land, with a net productiveness of 20 bushels (28—8=20), is found in unlimited amount, the limit of cultivation is pushed backwards, and the best of the English tracts brings but four bushels rent; the next best but two; the 20-bushel tract now bears no rent, as

it is in competition with free American land of indefinite extent.

Again, assume that the introduction of Bessemer steel rails and various improvements in ocean navigation reduce the cost of transportation of American grain to seven bushels out of every 28, what will be the effect on English rents? Clearly, the American land now has a net productiveness represented by 21 bushels, and, as it is of unlimited extent, all the English 20-bushel land is thrown out of cultivation —for who would wish to cultivate it? and the rent of the best English land is reduced to three bushels, and that of the second grade to one.

219. Relation of Rent to the Price of Land.—We have stated the economic doctrine of rent. The price of land and its rental value stand in a certain necessary relation to each other. But while the relation between the two is a necessary one, being no less direct than that of cause and effect, the ratio between the rent of land and the price of land varies widely. In some countries, where the amount of accumulated capital is large; where a high degree of civil security exists; where the rights of property are respected, and where the ownership of land carries with it social distinction and perhaps political influence, the price of land may be twenty, twenty-five, or even thirty times the annual rental. In other countries from the failure of one or all of the conditions indicated, land may not sell for more than fifteen, ten, or even five times its rental.

220. Rent Forms no Part of the Price of Agricultural Products.—From the law of rent, as it has been stated, we deduce the very important proposition

that rent forms no part of the price of agricultural produce.

No proposition which the political economist has occasion to announce is so startling, at the first hearing, as this; nor does any other have to contend against such persistent incredulity; and, yet, none can be more clearly established. We have seen that in the same market, at the same time, there is but one price for different equal portions of any commodity; and we have also seen that normal price is fixed by the cost of producing that portion of the supply which is produced at the greatest disadvantage.

Apply these principles to the case in hand. England does not raise all the wheat needed for the subsistence of her population. Besides cultivating the most fertile of her own fields, she makes heavy draughts upon the United States, France, Egypt, Hungary, and the Black Sea regions. For the wheat of all these countries, however, so far as it is of the same quality, there is but one price. That price is fixed by the cost of that part of the supply which is raised at the greatest disadvantage, which means, in this case, at the greatest distance, viz., on the plains of Dakota. This wheat the English must have: the proof of which is found in the fact that they do have it. Now, if they will have it, they must pay the cost of raising it, that is, must pay enough to induce men to go to that far-off country, undergo the privations of a frontier life, undertake all the risks of pioneer agriculture, and submit to enormous charges for the transportation of their product by land two thousand miles to the

seaboard, and, then, three thousand miles, by sea, till it is laid down in Liverpool.

If the English will not pay this price, they cannot have the wheat. That they get the wheat is proof enough that they pay this price, which, in turn, sets the price for all the wheat raised in England, and for all the wheat brought thither, whether from France, from Egypt or from the Black Sea, altogether irrespective of the cost of raising it in any other locality than that where it is produced at the greatest disadvantage.

Wheat may be raised on the fertile farms of Middlesex at an actual cost not exceeding two shillings a bushel ; but the Middlesex farmer will not, on that account, sell his wheat below the market price, say six shillings, which price is fixed, as we have seen, by the wheat from America. The difference, four shillings, is to be profit for somebody ; and we will now proceed to show that this body must be either the landlord or the tenant, not the agricultural laborer, and not the consumer of flour.

221. What Would Happen if Rents Were Remitted? —Perhaps we shall best make this appear by means of an illustration. Let us suppose a philanthropic gentleman to call his tenants together, and tell them that, in consideration of the hard times and the suffering of the poor he has determined to remit one-half of the rent of all his farms, so that the farmers may be enabled to sell wheat at a lower price, and thus the poor be enabled to buy bread at a cheaper rate. What would be the consequence? Doubtless all the tenants would accept the proffered terms cheerfully. But would they sell the wheat at

any lower price? Why should they? They can get the market price for it, and that price is not fixed by the cost of raising wheat on their farms, or on any farms for which rent is paid. It is the no-rent* land that raises that last portion of the necessary supply of wheat which fixes the price of all wheat.

But suppose, to imagine a most improbable case, that some one out of the fifty tenants on this estate were to go to the dealer in grain to whom he was accustomed to sell his crop, and say: "Mr. B., inasmuch as my landlord has remitted half my rent, this year, I offer you my wheat a shilling less a bushel, in order that you may sell it at a corresponding reduction to the baker." What would the grain dealer do? Clearly he would take the wheat, at the reduced price offered: but would he sell it to the baker for any less!

But perhaps it is said, we concede that the farmers will not sell their wheat at any lower price, on account of the remission of rent; but they surely will raise the wages of their laborers correspondingly. Why should they? They can make presents to their laborers, just as they could make presents to grain dealers or bakers, but we are talking now about business, and, as a matter of business, why should these fifty persons raise the wages of their laborers,

---

*The United States gives any settler in Minnesota, or Dakota, or Nebraska, or on any of the public lands, who will declare an intention to become a citizen, a farm of 160 acres, exacting only a registration fee of $26. The annual interest on $26, at 6 per cent., is $1.56, so that the settler gets the land on an annual payment of a cent an acre. A rent of a cent an acre may be called no-rent, and these are the lands we have called no-rent lands.

in consequence of the generosity of their own landlord? The laborers were willing to work for them, before, for the wages that were stipulated, the same wages, it may be assumed, which other laborers in the county were receiving. Why should the laborers now be unwilling to work for them at the same wages? And if the laborers are willing to work at the same wages, why should the farmers pay more?

222. To Recapitulate.—Rent is the surplus of the crop above the cost of cultivation on the least productive lands contributing to the supply of the market. Admitting the private ownership of land, that surplus, necessarily, so far as economic forces are concerned, is left in the hands of the landlord. There, so far as economic forces are concerned, it must remain. The landlord can give it away, if he pleases, just as he can give away his horse, or his house, or any thing that is his. He can give it to his tenant, just as he could give it to any one else. But if he does, it becomes a pure gratuity to the tenant, who, under the operation of the principle of self-interest, will transmit it neither to the agricultural laborer nor to the consumer of food, but will retain it entire for his own enrichment.

223. The Doctrine of Rent: How far Applicable to Actual Conditions?—Such is the economic doctrine of rent, which is known by the name of David Ricardo, its great expounder. We have said that this is true hypothetically, that is, upon the conditions assumed, viz., that the owners and the occupiers of land, each for himself, fully understand their own pecuniary interests, and will unflinchingly and unfailingly seek and find their best market.

How much does this mean? A great deal; more than ever was realized in any country of the world, at any time, though it has been far more nearly approached in some than in others. Just what is implied in the above assumption?

First, on the landlord's part, that he would as soon take a new tenant as retain one whose family had been on the soil for centuries; that he will entertain no other consideration than the realization of the largest possible rent; and that he knows all the facts which in any way bear upon the highest rate which could be charged for the use of the land without driving away all would-be tenants.

Secondly, on the tenant's part, that he would as soon move to another farm, to another county, or to another country, as stay where he is, should the least pecuniary advantage be offered by a change; that he has, at all times, the means to remove himself and his family and to place himself elsewhere; that, were he to remove, he could carry with him the value of his stock and fixtures, and of any improvements he might have made during his tenancy: that he thoroughly knows and can intelligently canvass with himself all the varying advantages of a sufficient number of localities, whether in Europe, America, or Australia, to make his choice practically indefinite; and that neither fear nor dread of change, nor love of home, friends or country, will intervene to keep him from his best market: that is, where he can rent land, of a given degree of productiveness, at the lowest annual rate.

In a word, the doctrine we are considering assumes that rents are determined solely by competi-

tion, and that competition is perfect within this sphere.

The briefest recital of the foregoing conditions shows clearly that the law of rent as laid down cannot furnish a formula by which the rent of a single piece of land on the globe can be determined in advance. The law is true only hypothetically, and the conditions assumed exist nowhere.

Yet this theoretical doctrine of rent is by no means to be regarded as vain and illusory. No projectile describes a perfect parabola. Yet the artillerist never fails to have reference to the law of the projectile while pointing his piece.

224. Rents in the United States.—In this country the economic doctrine of rent furnishes the principle which primarily determines actual rents. So completely is the American mind imbued with the feeling that a thing is worth what it will bring; so little sympathy is here found for the notion of classes which, by reason of weakness, must be hedged in from contact and competition with outside forces; so vast are the tracts of arable land not yet occupied; so freely do our people move from place to place; so slight are their attachments to locality, that no prejudice whatever would be created by a landlord's demanding the utmost rent which the tenant could, and in the result, would, pay.

Here we see the unrestrained operation of the principle of competition, and with a wholly beneficial result. The tenant and landlord, being substantially on an equality as to intelligence, enterprise, and freedom of movement, seek each his own interest, yet without injury to the other.

225. English Rents.—When, however, we reach the shores of England, we find a new force entering actively to influence rents, all on the side of the tenant's interest. Here the sentiment is universal that there are classes which, by reason of wealth, education and social position, are bound to do much, on the one hand, and to forbear much, on the other, out of regard to the interests of classes which are deemed to be, by reason of poverty and ignorance, permanently and hopelessly weak, and, in a greater or less degree, dependent.

But it is in regard to land that this sentiment operates with the greatest force. It is impossible for an English landed proprietor to feel that freedom in regard to raising rents which characterizes the action of an American landowner. Were he, for the purpose of raising rents, to drive away tenants whose families had been on the soil for centuries, he would, instead of gaining increase of style and state through an enlargement of his rent-roll thus obtained, find his social standing destroyed thereby.

With a condition of public sentiment thus acting strongly and steadily in restraint of the natural impulse of the land-holding class to advance rents, we should look to see a divergence of actual from theoretical rents, all on the side of the tenant's interest: and such, indeed, we find to be the case. "The rent of agricultural land," says Prof. Thorold Rogers, "is seldom the maximum annual value of the occupancy; in many cases is considerably below such an amount."

226. Customary Rents on the Continent of Europe.—On the Continent of Europe, rents are, in general,

not determined by competition, but by custom, to which Mr. Mill has assigned the same beneficent function in economics it has always performed in the sphere of politics, as "the most powerful protector of the weak against the strong." In Switzerland, France and Italy, rents were formerly fixed almost universally by the custom of the country, at a certain definite portion of the produce of the land. So strong is the force of custom in protecting the tenant's interest, in these countries, that oftentimes it happens that, even where cities have sprung up during the continuance of a family upon the soil, giving a local market for produce, and, by consequence, raising prices, the landlord, even in admitting a new family to the estate, does not attempt to exact a larger share of the produce.

"A proprietor," says Sismondi, writing of Tuscany, "would not dare to impose conditions unusual in the country, and, even in changing one metayer for another, he alters nothing of the terms of the engagement."

227. Rents in Ireland Prior to 1844.—Having seen how far actual may be made to diverge from theoretical rents, all on the side of the tenant's interest, by the force of a public sentiment restraining the greed of the landlord class and protecting a class deemed necessarily helpless and dependent against exaction and against eviction, let us now turn to a country where, in the time of which we are to speak, the population was not homogeneous; where prejudices of race and religion had engendered animosities which descended from generation to generation; where no friendly public opinion stood guard over

the interests of a peasantry whose own improvidence and recklessness concurred with the unrestrained greed of the landlord class in inciting a fierce and unremitting competition for the occupancy of the soil.

In the situation described, with the aggressive tendencies of the landlord class stimulated to the highest degree, and uncontrolled by the kindly sentiments or the conservative usages which in every other country in Europe during this period operated for the protection of the tenant's interest, and, on the other side, with the power of self-assertion in the Irish peasantry reduced almost to a minimum, it was a matter of course that rents were advanced to the full limit allowed by the economic law we have stated. Rents were demanded by the agent, or middleman, rents were even offered by the peasantry in the eagerness of their competition, far in excess of the economic maximum; in excess of what could possibly be paid; in many cases in excess, incredible as it may seem, of the whole annual produce of the soil.

228. Effects of Unequal Competition.—In the foregoing description of the state of the Irish tenantry prior to 1844, we have an illustration of the results of an unequal competition. That same force which in the United States, operating upon an intelligent, alert, active, aggressive population, under equal laws and with a spirit pervading the whole society which promoted the utmost freedom of movement and of contract, produces effects only beneficial, in Ireland, under the melancholy conditions recited, produced only disaster.

229. Actual vs. Theoretical Rents.—We see, then,

that practically there may be three classes of cases in respect to rent.

First—Where, under the influence of an active competition for the product of industry, with all the claimants substantially on an eqnality in respect to intelligence, alertness and freedom of movement, and with no laws or habits or sentiments opposing the complete exaction of all which any thing that is the subject of bargain and sale may be worth, rents, as in the United States, conform nearly to the Ricardian formula.

Second—Where, among a population presenting wide differences of wealth and intelligence, and perhaps, also, of rank and political power, sentiments of personal kindliness and mutual regard between landlord and tenant, and a strong, authoritative opinion throughout the community respecting the obligations imposed by the ownership of property, especially of landed property, serve, as in England, and in many countries of the continent of Europe, to reduce, in greater or less degree, the pressure of the landowning upon the tenant class; by which it comes about that rents vary widely from the Ricardian formula, always on the side of the tenantry.

Third—Where, with a tenantry ignorant, degraded by long neglect or long abuse, improvident, perhaps reckless in respect to family increase, little in the way of personal sentiments on the part of landlords, and nothing in the way of public opinion, enters to restrain the impulses which tend to advance rents to the theoretical maximum, with a result of ultimate

injury to the economic interests of both parties and of the entire community.

230. The Rent of Water Privileges.—We have thus far spoken only of the rent of arable land. We have taken this first, not only because it is most important, so far as the mere amount involved is concerned, but also because the principles governing rent can be here most easily discerned.

Water privileges have three uses: first, for power, in connection with saw-mills, grist-mills, cotton factories, &c.; secondly, for the supply of water, for drinking, washing, and other domestic purposes, to cities and towns; thirdly, for the irrigation of land, for the purposes of agriculture. The volume of water, the convenience of its application to the purpose for which water is, in the specific instance, required; proximity to the market, that is, the place where the water is to be used, these are the principal considerations which determine the productiveness of a water-privilege for the purposes of rent. For the supply of cities and towns, the quality of the water also becomes an element of importance.

Productiveness being thus estimated, there are all degrees among water-privileges. There are the no-rent privileges, which, by reason of distance, or inconvenience of application, or of insufficient or irregular flow, are not used at all, or are only used on condition that no compensation is exacted therefor. Above these, are found low-rent privileges and high-rent privileges, the measure of rent being the degree of productivness.

231. Building Lots.—The rent of building lots is determined by the principles we have already set forth.

The productiveness of land occupied for the purposes of manufacture or trade, has reference to the amount of business which the locality affords an opportunity to secure, or to the proximity of water-privileges, or of wharf-privileges, or to other facilities for either doing a greater amount of business with the same capital, or for saving expenditure upon a given amount of business. Such lots being limited in number, yet held by competing owners, their rent conforms closely to the Ricardian formula, under this varying construction of the word, productiveness.

In regard to the rent of building lots, competition is, if not perfect, at least very active on both sides. No favor is shown or asked; the two parties to the bargain are regarded as equal. The landlord gets all the land will bring, if not from one tenant, then from another. The tenant expects to pay all that any man will be willing to give for the commercial advantages of occupying the ground.

232. The Rent of Mines.—The rent of mines is not governed wholly by the economic law of rent which, as stated (pars. 209, 212) has reference to the native and *indestructible* powers of the soil. Under proper care and husbandry, cultivation need not exhaust the soil. The enjoyment of water privileges does not exhaust the capacity of the river, which flows on forever. The occupation of the ground by a building for a generation does not contract the surface available for the same or a different use by another generation. But, by the very nature of such deposits, the enjoyment of mining privileges diminishes the sum of the mineral in existence. The mine

may be "worked-out" in ten years or in twenty or in fifty, and nothing but an ugly pit be returned to the owner, at the expiry of the lease. The rent of such properties is not, therefore, regulated by the Ricardian formula, without modification. The rent must be increased sufficiently to compensate for the ultimate exhaustion of the deposits: the destruction of the value of the estate. Otherwise, the rule of rent for these properties is the same as in the case of other natural agents. The chief elements, here, in determining productiveness, for the purposes of rent, are the quality of the product, the extent of the deposits, the depth of working, the distance from a market.

233. The Rent of Buildings and of Permanent Improvements on the Land.—The so-called rent of buildings, exclusive of ground rent, is not governed at all by the economic law of rent, but by the principles which regulate the interest on capital, of which we are next to speak. A man owns a building lot, for which he could obtain a ground-rent, that is, rent proper. Being also a capitalist, he erects a building thereon. Why does he so? Because he believes that, in addition to the rent of the ground, he can also obtain for the occupation of the house erected thereon, a fair remuneration for the use of his capital, a remuneration equal (damage, trouble and risk of loss being taken into account) to what he would receive, were he to put his capital into the form of live stock or railroad shares, or government bonds.

The building is an investment of capital. If his investment has been shrewdly made, he will receive from his tenants a sum which, in the view of the

economist, consists of two parts, rent, proper—ground rent—and interest. We shall see, in the next chapter, that these two elements of the remuneration paid for the use of the house, are governed by widely different laws.

234. The Unearned Increment of Land.—We have seen how rent arises, under the private ownership of land, and what principles govern its amount and economic direction.

Upon this view of rent has arisen the question, Why should the private ownership of land be permitted to exist? at any rate, why should this incident of private ownership, the aggrandizement of the owner through the growth of the community, to which he may have not in the least contributed, 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.

235. Definition of Interest.—We have seen one share cut off from the product of industry—rent; one claimant satisfied—the landlord. The reader doubtless now sees why this topic was first treated. In economic theory, this is the first claim to be adjusted and paid.

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 savage or barbarous condition of life. To the varying strength of that motive with different men, and different races, we shall have occasion to refer further on.

236. 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 used as the agent for 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.

237. 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. 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, with but little of its accumulated means, the supply

of capital will be scanty, and the rate of interest will rule high.

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. How is this?

Capital is, as we have seen, the result of saving. Interest, then, is the reward of abstinence. The strength of the motive to accumulation will, in general, vary with the reward of abstinence. If this be high, the disposition to save will be strengthened, and capital will be rapidly accumulated; if this be low, that disposition will be relatively weak, and capital will increase slowly.

238. 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 with the progress of years.

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 generally 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.

239. There is no No-Interest Capital.—We have seen that the whole theory of rent rests on the assumption that there is a body of no-rent lands. These serve as the base from which to measure upwards the successive degrees of productiveness of the lands bearing rent.

There is nothing to correspond to this in the theory of capital. 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 of capital, 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 accident or erroneous calculation.

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.

240. 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 it for productive uses?

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." 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. Holland, during the most flourishing period of the Republic, was even able to borrow at two per cent.

241. 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. 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, say, or a third, of the value of improved real estate, there 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.

242. 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.

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 merely 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.

With the great majority of persons no calculation whatever, deserving of the name, enters into the negotiation of loans where more than double interest is paid. They are simply tempted beyond what they are able to bear. Few, indeed, would be capable of making any computation of the value of

the risks they take ; few even go through the form of doing so for the satisfaction of their own minds. 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 simply 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.

243. 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 else 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.

244. 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 very little real appreciation of the degrees of risk taken; 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 the most marked difference between extra-hazardous and ordinary risks in the loan of capital is that, while, with the former, the rates obtained are, as a whole, taking all classes of investors or lenders together, far below the actuarial value of the risks taken, with ordinary risks the rates of interest are, on an average, above their true value, as estimated with reference to the danger of the loss of the principal sum.

This results from the fact that the natural conservatism of large bodies of property owners, and the very strict laws regulating the accountability of trustees, fix a rate of interest for loans and investments deemed absolutely safe, which is below their proportional value, so that any large lender placing his risks judiciously and spreading them somewhat widely, is certain to realize a larger return from his capital through a term of years, after deducting losses, than if he had invested in the most approved securities.

245. Differing Rates of Interest in the Same Market.— We have laid down the proposition (par. 96) 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 3 per cent., and give his check on the bank for one-third of his deposit; buy "railways" paying 6 per cent. dividends, to the same amount, giving his check for another third part of his deposit; and loan the remainder at 10 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, 3¼ per cent. interest on the investment; Russian bonds bringing 5¼ per cent., and Turkish bonds bringing 10½ 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 from the "consols" constituted pure interest, the reward of abstinence, the sufficient inducement to abstain

from the immediate enjoyment of wealth. Of the 10½ per cent. interest obtained on the Turkish loan, 7¼ was the price of the insurance of the principal, according to the degree of risk involved, as viewed by the purchaser.

246. 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 that in which capital is loaned. This can rarely be called a good market, even in the most limited and partial sense. All bargains in the "money market," as it is popularly called, take place necessarily upon information imperfect at the best, often of a private and confidential nature; so that it frequently happens that, in the same market, at the same moment, loans, upon equally good security, are made at very different rates.

247. 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 to the causes which produce these differences, is reason found for differing 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 per 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

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; but security is a relative term. The older the country the greater the permanence of economic relations; the more does industry settle down within traditional limits; the higher the value assigned to commercial reputation, the fewer are the chances of revolutionary changes in business.

248. 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.

I remember to have read somewhere an estimate by an economist of reputation, fixing the "disinclination of capital to emigrate" at two per cent. It is doubtful, however, whether the matter is fairly 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 even 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.

249. Definition of Profits.—We have 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.

250. The Entrepreneur 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 of production the employer, the master, the entrepreneur, becomes a necessity of the situation. He performs a function which is indis-

pensable to a large and varied production of wealth, and for doing so receives a remuneration out of the product of industry, which we call profits.

251. Neglect of the Entrepreneur Function, by English and American Economists.—Unfortunately, as it seems to me, the entrepreneur 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.

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 and, on the other hand, 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 of the entrepreneur, so rare are the abilities they demand for their satisfactory and successful performance, 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 other hand, without these

* "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."

higher qualifications, the mere possessor of capital will employ labor at the risk, almost the certainty, of total or partial loss. The employer, the entrepreneur, thus rises to be the master of the situation. It is no longer true that a man becomes the employer of labor, because he is a capitalist. Men command capital because they have the qualifications to employ labor. To men so endowed, capital and labor alike resort, for the opportunity to perform their several functions and to entitle themselves to shares of the product of industry.

252.—Use of the word Profits by English and American Economists.—As the English and American economists generally leave the entrepreneur out of their discussion of production, so they leave out of view the share of the entrepreneur when treating of the distribution of wealth. "Profits" come to mean only the remuneration for the use of capital, what we call distinctively interest; or, if it be recognized that the man who organizes and conducts industrial operations receives something over and above the mere return upon that portion of the capital employed by him which he holds in his own right, that something is disparaged by being termed "the wages of supervision and management."

253. A Different View.—Now it is fundamental in my theory of distribution, as to which I am generally in accord with the French economists, that the entrepreneur class, the employers of labor, receive a share of the product of industry which is at once so important, through its amount, that it cannot possibly be omitted from consideration, and so widely different in the principles by which it is

governed, that the term wages cannot be applied thereto without inducing a wholly unnecessary and mischievous confusion of ideas, leading directly to false results.

To the entrepreneur's share of the product of industry I shall strictly apply the term profits. This use of the term profits, in my judgment, tends to promote clearer conceptions regarding the distribution of wealth, in the modern industrial state.

254. Profits a Species of the same Genus as Rent.— In my opinion, profits thus defined bear a very strong resemblance to rent. In this view I follow Archbishop Whately, who, in the appendix to his treatise on Logic, declares that the rent of land is only a species of an extensive genus, although, as he complains, the English economists have treated it as constituting a genus by itself, and have either omitted its cognate species, or have included them under genera to which they do not properly belong. If this view is correct, the principles deduced therefrom will be of very great consequence, not only to political economy, but to social philosophy. Let us, therefore, state again the essential differences between Rent and Interest.

1st. A portion of the land cultivated for the supply of any given market, bears no rent; this we call the no-rent land. The rent paid for any piece of land is exactly measured, in theory, by its excess of advantages in production over the advantages in production pertaining to the no-rent land. On the other hand, there is not any no-interest capital. It is true that a person lending capital may not only not obtain, in the result, any interest for its use, but

may even lose the principal; but this will be due to violence or fraud, to flood or fire or stress of weather, or, else, to the incompetency of the borrower to conduct business, all of which we may sum up in the word accident. There is no reason why such accidents should befall one portion of capital and not another, whereas there is a reason, in the nature of the case, why one piece of land should bear a rent and another not; why one piece should bear a high and another a low rent.

2d. It follows from the above, that interest forms a part of the price of all products, whether the capital concerned be employed to assist the operations of the agriculturist, the manufacturer, the transportation company, the merchant or the banker; but rent forms no part of the price of agricultural produce.

255. Profits Governed by the same Law as Rent.—Having restated the essential distinction between interest and rent, I shall now undertake to show that profits, the remuneration of the entrepreneur, partake very largely of the nature of rent, being a species of the same genus; and that, so far as this is the case, profits do not form a part of the price of the products of industry, and do not cause any diminution of the wages of labor.

The successful conduct of business under free and active competition, is due to exceptional abilities or to exceptional opportunities. Whether due to exceptional abilities or to exceptional opportunities, my proposition would be equally well-established, just as it makes no difference in the theory of rent whether a piece of land owes its superior ad-

vantages for the purposes of cultivation to higher natural fertility, or to closer proximity to the market to be supplied.

Yet it cannot be a matter of indifference to social philosophy whether the power to command profits be due to exceptional abilities or to exceptional opportunities ; and we may, therefore, be pardoned for pausing to point out that the former are far more efficient than the latter, in securing profits. To justify this assertion it will be enough to refer to the notorious fact that a great majority of all business houses which have achieved notable success have been founded by men who owed almost nothing to opportunity ; perhaps by men who struggled up to the high place they occupied in the industrial order against poverty or actual misfortune ; while, on the other hand, nothing is more familiar than the spectacle of great houses, deeply founded, which have enjoyed great prestige, wide connections and large capital, dwindling away little by little, if not brought abruptly to their downfall, under the successors of the original founder, simply because the management which had been strong and brave and wise, became commonplace, purposeless, timid and weak.

All this is so familiar that I do not fear that any American, at least, will question the assertion that exceptional abilities have far more to do with the successful conduct of business than exceptional opportunities. Hereafter I shall for convenience and simplicity, speak of profits as due to exceptional abilities, just as in discussing the question of the use of land, we speak of rent as due to differences in

fertility, assuming that all the fields under view are equally near the market.

256. A Theoretical No-Profits Stage of Production.—Now, let us suppose that (1) the number of men of exceptional abilities were more than sufficient to do all the business that required to be done, of all sorts and in all places; (2) that these men were among themselves equal in all respects which concern the conduct of business; and (3) that this class, so constituted and so endowed, were distinguished from all not of their class so clearly and conspicuously that no one having these exceptional abilities should ever fail to be recognized, and no one lacking such abilities in the full measure should esteem himself capable of conducting business, or be so esteemed, for the purpose of obtaining credit, by those who have capital to lend or goods to sell. Should we not then have a situation closely analogous to that which we described in the case of a community near which was found an amount of good land, of uniform quality, more than adequate to raise all the produce required? Either this class would, by forming a combination and scrupulously adhering to its terms and its spirit, create and maintain a monopoly price for their services in conducting the business requiring to be done, which is altogether improbable, or, else, they would, by competing among themselves for the amount of business, bring down its rate to so low a point that the remuneration of no one of this class would exceed what he could earn for himself in other avocations.

This, which we might call the "no-profits" stage of industrial society, corresponds closely to the

"no-rent" stage in the cultivation of the soil. The persons remaining in the conduct of business would, indeed, earn their subsistence, but no more, and economically it would make no difference to them whether they did this as employers or as employed.

257. In fact, however, the qualifications for the conduct of business are not equal throughout all of a sufficiently numerous class: on the contrary, the range of ability is almost world-wide.

First, we have those rarely-gifted persons who, in common phrase, seem to turn every thing they touch into gold; whose commercial dealings have the air of magic; who have such power of insight as almost to seem to have the power of foresight; who are so resolute and firm in temper that apprehensions and alarms and repeated shocks of disaster never cause them to relax their hold or change their course; who have such command over men that all with whom they have to do acquire vigor from the contact.

Next below we have that much larger class of men of business, of a high order of talent, whose unqualified success is easily comprehended, even if it cannot be imitated, by their less gifted competitors; men of natural mastery, sagacious, prompt and resolute in their avocations.

Then we have the men who, on the whole, do well, or pretty well, in business; men who enjoy a harmonious union of all the qualities of the entrepreneur, though only in moderate degree, or in whom some defect, mental or moral, impairs a higher order of abilities; men who are never masters of their fortunes, are never beyond the imminence of

disaster, and yet, by care and pains and diligence, win no small profits from their business, and, if frugality be added to their other virtues, accumulate in time large estates.

Lower down in the industrial order are a multitude of men who are found in the control of business enterprises, for no very good reason that can be seen by those who know them; men of checkered fortunes, sometimes doing well, but more often ill; men who are in business because they have forced themselves into it under a mistaken idea of their own abilities, perhaps encouraged by the partiality of friends who have been willing to place in their hands the agencies of production, or intrust them with commercial or banking capital. The industrial careers of these men are not peculiarly happy, though the degree in which they suffer from the constant imminence of loss, perhaps of bankruptcy, is very much a matter of temperament.

258. The No-Profits Class of Entrepreneurs.—Now, in my view of the question of profits, we find, in the lower stratum of the industrial order thus sketched, a "no-profits" class of entrepreneurs. Notwithstanding all the magnificent premiums of business success, the men of real business power are not so many but that no small part of the posts of industry and trade are filled by men inadequately qualified, and who, consequently, have a very checkered career and realize for themselves, taking their whole lives together, a very meager compensation.

Live they do, partly by legitimate toll upon the business that passes through their hands, partly at

the cost of their creditors, with whom they make frequent compositions, partly at the expense of their friends, or at the sacrifice of inherited means. This bare subsistence, obtained through so much of hard work, of anxiety, and often of humiliation, we regard as that minimum which, in economics, we can treat as *nil*. From this low point upwards we measure profits.

259. Profits do not form a part of the Price of Manufactured Products.—If this view of the employing class be correctly taken, and who will say that it does not fairly represent the facts of modern industrial society? it is seen at once that, under perfect competition, that is, if all the conditions of a good market be supplied, manufacturing profits, for instance, are not obtained through any deduction from the wages of mechanical labor, any more than rent is obtained through any deduction from the wages of agricultural labor; and that, secondly, manufacturing profits do not constitute a part of the price of manufactured goods, any more than rent constitutes a part of the price of agricultural produce. All profits are drawn from a body of wealth which is created by the exceptional abilities (or opportunities) of those employers who receive profits, just as all rents are drawn from a body of wealth, which is created by the exceptional fertility (or facilities for transportation of produce) of the rent-lands.

The normal price of manufactured goods of any particular description is determined by the cost of production of that portion of the supply which is produced at the greatest disadvantage (par. 99). If the demand for such goods is so great as to require

a certain amount to be produced under the management and control of persons whose efficiency in organizing and supervising the forces of labor and capital is small, the cost of production of that portion of the stock will be large, and the price will be correspondingly high; yet, high as it is, it will not be high enough to yield to the entrepreneurs of this grade any more than that scant and difficult subsistence which we have taken as the no-profits line.

The price at which these goods are to be sold, however, will determine the price of the whole supply, since, in any given market, at any time, there is but one price for different equal portions of the same commodity. Hence, whatever the cost of those portions of the supply which are produced by entrepreneurs of a higher industrial grade, they will command the same price as those portions which are produced at the greatest disadvantage. The difference, so measured, will go as profits to each individual entrepreneur, according to his own success in production.

260. Profits are not Subtracted from Wages.—Do profits, then, come out of wages? Not at all. The entrepreneurs of the lowest industrial grade—the no-profits employers, as we have called them—must pay wages sufficient to hire laborers to work under their direction.

The entrepreneurs of the higher industrial grades, paying wages at the same rates, and selling their goods, so far as they are of equal quality, at the same price as the entrepreneurs who make no profits, are yet able by their careful study of the sources of

their materials; by their comprehension of the demands of the market; by their organizing force and administrative ability; by their energy, economy, and prudence, to accumulate a clear surplus, after all obligations are discharged, which surplus is called profits.

261. The No-profits Entrepreneur.—A failure to discern the true relations of profits to wages has led to a very mistaken apprehension of the interests of the community, and especially of the laboring classes, regarding the employers of labor. While the large profits of the successful entrepreneur have been the subject of much jealousy, and almost uniformly excite in the minds of the unthinking the sense of personal wrong, there is an entire lack of jealousy exhibited towards the unsuccessful man of business, who often receives a great deal of sympathy from the laboring class. Many writers even deplore, on economic grounds, the modern tendency to the concentration of productive industry in a comparatively few hands.

So far as the sympathy extended towards the unsuccessful man of business flows from a kindly disposition towards the unfortunate, it is, of course, very amiable. But there is a reason to believe that this sentiment is, in the main, produced by a misapprehension of economic relations. The laborers appreciate, in some degree, the cares under which the unsuccessful employer labors, the anxieties from which he suffers, the humiliation into which he is occasionally plunged. They know he has a pretty poor time of it on the whole, and they are not envious of him; on the contrary, they use his

hard lot to sharpen their envy of the man who reaps large profits from the conduct of business and the employment of labor.

If, however, we have rightly indicated the source of profits, not only is the unsuccessful entrepreneur deserving of no special economic sympathy on the part of the laboring class, but his conduct of business, his control of labor-force and capital-force is at a great cost to the laboring class, as forming a part of the general community.

We saw that rents were measured upward from the productive level of the no-rent land. If, therefore, that level is lowered, rents are, by that fact, raised. Similarly, profits are measured upwards from the level of the no-profits class of employers; and any cause which brings incompetent persons into the conduct of business, or keeps them there against the natural tendency of trade to throw them out, increases the profits of the successful entrepreneur, by enhancing the cost of the production and, consequently, the price, of that portion of the supply which is produced at the greatest disadvantage. This enhancement of price is at the expense of all who consume the goods so produced; the laboring class equally with others, in theory; probably in fact more than any other, on account of their limited ability to look out for their own interests in retail trade.

262. Many causes help to swell the proportion of incompetent employers of labor.

Shilly-shally laws relating to insolvency do this; bad money does this; truck does this; slavery does this; "protection" does this. Each of these causes

enables men to escape the legitimate consequences of business incompetency.

The more active becomes the competition among the wages class, the more prompt their resort to market, the more persistent their demand for every possible increase of remuneration, the greater will be the pressure brought to bear upon such employers to drop out of the places into which they have crowded themselves at the cost of the general community.

263. Co-operation: Getting rid of the Entrepreneur. —In the department of Production we described the function of the entrepreneur, the person who hires labor, on the one hand, and borrows capital on the other, leasing land, in addition, or not, as the case may be, and, having thus come into possession of two or more of the prime agents of production, initiates industrial operations according to his own plans, and with a view to his own economic benefit. Coming down to the department of Distribution, we have inquired how the contemplated benefit is secured by the entrepreneur, and what are the limits of that benefit, which we term profits.

It has been said, in the course of this discussion, that this benefit obtained by the entrepreneur, his profits, has been the object of not a little jealousy and envy on the part of the laborers and capitalists to whom he has paid wages or interest. These wages and this interest the recipients would be glad to see increased by some addition derived from the source from which the entrepreneur obtains his profits.

264. Organized and systematic efforts to get rid of the entrepreneur have not been unknown. Among

the many schemes for largely and rapidly improving the condition of the masses of the people, which had their birth in the period of social and political fermentation which we call the Revolution of 1848, none had fairer promise of substantial results than that known by the name of Co-operation, by which is intended an industrial organization from which the entrepreneur is excluded, and under which the product of industry is to be divided into three principal shares, instead of four as under the entrepreneur system. I here only indicate the place which co-operation occupies in the scheme of Distribution, postponing the discussion of the scheme, as to its desirability and practicability, to Part VI.

CHAPTER V.

WAGES.

265. Definition of Wages.—We have seen three shares cut off the product of industry. Of the four principal parts* into which that product is divided, under the entrepreneur organization as existing almost universally in England and as rapidly extending in the United States, on the continent of Europe, and in all progressive countries, there remains but one to be treated, Wages, the remuneration of hired labor.

Before seeking the law which governs wages, there are two distinctions which require to be drawn very clearly, that, viz., between real and nominal wages, and that between the real and the nominal cost of labor.

266. Real and Nominal Wages.—Real wages are the remuneration of hired labor as reckoned in the necessaries, comforts and luxuries of life.

Real wages may differ widely, even when nominal wages are of the same amount, by reason of:

(*a*) Variations in the purchase power of money.

(*b*) Varieties in the form of payment, as when the board of the laborer, the rent of a cottage, the privilege of grazing a cow, allowances of certain quanti-

* Certain minor shares in distribution will be treated in the next chapter. For the purposes of the present discussion they may safely be disregarded

ties of food, drink or fuel, the right to take flour at miller's prices, one or more of these, are added to the money wages of the laborer. Such forms of payment are not of much importance throughout the United States, generally, at the present time; but in many European countries they constitute elements which cannot be overlooked in discussing the question of comparative wages.

(*c*) The greater opportunities, in some avocations than in others, of extra earnings, by the laborer himself or by the members of his family. Thus, Prof. Senior says: "the earnings of the wife and children of many a Manchester weaver exceed or equal those of himself. Those of the wife and children of an agricultural laborer, or of a carpenter or coal-heaver, are generally unimportant." The true unit in the comparison of wages is evidently the family.

267. (*d*) The greater regularity of employment in some avocations than others. Varying regularity of employment may be due to (1) the nature of the individual avocation, (2) the force of the seasons, (3) social causes, (4) industrial causes, of a general character, like strikes, panics and so-called "hard times."

In illustration of the foregoing causes, we have the widely varying rates of agricultural wages from one season to another, being often twice as great in the third as in the first quarter of the year. This is due to both of the first two causes adduced. It is not alone the difference of the seasons which makes agricultural wages so irregular; in part, also, it is the nature of the operations involved. After the seed has been planted, time must be given it to

grow, and this would be so, were there no winter. In other avocations it is the force of the seasons alone which makes employment irregular, as, for example, in the brickmaking, quarrying, carpentering, house-painting and other trades.

Among social causes affecting the regularity of employment, as between country and country, may be mentioned the observance of festivals and religious rites, which among some people occupy a hundred and more days in the year.

(*e*) The longer duration of the labor power in some avocations and in some countries, than in others.

Thus, Dr. Neison has shown that the mean mortality in England between 25 and 65 years of age, is, in the clerical profession 1.12 per cent. ; in the legal, 1.57 ; in the medical, 1.81. In domestic service, the mortality among gardeners, is but .93 per cent. ; among grooms, 1.26; among coachmen, 1.84. Of the several branches of manufacture, paper shows a mean mortality of 1.45 ; iron, 1.75 ; lead, 2.24 ; earthenware, 2.57.

Dr. Edward Jarvis has shown that on the average, an Irishman who has reached the age of 20, has 28.88 years to live ; a Frenchman, 32.84 ; an Englishman, 35.55 ; a Norwegian, 39.61.

It is evident that if two persons begin to labor productively at the same period of life and continue at work until death, at the same nominal rate of wages, that one receives the higher real remuneration who lives the longer, inasmuch as the cost of his maintenance during the first unproductive years of life must, in any philosophical view of the subject, be charged upon his wages during his period of labor.

268. Nominal and Real Cost of Labor.—Another distinction which requires to be observed is that between wages and the cost of labor.

In treating wages as high or low, we occupy the laborer's point of view. In treating the cost of labor as high or low, we occupy the point of view of the employer.

Wages are high or low, according to the abundance or the scantiness of the necessaries, comforts and luxuries which the laborer can command as the remuneration for his services. The cost of labor is high or low, according as the employer gets an ample or a scanty return for the wages he pays the laborer. It is possible that an employer may pay high wages, and yet the cost of labor to him may prove to be low, by reason of the laborer's superior efficiency.

Indeed, it is probably true that, as a rule, the highest paid labor is that which costs the employer least.

This is evidenced by the two facts that, generally speaking, employers, when they reduce their force, discharge their lowest paid laborers first; and that, generally speaking, it is the countries where the lowest real wages are paid which feel the necessity of imposing commercial restrictions to keep out the products of others. Thus, India, where the cotton spinner gets only 20 pence a week, is flooded by the cottons of England, where the spinner receives 20 shillings: and Russia, where the laborer in iron works receives but three roubles a week, has to protect herself, or thinks she must do so, against the iron of England, where the workman receives four or five times as much.

269. Relation of Wages to the Other Shares of the Product of Industry.—It has not been by accident, or whim, or from any notion respecting the comparative dignity of the several claimants to the product of industry, that rents, interest and profits have been discussed before wages.

This order has been followed for a positive reason, which is that, in the theory of distribution here proposed, wages *equal* the product of industry *minus* the three parts already determined in their nature and amount. In this view, the laboring class receive all they help to produce, subject to deduction on the three several accounts mentioned.

270. Rent Deducted.—First, rent is to be deducted. On the lowest grade of lands there is no rent. On the more productive soils rent, at its economic maximum, equals the excess of produce after the cost of cultivating the no-rent soils has been paid. This rent, as we have seen, does not affect the price of agricultural produce, and does not come out of the remuneration of the agricultural laborer.

We thus see that the first deduction to be made from the product of industry is of a perfectly definite nature. The laborer cannot get it, or any part of it, by any economic means. It must go to the landowner, unless it be confiscated by the State, or ravished away by violence.

271. Interest Deducted.—Secondly, from the product of industry must be deducted a remuneration for the use of capital. That remuneration must be high enough to induce those who have produced wealth to save it and store it up, in the place of consuming it immediately for the gratification of personal ap-

petites or tastes. This may imply, in one state of society, an annual rate of interest of eight per cent. ; in another, of five ; in another, of three.

Since the product remaining after the payment of interest is always, in theory, equal to what would have been the product, had interest not been paid (that is, had the capital for the use of which interest is paid, not been employed), and since in fact, the product so remaining is always greater ; in general vastly greater, than the product would otherwise have been, that party to the distribution of wealth whose claims are residual, that is, which takes all that no other claimant carries away, is benefited by every payment of interest on account of capital used in the production of wealth. Indeed, as high interest, under free competition, shows that the contribution made to production through each new accession of capital is very large, it may be said that the residual claiment upon the product of industry derives a greater relative benefit through the employment of capital where a high rate than where a low rate of interest is paid.

272. Profits Deducted.—The third and last deduction to be made from the product of industry before the laborer becomes entitled thereto, is what we have called profits, the remuneration of the entrepreneur, the man of business, the captain of industry, the merchant, manufacturer, or banker, who sets in motion the complicated machinery of modern production.

From the importance assigned, in this work, to the entrepreneur function the conclusion might hastily be drawn that production would be primarily

for his benefit, that he, if any one, would be the residual claimant upon the product; that, paying the capitalist, on one side, enough, under the name of interest, to secure the use of his capital, and paying the laborer, on the other side, enough, under the name of wages, to secure his services, this man of business, captain of industry, merchant, manufacturer, or banker, would retain as his own all that remains. And so, indeed, in any individual transaction he does, owing to the force of contract.

If, however, we have correctly indicated (pars. 260–262) the source of the entrepreneur's profits, they are of the same nature as rent. As there are no-rent lands, so there is a class of employers who derive from the business they conduct a bare subsistence, at the cost of much anxiety, and perhaps also of discredit, many of them living mainly at the expense of their creditors. These we call the no-profits employers. From this point, where profits, if any, are so small and so hardly earned that they may, for scientific purposes, be disregarded, upwards through many grades, we have employers who derive moderate profits, liberal profits, grand profits, monumental profits aggregating in a life time colossal fortunes, according to the degrees in which they bring courage, prudence, foresight, frugality, and authority over men, to the organization and conduct of business enterprises.

If I am right in this view of the nature of the entrepreneur's function and of the source of his profits, those profits would, under full and free competition, not form a part of the price of commodities (price being determined by the cost of production under

the most disadvantageous conditions, *i.e.*, in this case, production by the no-profits employers); while no economic means whatever would suffice to carry any portion of profits to wages, even were employers forbidden by law to receive profits. In other words, these profits consist wholly of wealth created by the individual employers themselves, over and above the wealth which would have been produced, in similar industrial enterprises, by the same labor-force and capital force under the control of employers of a lower grade of economic efficiency.

273. The Laborer, the Residual Claimant to the Product of Industry.—These three shares being cut off the product of industry, the whole remaining body of wealth daily or annually created, is the property of the laboring class,* their wages, or the remuneration of their services. So far as, by their energy in work, their economy in the use of materials, or their care in dealing with the finished product, the value of that product is increased, that increase goes to them

---

* This is substantially the position taken by the lamented Prof. Stanley Jevons, of University College, London, who states that "the wages of a working man are ultimately coincident with what he produces, after the deduction of rent, taxes, and the interest of capital." In this matter of Wages, Prof. Jevons emphatically repudiates the doctrine generally accepted in his own country, saying: "Our English Economists have been living in a fool's paradise," and frankly ranges himself with the French economists, "from Condillac, Baudeau, and Le Trosne, through J. B. Say, DeStutt Tracy, Storch, and others, down to Bastiat and Courcelle Seneuil."

"The truth," he declares, "is with the French School, and the sooner we recognize the fact, the better it will be for the world, except, perhaps, the few writers who are too far committed to the old erroneous doctrines to allow of renunciation." [Preface to the Second Edition of his Theory of Political Economy, 1880.]

by purely natural laws, provided only competition be full and free.* Every invention in mechanics, every discovery in the chemical art, inures directly and immediately to their benefit, except so far as a limited monopoly may be created by law, for the encouragement of invention and discovery.

Unless by their own neglect of their own interests, or through inequitable laws, no other party can enter to make any claim on the product of industry, nor can any one of the three parties already indicated carry away any thing in excess of its normal share, as hereinbefore defined.

274. What Will They do With it?—We have seen what is the best the laboring class can, in theory, do for themselves, under the existing organization of industry; what is the most they can claim for their services? Let us now inquire, what, in fact, this class do for themselves in this respect; and if they fall short of realizing their full share of the product of industry, to what causes the failure is to be attributed.

The laboring class may do themselves an economic injury in either or both of two ways; first, through excessive reproduction, sexually, leading to overpopulation, involving the necessity of cultivating poorer and poorer soils, with the result of continually diminishing per-capita production; secondly, through a weak, spasmodic, or unintelligent competition with the employing class.

The consideration of the former of these causes of economic injury will be postponed till we reach the

*A further discussion of this proposition will be found at the close of the present chapter.

department of Consumption. The latter will form the subject of the following paragraphs:

275. Imperfect Competition.—A total failure of competition is, of course, impossible. No class of laborers will be found so stolid and inert as to make no exertions whatever to change a worse for a better condition, economically. The impulse to buy in the cheaper and to sell in the dearer market will, in some measure, actuate every body of laborers. Yet the degree in which that motive is effectual will be found to vary widely.

A century ago Adam Smith wrote:

"Eighteen pence a day may be reckoned the common price of labor in London and its neighborhood. At a few miles' distance, it falls to fourteen and fifteen pence. Ten pence may be reckoned its price in Edinburgh and its neighborhood. At a few miles' distance it falls to eight pence, the usual price of common labor through the greater part of the low country of Scotland, where it varies a good deal less than in England. *Such a difference of prices, which it seems is not always sufficient to transport a man from one parish to another, would necessarily occasion so great a transportation of the most bulky commodities, not only from one point to another, but from one end of the kingdom, almost from one end of the world, to another, as would soon reduce them more nearly to a level.*"

276. It might be supposed that the increase during the century in the facilities for transportation and for the diffusion of information would have done much to remove the obstructions which, in Adam Smith's day, retarded the movement of labor to its

market; but the force of ignorance, fear and poverty is not so easily broken. Prof. Fawcett in his Political Economy writes: "During the winter months, an ordinary agricultural laborer in Yorkshire earns thirteen shillings a week; the wages of a Wiltshire or Dorsetshire laborer, doing the same kind of work, and working a similar number of hours, are only nine shillings a week. This great difference in wages is not counterbalanced by other considerations. Living is not more expensive in Yorkshire than in Dorsetshire, and the Dorsetshire laborer does not enjoy any particular advantages or privileges which are denied to the Yorkshire laborer."

277. **Change of Occupation.**—So much for the freedom of movement from place to place, which is needed to meet the requirements of industrial competition. Of the freedom of movement from one avocation to another, which may be required for the same end, an even less favorable account may be given. An American will find it difficult to conceive how slow and painful is the process by which an overcrowded avocation is depleted or a growing industry reinforced, in any of the States of Europe.

In his last and greatest work, Professor Cairnes sought to reach a measure of the rate of this movement in England. His result was substantially this: that only loss by death or disability could be relied upon to relieve the labor market in any branch of industry which was overdone, and that the sole "disposable fund" for supplying new laborers to new or growing branches of industry was to be found in the body of persons each year "coming of age," industrially speaking.

So far, however, are the members of the rising generation from being perfectly free to move into avocations other than those of their parents, that mill-owners are harassed by applications from their hands to take children into employment on almost any terms; and the consciences of employers have required to be reinforced by the sternest prohibitions and penalties of the law to save infants of tender years * from factory labor, since the more miserable the parents' condition, the greater becomes the pressure on them to crowd their children into service; the scantier the remuneration of their present employment, the less becomes their ability to secure the better disposition of their offspring. Once in a mill, we know how little chance there is of the children afterwards taking up for themselves another way of life.

In the agricultural districts of England, within recent years, gangs of children of all ages, from sixteen down to ten or even five years, have been formed, and driven from farm to farm, and from parish to parish, to work all day under strange overseers, and to sleep at night in barns, huddled together without distinction of sex.

Even so late as 1870, children were employed in the brickyards of England, under strange taskmasters, at three and a half years of age.

Such instances show the error of supposing that parents who are tied down hopelessly to an occupation which affords but the barest subsistence can

* Sir Arch. Alison states that the passage of the first labor act, of 1802, found children only three years old employed in the cotton factories of England.

freely dispose of their children to the best advantage among a large class of occupations. The truth is, that *until you secure mobility to adult labor you will fail to find it in the rising generation*, and that among an ignorant and degraded population four-fifths, perhaps nine-tenths, of all children, by what may be called a moral necessity, follow the occupations of their parents, or those with whom fortune has placed them.

278. The Industrial Effects of a Failure of Competition.—If industrial movement may be thus tardy and limited, even among a people of Teutonic blood and enjoying free institutions, it becomes a matter of serious economic concern to inquire what are the industrial effects of a partial failure of competition.

And, first, let us see just what it is that we look to competition, when active and complete, to accomplish.

We have defined competition to be the operation of individual self-interest among buyers and sellers. We saw that this implied that each man acts for himself, by himself, solely, in order to get the most he can from others, and to give the least he must, himself; and that competition is opposed in principle alike to combination, to custom, and to the influence of the sentiments of charity, gratitude or patriotism, in exchange.

Now, this may appear a very unamiable thing; yet, rightly viewed, perfect competition would be seen to be the order of the economic universe, as truly as gravity is the order of the physical universe, and to be not less harmonious and beneficent in its operation.

279.—The Economic Harmonies.—When we say that through competition one reaches his best market, does this mean that he does that which is best for himself alone? On the contrary, he does not only that which is best for himself, but that, also, which is best for others. He not only gets more than by resorting to any other market, but he gives more also. If in that market his service or commodity bears a higher price than elsewhere, that is of itself a proof that his service or commodity is there in greater demand, more needed, the subject of an intenser want, than elsewhere.

280.—The Possible Degradation of the Laborer.—But the main office of competition is to preserve individuals and classes from destruction or industrial degradation through excessive burdens imposed by authority, through natural catastrophes affecting the sources of livelihood, or through the gradual decay of commercial demand.

Deal the heaviest blow you can with a hammer into a bin of barley, and you will not injure a single grain, though the hammer be buried to your hand, because every grain moves freely from its place, and the mass simply opens to receive the intruding substance and closes around and above it. Lay one of the grains upon a rock, and a blow of a twentieth part the power will smash it into a paste. Let the stoutest ship that ever rode out a hundred gales have her bow lodged in the sands, and the oncoming waves of the first storm will break her up in a few hours, and scatter her planks and her cargo in complete wreck along the shore.

In the nature of the case, blows must fall, from

time to time, upon every industrial community or class. Whether these be due to wars or failures of the harvest, or to conflagrations and floods, or to the shifting of commercial demand, or to vicious legislation, labor has an ample security against any deep and permanent injury, so long as its actual mobility is unimpaired. On whatever spot the blow may fall, complete freedom of movement, from place to place and from avocation to avocation, will cause the original loss to be distributed over the industrial body, while the forces of repair and restoration will immediately set to work to make good what has been taken away.

281.—To Him That Hath Shall be Given.—This tendency to the diffusion of all benefits and the equalization of all burdens, and to the repair of all local injuries at the expense of the vital powers of the whole industrial body, which is effected through the natural operation of the laws of trade under free and full competition, we term the Economic Harmonies. But the political economist is bound to note, not only that the assumption of full and free competition, which underlies this theory of the self-protecting power of labor, is wholly gratuitous as applied to vast portions of the earth's population; but, also, that, when the mobility of labor becomes in a high degree impaired, the reparative and restorative forces do not act at all, but, on the contrary, a new and altogether antagonistic principle begins to operate, viz., the principle that "to him that hath shall be given, and from him that hath not shall be taken away even the little that he seemeth to have." Under the rule of this great economic as well as

social law, industrial injuries once suffered tend to remain, and not to be removed.

282. What may help the Laboring Class in Competition for the Product of Industry.—Granting that perfect competition would do all that has been claimed for the working classes, realizing the very ideal conditions under which they should work, but, at the same time, recognizing the fact that, in industrial society as now constituted, competition is very partial and incomplete, let us inquire what, if anything, can be done to help the laboring classes in their competition for the product of industry.

The answer of the economists of the *laissez-faire* school to this inquiry is a very easy one. Freedom being the ideal condition, and society suffering from lack of it, let us have all the freedom we can get, at this time, and thus prepare the way for more of it in the time to come ; let us abolish every thing in the way of restraint or regulation, every thing in the way of concert or combination in industry, which we can abolish, and trust to the future for doing away with those obstructions to the freedom of industrial action and movement which are now beyond our reach.

283. Economics and Politics.—This answer is so easy as not unfairly to arouse some suspicion. Do we deal in this spirit with the question of progressive freedom in government ? Is it not admitted by the most ardent friends of freedom, that discretion and order must be observed in removing political checks and balances and limitations ? Are there not, in any well-organized society, restrictions which correspond to certain human infirmities of which we cannot now

hope to rid the race, in such a way that the existence of the restrictions increases the actual degree of freedom enjoyed by the community, while the removal of these would in the present unmistakably diminish the general freedom of action on the part of members of the community?

284. The Burning Theater.—But if any reader distrusts an analogy drawn between economics and politics, let us take a case from real life where all the elements can be easily and confidently grasped.

Suppose a crowded audience to be seeking to escape from a theater which has taken fire. There might be time enough to allow the safe discharge of all in the house, and, if so, the individual interest of each person clearly would coincide with the interest of the audience viewed collectively, namely, that he should fall in precisely according to his position relative to the common place of exit, and should move just so fast and no faster, according to the rate of discharge from the building into the outer air. Yet, human nature being what it is, we know that there would be great danger of a furious rush for the door, which would lead to the very serious retardation of the movement of the audience as a whole, and probably to many persons being trampled upon or burned.

Suppose, now, that at the moment of alarm, a score of resolute policemen were to present themselves and take control of the audience, what could they do? Clearly they could not cause the audience to be discharged more quickly, safely and harmoniously than would be the case did every person in the audience truly comprehend the situation and act

coolly with reference to his own interest, as above stated; but, as compared, not with what the audience ought to do, but what they probably would do, the advent of the policemen would save many limbs and lives, perhaps avert a calamity that would have filled the world with horror.

285. Registration of Land.—But if any one is still disposed to distrust all analogies drawn between things inside and things outside the sphere of economics, let us take the case of a regulation prescribing the registration of real estate and the recording of all transfers and mortgages of land. Such a regulation would be restrictive upon transfers. Transfers would be required to be made in writing and after a definite form; certain words must be used to make the instrument effective; a certain delay must be submitted to; an office, perhaps at a distance, must be visited; copies must be made; a fee must be given.

Yet who does not know that a regulation of this character, though in name restrictive, would in fact not retard but immensely promote the transfer of real estate? The slow and costly transfer of this species of property in England, where no such system of registration exists, in comparison with its cheap and easy transfer in the United States, affords a measure of the force of this cause.

286. Always a Practical Question.—Perhaps enough has been said to show that the question whether a certain act, ordinance or social arrangement retards or promotes the movement of labor to its market, is a practical question, to be considered and decided with reference to the existing condition of industrial

society and to the actual infirmities or liabilities of the laboring population to which it was intended to apply.* A crutch operates only by restraint, and to a man of sound limbs can be only a hindrance; but it is a restraint which corresponds to the infirmity of a cripple, and may be the only means of enabling him to walk, or even of keeping him from falling hopelessly to the ground.

In application of these remarks, a brief discussion of the influence of Trades Unions and strikes upon wages and upon the condition of the laboring class will be found in Part VI.

287. Wages and Public Opinion.—Is it consistent with economic principles that a favorable public opinion should enhance wages?

In the first place, why any incredulity on the first suggestion of the subject? Is it not true that sentiments of personal kindness and of mutual respect between classes of the community have had a very important influence, in many countries (see pars. 223–7), in determining the rates at which land should be leased? And if public opinion may be a very powerful, often a predominant, force in determining the rent of land, why should we not expect that it would have at least an appreciable force in determining wages?

288. The Reason of the Case.—But let us leave analogy, and turn to the reason of the individual case. How can the sentiments we have invoked become

* "The outcome of the inquiry is that we can lay down no hard and fast rules, but must treat every case, in detail, upon its merits. Specific experience is our best guide, or even express experiment where possible." Jevons—"The State in Relation to Labor."

an economic force, and thus enter into the distribution of wealth between the several classes which unite in its production?

Let us recall the principle, so often insisted on, that it is only as competition is perfect that the wages class have any security that they will receive the highest remuneration which the existing conditions of industry will permit; let us recall, moreover, that the failure of competition may be due to moral as much as to physical causes; that if the workman from any cause does not pursue his interest, he loses his interest, whether he refrain from bodily fear, from poverty, from ignorance, from timidity, or dread of censure, or from the effects of bad political economy, which assures him that if he does not seek his interest his interest will seek him.

Now I ask, can it be doubtful that the respect and sympathy of the community must strengthen the wages class in this unceasing struggle for economic advantage; must give weight and force to all their reasonable demands; must make them more resolute and patient in resisting encroachment; must add to the confidence with which each individual laborer will rely on the good faith of those who are joined with him in his cause, and make it harder for any weak or doubtful comrade to succumb in the contest?

And, on the other hand, will not the consciousness that the whole community sympathize with the efforts of labor to advance its condition, by all fair means, inevitably weaken the resistance of the em-

ploying class * to claims which can be conceded, diminish the confidence with which each employer looks to his fellows to hold out to the end, and make it easier for the less resolute to retire from the contest and grant, amid general applause, what has been demanded?

289. Recapitulation.—I may briefly summarize as follows the views thus far presented, on the subject of wages under the entrepreneur organization of industry:

1st. I hold that wages equal the whole product, *minus* rent, interest and profits.

2d. In reaching the origin and limit of profits, the remuneration of the employer, as distinguished from interest, the remuneration of the non-employing capitalist, I closely affiliate profits with rent.

3d. In determining how much in the shape of rent, interest and profits, shall be taken out of the product before it is turned over to the laboring class to have and to enjoy, I hold that the only security which the laboring classes can have that no more will be taken than is required by the economic principles governing those shares, respectively, is to be found in full and free competition, each man seeking and finding his own best market, unhindered by any cause, whether objective or subjective in its origin. In other words, I reject the doctrine, that if the laborer does not seek his interest, his interest will seek him, and hold, instead, that if

---

* "Masters are always and every where in a sort of tacit, but constant and uniform, combination not to raise the wages of labor above their actual rate."—Adam Smith: "Wealth of Nations."

the laborer does not seek his interest, he loses it, in greater or smaller measure.

4th. In the failure of competition, I hold that economic injury, more or less serious, may be wrought upon the laboring class.

(*a*) By the lowering of the standard of the employers of labor, allowing persons to remain in charge of production who would be driven out by a stronger competition, and thus increasing the aggregate amount of profits.

(*b*) By the breaking down of the industrial quality of the laboring class, through a reduction of wages which in time tells prejudicially upon their health, habits and spirit. Of this we shall speak further in the next chapter but one.

5th. In opposition to the orthodox doctrine that all such economic injuries are in their nature temporary and tend to disappear, I hold that, so far as purely economic forces are concerned, they tend to perpetuate themselves and to grow from bad to worse; and that only social and moral forces, like charity, education, religion, political ambition, entering from the outside, or physical forces, like the discovery of new principles of chemical or mechanical action, or of new resources in nature, can restore the economic equilibrium if once destroyed through the weakness of the laboring class.

6th. That among laboring populations whose freedom of movement has become greatly impaired, either by the force of law or by their own poverty, ignorance and inertia, restrictions and regulations from the outside, or combinations among the laborers themselves, although these do in form violate the

principles of competition, may yet, in so far correspond to the infirmities of such populations as to have the effect to promote, it may be greatly to promote, the actual efficiency with which the laboring class seek their own interests, in the distribution of the product of industry.

290. The Doctrine of Laissez Faire.—What, then, becomes of the characteristic doctrine of the so-called Manchester School, *laissez faire:* hands off: leave economic forces to work, alike unaided and unhindered, in the assurance that the interests of individuals will be found to harmonize so far with the interests of the community as to secure the highest welfare of each and of all?

"There is no evidence," says Prof. Cairnes, "either in what we know of the conduct of men, in the present stage of their development, or yet in the large experience we have had of the working of *laissez faire*, to warrant the assumption that lies at the root of this doctrine.

"Human beings know and follow their interests according to their lights and dispositions; but not necessarily, nor in practice always, in that sense in which the interest of the individual is coincident with that of others and of the whole. It follows that there is no security that the economic phenomena of society, as at present constituted, will arrange themselves spontaneously in the way which is most for the common good.

"In other words, *laissez faire* falls to the ground as a scientific doctrine. I say as a scientific doctrine; for let us be careful not to overstep the limits of our argument. It is one thing to repudiate the

scientific authority of *laissez-faire*, freedom of contract, and so forth; it is a totally different thing to set up the opposite principle of state control, the doctrine of paternal government.

"For my part, I accept neither one doctrine nor the other; and, as a practical rule, I hold *laissez-faire* to be incomparably the safer guide. Only let us remember that it is a practical rule, and not a doctrine of science; a rule in the main sound, but, like most other sound practical rules, liable to numerous exceptions; above all, a rule which must never, for a moment, be allowed to stand in the way of the candid consideration of any promising proposal of social or industrial reform."

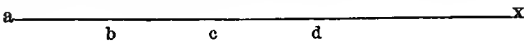
SOME ADDITIONAL REMARKS ON THE RELATION OF WAGES TO THE OTHER SHARES OF THE PRODUCT OF INDUSTRY.

Certain criticisms upon the larger work from which the present manual has been abridged, have shown me that the full significance of the term "*residual* claimant upon the product of industry" has not been understood.

Some have asked what difference it makes whether wages are the leavings of profits, or profits the leavings of wages? I shall attempt, therefore, to express more distinctly the force of this term.

Let us suppose a definite territory to be inhabited by a population engaged wholly in raising a certain vegetable fiber from the soil, carding and weaving that fiber and fashioning it for the uses of the inhabitants of neighboring regions with whom they have close relations

in trade. Let us suppose that the production of this community stands, at a certain time, at a certain amount, which we will express by the line



ax. This produce, in this amount, is divided by the economic forces at present operating into four shares, *ab*, rent ; *bc*, interest ; *cd*, profits ; *dx*, wages.

Now let it be supposed that, all other elements and conditions remaining the same, the population is changed over night, so that a distinctly higher class of laborers are found at work the next morning, with subtler instincts, quicker and neater in manipulation, having greater carefulness and prudence in the performance of work, more temperate in their habits, and more attentive to their duties, with the natural result that of the raw material consumed a saving is effected, through preventing waste and botch work, which enables five per cent. more of goods of equal quality to be produced. This is not an extreme supposition. As between workmen of one industrial grade and those of another, the difference in waste is often much greater.

We might also have supposed a gain to take place in the quality of the goods produced ; or an increase in the amount of material used to make up, with like economy, a much larger body of goods ; but these and many other suppositions would unnecessarily complicate the problem. Let us, then, stick to our original supposition, that the amount of goods is increased five per cent. by avoiding a part of the waste previously occurring in the use of material. To whom will this additional product go, through the normal operation of economic forces ? To the landlord class ? No ; clearly, for the material used now makes no larger draft upon the productive capabilities of the soil than formerly, and hence calls no lower grade of land into cultivation. The line, *ab*, therefore, remains of the same length. Will it go to the capital class, as additional interest ? No ; why should it ? An intelligent, neat, careful workman requires no more tools than an ignorant, slovenly and heedless workman ; the substitution of workmen of the former for those of the latter class, in the case supposed, would, therefore, clearly have no tendency to increase the demand for capital, or to diminish the supply. The line *bc*, would consequently not be lengthened by any increase in the length of the line *ax*, due to the cause indicated. Will the line, *cd*, be lengthened ?

Will any larger amount of the aggregate produce go to the employers of labor, in the form of profits? So far as the force of existing contracts is concerned, this might be the case; but we have expressly excepted the force of contract from our proposition regarding the distribution of the product of industry. In framing new contracts for labor, however, will the employing class be able to get their hands upon this increased product or any part of it? Herein lies the whole question. The landlord cannot get it or any part of it; the capitalist cannot get it or any part of it. Will the employer prove stronger in his economic position than either landlord or capitalist, and wrest this increment of product or any part of it, for his own emolument? Now, if the view of the function of the employing class, and of the origin of profits, heretofore offered (Chap. IV.), justly represents the substantial facts of modern industrial society, this would not be the case.

The substitution of intelligent, neat and careful workmen for those of a poorer industrial quality has no tendency to lower the standard of the employing class; to drive production down, so to speak, to a less efficient grade of entrepreneurs; and, consequently no tendency to enhance the volume of profits realized by the employing class, as a whole, since, as we saw, the profits of the successful employers are measured upwards from the line of the no-profits employers. Hence, the line *cd* will not be lengthened by any increase which may take place in the total length of the line *ax*, through the cause indicated; and as we have shown successively that the same is true of *ab*, and of *bc*, it follows that all increase in the length of *ax* will be found to take place within that part of it which has been designated as *dx*, representing the wages of labor. This is what I mean by the laboring class being the residual claimant upon the product of industry; and this I believe to be, upon the assumption of perfect competition, both profoundly true and of illimitable importance in economics.

Indeed, so far are the lines *bc*, and *cd*, in the foregoing illustration from being lengthened by any increase in the total length of the line *ax*, produced through such a cause as that indicated, that it would be easy to show that they are likely to be cut down through the operation of that cause. Good workmen do not only not require more tools than bad workmen, to perform the same kind and amount of work, but, when in large numbers, they actually require fewer by reason of greater intelligence and carefulness in the use of them.

Again, not only is no increase of profits except through the force

of contract, necessarily involved in an increase of production effected by an improvement in the industrial quality of the laboring class; but, as I have sought to show [par. 262] an improvement in the industrial quality of the laboring class tends directly, and tends strongly, to cut off the employers of the lowest grade; to drive them out of the positions which they have held solely by reason of inadequate competition; and thus, by raising "the lower limit of cultivation," in this respect, to diminish the aggregate volume of wealth going as profits to the employing class, just as the throwing of the lowest grade of soils out of cultivation diminishes the aggregate volume of wealth going, as rents, to landlords.

Now, what we have here shown to be true of an increase of production caused by an improvement in the industrial quality of the working classes, would hold true, in the main, of any discovery or invention, chemical or mechanical, which utilized material previously lost or wasted. Except only as far as a limited monopoly might be created by law, for the encouragement of invention and discovery, the whole fruit of such a gain in productive power would go to the laboring class through the normal operation of economic forces. Rents would not be increased; interest would not be increased; profits would not be increased; wages, and wages only, would be increased.

I have thus far, for simplicity of reasoning, confined my illustrations to cases where a saving of material is effected, either through an improvement in the industrial quality of the working classes, or through some chemical or mechanical discovery or invention.

But suppose the gain in productive power, arising through an improvement in the industrial quality of the working classes, should be such as to call for a larger quantity of raw material, and thus a lower grade of soil should be brought under cultivation. Suppose it to be such, also, as to require, for its full realization, new and finer and stronger tools and machines, and that thus a greater demand for capital should be created. How would the wages of labor then stand related to the product?

It is clear that, according to the principles which have been laid down in Chapter II., the aggregate volume of rents would be increased, in some amount, little or great. It is clear, also, that the demand created for more capital would tend to raise the rate of interest, in some degree, small or large. Whether the profits of the employing class should be increased at all, would depend wholly on the answer to the prior question, whether the increment of production

came in such a way as to call into service a lower grade of entrepreneurs, which might or might not be the result.

But I do not fear that any one who in general assents to the economic views which have been presented in this work regarding the distribution of wealth, will for a moment question that while rents and interest, and perhaps, also, profits, would be increased, through the operation of such a cause, wages would still remain the residual share of the product, in the sense which has been here indicated: would, that is, absorb all the gain which did not accrue, under perfectly definite restrictions, to the other shares, provided only, and provided always, that the laboring class, on their part, fulfill the conditions of a perfect competition.

Herein lies the natural advantage of the economic position of the laboring class, as I have sought to show it. The question which has been previously asked—*What will they do with it?*—is the greatest of economic, as it is the greatest of social, questions. That advantage may be at any time and to almost any extent forfeited by the wages class, first, through excessive reproduction sexually, the course and effect of which will be traced within the department of Consumption, or, secondly, through a failure, by reason of ignorance, inertia, fear or poverty, to seek and find their best market, with consequences which have already been sufficiently explained.

CHAPTER VI.

Some Minor Shares in Distribution.

291. We have discussed the distribution of the product, under the entrepreneur organization of industry. We have seen that this product is divided into four principal shares, rent, interest, profits and wages, corresponding to four classes of claimants. We have now to inquire what becomes of certain portions of the product, which do not appear to go into either of the four shares enumerated. And first of the amount taken by government.

292. Taxation.—There has long been a difference of opinion among economists, whether taxation should be a title in distribution or in consumption.

The difference is just this: Shall we regard government as a fifth original claimant upon the product of industry, taking its share under the name of taxes, as the land-owner takes rent, the capitalist interest, the employer profits, and the laborer wages; or shall we regard the product as divided into four shares, out of each of which is paid, as one form of the owner's consumption of his income, a sum, greater or less, for the sustentation of government, just as out of each such share are paid sums, greater or less, for shelter, for food, for fuel, etc.?

The question is not a very important one, and neither decision solves all the difficulties of the case,

since the functions of government are so various and so widely diverse.

On the one hand it is said that government is a great producer and should be regarded as a claimant in distribution, taking its share under the name of taxes. Government builds and keeps in repair roads and bridges and breakwaters and, perhaps, also, canals, railways and telegraphs, for the purposes of trade and industry. Government maintains a constabulary and court-houses and jails, that the honest and industrious may work without hindrance or even fear of molestation. Government does a great many other things which minister directly to the creation of values.

On the other hand, it is said that a great part of what government does has not the production of wealth as its primary object; and, secondly, that, whatever the objects of expenditure, government does not obtain its revenue through the agencies of exchange, but by forcible collection, men contributing to the support of government, not because government is prepared to render an equivalent for what it receives, but simply because government demands the contribution and will have it.

293. As has been said, the question is not free from difficulties, whatever course be taken. A thoroughly consistent treatment of the subject of taxation would require the appearance of this title in more than one department of political economy.

(*a*) The function of government in the creation of values is extensive and important under the modern organization of industrial society. The building and maintenance of roads and bridges, of breakwaters

and lighthouses, the opening of harbors, and the improvements of rivers, all directed, as they are, towards the end of a larger production of wealth, form a notable part of the industrial agencies of all progressive communities.

(*b*) The methods of taxation, the subjects of imposition, the agencies of collection, so far as they affect the ultimate *incidence* of taxation, that is, so far as they determine that the pressure of taxation shall finally rest here and not there, on this class and not on that, fall within the department of Distribution.

(*c*) The effects of the expenditure by government of a certain amount of wealth, as contrasted with the effects of the expenditure of the same amount by the classes who pay taxes, belong to the department of Consumption.

294. (*d*) The questions, how the largest amount of revenue can be secured with the smallest cost of collection; how the needed revenue can be procured with the least irritation of the public mind; how the highest assurance can be obtained as to the proper custody and disbursement of the funds collected; these and the like are questions in fiscal or "Cameralistic" science, and not in economics strictly considered.

(*e*) In addition to the question, stated above, what is the ultimate incidence of any existing or projected body of taxes; who, in the last resort, pays them; whose sum of enjoyment is actually diminished by the imposition, we have a question, to which writers on taxation devote a large part of their space, viz., who ought to pay the taxes of any

given community : what classes should contribute to the support of the goverment, and in what proportions ?

This is purely a question in political equity.

The foregoing would be the true logical treatment of taxation, in a work on political economy. In an elementary treatise, however, I do not deem it worth while to deal so elaborately with this subject, and will postpone to Part VI. whatever I have to say regarding taxation, except so far as it may be desirable to speak of the influence of governmental expenditures in the department of Consumption.

295. The Stipend Class.—For convenience of characterization, I apply the term Stipend Class to all those persons who are employed, not as a means to increase the income of their employers, but for the purposes of comfort, of leisure, of luxury, of dignity, or for the cultivation of intellectual faculties or moral graces. This class embraces many of the highest and many of the lowest members of society. At the one end of the scale, we have the menial servant; at the other, the minister of religion, the teacher of science, and the artist. To this class belong the soldier, the public official, the man of letters, the lawyer, and the physician.

The test for discriminating the wages class from the stipend or salaried class, is found in the expectation or non-expectation of profits. Where the reason for the employment is found in the expectation of the employer that he will realize a profit by the labor or service, there we have the true sign of the wages class; where that expectation does not exist, we recognize the characteristic of the stipend

class. Hence, we may broadly say: no profits, no wages.

Let us take, for illustration, the domestic servant. He is not employed as a means to his master's profit. His master's income is not due, in any part, to his employment; on the contrary, that income is first acquired, or reasonably assured, as a condition to the servant being employed at all; and just so far as servants are employed that income is expended. As Adam Smith remarks: "A man grows rich by employing a multitude of manufacturers (*i. e.*, of operatives); he grows poor by maintaining a number of menial servants."

On the other hand, the wage laborer is employed with a view to the master's profit; the master's income is derived from such employment, and, with good management, is greater the larger the number of persons employed.

"Though the manufacturer," says Adam Smith, meaning thereby what we would call the operative, "has his wages advanced to him by his master, he in reality costs him no expense, the value of those wages being generally restored, together with a profit, in the improved value of the subject upon which his labor is bestowed. But the maintenance of a menial servant is never restored."

296. I shall remit to the department of consumption all that it may be needful to say of this class. The income by which they are supported is not of their own making. They are supported out of the revenues of others. The future production of wealth may or may not be increased by virtue of their present employment. That is exactly the

question which we have to treat under the title consumption. We shall find that indirectly many members of this class minister most importantly to the economic greatness of their country, by nourishing personal virtue, by raising the standard of social ambition, by preserving life and health, by quickening the general intelligence of the laboring class, or by discovering new principles of chemical and mechanical action, or new applications of familiar principles to the arts, which may vastly increase the productive capability of the next generation.

But all this has reference to the future, to a future more or less distant. In the immediate present these persons are not producing, but consuming, wealth. They are supported out of the revenues of others.

297. The Speculating Class.—Incidental to all the processes of production and exchange is the chance of gain or loss through the rise or fall of prices during the interval between buying and selling; between making and selling. This gain or loss may be very slight, in any given case, or it may be very considerable.

Within this field, so far as the great body of business men are concerned, fortune holds undisputed sway. They lack, not only in degree but in kind, the faculty to discern the signs of the future; they do the best they can to produce good articles cheaply, to meet the demands of the public as to fashions and styles, to keep their general expenses down, and to avoid losses by bad debts. When they have done this, they have done all they can

for themselves ; and whatever gains or losses come to them through the fluctuations of the market, come as if wholly by chance. There are other men who have a rare power to apprehend in advance the movements of the market. Whichever way the market turns, it seems as though the sole object were to enrich these fortunate beings.

Of course, all this is speculation ; yet when it is carried on incidentially to a legitimate manufacturing or trading business, we do not call these men speculators.

298. In every progressive commercial community, however, is found a large and increasing number of persons who, either possessing this rare faculty of discerning the signs of the market, or flattering themselves that they possess it, make a business of buying or selling according to their anticipations of a rise or a fall. These persons are not manufacturers; they are not merchants, in any proper sense ; they do not buy from producers or sell to consumers ; they are neither importers, jobbers, wholesalers nor retailers ; they have perhaps no stores or warehouses or stocks of goods. They simply bet upon the market, having a well or ill-founded opinion of their own shrewdness and coolness in doing so. They may lose a fortune, or make a fortune.

299. The Economic Function of Speculation.—Of speculation as a business, two things may be said. First, it is surprising what an enormous aggregate of transactions a man of little capital and no brains to speak of, may conduct in the course of his life, and yet neither lose nor gain much if only he

confines himself to small individual operations. Secondly, not less surprising are the gains of speculation when conducted by a real master. The amount of wealth that can be brought into his hands appears fabulous. Every year an appreciable portion of the product of industry passes into the possession of the men of this class.

Speculation is not wholly without its advantages to the community. If corn is likely to be scarce and, by consequence, high, four months hence, the man who now begins to buy does, in so far, call attention to that probability, and, by raising the price, advertises, so to speak, for an increased supply to be brought in from the outside, or for greater carefulness in husbanding the existing stock. If beef is likely to fall in price, sixty days hence, the man who now sells does what lies in him to give notice of an excess of supply, and thus affords duller-witted holders opportunity to get rid gradually of their stock.

In a word, speculation while confined within moderate limits, is the agent for equalizing supply and demand, and rendering the fluctuations of price less sudden and abrupt than they would otherwise be.

300. Causes which Increase Speculation.—There are causes, however, which go to render speculation extravagant, carrying it beyond all reasonable bounds, multiplying the numbers of the speculating class and vastly increasing their gains, at the expense of the sober, productive industries of a country. Foremost among these is a vicious money system. The frightful extent to which this cause

engenders speculation may be seen in the history of the "Continental" money of the American revolution, of the "Assignats" of the French revolutionary period, and of the "Greenbacks" of the war of Secession. With prices fluctuating violently and rapidly, as the result of bad money, the opportunities for acquiring large wealth by speculation are increased ten-fold, it may be a hundred-fold.

301. Loaded Dice.—Of much of the speculation which is practiced in the United States and in other countries, though perhaps not so grossly elsewhere as here, it must be said that it is wholly beyond economic, as well as moral sympathy. If all speculation is gambling, this is gambling with the dice loaded. By means of combinations and corners, the markets are often profoundly influenced in order to produce the very fluctuations on which the grain or petroleum or stock gamblers have made their bets. The mischiefs suffered by trade and industry, originating in this source, are monstrous, even incalculable.

CHAPTER VII.

The Reaction of Distribution upon Production: The Degradation of Labor.

302. Actual Production Compared with Productive Capability.—In a previous chapter (Chapter IV., Part 2), we considered the elements which enter into the productive capability of a community, and indicated, as the one most important question with which political economy has to deal, the inquiry, why it is that the actual production of any community falls so far short of what its land power, its labor power, and its capital power are jointly competent to effect.

It was there stated that only when we should have passed through all the departments of political economy should we be in a position to answer this question.

303. Even under the title of Production, however, we saw that grave liability to loss of productive force inheres in the industrial structure of society, especially under the *entrepreneur* system, by which the labor power and the capital power of the community become subjected to the direction of a comparatively small number of individuals, "whose peculiarities of character, of habit, of station, seriously modify the application of capital and labor to production; whose mistaken aims, whose erroneous impulses, may divert these forces from

that object; whose accidents of fortune may impair the energy of the industrial movement or paralyze it altogether."

Again, under the title of Exchange, we saw (Chapter VII., Part 3) that still further and even more grave liabilities to loss of industrial force inhere in that commercial system which, by separating producers and consumers, often by wide intervals, sometimes by half the circumference of the globe, introduces the opportunity for serious misunderstandings between these two classes; misunderstandings which, when intensified by panic, may at times result in a wide and long-continued suspension of productive activity.

304. We are now to inquire respecting the reaction of Distribution upon Production. Is here a liability to a still further loss of productive force? Discarding the terms *just* and *unjust*, or *equitable* and *inequitable*, as applied to the distribution of wealth, let us ask whether there is found, in a division of the product of industry according to certain proportions, between the several parties who have united in production, a sufficient cause for a smaller production of wealth in the future than would result from a division of the same product between the same parties in different proportions?

The question we have just asked is one of great importance, which has unfortunately been disregarded by most economic writers. In a previous work * I have, at considerable length, discussed this question. The limits of the present treatise will only

* The Wages Question, 1876.

allow the line of argument to be indicated in a very general way.

305. It appears to me clear that, if any permanent economic injury is to be suffered through causes affecting the distribution of wealth, there is far greater liability to such injury from causes acting in reduction of the wages of labor, than from causes which may tend to diminish the share of any other one of the claimants to the product of industry.

We have not to look to a reduction of rents, unless effected by legal spoliation or personal violence, as the probable cause of permanent economic loss to the community. The ownership of land is not likely to be made undesirable by the operation of any forces not acting in one or both of the two ways just indicated—so much does rent tend to advance with the progress of society and the growth of wealth. The interest of capital, again, is, as we have seen (Par. 237), the reward of abstinence ; and a high rate of interest is, therefore, a strong inducement to the accumulation of capital, by which, in the result, production will be increased. Apart, however, from the constraints of law, it is difficult to see that the normal operation of the principle of demand and supply is likely to reduce the remuneration for the use of capital to the prejudice of future production.

The State, indeed, may enter, as we shall see under a future title (Par. 351–354), so to restrict the paying and receiving of interest as to work an undoubted and not inconsiderable economic injury. Grave, however, as are the possible mischiefs of usury laws, so-called, I cannot believe that they

equal the mischiefs which may arise from sources hereafter to be indicated as affecting the wages of labor.

306. It is the employer, as we have seen, the entrepreneur, the captain of industry, who, on the one hand, borrowing capital and paying interest therefor; on the other, hiring labor and paying its remuneration under the name of wages, initiates, and, under the modern organization of industry, alone can initiate production. Since the employer's function is all-important, and since his personal motive to production must be the securing of profits from his business, it is, of course, desirable, in the interest of the largest production of wealth, that those profits should not be reduced below the point which is necessary to secure the active, unremitting application of all the employer's powers and faculties. It is conceivable that the remuneration of the employer might be so trenched upon by legal restrictions, by taxes, by working men's strikes, by the influence of bad money, or by other causes, as to impair, or even to destroy, his individual interest in the production of wealth. And thus, again, we might have a division of the product of industry which should tend to a lower future production than would have resulted from a division of the product according to different proportions.

It is, however, as I am constrained to believe, in causes acting in reduction of the wages of labor, that we find the largest possibility of economic injury. It is in this way that the reaction of distribution upon production is likely most seriously to impair the industrial capability of the community.

This is not the view commonly taken by the English and American economists. Prof. Cairnes thus expresses himself respecting the consequences of a reduction of the rate of wages: "Supposing a group of employers to have succeeded, as no doubt would be perfectly possible for them, in temporarily forcing down wages, by combination in a particular trade, a portion of their wealth previously invested would now become free. How would it be employed? Unless we are to suppose the character of a large section of the community to be suddenly changed in a leading attribute, the wealth so withdrawn from wages would, in the end, and before long, be restored to wages. The same motives which led to its investment would lead to its re-investment, and once re-invested, the interests of those concerned would cause it to be distributed amongst the several elements of capital in the same proportion as before. In this way covetousness is held in check by covetousness, and the desire for aggrandizement sets limits to its own gratification." And in a similar vein, Prof. Perry, of our own country, has said: "If in the division between profits and wages, at the end of any industrial cycle, profits get more than their due share, these very profits will wish to become capital, and will thus become a larger demand for labor, and the next wages fund will be larger than the last,"

307. Had we already discussed the principles which govern the consumption of wealth, it would be easy to show that Professors Cairnes and Perry are mistaken in their view of the necessary effects of an enlargement of profits at the expense of wages, inas-

much as a portion of such enhanced profits, instead of becoming capital (that is, wealth devoted to re-production), might become fine horses and houses, fine clothes and opera boxes; while another portion might take the form of coming to the office one hour later in the morning and going home one hour earlier in the afternoon.

But, passing by this point for the present, the entire argument by which the English and American economists generally have sought to establish what we may call "the economic indifference of the rate of profits," is still further defective, in that it neglects those very important considerations which relate to the possible degradation of labor; that is the reduction of the laborer from a higher to a lower industrial grade.

308. The constant imminence of this change, the smallness of the causes—often accidental in origin and temporary in duration—which may produce it, and the almost irreparable consequences of such a catastrophe, can hardly be set forth too strongly in treating of the distribution of wealth.

The assumption which underlies the statements I have quoted is that the laboring classes, while suffering economic injury from any source, will themselves remain firm in their industrial quality, and await the operation of the restorative and reparative forces which shall, in time, set them right.

The human fact, so often to be distinguished from the economic assumption, unmistakably is that there is on the part of the working classes, unless protected in an unusual degree by political franchises, by the influence of public education, and by self-

respect and social ambition, a fatal facility in submitting to industrial injuries, which too often does not allow time for the operation of the beneficent principles of relief and restoration. The industrial opportunity comes around again, it may be, but it does not find the same man it left; he is no longer capable of rendering the same service; perhaps the wages he now receives are quite as much as he earns.

309. Let us consider the possible effects of a considerable reduction of wages. If the amount previously received had allowed comforts and luxuries, and left a margin for saving, the reduction would probably be resented, in the sense that population would be reduced by migration or by abstinence from propagation, until the former wages should be, if possible, restored. But if the previous wages had been barely sufficient to furnish the necessaries of life, and especially if the body of laborers were ignorant and unambitious, the falling off in the quantity and quality of food and clothing and in the convenience and healthfulness of the shelter enjoyed (see Pars. 42–6), would at once affect the efficiency of the individual laborer.

With less food, which is the fuel of the human machine, less force would be generated; with less clothing, more force would be wasted by cold; with scantier and meaner quarters, fouler air and diminished access to the light would prevent the food from being duly digested in the stomach and the blood from being duly oxydized in the lungs, would lower the general tone of the system and expose the subject increasingly to the ravages of disease. In

all these ways the laborer would become less efficient, simply through the reduction of his wages.

310. The economists assert that whatever is taken from wages will increase capital, and hence quicken employment, and that this, in turn, will heighten wages. But we see that it is possible that what is taken from wages no man shall gain; it may be lost to the laborer and to the world. Now, so far as strictly economic forces are concerned, where enters the restorative principle? The employer is not getting excessive profits to be expended subsequently in wages; the laborer is not under paid; he earns now what he gets no better than he formerly did his higher wages.

This image of the degraded laborer is not a fanciful one. There are in Europe great bodies of population which have come in just this way to be pauperized and brutalized, weakened and diseased by under-feeding and foul air, hopeless and lost to all self-respect, so that they can scarcely be said to desire any better condition, and still bringing children into the world to fill their miserable places in garrets and cellars, and in time in the wards of the workhouse.

If such an injury as has been indicated may be suffered in respect to the physical powers of the laborer through the reduction of wages, quite as speedily may his usefulness be impaired through the moral effects of such a calamity. Just as the greatest possibilities of industrial efficiency lie in the creation of hopefulness, self-respect and social ambition, so the greatest possibilities of loss lie in the discouragement or destruction of these quali-

ties. We have seen through what a scale the laborer may rise in his progress to productive power. By looking back, we see through what spaces it is possible he may fall under the force of purely industrial disasters.

But we may at this point be called upon to meet an objection, founded upon the assumed sufficiency of the principle of self-interest. How, it may be asked, is it possible that employers shall fail to pay wages which will allow their laborers a liberal sustenance, if, indeed, it be for their own advantage to do so; if, by that means, the economic efficiency of the laborers will be thereby increased?

I answer, first, that the assumption of the sufficiency of self-interest to secure wise action is grotesquely wide of the miserable truth regarding human nature, to whatever department of activity we have reference. Mankind, always less than wise and too often foolish to the point of stupidity, on the one hand, or of fanaticism on the other, whether in politics or in domestic life, in hygiene or in religion, do not all at once become wise when industrial concerns are in question.

The argument for feeding a hired laborer liberally, that he may work efficiently, applies with equal force to the maintenance of a slave; yet we know too well that every where the lust of immediate gain has always despoiled the slave of a part, often a large part, of the food and clothing necessary to his highest efficiency. The same argument could apply, and apply with undiminished force, to the case of live-stock. Yet it is almost impossible, by any amount of preaching and teaching, by any number

of fairs and premiums, to keep a body of farmers up to the point of feeding cattle well and treating them well. The world over, the rule regarding the care of live-stock is niggardliness of expenditure, working deep and lasting prejudice to production.

The foregoing would be a sufficient answer to the objection I have anticipated. On every hand we see true self-interest sacrificed to greed: why should it not be so in the case of the wages of hired labor?

But another and additional reason appears. It is that the employer has none of that security which the owner of stock or the master of a slave possesses, that what goes in food shall come back in work. A man buying an underfed slave or ox knows that when he shall have brought his property into good condition the advantage will all be his; but the free laborer may at any time carry to another employer whatever of bone and sinew and nervous energy he may have gained through liberal subsistence. There, as yet, is no law which gives the employer compensation for "unexhausted improvements" in the person of his hired man.

PART V.

CONSUMPTION.

CHAPTER I.

SUBSISTENCE: POPULATION.

311. **What is Consumption?**—By the term consumption, in economics, we express the use made of wealth. This does not necessarily imply the destruction of the form or material of the commodities so used, or even the exhaustion of the value which had at some time been imparted to them, although, in general, the use of wealth involves, in a greater or less degree, loss of substance and change of form, with a decline, rapid or slow, in that power in exchange which we call value.

"That almost all that is produced is destroyed, is true; but we cannot admit that it is produced for the purpose of being destroyed. It is produced for the purpose of being made use of. Its destruction is an incident to its use: not only not intended, but, as far as possible, avoided." * That destruction may, in exceptional cases, be long postponed.

---

* Prof. N. W. Senior.

Iron ore is consumed, *i. e.*, applied to the end in view in its production, when thrown into the furnace, and here takes place almost instantaneously not only a great chemical change, but a complete loss of form. The iron bar or plate is in turn consumed, when it is fitted into a bridge, without undergoing any chemical or mechanical change at the time, to be thereafter subject only to slow agencies of decay in the atmosphere, or to effects of attrition which, from one year to another, would be imperceptible. The bridge is consumed, that is, applied to the end in view in its production, when opened to traffic.

312. Consumption as a Department of Political Economy.—Why should the economist interest himself, at all, in questions relating to consumption? Why, having traced wealth through its production, distribution and exchange, should he not leave it in the hands of the consumer * without further inquiry, satisfied with its having reached the end for which it was created?

I answer: it is in the use made of the existing body of wealth that the wealth of the next generation is determined. It matters far less for the future greatness of a nation what is the sum of its

* The late Prof. Jevons, in the introduction to his "Theory of Political Economy," after noting the close analogy to the science of Statical Mechanics, presented by the Theory of Economy proposed by him, significantly says: "But I believe that Dynamical branches of the science of Economy may remain to be developed, on the consideration of which I have not at all entered." Elsewhere Prof. Jevons says: "We, first of all, need a theory of the Consumption of Wealth."

wealth to-day, whether large or small, than what are the habits of its people in the daily consumption of that wealth; to what uses those means are devoted, whether to ends which inspire social ambition, which restrict population within limits consistent with a high per-capita production, which increase the efficiency of the laborer and supply instrumentalities for rendering his labor still more productive, or to ends which allow the increase of population in the degree that of itself involves poverty, squalor and disease, which debauch the laborer morally and physically, striking at both his power and his disposition to work hard and continuously, and which waste in idle or vicious indulgence wealth that should go into increase of capital.

313. Subsistence.—The primary use of wealth is for subsistence. In the earliest stages of human society, man, like the lower animals, had only one want. Like the lower animals, he gathered his food, whether fish or flesh or nuts or berries, where he chanced to find it, and ate it without preparation. Long, however, before he began to cultivate food, even in the simplest way, he began to cook it. The discovery of fire and its application to the preparation of food, is made by some writers upon primitive society to mark the boundary betwen the purely savage and the barbarous condition.

314. Clothing and Shelter.—At what stage in the evolution of the human kind, clothing and shelter, other than that furnished by the casual cave or by the foliage of the forest, became a requirement of the theretofore naked man, exposed unsheltered to

the storm, we need not inquire. At moderate elevations above the sea, throughout the zone of the earth in which the human race probably originated, that requirement has never been very onerous, so far as the labor of construction or preparation is concerned. Food still remains, in those regions, the one great requirement of human existence. When, however, mankind spread over higher altitudes or zones further removed from the equator, the requirement of clothing, of shelter, and last of all, of fuel, came to be of increasing urgency and severity.

Within certain limits, however, clothing, shelter and fuel are, in the higher latitudes, convertible, or interchangeable with food, in the human economy. One of the prime purposes of food being there the maintenance of the warmth of the body, that occasion may, in part, be served indifferently by a certain amount of food administered internally, or by clothing of a certain thickness applied to the frame, or by the combustion of a certain amount of fuel in the open air or of a smaller amount within an inclosure.

And here, as on the ten thousand occasions of a higher civilization, it is found that the greatest economy resides in the largest capitalization of labor. A dress of skins, which may have cost the effort of a week, will, during the time it lasts, more than replace, for purposes of warmth, food which would have required the efforts of many months. A hut which may have been a season in building, may save more in the food actually required for health and comfort, during the life time of the builder, than

could have been obtained by the hunting or the fishing of years.

315. Let us suppose that, within some natural geographical division of the earth, the conditions of production are such that each adult male is able by steady labor to secure for himself considerably more, in the way of food, clothing, shelter, and fuel than is required for his own subsistence in health and strength to labor, and in physical comfort. The question we have now to ask is, what will these laborers do with the wealth they produce, after the strict needs of their own subsistence are met; how will they consume it?

316. **The Wife.**—In the first instance, it may be assumed that each laborer will undertake the support of one adult female, and this, not out of charity or compassion, not by the force of any legal arrangement, not with any reference to the continuance of the tribe or community, but in obedience to a natural personal instinct which is second only, in the demand it makes upon men, to the craving for food. The latter satisfied, the former asserts itself, irrepressibly, among all classes and conditions of men, in all states of human society.

The woman with whose subsistence the laborer's income or annual production of wealth thus becomes charged, will, in a greater or less degree, add to the means of the family thus formed. She will spin and weave, fashioning the fibrous materials which the man has gathered, into garments, blankets, and nets; she will, in various ways, prepare the flesh, the fish, or the vegetable food, which the head of the family supplies, rendering it more palatable,

more nutritious, more wholesome, or less perishable, according to the nature of the subject matter; she will bring water from the spring or brook; she will keep the hut or tent in a certain order and decency.

While, thus, the female, in an early stage of industrial society, adds something to the family means, both by what she makes and by what she saves from waste, we may assume that, speaking broadly, she does not produce nearly as much as she consumes. Nor is the contribution made by the wife to the joint revenue of the family in any degree a determining cause of the formation of the family. That association would in general take place just as surely were the wife physically incapacitated for making any such contribution, a sufficient reason being found in the natural instinct adverted to.

We have, thus, the two earliest forms of the consumption of wealth, first, in the sustentation of the individual laborer, and secondly, in the maintenance of the wife, over and above her contribution, whatever that may be, to the joint support of the family.

317. **The Child.**—Now, we have to note the third great form of consumption, in the order of nature. The association of husband and wife is followed, in the vast majority of cases, by offspring. The proportion of exceptional cases among laboring populations is very small. We may, therefore, disregard these in our argument.

The appearance of the child makes a new and imperative demand upon the revenue of the family,

which is, within the limits of the father's ability, met, in general, fully and even cheerfully. It is not in obedience to the requirements of law, or because of any patriotic desire to make good the numbers of the community, or to contribute to the strength of the state, that the father gives up to his children all that margin of subsistence which as a single man, or, though in a less degree, as a married man without children, he might have enjoyed. It is in obedience to a purely individual feeling, of an instinctive character, so generally planted in the human mind that, in spite of all instances of parental neglect or cruelty, we may speak of it as universal.

318. Children in Excess.—Let us suppose that with three children, of various ages, the subsistence which can be provided by the head of the family is fully taken up. If, now, other children are to appear to claim a support at the hands of the husband and father, what will be the result? Clearly, a reduction in the standard of living. There will no longer be food, clothing, shelter and fuel adequate to maintain each and every member in health and strength, and without pain or discomfort resulting from deprivation of things needful. The newcomers will, indeed, under the impulse of the parental instinct, be admitted to an equal participation in the family income; but the share of each member of the family will be diminished. The pinch may come earliest and most severely at one point rather than another: food may be denied, or fuel, or clothing, or shelter, according to circumstances; but, in one way or another, something less

than what is necessary to maintain the members of the family in health and strength and comfort, is supplied.

319. The Effort of Nature to Restore Equilibrium.—Now let us, further, suppose this increase in the number of children beyond the limits of subsistence to have taken place uniformly throughout the tribe occupying the geographical division assumed for the purposes of this discussion, but to have taken place once for all, from a purely transient cause. Will there be any effort of nature to restore the condition of general health, strength and comfort, or absence of discomfort, which has been for the time lost through population trenching upon the limits of subsistence?

It is, indeed, true that nature will make an effort, but this will prove unequal to the work to be done. The history of a thousand tribes shows that there is not sufficient force in famine or disease to prevent the permanent reduction of a community, through excess of numbers, from a condition of physical well-being to one of inadequate subsistence with consequent impairment of vital force and labor power.

320. Solidarity of the Family.—Of late years, with the growing interest in biological investigation, there has been manifested a disposition to glorify privation and famine, as agents in the uplifting of the human condition, the doctrine of the "survival of the fittest" being applied to societies of men without due consideration of a most important difference existing between men and other species of animals.

It is the solidarity of the family which prevents the law of the survival of the fittest from exerting that power in raising the standard of size and strength and functional vigor among men, which it exerts among animals generally. Throughout the animal kingdom, exclusive of man, the solidarity of the family exists, indeed, but to a limited extent only, and for a brief period. The mother protects and nourishes her offspring most sedulously and devotedly; drains her life blood for its support, and will die in its defence; but, in general, when the offspring is weaned the connection is broken; the lives become separate; the young one must thereafter be its own provider and protector; mother and child become competitors for food in the same field or forest; may even tear and kill one another in the struggle for existence. Thus the principle of the survival of the fittest obtains leave to operate.

321. With man, however, the conditions of the struggle for existence are greatly changed. Generally speaking, that struggle is between families as units, not between individuals. Within the family, the young and old, the weak and the strong, male and female, are bound together by natural instincts which are too strong for pain, for hunger, for death itself. If want or famine pinch, all suffer together. If one member of the family fall sick, instead of being neglected, or even trampled on, as among the lower orders of animals, he commands the tenderest care of all, while none has a right to any thing as against the sufferer. This, clearly, is not a condition under which the principle of "the survival of the fittest" can operate among men, to raise the

standard of size and strength and functional vigor. Instead of the natural elimination of the weakest and the worst, it is here the best who, from sexual or parental love, bare their breasts to receive the blows of fortune.

We see, then, that the solidarity of the family, in the case of man, defeats that effort of nature which is so successfully made throughout the vegetable kingdom and throughout the animal kingdom exclusive of man, to restrict the members of any species within limits which are consistent with ample nourishment and the full perfection of the type, and even to allow of the gradually progressive development of the species in the direction of greater size and strength and functional activity. On the contrary, we may have, in the case of any tribe of men, a reduction effected abruptly or gradually in the conditions of subsistence, without any adequate effort of nature to resist the downward movement or to remedy the resulting injury to the vital force or the labor force of the country.

322. The Capabilities of the Procreative Force.—We have thus far inquired respecting the effects of an increase of the number of children in any community beyond the limits of subsistence, assuming for the moment the increase to be due to purely transient and adventitious causes. How is it as to the degree of activity and persistence in the procreative force, in the presence of a threatened reduction in the standard of living below the point of health, strength and freedom from discomfort?

In his celebrated treatise on Population, Mr. Malthus assumed a birth rate sufficient to yield, in

spite of celibacy and exceptional sterility, in excess of four children to a family. There is reason to believe that in any colony of European blood, planted on new land, of reasonably salubrious quality, within the temperate zone, this rate of increase would invariably be reached. That rate of reproduction would be sufficient to secure an appreciable increase of each generation over the one preceding, were the facts of infant and of adult mortality but moderately favorable to the growth of population.

323. Geometrical Progression.—Now, if we may assume for the members of successive generations an undiminished degree of fecundity, we have here all the conditions of a geometrical progression. And the possibilities of geometrical progression, when persisted in for a long time, become simply tremendous, whether in population, in wealth, or in any other direction.

Thus, to take a series of ten terms we might have

Arithmetical: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.
Geometrical: 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024.

These tremendous leaps in the geometrical series, are due to the fact that the increase between the first and second terms becomes itself the cause of a proportional increase between the second and third terms; which increase, in turn, becomes the cause of corresponding increase between the third and the fourth, and so on to the end.

324. Population Increases by Geometrical Progression.—Now it is according to this law that population increases; and, as we said, the consequences of a

persistence in a geometrical ratio, through a considerable period of time, are simply tremendous. "The elephant," says Mr. Darwin, "is reckoned the slowest breeder of all known animals, and I have taken some pains to estimate its probable minimum rate of natural increase. It will be safest to assume that it begins breeding when thirty years old, and goes on breeding till ninety years, bringing forth six young in the interval, and surviving till one hundred years old; if this be so, after a period of from seven hundred and forty to seven hundred and fifty years, there would be alive *nearly nineteen million elephants descended from the first pair!*"

Man, though a slow breeder, as compared with many of the lower animals, has a rate of reproduction far exceeding that of the elephant. Population has shown the capability, over a vast extent of territory, on more than one continent and through considerable periods of time, of doubling once in twenty-five years. With this capability we may say that if "neither evil, nor the fear of evil" checked the population of the United States, it would, in a century and a half, amount to three thousand two hundred millions!

325. The Persistence of the Procreative Force.—Such being the capabilities of the procreative force, when operating unrestrained, let us inquire what virtue there is in the fear of a reduction of the standard of living below the point of health and physical comfort to check population at that line.

It is commonly assumed, in discussions relating to wages, that the laboring class will more and more

withhold their increase as the conditions of life become harder and harder; and that any economic injuries which they may suffer, from whatever cause, will, in the order of nature, be in this way repaired. Instead of it being true, however, that the laboring class tend thus to resist and resent any lowering of the standard of subsistence, the fact is that never is the procreative force more active than when the conditions of life become meager and squalid; when the reserve of the summer against the winter, and of the good year against the bad, is swept away by the clamorous necessities of to-day; when alike enjoyment of the present and hope for the future are at their lowest point.

Never had the marrying age been earlier, or christenings more frequent in Ireland, than when, just upon the verge of the great famine, Earl Devon's Commission, in 1844, thus described the condition of the peasantry: "In many districts, their daily food is the potato; their only beverage, water; their cabins are seldom a protection against the weather; a bed or a blanket is a rare luxury; and, in nearly all, their pig and manure heap constitute their only property."

The state of the population of India and China affords a conclusive proof that there is not sufficient virtue in economic forces to keep population above the plane of extreme misery, if once it fall below the plane of comfort and decency of living. On the contrary, a moral weakness or recklessness is induced which tends strongly and swiftly to carry population to the point of industrial distress. Then, indeed, famine makes its appearance, as periodically

in India,* to set bounds to increase of numbers; but, for the reasons that have been stated, this force does not operate, as in the animal kingdom exclusive of man, to cut off only the least active, aggressive, intelligent, or self-reliant. The effect of famine, and of the diseases generated by famine, operating upon population across the barrier imposed by the solidarity of the family, is to lower the physical tone, to taint the blood, and weaken the will-power of the entire industrial body, making it increasingly difficult, from generation to generation, to restore the lost conditions of economic well-being.

* During the past 22 years there have been five periods of distress in India, reaching the pitch of famine. Formerly incessant wars kept down the population of India; but since British dominion has imposed peace upon its hundred tribes, famine has taken the place of war, in limiting population.

CHAPTER II.

The Appearance of New Economic Wants.

326. The Ascending Scale of Personal Consumption.—We have thus far dwelt on the effects of an increase of numbers beyond the limits of subsistence; as the latter are determined by the law of diminishing returns in agriculture. We have seen that, as the procreative force increases rather than diminishes in the face of poverty and squalor, there is no natural resting place for population, if once it passes below the plane of ample subsistence, until it reaches the point where it meets the "positive checks" of famine and disease, and, it may be added, of war. This principle of population, to which we give the name, Malthusianism, was first clearly enunciated and fully illustrated by Mr. Malthus, in the last year of the last century.

Let us now, retaining our assumption that the point of "diminishing returns" in agriculture has already been reached, consider the relations of subsistence and population, on an ascending scale of personal consumption. We have seen that population will go on increasing as fast and as far as food is provided to support it, all increase of wealth surely taking the form of an increase of numbers, unless other and more imperative demands are made upon the income of the family. But let us

suppose that, at the point where a competent subsistence is provided to maintain the whole population in health and strength to labor, and in freedom from all discomfort resulting from privation of things absolutely necessary, the want of something beyond this comes to be strongly felt by the individual members of the community.

327. Diversity of Early Economic Desires.—What that want may be does not matter for the purposes of the present discussion; and, indeed, it would not be likely to be the same in the case of all communities. In one, the first want felt, after the absolute requirements for the support of life and laboring power are satisfied, is of ornament and decoration.

In another community, the first want felt after the claims of immediate bare subsistence are met, is of a store for the future and a provision against the caprices of the seasons and the casualties of life.

The first want emerging in the life of another community may be of wealth to be expended in worship and in honor of the national or local deity.

In still other communities, the new want may take the form of a love, no longer of ornament, but of comely dress, or of desire for a diversified diet, or of a taste for leisure, or of a craving for some costly drug or drink, like the opium of the East Indian and the Chinaman or the fire water of the North American Indian.

328. Economic Wants Antagonize the Procreative Force.—But whatever be the passion or desire which is first developed in the mind of any community, it makes a demand upon the existing body of goods or upon the current production of wealth, which at

once antagonizes the strong and urgent disposition which has been indicated, to the consumption of wealth for the support of an increasing population. The newly awakened passion or desire can not be gratified out of the existing fund of wealth, unless the procreative force receive a check.

Any economic want may act in restraint of population in one or more of three ways: first, by diminishing the numbers of the marrying class, inducing celibacy among those who do not find the way to obtain an income adequate to the support of a family; secondly, by procrastinating the period of marriage; and, thirdly, by diminishing the birth-rate within the married state.

If, for example, the number of married pairs in a given community were brought down from 100 to 80, by the spread of celibacy; if, through later marriages, the child-bearing period for each married pair were reduced from twenty years to fifteen, and if the interval between births were extended from two years to three, the number of children born under the latter state of things would be, to the number born under the former state, as 40 to 100.

329. A Diversified Diet.—Whatever be the want most commonly felt, after the requirements of mere subsistence are met, there can, I think, be no question that the want which has been efficient on the largest scale, at once in promoting labor for its gratification, and in restricting the increase of population, is the craving for a diversified diet. Once let the traditional sole diet of the barbarian, be it fish, or flesh, or grain, be crossed with some other species of food, exciting thus the pleasure which resides in

variety, and an economic force has been introduced into the life of the community which is capable of producing mighty results.

A diversified diet, although doubtless it contributes, in a degree, to health and vigor, is yet a pure luxury, in the sense that it is never sought on the former account, but wholly because of the gratification of appetite thereby secured.

It will seem strange to those who have not studied the question of population, that an appetite for objects of pure luxury should be spoken of as having greater power to overcome the disposition to indolence and the disposition to excessive procreation, than the fear of privation and actual misery. Yet so it is; and as we go up the scale of human wants and desires, as viewed by the moralist, we shall find that, in general, the higher the want or desire, ethically considered, the stronger it proves to be, until we see mere sentiments, involving no gratification to any bodily sense, impelling men to exertions the most painful and protracted, and holding sternly in check the most masterful passion of the human kind.

330. Decencies.—Of a narrower range in its application to tribes and races of men than the desire of a diversified diet, but of far greater intensity and persistency within that range, is the desire of what we may call decencies, meaning thereby those things which are prescribed or required by the public opinion of the community. It is evident that the term decencies, in economics, must have a very various application to different communities and to different classes within the same community.

"The question whether a given commodity is to be considered as a decency or a luxury, is obviously one to which no answer can be given, unless the place, the time and the rank of the individual using it be specified. The dress which in England was only decent a hundred years ago, would be almost extravagant now; while the house and furniture which now would afford merely decent accommodations to a gentleman, would then have been luxurious for a peer.

"Shoes are necessaries to all the inhabitants of England. Our habits are such that there is not an individual whose health would not suffer from the want of them. To the lowest class of the inhabitants of Scotland they are luxuries. Custom enables them to go barefoot without inconvenience and without degradation. When a Scotchman rises from the lowest to the middling classes of society, they become to him decencies. He wears them to preserve, not his feet, but his station in life. To the highest class, who have been accustomed to them from infancy, they are as much necessaries as they are to all classes in England.

"A carriage is a decency to a woman of fashion, a necessary to a physician, and a luxury to a tradesman."*

331. The Desire of Decencies the Great Preventive Check to Population.—Whatever dignity the moralist may assign to the disposition to conform to the prevailing sentiments of the community, either by doing that which is prescribed by public opinion, or by

* N. W. Senior.

shunning that which public opinion reprobates, the economist must recognize this as the most effective motive which operates to withstand the increase of population.

"The great preventive check," says the wise economist but just now quoted, "is the fear of losing decencies." If by this is to be understood the check which is of greatest potency where it operates at all, the remark is perfectly just. But, in fact, it is only in a few communities that this cause operates with sufficient force to restrict population within the limits of the highest per-capita production of wealth.

In England, it has for generations been found adequate throughout the noble and wealthy classes; but among the working classes reproduction has gone on with the least possible regard to its effect upon the standard of living. In France, on the other hand, even the peasantry are so fully alive to the inexpediency of a rapid multiplication, and are so temperate and prudent, that the excess of births over deaths has been reduced to a minimum. Doubtless the popular tenure of the soil in that country contributes directly and powerfully to this result.

In the States of the American Union, the increase of population was, until recently, every where encouraged by the fact that the country had not reached the condition of diminishing returns, but, on the contrary, as is always the case before that condition is reached, foreign immigration and native growth in numbers alike added to the power and wealth of the several communities. Within the

past twenty-five years, the rate of natural increase in the Northeastern States has encountered a decided check, due to a rising standard of living in communities whose productive capabilities were already well developed; and, were it not for the newly-arrived foreign residents, the annual excess of births over deaths in this section would be but slight

CHAPTER III.

Certain Views of the Consumption of Wealth.

332. Cheap vs. Dear Food.—We have, thus far, spoken of economic wants, mainly in their effects as retarding the increase of numbers. Until an adequate check, of a sufficiently persistent character, has been secured here, the economist who fully appreciates the consequences of over-population can hardly fail to recognize almost any economic want, whatever its origin or its object, and however little either may be approved by the moralist or physiologist, as being better than none.

It has been from this point of view, that the English writers have insisted so strongly that cheap food, which one would surely think an economist would approve, as leaving means for expenditures of a higher character, is, on the contrary, a thing to be deprecated.

Thus Mr. J. R. McCulloch says: "When the standard of natural or necessary wages is high—when wheat and beef, for example, form the principal part of the food of the laborer, and porter and beer the principal part of his drink, he can bear to retrench in a season of scarcity. Such a man has room to fall; he can resort to cheaper sorts of food

—to barley, oats, rice and potatoes. But he who is habitually fed on the cheapest food has nothing to resort to, when deprived of it. Laborers placed in this situation are absolutely cut off from every resource. You can take from an Englishman; but you cannot take from an Irishman. The latter is already so low, he can fall no lower; he is placed on the very verge of existence; his wages, being regulated by the price of potatoes, will not buy wheat, or barley, or oats; and whenever, therefore, the supply of potatoes fails, it is next to impossible that he should escape falling a sacrifice to famine."

333. Better Things than Dear Food.—Clearly, the basis of this reasoning is the Malthusian doctrine. These economists recognize the strong probability, the almost certainty, that a people will carry their increase closely up to the limits of subsistence according to the kind of food they use, whatever that may be.

But suppose we have a community which will accept the opportunity of living upon cheap food, and apply the saving in annual consumption, which is effected thereby, to the permanent enlargement of their capital, or to other forms of enjoyment, to dress, to better lodgings, to luxuries, perhaps to expenditures upon education and culture, what harm, then, would Mr. McCulloch find in cheap food, be it potatoes, or rice, or the Indian corn of America? Surely none.

Let me not be understood as quarreling with this potato philosophy of wages, so far as the assumption which underlies it is justified by the facts of human society, as it very widely is. I only claim that in

any country whose people had shown the capability of setting bounds to the increase of population by the exercise of their own judgment and will, instead of allowing those bounds to be set by privation and disease alone, cheap food would become a means of increasing the comfort and luxuries enjoyed by that people in other directions of expenditure.

334. The Claim in Behalf of Government Expenditure.—On the part of many, perhaps most, persons who favor large government expenditures, the actuating motive is found in the opinion hereafter to be dealt with, that wasteful and even destructive consumption "makes trade good," "encourages industry," "raises wages," &c. Something which is at least less obviously false than this must be intended in the proposition laid down by more than one economist of reputation, that government expenditures, within moderate limits, are industrially beneficial.

This view may be stated in the language of Mr. McCulloch, one of the most careful of the English economists of the last generation:—

"A moderate increase of taxation has the same effect on the habits and industry of a nation that an increase of his family or of his necessary and unavoidable expenses has upon a private individual. To the desire of rising in the world, inherent in the breast of every individual, an increase of taxation superadds the fear of being cast down to a lower station, of being deprived of conveniences and gratifications which habit has rendered almost indispensable; and the combined influence of the two principles produces effects that could not be produced by the unassisted agency of either. They stimulate

individuals to endeavor, by increased industry and economy, to repair the breach taxation has made in their fortunes; and it not infrequently happens that their efforts do more than this, and that, consequently, the national wealth is increased through increase of taxation.

"But we must be on our guard against an abuse of this doctrine. To render an increase of taxation productive of greater exertions, economy and invention, it should be slowly and gradually brought about, and it should never be carried to such a height as to incapacitate individuals from making the sacrifice it imposes by such an increase of industry and economy as it may be in their power to make, without requiring any very violent change in their habits."

335. An Instance in Point.—Such is the claim in behalf of government expenditure. What is to be said of it? Let us proceed by way of an example. Let us take a large population spread over a vast extent of country, like India, which possesses almost illimitable facilities for the improvement of the soil through irrigation, and whose broad spaces demand numerous and extensive lines of artificial communication, by canal or railway. Let it be supposed that the people occupying this country are what the people of India now are, in numbers, in character, in habits of living and of working, continually tending to increase up to the limits of subsistence, even to the very verge of famine; not only accumulating no capital, but laying by no store for future wants; having neither the genius for organization nor the capacity for self-denial which would be required to

initiate the simplest local improvements, not to speak of vast systems of transportation or irrigation.

Now, we may imagine such a population to be ruled by a benevolent, disinterested despot of the highest order of intelligence, a Napoleon devoted to the arts of peace. We may imagine this ruler, by a system of taxation that shall be as just between individuals and as judicious in its seasons and methods as human wisdom can make it, first, drawing from the crops of good years a store against the occurrence of bad harvests; then, by a gradually increasing stringency of exaction, adding to the cost of living in such a way as to discourage the rapid growth of population, while applying the proceeds of all taxes to great public improvements which enable the food supply of the empire to be readily equalized in the event of local scarcity; which guard the crops against the effects of periodic droughts; which afford rapid and cheap passage to the products of inland districts and allow the labor of men and bullocks, once devoted to a tedious and costly transportation of materials, to be applied to the multiplication of the materials themselves, be they materials for food, or clothing, or shelter.

And as the productive power of the country increased under such an administration, we can imagine the high-minded ruler, intent on his benevolent purpose, still drawing away from the people by taxation, all the surplus above the necessary cost of subsistence for the present population, which might otherwise be applied to the increase of population, and, with the means thus acquired, providing capital in its various forms for the use of the frugal

and the temperate, perfecting communications, protecting the health and lives of his subjects by sanitary arrangements, and, at last, undertaking the elementary education of the whole body of the people, by instruction both in letters and in the mechanic arts.

All this, it is clear, an absolute ruler of the character indicated might do for his people;* and not a little of this many a benevolent and able ruler has done for his people. The "forced frugality," to use Bentham's phrase, which his taxes have imposed, has at once repressed population and stimulated industry among the existing body of laborers: while the wise expenditure, upon public works and in public education, of the vast sums thus brought into the treasury, has sown the seed from which has sprung many a golden harvest.

336. Danger of Abuse and Waste in Government

---

* This is, in fact, involved in the theory of the British administration of India: the reasons are well stated in the following paragraph from the *Times* of 1879:

"In England the remission of taxation is urged with great force, because, it is said that taxes remitted will fructify in the pockets of the people. No result of this kind can be expected in India. If the conditions of living are made easier there, as they would be by a remission of taxes, the consequences would not be an improvement in the well-being of the people, but an increase of their numbers. Our duty, therefore, as guardians and governors of the people, charged with the responsibility of keeping alive in times of famine a vast population with no reserved resources of its own, is to save for those who do not save for themselves, to keep a margin of income over expenditure so that we may have in hand a fund upon which to draw in the recurrent periods of distress. This is a leading principle in Indian finance. Whoever forgets this neglects the primary duty of an Indian Administrator."

Expenditure.—But while we see, thus, what an ideal monarch might do for a people indolent, unambitious, sensual; we are forced also to remember how large a part of the wealth raised by taxation, even under governments no worse than the average, has, in all ages, been spent in war, pomp and folly; how strong is the temptation to extravagance and even to corruption in all governmental expenditure; how much of what the people pay the treasury does not receive; how much of what the treasury disburses, even in seeking truly productive ends, does not reach its intended object.

Yet it is possible that this feeling may be carried too far. When one contrasts the highways, the bridges, the streets, the harbors, the break-waters, the light-houses, and other aids to transportation and commerce, which government provides, with the best that could reasonably be looked for from individual or associated effort, without the taxing power; when one contrasts the system of public education in the most backward of our Northern States with the best that voluntary contributions or private munificence ever supplied; when one contrasts the sanitary arrangements for supplying pure air and pure water to our crowded cities with the condition of things which exists where these matters are left to unofficial action, he will, if intelligent and candid, find occasion to qualify in no small degree his assent to the proposition that, under a well-ordered constitution, government is only a policeman, to keep people from breaking each other's heads or picking each other's pockets.

337. Two Popular Fallacies Concerning Consump-

tion.—In a preceding chapter,* we discussed the question, how it is that there can be at any time, abounding natural resources, unemployed labor power, unemployed capital power, no lack of disposition on the part of the owners of capital to secure a return from the productive use of their property, no lack of disposition on the part of laborers to earn wages by work, and yet an enforced idleness with resulting poverty and squalor. Two popular explanations of this condition of things are always sure to be offered during the continuance of "hard times," one of which finds its expression in the sounding phrase "over-production," while the other emphasizes its supposed antagonism to the theory of the over-productionists, by the use of the term "under-consumption."

A brief reference to the conditions under which wealth is produced, will suffice to show that, like all condensed phrases, each of these large words signifies more than one thing; that, in certain senses, each phrase embodies a great deal of arrant nonsense; that, taken otherwise, each embodies a vital truth; and, finally, that, so far as either means any thing at all, that meaning is exactly identical with what is expressed by the other.

338. **Over-production.**—All producers are also consumers. Men produce only because they desire to consume. They produce only so much as they desire to consume. It is true that any given producer may desire to realize his enjoyment either now, or at a future time; either in satisfying his own personal

* Paragraphs 195–201.

wants and appetites, or in satisfying those of friends, children or beneficiaries. But the instances of deferred enjoyment may be trusted to average themselves from year to year, and from generation to generation.

The idea of over-production, therefore, involves the absurdity of supposing that men will labor to produce that which they have not the desire to consume.

But passing over this initial absurdity, we observe in the use of this phrase, a vague notion that the amount of necessaries, comforts and luxuries which a community, at any given stage of its progress, is prepared to consume is a definite amount; and that if the amount produced is somewhat rapidly increased, the capacity for consumption will be outrun, and men will stand, without appetite, before a mass of good things, for which they know no uses and with which they are, for the time, utterly at a loss to deal.

The fallacy of this will sufficiently appear if we ask, not who are the men able and willing to make away with a vastly greater body of wealth than they find themselves in possession of, but who are the men who would not be found willing and able to do this? Is there any laborer or mechanic receiving wages to the amount of $300 or $500 a year, who could not, and would not gladly, spend $600 or $1,000? Is there any merchant or professional man or man of leisure, with an income of $3,000 or $5,000, or $10,000, who could not easily give account of an income of $6,000, or $10,000, or $20,000? What with houses and horses, clothes, equipage, and

travel, costly viands and drinks, any civilized community could instantly double, quadruple, or decuple its consumption of wealth, were the wealth provided.

339. Under-consumption. — In like manner, the phrase, under-consumption, involves an initial absurdity, when applied in explanation of so-called "hard times." Thus, during the period of 1876-9, it was said that the people of the United States were suffering from under-consumption; yet, not for a long period, if ever, had consumption followed so quickly upon production; had the food earned been so quickly eaten; had the margin of saving been so small, as during the years referred to. A strange term, truly, to apply to such a condition: this under-consumption!

But passing by this initial absurdity, we find that beneath the phrase, under-consumption, lurks the notion that, somehow or other, wealth when once produced is in danger of getting in the way, so that other wealth cannot be produced until this be first eaten or drunk or burned up, or by some means gotten rid of. As a matter of fact, there has never been any accumulation of wealth on the earth's surface so great as to impede the further production of wealth, and there is not likely to be. Were men willing to produce wealth without consuming it, they could go on forever without encountering any obstacle through the failure of consumption. Of course, men will not, in general, produce more than they desire, sooner or later, to consume; but human appetites are not so weak that consumption may not safely be left to take care of itself. But the

disposition of men to labor is not so strong and constant that no anxiety need be felt respecting the production of wealth.

340. Over-production and under-consumption mean the same thing, and that is under-production. This is, of course, a mere jangle of words, until the phrases are qualified as they should be. Over-production, as alleged by those who would explain hard times, is *partial over-production*, production, that is, which has gone on in certain lines, generally under speculative impulses, until it has exceeded the normal, or even, possibly, a highly stimulated demand. This excess of supply in certain lines leads to the accumulation of vast stocks of unsalable goods, which is *partial under-consumption*, these stocks melting slowly away through a period extending over months, it may be, years. Meanwhile, *general under-production* is the result. The bodies of labor and capital which have been called into the over-done branches of industry, cannot readily, if at all, be transferred to other branches; they remain where they are, half employed, waiting for the renewal of demand. In the dreary interval, producing little, they have little with which to purchase the products of others, and these are consequently compelled to restrict their own production proportionally, as was shown in pars. 199–200.

In this way it is we vindicate our paradox that over-production means nothing more or less than under-production. There is no over-production possible, except a partial over-production, an over-production in certain lines, which inevitably involves a lowering of the scale of production as a whole:

that is, partial over-production involves general under-production.

It is under production, not over production or under-consumption, which makes hard times.

Over-production, general over-production, is impossible, and, were it to occur, were the creation of wealth to outrun men's capacity to consume, no one would be injured thereby. But under-production is an unmistakable evil. It means less wealth produced, and consequently fewer of the comforts and necessaries of life, on the average, to each member of the community. To large classes it means hunger, cold and squalor; debility, sickness and premature death.

341. The Destruction of Wealth.—We have already adverted to the fact of the extensive destruction of wealth, by accident or by natural causes, as affording an explanation, in part, of the comparatively slow progress of accumulation, even in the states whose land power, labor power and capital power are greatest. We have now to deal with the same fact, in our theory of consumption.

A stubborn belief appears among the non-agricultural masses of every community where wages or labor or wealth is a topic of familiar discussion, to the effect that the destruction of wealth in some way increases production. Laboring people generally hold to this; our servants believe it religiously, and justify themselves, secretly or openly, for all their breakage and wastage by the plea that it "makes trade good." Even cultivated persons are not free from an instinctive feeling that the abrupt removal of the existing body of wealth quickens industrial

activity and promotes the general welfare, though it may be at the cost, for the time, of individuals.

Frederic Bastiat, in one of his capital little essays, has dealt with this notion so cleverly that there can be no excuse for any writer using his own phrases on this theme.

342. The Broken Pane.—"Have you ever had occasion to witness the fury of the honest burgess, Jacques Bonhomme, when his scapegrace son had broken a pane of glass? If you have, you cannot fail to have observed that all the bystanders, were there thirty of them, lay their heads together to offer the unfortunate proprietor this never-failing consolation, that there is good in every misfortune, and that such accidents give a fillip to trade. Every body must live. If no windows were broken, what would become of the glaziers? Now, this formula of condolence contains a theory which it is proper to lay hold of in this very simple case, because it is exactly the same theory which unfortunately governs the greater part of our economic institutions.

"Assuming that it becomes necessary to expend six francs in repairing the damage, if you mean to say that the accident brings in six francs to the glazier, and to that extent encourages his trade, I grant it fairly and frankly, and allow that you reason justly.

"The glazier arrives, does his work, pockets his money, rubs his hands, and blesses the scapegrace son. *This is what we see.*

"But if, by way of deduction, you come to conclude, as is too often done, that it is a good thing to

break windows—that it makes money circulate—and that encouragement to trade in general is the result, I am obliged to cry, halt! Your theory stops at what we see, and takes no account of *what we don't see.*

"We don't see that since our burgess has been obliged to spend his six francs on one thing, he can no longer spend them on another.

"We don't see that if he had not this pane to replace, he would have replaced, for example, his shoes, which are down at the heels; or have placed a new book on his shelf. In short, he would have employed his six francs in a way in which he cannot now employ them. Let us see, then, how the account stands with trade in general. The pane being broken, the glazier's trade is benefited to the extent of six francs. *This is what we see.*

"If the pane had not been broken, the shoemaker's or some other trade would have been encouraged to the extent of six francs. *This is what we don't see.*"

343. Destruction Sometimes the Removal of Obstruction.—It is, of course, possible to conceive a situation where the destruction of wealth may have the direct effect to secure a larger production of wealth. Thus, a man may occupy a certain water privilege with an antiquated mill, which he can not make up his mind to tear down. To destroy the mill seems to him like waste, or, even if he appreciates the fact that the erection of a new and more commodious mill, with modern appliances, on the site, would be true economy, he cannot bring himself to incur the initial expense just at this time; he procrastinates

in the matter, and so perhaps goes on, year after year, cramped in his operations, perhaps unable even to undertake production in certain lines for which there is an advantageous opening. Now, in such a case it might happen that the burning down of the old mill would lead to the immediate erection of a new one which would pay for itself in a short time, and the net result, thereafter, be the substitution of a powerful and efficient agent of production for one that was inadequate and outworn.

Undoubtedly, too, the destruction by fire of the old and crooked parts of certain cities, filled with rookeries and tumble-down houses, almost impassable to traffic and repulsive of aspect, has led to an actual increase of wealth within a short time thereafter. The quarter destroyed may have been long a nuisance and an obstruction to the growth of the city and the development of its trade; but the inertia of property owners, their blindness to their large, their permanent interests, their indisposition, either from apprehension or avarice, to make large capital expenditures, and especially the fact that it was of no use for a single property owner to try to improve the quarter by tearing down his rookeries and building handsome and commodious structures, so long as the general character of the neighborhood remained what it had been, these causes might have long withstood the needed improvements. The fire comes, resolves all doubts, burns up in an hour the accumulated foulness of hundreds of years, leaves the ground open to building, and six months or a year thereafter, a new and elegant quarter has arisen

from the ashes. Not all, not by any means the larger part, of this represents the production of wealth in the interval. By far the greater share represents the transplanting to this spot of wealth previously existing. Yet, in addition, there may, as we said, conceivably have been a large creation of values due to the improvement of commercial sites and commercial avenues heretofore neglected.

Such instances of the destruction of wealth leading to a larger production are comparatively rare. In the vast majority of cases, that destruction, however rejoiced over by shallow persons who are influenced only by "what they see," or by selfish persons who secure an immediate individual advantage from the loss of others, which is also a public loss, is a misfortune which is properly only the subject of regret.

CHAPTER IV.

Consumption the Dynamics of Wealth: Reaction of Consumption upon Production.

344. We have examined several of the theories most prevalent regarding the consumption of wealth, some of them held by economists of reputation, others held only by the ignorant or the thoughtless.

We saw that what I have ventured to call the potato-philosophy of wages, by which dear food is made, strangely enough, to be a condition most beneficial to the laboring classes, is only justified upon the assumption that, excepting small and unelastic expenditures for clothing and shelter, nothing is indispensable or "necessary" to the working-man except his food; that this food will consist, practically, of a single staple article, the cost of which thus comes to determine the entire expenditure; and, hence, that if this staple article be cheapened, the laboring class will be left in the position indicated by Mr. McCulloch (Par. 332), always on the verge of famine.

But we in the United States know that a cheap staple article, like Indian corn, may be compatible with a lavish expenditure on garnishes, fruits, con-

diments, relishes and drinks;* secondly, that a great many things may become indispensable to the working classes beyond their food; that decent and comfortable homes, with yards and gardens, school-houses and churches, may be made just as "necessary" as food and drink; that in such a community, parents will gladly deny themselves the wages their children might earn, in order to send them to school, and the husband gladly deny himself the wages the wife might earn, in order that she may "keep the house."

Not only may individual desires continually multiply among a people, where political freedom and social ambition exist, but as they multiply they should also intensify. The higher the industrial desires rise, the more tenacious they become. Tastes are not only more costly than appetites, but they are far stronger.

345. Again, we considered the plea in behalf of governmental expenditures as constituting a desirable form of consumption. We saw that government may undertake vast works of construction, or services vitally important to the security of life and property, to which the abilities and the resources of individuals might be utterly inadequate. We saw no reason for attributing to such expenditures by government any different economic character or effects than would belong to equal expenditures by individuals who might have the power and the

* Many an American mechanic spends as much for milk, butter and eggs, alone, as he does for flour and meal; and as much more, still, for tea, coffee and sugar.

disposition to construct the same works and perform the same services.

We saw, however, that certain sound thinkers, like McCulloch and Bentham, attribute a possible economic virtue to expenditures made by government, for purposes, not such as individuals could not compass, but such as individuals, from lack of industrial or social ambition, of self-denial, or forethought, would not undertake. We saw that there is a modicum of truth in this view of governmental expenditure, upon its underlying assumption, viz., that individuals will not, for themselves, expend wealth wisely; but we saw nothing which need qualify the objections raised to unnecessary governmental expenditure among any people who are only moderately well qualified to judge of their own interests, and are only moderately disposed to exercise abstinence and self-control for the sake of the future.

346. Again, we considered certain popular and more or less fallacious notions regarding the relations existing between the use of present wealth and the creation of new wealth. We saw that some persons, who are often persons of general intelligence, hold that, in order there may be as much wealth as possible to be enjoyed, great pains should be taken against an "over-production" of wealth, an excess of food, clothing, fuel, and other necessaries, comforts and luxuries of life appearing to these persons to be the proper subject of continual apprehension. While, thus, on the one hand, some fear that too much wealth will be produced, others fear lest the wealth that exists shall be too slowly made

away with. Under-consumption is the economic bugbear of these persons. Wealth is, in their view, not so much of a good but that it is desirable it should be caused to disappear as rapidly and as completely as possible. They have a notion that wealth, once produced, some how or other gets in the way of the production of new wealth; and that it is all-important that it should be eaten up, or drank up, or worn out, or otherwise disposed of: the sooner the better. It matters less how wealth shall be consumed, than when. Any form of consumption is better than a slow consumption. That is the most advantageous of all, which is the most rapid possible.

We saw, also, that many persons, not all of the most ignorant class, go a step beyond this, holding that if wealth cannot be consumed fast enough, it should be destroyed. These persons look to fire and flood to "make trade good." They find too many things upon this earth which are adapted to give pleasure and soothe pain, to increase the power of man over matter and the elemental forces, to prolong life, to instruct, civilize and refine. They may not be able to present an argument in favor of their view of the subject, but they know, by the way they feel, that a conflagration, or an inundation, or a protracted war, really does promote human well-being. Of that they are sure.

347. If we have dealt sufficiently with the foregoing notions regarding consumption, we have reached the point where we may hope to find the true Dynamics of Wealth.

I have said that, as a means of checking the in-

crease of numbers, which would otherwise surely carry population to the point of misery, famine and pestilence, the appearance of almost any economic want must be greeted by the economist as an economic good, without much regard to the origin or object of that want. But the moment the capability of the self-limitation of population is assured, the economist discovers wide differences between the various demands for the consumption of the existing body of wealth, made by the differing appetites and desires of different communities, or of different classes in the same community.

It is in the reaction of Consumption upon Production that we reach at last the chief cause of that great falling off of actual production from productive capability, of which we found a partial explanation under preceding titles of this work.* When we remember that the expenditure of the people of Great Britain, annually, for alcoholic beverages reaches the enormous sum of $900,000,000; and when we remember that this enormous expenditure, which is more than ten-fold the sums devoted to elementary education throughout the kingdom, is but one of many forms of consuming wealth which not only have no effect to increase subsequent production, but have a direct and positive influence to diminish the disposition and the power to labor, we get a rude measure of the force which a consumption of wealth directed towards different ends might introduce into the economic life of that country.

* Chap. IV., Part 2; Chap. VII., Part 3; Chap. VII., Part 4.

It is here we find the body of economic literature most deficient. We need a new Adam Smith, or another Hume, to write the economics of consumption in which would be found the real Dynamics of Wealth,* to trace to their effects upon production the forces which are set in motion by the uses made of wealth ; to show how certain forms of consumption clear the mind, strengthen the hand and elevate the aims of the individual economic agent, while promoting that social order and mutual confidence which are favorable conditions for the complete development and harmonious action of the industrial system ; how other forms of consumption debase and debauch man, as an economic agent, and introduce disorder and waste into the complicated mechanism of the productive agencies. Here is the opportunity for some great moral philosopher, strictly confining himself to the study of the economic effects of these causes, peremptorily denying himself all regard to purely ethical, political, or theological considerations, to write what shall be the most important chapter of political economy, now almost a blank.

---

* The late Prof. Jevons, in the introduction to his "Theory of Political Economy," after noting the close analogy to the science of Statical mechanics, presented by the Theory of Economy proposed by him, significantly says : "But I believe that Dynamical branches of the science of Economy may remain to be developed, on the consideration of which I have not at all entered." Elsewhere Prof. Jevons says : "We, first of all, need a theory of the Consumption of Wealth."

PART VI.

SOME APPLICATIONS OF ECONOMIC PRINCIPLES.

348, The Topics to be Treated.—It has seemed best to reserve to this portion of our work the discussion of some topics which involve the application of economic principles to questions of law or governmental policy, into which considerations of political equity or political expediency will intrude themselves so that they can hardly be shut out; and also to place here some matters of economic detail which might have unduly interrupted the course of our argument had they been dealt with at the points with which they are logically connected.

Throughout this part, therefore, I may be found to adduce considerations not strictly economic, with a freedom I have not allowed myself heretofore.

The topics to be treated under this title are:

1. Usury Laws.
2. The Banking Functions.
3. Industrial Co-operation.
4. Trades-Unions and Strikes.
5. The Unearned Increment of Land.
6. Political Money.
7. Bimetallism.

8. Pauperism.
9. The Revenue of the State.
10. Taxation.
11. "Protection" vs. Freedom of Production.

I.

USURY LAWS.

349. The Justification of Interest.—It has already been said (par. 15) that it is not the province of the economist to justify the existing order of things, or to establish the morality or the political equity of laws or institutions affecting property; yet we shall get so good a side-light upon the economic principles governing the loan of capital in briefly considering the objections that have been raised against interest, or the taking of usury, as it is invidiously called, that it may be worth our while to step out of the direct path for a moment, at this point.

For many centuries, and even within a comparatively recent period, the Christian Church proscribed the taking of usury as a moral offence, and the laws of nearly all civilized countries made it a crime.

The origin of the prejudice against usury is commonly attributed to a mistaken apprehension of a provision of the Mosaic Code forbidding the receipt of interest from any member of the chosen race, and to a passage in the works of Aristotle, those works which once had so profound and pervasive an influence in forming the political philosophy of Europe, to the effect that *as money does not produce money*, nothing more than the return of the principal sum lent can equitably be claimed by the lender. That

dictum, claiming no divine authority but professing to found itself on reason, remained unchallenged for ages amid all the political speculations of Europe. Mr. McCulloch attributes to John Calvin the honor of having first detected the fallacy of this argument against usury.

Money does, indeed, not produce money; but if a man borrows money he may with it buy grain which, when sown, will bring forth "some thirty, some sixty and some an hundred fold;" he may purchase cattle, of which a small herd will, in a few years, become a mighty one; or if he employs it in trade or in manufactures, his production may be so largely increased thereby that he may pay a liberal reward to the lender, and yet be far better off than if he had not borrowed.

350. Interest Permitted.—England led the movement towards a more enlightened policy. By an act of 1546 lenders were allowed to receive interest, though at a rate not to exceed ten per cent. Subsequent statutes reduced the rate of legal interest successively to 8, 6 and 5 per cent., at which last point it remained till the present reign (Victoria), when all restrictions on loans were abolished.

Among the American States, Massachusetts has made contracts of loan as free as those of purchase and sale.

Interest is now allowed to be paid on loans in all civilized countries, the prohibition of usury having fallen utterly out of the sympathies of this age. That the lender has a right to participate in the gain which the borrower anticipates from the use of the money or other commodities lent, is not better estab-

lished in law than in the popular philosophy of life. Money-lending has passed beyond all stigma; and the profession of the banker, who organizes and conducts the borrowing of whole communities, is among the most honorable known to modern society.

351. Shall the Borrower be Protected by Law? — Yet while it is now fully recognized as both right and expedient that the lending of money at interest should be not only allowed but encouraged, there still survives an opinion, very widely spread, that the taking of interest should be under the regulation of the State, to prevent the abuses which are apprehended from the power of the money-lender over the needy and necessitous borrower: that, to use Bacon's phrase, "the tooth of usury be grinded, that it bite not too much." This opinion finds expression in the statutes of nearly all nations and of many States of the American Union, and even in the general banking law of the United States.

The term, usury laws, now, therefore, has reference, not to the prohibition of interest but to its regulation, generally through the means of a prescribed maximum rate which it is made unlawful to exceed.

I am not sure that these laws were, in an earlier time, wholly without justification in economics or in political equity. They were enacted in the interest of the would-be borrower, who was regarded as unable to sustain, without grave injury, which might also work injury to the community, the competition to which he was subjected in his efforts to secure the loan of capital. And in the age in which

these laws generally were enacted, this assumption was not without reason.

Borrowers were, then, generally persons embarrassed or distressed, whether by their own fault or by misfortune. Trade and manufactures were not then, as so largely now, carried on by means of borrowed capital. The man who asked a loan was presumably in circumstances which put him very much at the mercy of the money lender.

And the money lender in those days was not, in general, a nice sort of person. The recent outbreaks in Roumelia, Roumania and Russia testify to the natural feelings of a simple-minded, ignorant, passive, and more or less stupid people, who see houses and lands and cattle and goods, and even standing crops, pass with fatal certainty out of the hands of the many into the hands of a class in whom the faculty of acquisition is developed to such a degree as to make them, in comparison with a peasantry like that of the Slavonic States, as wolves among sheep.

We allow all men to walk our streets indifferently, because men are so constituted physically as to be substantially equal, so far as contact is concerned. We brush each other and sometimes run full against each other, and yet give and take no harm. But suppose one-half the people of our cities were made to be as fragile and brittle as glass, while the other half were as heavy and as hard as iron, would not the law require the latter to go by separate streets, and protect the weaker part of the community from a contact that would be fatal?

352. How Usury Laws are Evaded.—Among the

methods resorted to for evading the laws against usury may be mentioned the following:

1. Fictitious deposits.—The bank scrupulously respects the legal prescription of a maximum rate of interest; but its customers make up the difference by keeping "a large line of deposits."

2. Commissions and fictitious exchange.—Whenever capital is in great demand, especially in times of commercial pressure, it is customary for bill brokers to charge "commissions," which are really nothing but additional interest, and for banks to create fictitious "exchange," by making notes payable in other places, and charging a percentage on the transfer of the funds, which, also, is disguised interest.

3. Another way in which the lender may obtain the advantage of which the law would deprive him, is by compelling the would-be borrower to take the capital for a longer term than actually required.

But of even more importance, in this connection, though it is rather to be regarded as one of the injurious effects of usury laws than as a means purposely resorted to for evading them, is the fact of the forced sales of goods,* to which merchants and manufacturers are often driven by their inability, under the law, to pay a rate of interest sufficient, in hard times, to secure a needed loan.

353. May Usury Laws Influence the Rate of Interest?

* It is to this Lord Bacon alludes when he says: "Were it not for this easy borrowing upon interest, men's necessities would draw upon them a most sudden undoing, in that they would be forced to sell their means (be it lands or goods) far underfoot; and so *whereas usury doth but gnaw upon them, bad markets would swallow them quite up.*"

—On the whole, the question of the effect of usury laws upon the rate of interest, in a primitive and mainly agricultural community, is not quite so simple as most writers on economics have regarded it. On the one hand, I have no doubt that the fixing of a legal rate of interest has a certain effect upon the disposition of owners of capital in lending that capital. We have seen (par. 109), that the moral and intellectual elements of supply and demand are very potential in exchange. The current rate of interest, in a country where a rate is fixed by law, doubtless at times affords an example of the operation of this force. On the other hand, it is equally clear that such provisions of law may be evaded by the various means recited, and probably will be evaded whenever the inducement offered is very great; while, so far as borrowers are driven to shifts to disguise an excess of usury, they are likely to find themselves worse off than they would be in an open market.

354. The Balance of Advantages.—But in any modern commercial community of large and varied and complicated industrial concerns, the case regarding laws fixing the rate of interest is a very simple one.

In an advanced state of industrial society, where borrowing is no longer the resort of the embarrassed and distressed, alone, or mainly, but, on the contrary, the most flourishing trade and manufactures are carried on chiefly by means of borrowed capital; where, in the usual course of prosperous business, notes are made and are paid by thousands, or by tens of thousands, every day, usury laws become purely mischievous

First, because the vastly greater interests of trade and industry would properly outweigh, were society called to choose between them, the interests of distressed and embarrassed individuals, in this matter of the loan of capital; and,

Secondly, because such persons will, in fact, benefit by the greater plentifulness of capital, the greater ease of borrowing, and the consequently lower rate of interest, which, in general, result from freedom regarding contracts for loan in a commercial and manufacturing community. The "business classes," active, alert, aggressive in competition, will make rates of interest by which the less fortunate members of society will profit.

II.

THE BANKING FUNCTIONS.

355. An Ancient Profession.—"The trade or profession of banking," says Lord Liverpool, "has been exercised in all countries and all ages. It existed in the republic of Greece and in ancient Rome. There were, in all these States, men who received money as a deposit, repaid it upon the drafts of those who had intrusted them with it, and derived their profits from having this money in their custody."

1st. Financiering.—In modern times, the first banks appear in Italy. Mr. Bagehot states that the earliest of these "were finance companies. The Bank of St. George, at Genoa, and other banks founded in imitation of it, were at first only companies to make loans

to, and to float loans for, the governments of the cities in which they were founded."

356.—2d. Book Credits of the Bank of Amsterdam.— The next banking function historically developed was that of giving the people good money in place of a medley of worn and clipped coins of a great diversity of coinages, belonging to many nations. It was to serve this office that the banks of Northern Europe were created.

"Before 1609," says Adam Smith, "the great quantity of clipped and worn foreign coin which the extensive trade of Amsterdam brought from all parts of Europe, reduced the value of its currency about 9 per cent. below that of good money, fresh from the mint.

"In order to remedy these inconveniences, a bank was established, in 1609, under the guarantee of the city. This bank received both foreign coin and the light and worn coin of the country, at its real intrinsic value in the good standard money of the country, deducting only so much as was necessary for defraying the expense of coinage and the other necessary expenses of management. For the value which remained after this small deduction was made, it gave a credit on its books. This credit was called bank-money, which, as it represented money exactly according to the standard of the mint, was always of the same real value, and intrinsically worth more than current money."

It will be observed that Adam Smith calls these credits inscribed upon the books of the Bank of Amsterdam, "bank-money;" but this money, if it is to be called so, will be seen to differ widely from

the bank money of to-day, already described: 1st. It did not circulate from hand to hand, as the ordinary medium of effecting exchanges; 2d. It was never in excess of the amount of metallic money actually on deposit in the vaults.

357.—3d. Cancellation of Indebtedness.—The next banking function, which we are called upon to notice, is the cancellation of indebtedness.

An enormous volume of indebtedness at all times exists in any highly progressive country, which has to be paid and renewed from day to day. The labor and loss of time involved in collecting debts and paying moneys, with the probable delay and disappointment involved therein, would be almost intolerable unless some special agency were established for doing this work upon a large scale and with all the advantages which we have found to result from the application of the division of labor. This function the bank performs.

If, in any great city, many banks are required to carry on this function, these banks, in turn, establish a common agency for settling their mutual obligations, called a Clearing House.

358.—4th. Exchange.—The next banking function is to remit money and conduct exchange.

In essence, where a man *buys exchange*—he buys the right to have paid to him, or his agent, or creditor, a certain amount of fine gold or silver, to be delivered in some other place mentioned in the contract. If I buy in New York "exchange on London," some one who owns gold in London, or who has a right to demand gold there, sells me his claim to receive a definite amount of that metal, in

London, at a definite time, or at my convenience if we so agree. I may then, either go to London and get the metal, as, for instance, if I am starting out on a European tour, or I may send an order, by post or telegraph, for some one else to get it there, as, for instance, if I have bought pictures in London.

Now, we may suppose that, in order to induce some person to sell me "exchange on London," I have to pay him, not goods but a certain amount of gold in New York, where we both live. How much gold shall I pay him in New York to induce him to give me the right to receive a certain amount, say 1,000 ounces, of gold in London? Shall I have to pay him 1,000 ounces, or more or less? That depends on whether exchange is at par, or above par, or below par.

Exchange between two places is at par, when, by paying a certain amount of money metal, or its equivalent, in one place, you can purchase the right to receive an equal amount of the same metal in the other.

Exchange is above par or below par, when the right to receive elsewhere a given amount of gold or silver, is to be purchased by paying, in the one case, a larger, and, in the other case, a smaller amount of the same money metal, in the place where the transaction is effected.

Exchange will be at par when the sums of the payments to be made to and from any two places, within a given time, exactly balance each other. If the sum of the payments to be made within a limited period by the merchants of one place, say New York, to the merchants of another place, say

London, is greater than the sum of the payments to be made in New York by the merchants of London, then, exchange on London will be above par in New York, that is, a New York merchant having to pay a debt, within that period, in London, will have to pay down more than 1,000 ounces of gold in New York to buy the right to have paid to him, or to his creditor, 1,000 ounces of gold in London.

The upward limit of the premium on bills of exchange is the cost of remitting specie. The New York merchant, in the case supposed, will not pay more, in addition to 1,000 ounces, than the cost of sending 1,000 ounces from New York to London, freight, insurance, and commission being taken into account. If the holders of bills demand a premium above this, the New York merchant will send the metal, and in that way pay his debt. Within the limit thus assigned, the premium on bills rises or falls with the fluctuations of the market, according to the law of supply and demand.

This function, again, the bank to a great extent performs, and in so doing renders the trading community an immense service, saving an inconceivable amount of inconvenience and delay, of vexation and disappointment, often resulting in commercial discredit.

359.—5th. Safe Deposit.—The fifth banking function is to serve as a place of safe deposit. Mr. Francis, in his History of the Bank of England, attributes the rise of the city banks primarily to the need of this service on the part of shopkeepers and private persons of means. In this way the goldsmiths' street in London, Lombard street, came to be the

bankers' street, the greatest banking street of the world. The ordinary bank is still, to a great extent, a place of safe deposit for money, family jewels, deeds, and bonds, although special institutions for safe deposit are now found in many large cities.

360.—6th. Deposit and Discount.—The sixth and the chief of the legitimate functions of the modern bank is to serve as an intermediary in the loan of capital.

The technical terms, deposit and discount, serve to characterize this function. It is in this way that banks make their largest contributions to the advancement of commerce and industry. This office of banking is, however, as much overrated by some as it is underrated by others. Those who see the wonderful effects wrought by gathering into one great reservoir the wealth of ten thousand individuals, much of which would otherwise be hoarded, or unwisely applied, and by conducting it thence, as occasions require, in various directions, through channels judiciously devised to secure the highest and most effective irrigation of the field of industry, are apt to imagine that the bank in some way creates capital. This is a wholly mistaken notion. The bank adds to the wealth of the community, only by economizing and directing it to the best ends.

So important is this function that most European writers, when they speak of banking, have only in mind deposit and discount, all other functions being held to be minor and subordinate.

361.—7th. Issue of Paper Money.—To an American,

however, the word, banking, is more likely to bring up the notion of paper money. The issue of such money is the seventh and the last of the banking functions which we have occasion to describe.

The great London joint-stock banks, a single one of which holds deposits rising into tens of millions, and whose ordinary dividends are three, four or five times as great as those of the Bank of England, never issue a note.

In this country, however, the word, bank, through much of our history, has to most people signified little more than a place where paper money was manufactured.

362. The Banking Agencies.—Such are the banking functions. The agencies by which these functions are performed may be grouped under four heads: (1), state banks; (2), joint-stock banks; (3), private banks; (4), bill-brokers and dealers in exchange.

III.

INDUSTRIAL CO-OPERATION.

363. The Objects of Co-operation.—In Part IV. we have shown the place in the scheme of Distribution that is to be occupied by what is termed co-operation, should that project be, in any appreciable degree, realized.

We said that the object of co-operation is to get rid of the "entrepreneur," or employer, as an industrial agent.

364. The Benefits Aimed at by Co-operation.—Such

being the nature of co-operation, let us inquire a little more minutely what advantage might reasonably be looked for from it, provided it were found practicable.

Let us begin by taking the laborer's point of view:

First:—To secure for the laboring class that large amount of wealth, which, as we have seen, goes annually in profits to the employer.

Second:—To secure for the laborer the opportunity to produce independently of the will of an employer. Under the existing industrial system, it remains with the entrepreneur to decide, not only what shall be produced, and how and when and in what amounts, but also whether any production at all shall take place.

365. The foregoing are the two chief benefits which the laboring class have looked to co-operation to secure for them. In addition to these, the political economist beholds in co operation three sources of advantage. First: Co-operation would, by the very terms of the case, do away with strikes. The employer disappearing, these destructive contests, which are commonly called the conflicts of labor and capital, but are really conflicts between the laborer and the employer, would disappear also. Second: The workman would be incited to greater industry and to greater carefulness in dealing with materials and with machinery. The co-operative system would give him a direct, instant, certain interest in the product. Third: In no small degree would frugality be encouraged. While, under the existing entrepreneur system, the work-

man may save from his earnings and invest his means at interest, it cannot be doubted that a co-operative laborer having the opportunity to invest his savings at once in his own business would feel a much stronger inducement to frugality than does the wage laborer.

366. The Difficulties of Co-operation.—The advantages which would attend the successful establishment of co-operation being so many and so great, it may be asked why has this scheme, proposed so long ago, sanctioned by the highest economic authority, appealing directly to the self-interest of the laboring classes, not been immediately successful, on a large scale?

Co-operative enterprises may be divided into two classes—one attempting what we may call productive co-operation; the other what we may call consumptive co-operation. In enterprises of the former class, the laborer seeks to make for himself an income; in the latter he seeks to expend or consume that income to the best advantage; to make each dollar of his daily or weekly earnings go as far as possible in providing subsistence for himself and family.

367. Consumptive Co-operation has had no inconsiderable degree of success in England, in the way of shops for the sale of flour, meats, groceries and other articles of domestic consumption. In the United States, the indifference of the people, even of the poorer classes, towards small savings, and that same unwillingness to take pains to secure a sound administration of trusts which has permitted municipal and State governments to fall so largely into the hands of unworthy persons, have combined

to limit very narrowly the application of this scheme.

368. Productive Co-operation.—But while consumptive co-operation has had a degree of success which at least proves it to be a practicable scheme, given only a reasonable degree of popular interest in its maintenance, the history of productive co-operation alike in France, in England, and in the United States has been most discouraging. Of numberless enterprises undertaken within the last thirty-five years by associations of laborers, with the encouragement and often the active assistance of philanthropists and political economists, and enjoying the benefit of a vast amount of gratuitous advertisement, scarcely any remain.

369. The Difficulties of Productive Co-operation.—Why is it that co-operation, in the view of the many and great advantages which it offers, has had such partial and doubtful success? The answer is at hand. The difficulties of productive co-operation are directly as its advantages. The arbitrary powers wielded and the vast profits enjoyed by the entrepreneur class make the working classes desire, naturally enough, to bring about an industrial order in which they shall no longer be subject to such exercise of authority, and in which they shall themselves reap the large sums of wealth which they see passing into the hands of their employers. Yet when a body of laborers set up for themselves, the result very soon shows that the reason why the entrepreneur wields such despotic power and enjoys such revenues, is that he performs a part in modern industrial society which is of supreme importance.

The time may come, in the development of the human race through the education and elevation of the masses, when a body of laborers, joined together for the purpose of co-operative production, will give to their industrial enterprises as intelligent a direction, as close a supervision, as rigid a discipline, as energetic an impulse, as the present successful man of business gives to the enterprises on which his fortunes and his reputation are staked; but not a single instance is on record of a body of laborers having yet exhibited this capacity; and, for one, though believing thoroughly, so far as politics are concerned, in a government of the people, by the people, for the people, I see nothing which indicates that, within any near future, industry is to become less despotic than it now is.

The power of the master in production, "the captain of industry," has steadily increased throughout the present century, with the increasing complexity of commercial relations, with the greater concentration of capital, with improvements in apparatus and machinery, with the multiplication of styles and fashions, with the localization and specialization of manufactures.

I shall be heartily glad to see the working classes rise to the height of the occasion, and vindicate their right to rule in industry by showing their power to do it. But meanwhile it must be distinctly understood, that nothing costs the working classes so much as the bad or commonplace conduct of business; that industry must be energetically, economically, and wisely managed, no matter who is to do it; and that co-operation will be successful only as it results

in the production of equally good articles at equally low prices as those produced under entrepreneur management.

If we have made our analysis of profits correctly, it appears (pars. 258–60) that the gains of the entrepreneur are not taken from the earnings of the laboring class, but are wholly the creation of wealth by the competent employer, whether in banking, in trade, or in manufacture: gains measuring the difference in production between the commonplace or bad, and the able, and shrewd, and strong management of business.

IV.

TRADES-UNIONS AND STRIKES.

370. The Objects of Trade Unions.—It has been shown (pars. 282–6, 290) under the title of Distribution, that the question, whether any law or institution does or does not promote the freedom of industrial movement enjoyed by the community, is a question not to be decided *à priori*, but upon a consideration of the actual effects of such a law or institution, comparison being made, not between the state which will result therefrom and an ideal state of perfect economic mobility, but between the new condition and the condition which does exist or probably would exist without that law or institution.

Let us take the case of Trades-Unions, so-called, which, in addition to much good work as so-called "Friendly Societies," often undertake, through

agreements among themselves and perhaps simultaneous strikes against employers, to fix wages, regulate the hours of labor, and control many of the various details of industry.

371. May Trades-Unions Promote the Interests of Labor?—If we have correctly discerned the action of competition, such associations cannot enable a body of laborers to act better in respect to the interests of each and of all of them, than could be done by each man intelligently seeking his own interest, solely, upon his own initiative. We have seen (par. 278-9) that competition, perfect competition, affords the ideal condition for the distribution of wealth. But as we saw in the case of the audience in a theater that had taken fire, the action of men in concert and under discipline, while it can never be wiser than that of men acting coolly and intelligently for themselves, may be far wiser than the action of men stricken with panic and hurried into a senseless, furious rush. Respecting trades-unions, the question is not, whether joint action is superior to the individual action of persons enlightened as to their industrial interests, but whether joint action may not be better than the tumultuous action of a mass, each pursuing his individual interest with more or less of ignorance, fear and passion.

Now, with a body of employers, few, rich and powerful, having a friendly understanding among themselves and acting aggressively for the reduction of wages or the extension of the hours of work, and, on the other side, a body of laborers, numerous, ignorant, poor, mutually distrustful, while

each feels under a terrible necessity to secure employment, else wife and child will starve, who shall say that such a body of laborers might not be better able to resist the destructive pressure from the employing body, if organized and disciplined, with a common purse and with mutual obligations enforced by the public opinion of their class, than if each for himself were to measure strength with his employer?

I said, destructive pressure, for we saw that the pressure of competition, if it be unequal, may lead to the degradation of the laboring class, just as the pressure of the atmosphere, which is imperceptible when equally applied over all sides, becomes crushing and destructive when the air is withdrawn from within or from below; just as the waves over which and through which a ship rides unharmed, when herself free to move, become crushing and destructive, let once the ship's bow be jammed between rocks or lodged in the sands.

372. The Early English Strikes.—For myself, I entertain no doubt that the early strikes in England which followed the repeal, in 1824, of the Combination acts, were essential to the breaking up of the power of custom and fear over the minds of the working classes of the kingdom. For centuries it had been a crime, by statute, for workmen to combine to raise wages or shorten the hours of labor, while masters were left perfectly free to combine to lower wages or lengthen the hours of labor to any extent.* The beginning of the century found the

* "We have no acts of Parliament," wrote Adam Smith, in 1776, "against combining to lower the price of work, but many against combining to raise it."

laboring classes of England almost destitute of political franchises, unaccustomed to discussion and the communication of thought, tax-ridden, poverty-stricken, illiterate.

What else than the series of fierce revolts, the rebellions of down-trodden labor, which followed Huskisson's act of 1824, could, in an equal period of time, or, indeed, at smaller cost, have taught the employers of England to respect their laborers, and have taught the laborers of England to respect themselves; could have made the latter equally confident and self-reliant in pressing home a just demand, or made the former equally solicitous to refuse no demand that could reasonably be conceded?

For, be it remarked, perfect competition, which affords the only absolute security possible for the equitable and beneficial distribution of the products of industry, requires that each and every man for himself should unremittingly seek and unfailingly find his best market. If for any reason, whether from physical obstruction or legal inhibition, or from his own poverty or weakness of will or ignorance, or through distrust of his fellows or a habit of submission to his employer or his social superiors, any man fails, in fact, to reject the lower price and to seize the higher price, the rule of competition is, so far as that individual is concerned, violated.

373. Strikes are the Insurrections of Labor.—To strikes I assign much the same function in industry which insurrections have performed in the sphere of politics. Had it not been for the constant imminence of insurrection, neither France nor England

would through several centuries have made any progress towards freedom, or even have maintained their inherited liberties.

Strikes are the insurrections of labor. They are, of course, wholly a destructive agency. They have no creative power, no healing virtue. Yet, as insurrections have played a most important part in the political elevation of downtrodden peoples, so strikes may exert a most powerful and salutary influence in breaking up a crust of custom which has formed over the remuneration of a body of laborers, or in breaking through combinations of employers* to withstand a legitimate advance of wages, where the isolated efforts of individuals, acting with imperfect knowledge, with scanty means, and under a dread of personal proscription, would have proved inadequate.

Doubtless even more important than the specific objects realized by strikes, has been the advantage resulting from the permanent impression produced by these insurrections of labor upon the minds and the temper of both employers and employed. The men have acquired confidence in themselves and trust in each other; the masters have been taught respect for their men, and a reasonable fear of them.

Nothing quickens the sense of justice and equity like the consciousness that unjust and inequitable demands or acts are likely to be promptly resented and strenuously resisted. Nothing is so potent to

* "Masters are always and every where in a sort of tacit, but constant and uniform, combination, not to raise the wages of labor above their actual rate."—*Adam Smith*.

clarify the judgment and moderate the temper, in questions of right or wrong, as to know that a mistake will lead to a hard and a long fight. The "sober, second thought" often reveals errors in computations which had borne perfunctory tests, shows a way of escape from conclusions that had appeared inevitable, and opens a path to negotiation and compromise where strife was imminent.

374. What is the Failure of a Strike?—Nor must it be thought that because strikes often, perhaps we might say commonly, fail of their immediate object, they are, therefore, nugatory. Many an insurrection has been put down speedily, perhaps with great slaughter, which has been followed by remission of taxes, by redress of grievances, by extension of charters and franchises. It may be considered doubtful whether the successful or the unsuccessful insurrections of England have done more to advance English liberties. Of the rising of the peasantry against Richard II., which was suppressed in a few days, Prof. Thorold Rogers says: "The rebellion was put down, but the demands of the villains* were silently and effectually accorded; as they were masters for a week of the position, the dread of another servile war promoted the liberty of the serf." So even an unsuccessful strike may make employers more moderate, considerate and conciliatory, as they recall the anxieties, the struggles and the sacrifices of the conflict from which they emerged, in the immediate instance, victorious.

375. Something Better than Strikes.—Yet, as insur-

* Persons holding land by a servile tenure.

rections mark off the first stages of the movement towards political freedom, so strikes belong to the first stages of the elevation of masses of labor, long abused and deeply debased. With political rights such as are enjoyed by all classes in the United States, with universal education, free land, the quick communication of ideas, the cheap transportation of persons and effects, and the abundant opportunities offered for accumulating and investing savings, it is a shame to us, as a people, that we have not yet made for ourselves a better way out of our industrial disputes.

376. Factory Acts.—We should apply the same tests to any existing or projected legislation intended for the relief of the laboring classes, such as acts restricting the hours of labor, providing for the safety of operatives against accidents from contact with machinery, directing the sanitary inspection of workshops and factories, prohibiting the employment of children of tender age or of women underground, or in work unsuited to their sex, or immediately before or after confinement.

The one question in regard to each such measure is not whether its intention is philanthropic or otherwise; not even whether it does or does not, in form, violate the principle of competition; but whether it does, in effect,* and in the large, the

* "In discussing these matters, we need, above all things, discrimination. One hundred modes of government interference might be mentioned of which fifty might be very desirable and fifty condemnable. In each case, as I contend, we must look to the peculiar aim, purpose, means and circumstances of the case."—*Prof. Jevons: The State in Relation to Labor.*

long, result, leave the laboring classes better off or worse off as to the ability and disposition to seek and to find their best market; whether, in fact, in the condition of industrial society then and there existing, it promotes or retards competition.

The beginning of the present century found children of five, and even of three years of age, in England, working in factories and brick-yards; women working underground in mines, harnessed with mules to carts drawing heavy loads; found the hours of labor whatever the avarice of individual mill-owners might exact, were it thirteen, or fourteen, or fifteen; found no guards about machinery to protect life and limb; found the air of the factory fouler than language could describe, even could human ears endure the story.

377. English Factory Legislation.— The factory legislation of England began in 1802, with an act which limited the hours of labor in woolen and cotton mills to twelve, exclusive of meal times, imposed many sanitary regulations upon the working and sleeping rooms of operatives, required the instruction of children during the first four years of apprenticeship, and provided an official inspection of establishments for the due execution of the law.

Further legislation was had in 1816 and in 1831; while in 1833 was passed the important act known as 3d and 4th William IV., (ch. 103), which forbade night work in the case of all persons under eighteen years, and limited the labor of such persons to twelve hours, inclusive of an hour and a half for meals; prohibited the employment of children under nine years of age—while between the ages of nine

and thirteen the hours of labor were reduced to eight; prescribed a certain number of half-holidays, and required medical certificates of health on the admission of children to factories. Numerous acts subsequent to this have enlarged the scope of these provisions and extended them to other classes of workshops and factories.

378. Economists Oppose Factory Legislation.—Unfortunately, the professors of political economy in the Universities, in Parliament, and in the press, generally ranged themselves in opposition to this legislation. Acting upon a series of arbitrary assumptions which fell far short of the facts of human nature, the English economists insisted upon attributing to the individual initiative of the laborer, however miserable and blind and weak, however overborne by circumstances and bound to his place and work by poverty, ignorance and inertia, all that economic virtue which belongs to the individual initiative of the laborer when fully alive to his own interest, alert in seeking the highest price for his services or commodities, and able to move freely to his best market without hindrance from any source, whether within or without himself.

They asserted that labor was fully competent to protect itself against abuses if left free by law. They argued that to limit the power of the operative to sell his labor must, in the end, diminish the price he will get for it, not seeing that, just as a crutch, while it is only a hindrance and a burden to a sound man, may keep a cripple from falling to the ground, and may even enable him slowly and feebly to walk, so a restriction upon contracts for labor may corre-

spond to an infirmity of the laboring classes under certain moral and physical conditions, in such a way as to give them a greater freedom of movement than they would have without it.

V.

THE UNEARNED INCREMENT OF LAND.

379. The Law of Rent Re-Stated.—We have seen what is the nature of Rent. It represents the surplus of the produce over the cost of cultivation on the poorest lands actually contributing to the supply of the market at the time.

We saw (pars. 220–22) that, conceding the private ownership of land, rent is merely a question between landlord and tenant; that, so far as economic forces are concerned, rent must remain in the hands of the landlord; that, setting violence aside, it can only come into the hands of the tenant by gift from the landlord; that, were it, by virtue of the landlord's generosity, to reach the tenant, it would, so far as economic forces are concerned, go no further; it could only be carried to the agricultural laborer or to the consumer of agricultural produce, by another gift or series of gifts.

380. The Equities of Rent, as between Landlord and Tenant.—So much for the Economics of Rent; let us look a moment at the equities of it.

Certainly, as between the landlord and the tenant, the latter can set up no claim to any portion of rent. It is, as we have seen, of the very essence of rent that it represents, and is measured by, the surplus

of produce over the cost of cultivation on the poorest (or most distant) lands under cultivation for the supply of the same market. Now, these poorest or most distant lands have occupiers who are clearly, so far as their industrial position is concerned, just as meritorious as those who cultivate the better lands or the lands nearer the market.

381. As between Landlord and the Agricultural Laborer.—In the same way it may be shown that the agricultural laborers on lands which bear a rent have no claim, in equity, to any portion of that rent. Why should they receive any more for their services than the laborers who cultivate the no-rent lands and who would, therefore, receive no benefit from a remission of rent?

Clearly, then, as against either the tenant or the agricultural laborer, the landlord has an easy case. He can without any difficulty prove that neither of the two has any claim whatever to any part of what he receives as rent.

382. As between the Landlord and the Community at Large.—But suppose the issue to be raised between the landlord and the whole community: can the acquisition by individuals of the entire surplus of the produce above the cost of cultivation on the poorest soils, be so successfully defended on grounds either of political equity or political expediency?

As this appears to me likely to become, in a near future, a "burning" question, I think it but right to present fully the argument of those who urge that "the unearned increment of land" should go to the State and not to individuals. This argument cannot be better presented than in the language of

John Stuart Mill, who, in his later days, became President of the English Land Tenure Reform Association, whose professed object was to agitate this question.

383. Mr. Mill's Argument.—"Suppose," says Mr. Mill, "that there is a kind of income which constantly tends to increase without any exertion or sacrifice on the part of the owner, these owners constituting a class in the community whom the natural course of things progressively enriches, consistently with complete passiveness on their own part.

"Now this is actually the case with rent. The ordinary progress of a society which increases in wealth, is at all times tending to augment the income of landlords; to give them both a greater amount and a greater proportion of the wealth of the community, independently of any trouble or outlay incurred by themselves. They grow richer, as it were, in their sleep, without working, risking or economizing."

In another place, while professing a general respect for the rights of property, Mr. Mill proceeds:

"Some people ask, But why single out the land? Does not all property rise in value with the increase of prosperity? I answer, No. All other property fluctuates in value, now up, now down. I defy any one to show any kind of property, not partaking of the soil, and sufficiently important to be worth considering, which tends steadily upward, without any thing being done by the owners to give it increased value. So far from it, that the other of the two kinds of property that yield income, namely, capital, instead of increasing, actually diminishes in value

as society advances. The poorer the country, or the further back we go in history, the higher we find the interest of money to be. Land alone—using land as a general term for the whole material of the earth—has the privilege of steadily rising in value from natural causes; and the reason is that land is strictly limited in quantity; the supply does not increase to meet the constant increase of demand."

384. Mr. Mill's Land Tenure Reform Agitation.—The following is an extract from the programme of the Land Tenure Reform Association, of which Mr. Mill was President:

"To claim for the benefit of the State, the Interception by Taxation of the Future Unearned Increase of the Rent of Land (so far as the same can be ascertained), or a great part of that increase which is continually taking place without any effort or outlay by the proprietors, merely through the growth of population and wealth; reserving to owners the option of relinquishing their property to the State, at the market value which it may have acquired at the time when this principle may be adopted by the Legislature."

385. A Tax on Rents is not a Tax on Produce.—It will be observed that what Mr. Mill and his associates here recommend is a tax of 100 per cent. or less, upon rent, *i. e.*, the surplus profits of lands in excess of the cost of cultivating the poorest soils contributing to the supply of the market.

How widely this differs from a tax on all cultivated lands will be seen from Mr. Ricardo's statement of the effect of the latter species of tax:

"If a land tax be imposed on *all* cultivated land,

however moderate that tax may be, it will be a tax on produce, and *will therefore raise the price of produce.*

"Consequently the consumer will be taxed not only to pay the exigencies of the State, but also to give to the cultivator of the better land a gratuity, during the period of his lease, and afterwards to raise the rent of the landlord to that amount."

386. What Shall be Said of the Equity of this Proposal?—In their appeal alike to history and to political equity, I cannot see that the Land-Tenure Reformers under Mr. Mill's leadership were wrong. That by the original Teutonic constitutions the land belonged to the tribe or the community, and not to individuals, and was generally cultivated and enjoyed in common or by rotation of tenure; (2,) that even when permanence of individual possession was established and titles were created, the occupation of land was charged with duties to the State, both of fiscal contribution and of personal service, which were most onerous and laborious, and which tended to increase as the needs of the State increased and as the rental value of the land increased; (3), that, in Europe, generally, when the occupiers of land were released from these duties to the State, it was upon a consideration wholly inadequate or upon no consideration at all; while that release was conceded by the land-owning class, as the ruling class, to themselves as parties in interest; and (4), that the unqualified ownership of land, thus established, enables the land-owning class to reap a wholly unearned benefit at the expense of the general community, these propositions seem to me indisputable.

387. What of its Expediency?—As a measure of political expediency, however, the scheme of the assumption by the State of the unearned increment of land, appears fatally defective.

In the first place, it must be observed that a large part, at best, of the possible mischief has already been done, beyond repair, in the surrender of the rights of the community to individuals. As that surrender is now generations, even centuries old, and as much of the land has changed owners, sometimes over and over again in the interval, many of the present possessors having paid the full price of to-day, in good faith, under existing arrangements which were fully sanctioned by law, it would be simple robbery* for the State to reassert its interests in the land without fully indemnifying owners.

This the English Land-Tenure Reform Association, in their programme already quoted, fully acknowledged. They proposed to "reserve to owners the option of relinquishing their property to the State at the market value which it may have acquired at the time when this principle may be adopted by the Legislature."

It is only, then, to the future increase in the value of land that this scheme would apply.

But, secondly, government could, by the confession of the Association, not realize through this scheme all that is left after the foregoing deduction has been made. Inasmuch as the State is bound to be very

* Mr. Henry George, an American writer, in a widely circulated work, entitled Progress and Poverty, has proposed that the State should confiscate the present value of all landed property, without compensation to owners.

careful and solicitous not to do injustice, the appraisement of the present rental value, or capital value of estates, in the administration of such a scheme, must be highly conservative. This, again, is frankly admitted by Mr. Mill. "It is not necessary," he says, "to enforce the rights of the State to the utmost farthing. A large margin should be allowed for possible miscalculation."

388. How About Depreciating Property?—Thirdly, it is clear, that the State, if it will claim the benefit of all increase in the value of lands resulting from the growth of demand due to general causes affecting the increase of the community in numbers or productive power, is bound to make good all losses arising from that decrease in value which results from the decline of demand due to general causes acting in the opposite direction. If the so-called proprietor of land is not to be allowed to reap any gain not brought about by his own exertions, he must, in simple fairness, be protected against losses which no vigilance or effort of his could have averted.

Now, the range of this consideration is not a narrow one. In almost every community, even the most flourishing, the phenomenon of declining values is seen side by side with that of rising values.

And, fourthly, it is to be observed that, in administering this scheme of making good the loss of rental or capital value in the case of depreciating property, "a large margin should be allowed for possible miscalculation," which would operate to increase the amount which the community would be required to

pay in indemnification of owners. And, thus, in still another way, the inducement to the state to assert its interest in the lands now held by individuals, would be diminished.

389. Fifthly: — Practical objections might be multiplied; but it will be sufficient to refer to the official jobbery, trickery, and corruption which would be involved in the management by the state of all the landed property of the country, either in an attempt to administer it productively, or in the occasional re-valuation and re-leasing of it in parcels to suit the occasions of individuals. To my view, the condition of things that would result would be simply intolerable.

When we contemplate the history of even petty transactions of a like character, on the part of our national government or of the several state governments, it seems impossible to conceive that any inducement should ever draw the American people, traditionally jealous of the enlargement of governmental powers, on to the adoption of such a measure.

VI.

POLITICAL MONEY.

390. Inconvertible Paper Money is, by Distinction, Political Money.—In all modern societies, money is at once an economic agent and a political institution.

But there is one kind of money which owes its existence and acceptance as the common medium of exchange so completely to legislation or to the act

of the ruler, that it may be called, by eminence, political money. This is the inconvertible paper money of which we wrote in Chapter 5, Part III. In comparison herewith, all other forms of money known to modern commerce may be regarded as having so little of a political character as to justify their being called economic money.

The essential difference between what we here call economic and what we call political money, is that the supply of the former, under free coinage, is limited by natural conditions of production, while the supply of the latter is released from all such conditions, and is made to depend upon law or the will of the ruler. It costs no more labor to print two million dollars of paper money, or ten millions, or fifty, than to print one million. To multiply the amount of such money, it is only necessary to print the word fifty, or ten, or two, instead of the word one.

391. The Liability to Evil Inhering in Political Money. —In the case of every proposed political institution or arrangement, we are bound to investigate, not its possibilities only, but also its probabilities. It must appear that its successful working does not depend upon an exercise of prudence, virtue and self-control, which are beyond what is reasonably to be expected of men in masses, and of rulers and legislators as we find them; and the consequences of its possible perversion or abuse must be weighed against the advantages which might be derived from its legitimate application and employment. Paper money, then, as a political institution or arrangement, must submit to this test.

We have already (par. 179) shown that the smallest degree of depreciation, even the mere liability to depreciation, may unsettle the exchanges between the paper money country and those with which it trades, in a degree to work very injurious effects. But what we have here to consider is the liability to extensive over-issues, with an altogether new series of consequences to trade and industry.

392. Two Motives Operating to Produce Expansion.—This liability arises from the fact that, where the principle of inconvertible paper has once been adopted, two powerful motives tend to produce expansion, with no adequate restraining force in operation. All the selfish interests that make themselves felt, all the passions of the hour and the appetites that clamor for indulgence, favor expansion. There is a steady pressure on that side, which now and then rises to furious impulses against the frail barrier that withstands inflation.

How far is it wise for any moderate advantage to call into operation forces which are only to be kept from becoming in the highest degree destructive by being constantly watched and unremittingly opposed?

393. Time no Safeguard.—Nor does the liability to over-issue diminish with the lapse of time. Moderation in the issue of government paper money does not form a political habit which becomes a security against abuse. On the contrary, the longer the *régime* of inconvertible paper money lasts, the greater the danger. The popular mind becomes accustomed to the sight and the thought of it; the fear of it is worn off; a generation comes upon the

stage that has not known metallic money, or bank money convertible into coin on demand.

The danger of over-issue always threatens inconvertible paper money. The path winds ever along the edge of a precipice. Vigilance cannot for a moment be relaxed. The prudence and self-restraint of years count for nothing against any new onset of popular passion or in the face of a sudden exigency of government.

394. The Fiscal Motive.—The exigencies of the public treasury constitute, perhaps, the most formidable of the two dangers which menace the integrity of a paper money circulation.

"Real money," said Edmund Burke, "can hardly ever multiply too much in any country, because it will always, as it increases, be a certain sign of the increase of trade, of which it is the measure, and consequently of the soundness and vigor of the whole body. But this paper money may and does increase, without any increase of trade, *nay, often when trade greatly declines*, for it is not the measure of the trade of the nation, but of the necessity of the government; and it is absurd and must be ruinous, that the same cause which naturally exhausts the wealth of a nation should likewise be the only productive cause of money."

395. Scaling Down Debts.—In all free governments, or governments much subject to popular impulses, a second danger of over-issue arises from the appetite which is engendered in the masses of the people for further emissions for the purpose of scaling down debts, "making trade good," and enabling works of construction and extensive public improve-

ments to be undertaken, for which taxation could not easily provide the means.

The intrusion of the debtor class into the legislature, with their impudent demands for issues to scale down debts, is a familiar spectacle. Even the sterling virtue of early New England did not save those primitive communities from the fiercest impulses of political dishonesty, when once the paper money passion had been aroused. "Parties," says the historian Douglas, "were no longer Whigs and Tories, but creditors and debtors. Governors were elected and turned out as the different interests happened to prevail." The same feature appeared early in the history of the French Revolutionary paper money.

Paying debts is always a disagreeable necessity. For one man who would steal to acquire property, in the first instance, a score will do that which is no better than stealing, in order to retain property which has passed into their hands and which they have come to look upon as theirs, though not paid for.

It is the view of not a few sound economists* that

* Thus M. Chevalier says: "Such a change will benefit those who live by current labor; it will injure those who live upon the fruits of past labor, whether their fathers' or their own. In this it will work in the same direction with most of the developments which are brought about by that great law of civilization to which we give the noble name of progress."

And Mr. J. R. McCulloch declares that "though, like a fall of rain after a long course of dry weather, it may be prejudicial to certain classes, it is beneficial to an incomparably greater number, including all who are actively engaged in industrial pursuits, and is, speaking generally, of great public or national advantage."

a gradually progressive depreciation of metallic money, from age to age, might be advantageous to society as a whole, both relieving industry in some measure from the weight of burdens derived from the past, and giving a certain fillip to industrial enterprise.

But here the injury to the creditor class is not the work of man, but of God ; like the death of a miserly bad man which brings his wealth into the hands of a generous, philanthropic, public-spirited heir, at which change of ownership men may properly rejoice. But had the heir procured the death of the miser, the aspect of the case would have been entirely different. No plea of public spirit or benevolence in the disposition of the wealth could compensate society in the smallest degree for the deep and damning wrong through which that wealth changed owners.

A reduction in the burden of obligations, accomplished by the act of a legislature, in the issue of paper for the purpose of enabling the debtor to pay in a depreciated money, has no virtue in it to promote industry or encourage enterprise. It carries with it the sting of injustice and fraud. It draws after it retributive agencies which curse the people and the age

VII.

BI-METALLISM.

396. The question of Bi-metallism is to be decided solely upon the principles which have been laid down in Part III. as governing the value of money ;

but the question is one of so much popular interest and has been so confused by the passionate controversy waged over it, that it may be worth while to set the points at issue fairly forth, for the assistance of the beginner in economics.

And first let us depict the situation in view of which the controversy has arisen.

397. The Gold-Using Countries.—We find one group of states, whose habits of trade make gold money, or bank notes predicated upon a reserve of gold money, the most agreeable and convenient medium of exchange. These are rich countries, having vast accumulations of wealth derived from the industry of the past. In them, because their productive power is large, wages are high; in them trade and industry are organized with a great degree of complexity and minuteness. It is not needful for our present purpose to name all the countries of this group; but clearly it embraces England, France, Belgium and Holland, in Europe, and the United States, on this continent.

398. The Silver-Using Countries.—On the other hand, we find a group of countries—embracing an aggregate number of inhabitants many times greater than those previously mentioned, in which the facts of industry and the habits of the people respecting exchange are such as to make gold an impossible money. Such countries, beyond a doubt, are China and India, where the ordinary wages of labor range from two to eight cents a day. There are other countries—some in Europe and some in America settled by the people of Southern Europe—in which wages range from twelve to thirty

cents a day; in which, reasons, both of practical convenience and of sentiment and habit, give a decided preference to silver, a preference so decided that it is not reasonable to anticipate that these countries will soon, if ever, pass over from the silver-using to the gold-using group of countries.

399. What the Bi-Metallist Proposes.—It is this situation which the bi-metallist has in view when he propounds his scheme. Accepting the existence of a large group of countries in which gold naturally circulates as money and another in which silver is so used, he proposes to create a league of states, some of which are what we may, for brevity, call silver states, and some, gold states, which shall, each for itself, but by simultaneous action, establish the free coinage* of the two metals, and make the money of one metal to be legal-tender indifferently with money of the other metal, in payment of debts, at a certain ratio determined upon in advance by the consenting states.

When asked what is the object in view in such an international arrangement, the bi-metallist adduces two considerations which he alleges to be of vast importance to the world's trade and industry.

400. A Par of Exchange Desired between Gold Countries and Silver Countries.—The first is the establishment of a par of exchange between silver-using and gold-using countries.

Between two countries having the same money metal, a normal par of exchange exists. This par

* The distinction between free and gratuitous coinage is noted in par. 155.

of exchange is realized whenever the sum of the payments to be made in one country by merchants of the other country, within a certain brief period, is equal to the sum of the payments to be made in the latter by the merchants of the former country: in which event a merchant paying down a certain amount, say 1,000 ounces, of the common money metal, say gold, in his own country, can thereby purchase the right to receive 1,000 ounces of that metal in the foreign country in question.

Exchange will, in fact, fluctuate about this par of exchange, now above and now below, according to the movements of supply and demand, as these are determined by the relative amounts of debts to be paid and of payments to be received, respectively, in the course of trade between the two countries. The outside line of these movements of exchange is, as we saw, the cost of shipping specie.

But between two countries having money of different metals, say of gold in one country and of sil ver in the other, there is no par of exchange, irrespective of a bi-metallic league like that under consideration. Wholly in addition to the usual movements of exchange, the question how much of gold an Indian merchant can obtain the right to receive in London, by paying down a certain amount of silver in Calcutta, depends on the silver price of gold, the gold price of silver, at the time. And as the two metals have their separate sources of supply, and, to a certain extent, independent uses, whether in the arts or as money, their respective values are likely to fluctuate greatly.

401. It is a necessary result of this that much more

uncertainty is involved in trade between a gold and a silver country than between two gold countries, or two silver countries: the chances of undeserved losses or unearned gains are greatly increased. No merchant in a silver country selling to a gold country, no merchant in a gold country selling to a silver country, can know for how much of the metal which forms the money of the country to which he exports his wares he must sell them, in order to make himself good for the metal which he has expended at home in producing or purchasing those wares.

It is true that, in one sense, what one merchant in an individual case loses some other merchant, or some banker, or some speculator, may gain. But it is fundamental in my view of political economy that unearned gains do not encourage industry to the extent to which undeserved losses discourage it.

402. Now this disadvantage under which international trade suffers, the bi-metallist professes to be able to remove, through the scheme that has been described.

It is one of the accidents of the controversy over this question that the mono-metallist writers are estopped from denying that this result would, if practicable, be desirable in a very high degree. There are but few of those writers who have not, in discussion of the effects of inconvertible paper money, treated the loss of a par of exchange with foreign nations as a serious disaster.

403. The Greater Stability of Value in Bi-metallic Money.—A second benefit to be attained, according to the bi-metallist programme, is that the two

metals, thus bound together, would constitute a better money than either metal by itself could be. The inequalities of mining production would tend in a degree to equalize each other, with the result of a greater uniformity in the production of the compound mass, and hence of a greater steadiness in the value of money.

Here, again, the mono-metallists are at a controversial disadvantage. In order to establish the impracticability of the bi-metallic scheme, they have dwelt strongly on the tendency of the two metals to vary widely in value, and this view is fully borne out by the facts of the last three or four centuries. But this argument against the practicability of the bi-metallic scheme virtually amounts to an admission of the merits of that scheme, if found practicable.

I think it must be conceded, on this statement, that the bi-metallic scheme, if it could be carried out so as to realize the expectations of its advocates, would confer very great benefits upon international trade, and, by consequence, upon the production of wealth.

404. Is it Practicable?—Let us, then, inquire what are the economic conditions of the case: how far it is reasonable to believe that this scheme could be successfully established.

What is the force to which the bi-metallist looks to restrain the tendency to divergence between the values of the two money metals, silver and gold? It is evident that any rational scheme to influence value must aim at affecting either supply or demand. Can, then, government influence the supply

of or the demand for a money metal? Clearly, unmistakably, yes. Government can in a very great degree influence the demand for either of the money metals by coining it into money and conferring on the coin legal-tender power.

To illustrate this, let us suppose that, in any country, both gold and silver are made legal tender in payment of debts, at the ratio of $15\frac{1}{2}$ of silver to 1 of gold:* that is, the law decrees that a debtor may extinguish an obligation by the payment of a certain number of ounces of gold, or, at his option, of fifteen and a half times that number of ounces of silver. Let it be assumed that, at the moment of the decree, this was the actual market ratio between the metals.

Let it now be supposed that causes, natural or commercial, that is, affecting the supply of one metal or the other, or affecting the demand for the one or the other, begin to operate to produce a divergence from this ratio: say, to make an ounce of gold worth more than fifteen and a half ounces of silver, what will occur? The bi-metallic principle will at once begin to act in restraint of this movement towards divergence.

How will it operate? Through the desire of every debtor to meet his maturing obligations in the cheapening metal. All debtors will, in the case supposed, seek silver. This extension of demand acts directly in contravention of the force which is lowering its value.

---

* The ratio established in the States of the Latin Union, viz., France, Italy, Belgium and Switzerland.

On the other hand, that metal—gold—which is tending to become dearer, from that fact alone falls out of demand. No debtor seeks it as the means of paying his debts. This diminution of demand at once operates in counteraction of the forces tending to raise the value of gold.

405. The Opinion of Mono-Metallic Writers.—Now, is this a purely fanciful view of the subject, taken only by the advocates of the bi-metallic scheme? On the contrary, it has been seen in operation over extensive countries, of great commercial importance, through long periods of time; and the validity of the cause is fully confessed by mono-metallic writers of the highest reputation.

M. Chevalier, the eminent French economist, writing of this system as it prevailed in his own country in 1857, when, in consequence of the great gold discoveries in California and Australia, gold was tending to fall and silver to rise, and thus to pull away from the mint ratio of $15\frac{1}{2}$: 1, then established in France, speaks thus emphatically: "Whilst this state of things lasts, it will be *impossible*, at London, Brussels, Hamburg, or even at New York, or at any other great center of commerce, for gold to fall much below $15\frac{1}{2}$ times its weight in silver." And Prof. Cairnes, writing of the same period, said: "The crop of gold has been unusually large; the increase in the supply has caused a fall in its value; the fall in its value has led to its being substituted for silver; a mass of silver has thus been disengaged from purposes which it was formerly employed to serve; and the result has been that *the two metals have fallen in value together.*"

Mr. Bagehot: "Whenever the values of the two metals altered, these countries acted as equalizing machines: they took the metal which fell; they sold the metal which rose; and thus the relative value of the two was kept at its old point."

Prof. Jevons thus strikingly illustrates the compensatory action of the two metals: "Imagine two reservoirs of water, each subject to independent variations of supply and demand. In the absence of any connecting pipe, the level of the water in each reservoir will be subject to its own fluctuations only. But, if we open a connection, the water in both will assume a certain mean level, and the effects of any excessive supply or demand will be distributed over the whole area of both reservoirs.

"The mass of the metals, gold and silver, circulating in Western Europe in late years, is exactly represented by the water in these reservoirs, and the connecting pipe is the law of the 7th Germinal, an XI,* which enables one metal to take the place of the other as an unlimited legal tender."

406. Bi-Metallism not a Chimera.—We see, thus, that the bi-metallic scheme is not based upon any fanciful notion, but upon economic principles which are incontestable. If it be worth while for any nation to undertake this work of holding silver and gold together, it can do so just as long as it has any considerable quantity of the metal which at the time tends to become dearer, to dispose of; if it be worth

* 1803, French revolutionary style, the date commonly assigned to the establishment of the bi-metallic system in France.

while for any group of nations to undertake this, they can maintain the approximate equivalency of the two metals just as long as their joint stock of the metal which at the time tends to become dearer remains unexhausted. Every additional state that joins the bi-metallic group strengthens the system in two ways, first by contributing to the stock of the metal which may, under the natural or commercial conditions prevailing at the time, tend to become dearer, and, secondly, by withdrawing itself from the list of states which may contribute to the demand for that metal.

407. The Operation Illustrated.—We may suppose the commercial world to be divided into sixteen states, A to P, the first six having the single gold standard; four, G to J, the so-called double standard of gold and silver, under the bi-metallic system: say at $15\frac{1}{2}$: 1; the remaining states having the single standard of silver, thus:

A, B, C, D, E, F, (G, H, I, J,) K, L, M, N, O, P.

It is evident that, in the event of a change in the conditions of supply tending to cheapen silver relatively to gold, the new silver would pass into the countries of the double standard G to J, and be there exchanged for gold, at the rate of $15\frac{1}{2}$: 1, with some small premium as the profit of the transaction, and, as a result, the gold displaced from the circulation would be exported to the gold countries, A to F, in settlement of trade balances.

The rapidity with which this substitution of silver for gold in the bi-metallic states will proceed must depend, first, on the force of the natural causes operating to cheapen silver; and, secondly, on the

force of the commercial causes operating to maintain or advance the value of gold. The length of time during which the drain of the dearer metal can be sustained without exhaustion, will (given the rate of movement) depend solely upon the stock of that metal existing in the bi-metallic states when the drain begins.

But chief among the commercial causes operating to maintain or advance the value of gold, is the exclusive power with which gold is invested by law to pay debts in states A to F; while the stock of the dearer metal available to sustain the drain described, is made up, not of all the gold in the sixteen states A to P, or in the ten states A to J, but only of the gold in the four bi-metallic states, G to J.

Now, let us suppose the sixteen commercial states to be somewhat differently divided, as follows:

A, B, C, D, (E, F, G, H, I, J, K, L,) M, N, O, P.

The bi-metallic system is now not merely twice as strong but stronger in a far higher proportion, since not only is the amount of the dearer metal subject to drain increased, but the demand for that metal, in preference to silver at $15\frac{1}{2}:1$, now comes from four countries only, instead of six, as formerly.

The transfer of still another state from each of the two single-standard groups, would vastly increase the stability of the bi-metallic system.

A, B, C, (D, E, F, G, H, I, J, K, L, M,) N, O, P.

Not only would the base of the system be broadened by bringing the dearer metal of ten states, D to M, under tribute, in the event of changes operating on the supply of either metal to affect its value; but the force of the causes threatening the equilibrium

of the system would be reduced, since the demand for the dearer metal would now come from only three states: A, B, C, in the case of a cheapening of silver relatively to gold; N, O, P, in the case of a cheapening of gold relatively to silver. Those three states cannot take the dearer metal indefinitely. They would soon be surfeited. An excess of money in them would cause prices to rise, and gold (supposing gold, for example, to be the metal which tends to become the dearer) would no longer purchase in them more goods than silver would in the silver countries. In consequence, movement would cease and equilibrium be restored.

And it is to be noted that, with a bi-metallic league embracing so many states, those which tended naturally to the use of silver as money would continue to use silver predominantly; those which tended to use gold would still use gold as their main money of circulation.

VIII.

PAUPERISM.

408. The Impotent vs. the Able-Bodied Poor.—The relief of the impotent poor, whether by private or by public charity, is, so far as political economy is concerned with it, a question relating to the consumption of wealth. It is so much a matter of course, under our modern civilization, that the very young and the very old, the crippled and deformed, who are unable to earn their own maintenance, shall not be allowed to starve, that the matter of relief to these classes becomes one of administrative detail,

that does not require even to be alluded to in an elementary treatise on economics.

The experience of that country from which we derive our law and much of our administrative machinery, is, however, so instructive as to the influence for mischief upon the entire laboring population and upon the future production of wealth which may be wrought by ill considered provisions for the distribution of alms to the able-bodied poor, as to make it worth while briefly to recite that experience here; and thereupon to define the limits outside of which the consumption of wealth for this purpose becomes prejudicial to production.

We shall get at our subject most directly by inquiring, why it is that the laborer works at all. Clearly that he may eat. If he may eat without it, he will not work. The neglect or contempt of this very obvious truth by the British Parliament, during the latter part of the eighteenth and the earlier part of the nineteenth century, brought the working classes of the kingdom almost to the verge of ruin, created a vast body of hopeless and hereditary pauperism, and engendered vices in the industrial system which have been productive of evil down to the present day.

409. Establishment of the English Pauper System.— By the act of the 43rd year of Queen Elizabeth's reign, every person in the kingdom was given a legal right to public relief, if required; but voluntary pauperism was severely dealt with, and the able-bodied were compelled to work.

The principle of requiring the able-bodied poor to work continued for generations to be fundamental

in the English pauper system; and for the better enforcement of this requisition parishes or unions of parishes were, by an act of 9th George I., authorized to build workhouses, residence in which might be made a condition of relief. Moreover, from the days of Elizabeth to that of George III., the spirit which actuated the administration of the poor laws was jealous and severe. Doubtless in that administration unnecessary harshness was sometimes practiced; but, on the whole, the effect on the working classes was wholesome, for it was made undesirable to become a pauper.

410. Removal of the Workhouse Test.—On the accession of George III., a different theory came to direct legislation relating to poor relief, and a widely different temper of administration began to prevail. Six successive acts, passed in the first years of George III., intimated the changed spirit in which pauperism was thereafter to be dealt with. In the 22nd year of that reign, the act known as Gilbert's act gave a fuller expression to this spirit. By that act the workhouse was no longer to be used as a test of voluntary pauperism:

The 32d section provided "That where there shall be in any parish, township or place, any poor person or persons, who shall be able and willing to work but who cannot get employment, the guardian of the poor of such parish, etc., on application made to him by or on behalf of such poor person, is required to agree for the labor of such poor person or persons at any work or employment suited to his or her strength and capacity, in any parish or place near the place of his or her residence, and to maintain,

or cause such person or persons to be properly maintained, lodged and provided for, until such employment shall be procured, and during the time of such work, and to *receive the money to be earned by such work or labor, and apply it in such maintenance as far as the same will go, and make up the deficiency, if any.*"

By the repeal of the workhouse test, and by the additional most injudicious provision which we have placed in italics, a deadly blow was struck at the manhood and industrial self-sufficiency of the working classes of England.

411. The Logical Outcome.—By 1832 the false and vicious principle on which Gilbert's act was based had been carried logically out to its limits in almost universal pauperism. The condition of the person who threw himself flat upon public charity was better than that of the laborer who struggled on to preserve his manhood in self-support. The drone was better clothed, better lodged and better fed than the worker.

All the incidents of this bad system were unnecessarily bad. The allowance for each additional child was so much out of proportion to the allowance for adults, that the more numerous a man's children the better his condition, and thus the rapid increase of an already pauperized population was encouraged; while the allowance in the case of illegitimate children was even greater than for those born in wedlock. "It may safely be affirmed," said the Poor Law Commissioners of 1831, "that the virtue of female chastity does not exist among the lower orders of England, except to a certain degree among

domestic servants, who know that they hold their situations by that tenure and are more prudent in consequence."

Such may be the effects of foolish laws. The legislator may think it hard that his power for good is so closely restricted; but he has no reason to complain of any limits upon his power for evil. On the contrary, it would almost seem that there could be no nation, of any race of men, which a few laws respecting industry, trade and finance, passed by country squires or labor demagogues in defiance of economic principles, could not transform within half a generation into a nation of beasts.

412. Poor Law Reform.—We have seen what a system the English squirearchy substituted for the economic law that he that would eat must work. The natural effects of this system were wrought speedily and effectually. The disposition to labor was cut up by the roots; all restraints upon increase of population disappeared under a premium upon births; self-respect and social decency vanished before a prize for bastardy. The amount expended in the relief and maintenance of the poor had risen, in 1832, to £7,000,000.

In this exigency, which, in truth, constituted one of the gravest crises of English history, Parliament, by the Poor Law Amendment Act (4th and 5th, William IV) returned to the principle of the act of Elizabeth. The workhouse test was restored; allowances in aid of wages were abolished; paid overseers were appointed, and a central system was created for the due supervision of the system; illegitimacy was discouraged by punishing the father, instead of

rewarding the mother; and the law of pauper settlement was modified so as to facilitate the migration of laborers in search of employment.

By this great legislative reform the burden of pauperism, in spite of the continuing effects of the old, evil system, was reduced in three years, by an average amount, the kingdom over, of forty-five per cent.

413. The Principle that Should Govern Poor Relief.— The moral of this episode in the industrial history of England is easily drawn. It is of the highest economic consequence that pauperism shall not be made inviting; but that, on the contrary, the laborer shall be stimulated to the utmost possible exertions to achieve self-support, only accepting relief as an alternative to actual starvation. It is not, to this end, necessary that any brutality of administration shall deter the worthy poor who have no other resource; but, it should be the prime object of legislation on this subject to make the situation of the pauper less agreeable than that of the independent laborer, and that, by no small interval.

"All," says Mr. George W. Hastings, "who have administered the Poor Law, must know the fatal readiness with which those hovering on the brink of pauperism believe that they cannot earn a living, and the marvelous way in which, if the test be firmly applied, the means of subsistence will be found somehow."

IX.

THE REVENUE OF THE STATE.

414. The revenue of the State may be derived from ·

I. Voluntary Contributions.

We who have lived in an age of legality can scarcely raise our minds to contemplate a state of society where the expenses of government should be met through spontaneous self-assessment by the citizen ; yet, in a more primitive condition, such a state of things has existed widely, and in a few instances has come down nearly to our day.

The papal revenues may perhaps be brought under this title. Adam Smith cites Hamburg, Basle, Zurich, Underwald, Holland, and other communities, where the self-valuation of the citizen was accepted.

415. II. Public Property, Lucrative Prerogatives, and State Enterprise.

The following may be named as the chief sources of revenue under this head.

(1.) Rent-charges in favor of the state as the proprietor of all lands. This has been fully discussed under the title : the Unearned Increment of Land.

(2.) Escheat : the principle that the state is the proprietor of all property to which individual titles or claims are lost.

Modern society whether out of sympathy with the property-right, or from a positive desire to promote instincts of the spirit of accumulation, has given continually wider extension to the power of bequest

and to the principle of inheritance, until escheat, as a source of revenue, has ceased to be of much importance.

In 1795, the great English law reformer, Jeremy Bentham, in a pamphlet entitled "Escheat *vice* Taxation," seriously propounded a scheme by which the entire revenue of the state should be derived from this source.

416. (3.) Fines and Forfeitures for Criminality and Delinquency. Since government exists largely for the protection of life, property and labor, the cost of maintaining government and administering justice might properly be drawn, if it were found possible, from the delinquent and criminal class.

In feudal times, fines and forfeitures constituted a very important source of revenue to the crown.

The crimes of those days were largely political, and political offenders are likely to be men of wealth and position, who will be fat subjects for amercements. The Wars of the Roses were so fruitful of forfeitures that a large proportion of the land of the realm became the property of the crown.

In the present age political crimes have become comparatively infrequent, and the criminal class are now mainly drawn from the poor, who are not proper, perhaps not possible, subjects for pecuniary exaction.

Hence this branch of public revenue has shrunk into comparative insignificance. Fines and forfeitures pay a part of the expense of strictly judicial establishments, especially of the lower or police courts; but they add little to the general receipts of the state.

(4.) Tributes from colonies, dependencies and conquered nations, including war fines, requisitions and indemnities.

(5.) The sale of offices, honors and titles.

This source of revenue makes a prominent figure in the history of finance; but has, at present, mainly a curious interest.

417. (6.) Domains (L'Etat Capitaliste.)

Even under the modern European principle of the private ownership of land, the state is, in all countries, the possessor of larger or smaller domains from which a revenue may be derived.

It is the habit of writers on finance to speak, and perhaps justly, in the most disparaging tone of the administration of public estates for productive purposes. Adam Smith expresses himself in the strongest terms. "The servants of the most negligent master are better superintended than the servants of the most vigilant sovereign." Referring to his own country, he says: "The crown-lands of Great Britain do not, at present, afford the fourth part of the rent which could probably be drawn from them, if they were the property of private persons. If the crown-lands were more extensive, it is probable they would be still worse managed." And, not to disparage English administration too greatly, he adds: "In the present state of the greater part of the civilized monarchies of Europe, the rent of all lands in the country, managed as they would probably be if they all belonged to one proprietor, would scarce amount, perhaps, to the ordinary revenue which they levy upon the people, even in peaceful times."

However much this statement might require to be modified with respect to the management of government property in a country like Germany, with its admirable civil service and its systematic administration of public trusts, no one would think of questioning the full literal truth of Adam Smith's declaration if applied to our own country, with its civil service based upon the principle of rotation in office and appointment as the reward of partisan activity.

Of the present European States, Russia, Prussia, Bavaria, Sweden, and Hanover, derive considerable revenues from public domains, the first named being pre-eminent in this respect.

418.—(7.) State Enterprise (L'Etat Entrepreneur). —Whatever the disabilities of the State in acquiring a revenue from the rental or sale of property, whether that consist of agricultural lands, or mines, or forests, or fisheries, or phosphate deposits, those disabilities are greatly increased when the state seriously undertakes the management of commercial or manufacturing business. The state as capitalist is at no small disadvantage; as entrepreneur, that disadvantage is vastly aggravated.

Yet the rule of failure, on this side of governmental agency, is not unbroken. Dr. Smith mentions the republic of Hamburg as deriving a considerable revenue from a public wine cellar and from an apothecary's shop. The profits of banking have been realized in a notable degree by several cities that were also states, as Hamburg, Venice and Amsterdam. The Post-Office can be made, and has been made, "to pay," and that handsomely. The

businesses of distilling in Russia, of sugar refining in Egypt, and of opium manufacture in British India, have been made the subjects of no inconsiderable profit to government. The supply of towns in the matter of water, and, in a smaller number of instances, of gas, has been attempted, not unsuccessfully, by municipal governments.

The instance, however, which goes furthest to contradict the generally received opinion of the hopeless incapacity of the state to conduct industrial enterprises, is afforded by the railways of Germany.

419. III. Quasi Taxes.—The following may be named as sources of revenue under this head:

(1.) Monopolies, conferred upon individuals or corporations, in consideration of a capital sum paid down, or of a definite share in the resulting profits.

Monopolies have played a most conspicuous part in the history of public revenues; and, in spite of the spirit of the age, which is, in general, strongly opposed to exclusive privileges of manufacture and sale, they still form a prominent feature in the budget of many of the most progressive countries of Europe.

Monopolies may be commercial, industrial, or financial. The distinction between the monopolies of the past and those of the present day, is most marked. Formerly monopolies were granted, for the profit of the government, to persons and corporations to carry on a vast variety of operations, great and small alike, most of which were susceptible of private management.

Such were the monopolies of the 17th and 18th centuries. To-day, under the light of political economy, all prudent governments restrict the principle of monopoly to a very few very important interests, and, by preference, to those which in their nature tend to monopoly.

But there are also certain special interests of great commercial importance, in every way fitted for private management, which, on account of their high capability for yielding revenue, some of the most enlightened nations still constitute exceptions to the principle of open public competition in manufacture and trade.

Among the objects thus specially excepted by many modern states from the principle of competition, in the interests of revenue, are opium, salt, tobacco and matches.

420.—(2.) Lotteries. This needs only to be mentioned as a source of revenue largely made use of, in the past, by almost all governments, and still forming an important feature in the budget of some civilized countries.

(3.) Purveyance.—The right of buying provisions and other necessaries for the use of the royal household, at an appraised valuation, in preference to all other purchasers and even without the consent of the owner, is now greatly restrained and confined, and in almost all highly civilized countries is wholly discontinued—except during actual war, or in the case of a royal progress.

(4.) Fees.—A fourth mode of raising revenue which partakes largely of the nature of a tax, without bearing its form, is through the exaction of

fees for stated or occasional services performed by the agents of the State.

It is fairly a question whether the maintenance of the ordinary roads of a country is not, in such a sense, and in so far, a general charge that fees, under the name of tolls, constitute a *quasi tax*, instead of being, according to the assumption on which they are collected, the price paid by the individual for a service rendered to himself directly and exclusively.

Of the remaining forms of quasi taxes (5) seigniorage on the coin, and (6) the issue of paper money, whether with or without a reserve of specie for redemption purposes, enough has been said in Part III.

421. IV. Taxation in its Various Forms.—Under the next title we will inquire, as fully as our narrow limits of space will permit, respecting the several theories of taxation which have been indicated.

X.

THE PRINCIPLES OF TAXATION.

422. Inadequacy of the Literature of Taxation.—According to an eminent German financier, Hoffmann, it would be difficult to find in the whole realm of political economy a subject more generally misconceived, more disfigured by false views, more degraded by a partial study, than Taxation.

423. Adam Smith's Maxims.—Perhaps as good an idea of the feebleness and emptiness of the English literature in this department can be obtained as in

any other way by referring to Adam Smith's maxims respecting taxation. Dr. Smith proposed four maxims or principles, "which," says Mr. Mill, "having been generally concurred in by subsequent writers, may be said to have become classical." Probably two-thirds of all English writers on political economy since Smith have referred to these rules, and more or less fully quoted them; many have adopted them entire, and made them the basis of their treatment of the subject of taxation.

The first and most important, as it is the most famous, of these rules concerns the ground of assessment, as follows: "The subjects of every state ought to contribute towards the support of the government as nearly as possible in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state."

424. The Social-Dividend Theory of Taxation.— This maxim, though it sounds fairly, will not bear a close examination. What mean those last words, "under the protection of the state?" They are either irrelevant, or else they mean that the protection enjoyed affords the measure of the duty to contribute. But, the doctrine that the members of the community ought to contribute to the public support in proportion to the benefits they derive from the protection of the state, or according as the services performed in their behalf cost less or cost more, involves practical absurdities of the grossest character.

Those who derive the greatest benefit from the protection of the state are the poor and the weak—

women and children and the aged; the infirm, the ignorant, the indigent. The man of wealth can in a degree protect himself. He is not brought, in the pursuit of his interests, into dangerous situations; while at home he can defend himself from violence by appliances beyond the reach of the cottager.

Even as among the well-to-do and wealthy classes of the community, does the protection enjoyed furnish a measure of the duty to contribute? If so, the richer the subject or citizen is, the less, proportionally, should he pay, since the cost of protecting wealth in single hands increases at a lower ratio than the wealth itself. It is easier to guard and keep from harm $100,000 situated in one place than the same amount distributed among twenty places. A man who buys protection in large quantities should get it at wholesale prices, like the man who buys flour and meat by the car-load. Moreover, it costs the state far less to collect a given amount from one taxpayer than from many.

Returning to the maxim of Dr. Smith, I ask, does it put forward ability to contribute, or protection enjoyed, as affording the true basis of taxation? Which? If both, on what principles and by what means are the two to be combined in practice?

425. Taxation According to Ability.—But if we take the last six words as merely a half-conscious recognition of the Social-Dividend theory of taxation, and throw them aside as inconsistent with Dr. Smith's real intention, we shall still find this much-quoted maxim far from satisfactory: "The subjects of every state ought to contribute towards the support of the government as nearly as possible in pro-

portion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy."

But are the abilities of two persons to contribute necessarily in proportion to their respective revenues? Take the case of the head of a family having an income of $500 a year, of which $400 is absolutely essential to the maintenance of himself and wife and children in health and strength to labor. Is the ability of such a person, who has only $100 which could possibly be taken for public uses, one half as great as that of another head of a family similarly situated in all respects except that his income amounts to $1,000, and who has therefore $600 which could conceivably be brought under contribution? Manifestly not.

We shall, then, still further improve Dr. Smith's maxim if we cut away all after the first clause: "The subjects of every state ought to contribute towards the support of the government as nearly as possible in proportion to their respective abilities." The maxim as it stands is unexceptionable, but does not shed much light on the difficult question of assessment.

426. The Leave-them-as-you-Find-them Rule of Taxation.—The best statement I have met of the principle of contribution based on ability is contained in an article in the *Edinburgh Review* of 1833: "No tax is a just tax unless it leaves individuals in the same relative condition in which it finds them." What does the precept, which we may call the leave-them-as-you-find-them rule of taxation, demand? In seeking an answer to this question, let us inquire,

historically, what bases have been taken for assessment. We note four : *

1. Contribution has been exacted on the basis of Realized Wealth, commonly spoken of as capital.

2. On the basis of Annual Income or Revenue.

3. On the basis of Faculty, or native and acquired power of production.

4. On the basis of Expenditure, or the individual consumption of wealth.

These are the four historical bases of taxation. Let us see how far each in turn answers the requirement that the subject or citizen should contribute according to his ability.

427. Taxes on Realized Wealth.—And, first, of Realized Wealth as a basis of assessment. Wealth is accumulated by savings out of revenue. If, then, wealth alone is to be taxed, it is saving, not production, which contributes to the support of the State. Economically, there cannot be a moment's doubt that for government thus to draw its revenue from only that part of the produced wealth of the community which is reserved from immediate expenditure, either for assurance against future ills and provision for future wants or for active employment in current production, must be in greater or less degree prejudicial. The question also arises, where is the political or social justice of such a rule of contribution? *If my income belongs to me, to*

* It will be noted that we do not mention Rent-bearing Land. A tax on Rent is, as we have seen, not a general tax. It does not affect the price of produce. It does not fall on those members of the community who do not own land. This subject has been sufficiently discussed under the title, the Unearned Increment of Land.

spend for my own comfort and gratification, without any deduction for the uses of the state, why should I lose my right to any part of it because I save it? To tax realized wealth is to punish men for not consuming their earnings as they receive them. Yet it is eminently for the public interest that men should save of their means to increase the capital of the country.

428. Revenue as the Basis of Taxation.—Turning to Revenue, it would seem, on the first thought, that we had reached a rule of equitable contribution. Yet the rule of contribution according to revenue is subject to grave impeachment on grounds of justice.

Here are two men of equal natural powers. One is active, energetic, industrious; he toils early and late and realizes a considerable revenue, on a portion of which the state lays its hand. The other lets his natural powers run to waste; trifles with life, lounges, hunts, fishes, gambles, and is content with a bare and mean subsistence. *Was his duty to contribute to the support of the state less clear or less in degree than that of the other? If not, how has his idleness, shiftlessness, worthlessness, forfeited the state's right to a contribution from him in proportion to his abilities?*

We must, I think, conclude that, while to tax wealth instead of revenue is to put a premium upon self-indulgence in the expenditure of wealth for present enjoyment, to tax revenue instead of faculty is to put a premium upon self-indulgence in the form of indolence, the waste of opportunities, and the abuse of natural powers.

429. Expenditure as the Basis of Taxation.—Passing for the moment by our third title, we find that the fourth basis taken for taxation has been Expenditure. This must not be confounded with taxes on consumption, as constituting *a part* of a tax system in which taxes on realized wealth, taxes on revenue, taxes on faculty, one or all of these, also appear. Nor do we speak here of taxes on expenditure imposed in practical despair of an equitable distribution of the burdens of government. We are now concerned with expenditure only as the single basis of taxation, in the interest of political equity.

"It is generally allowed," wrote Sir William Petty, two hundred years ago, "that men should contribute to the public charge but according to the share and interest they have in the public peace; that is, according to their estate or riches.

"Now, there are two sorts of riches, one actual and the other potential. A man is actually and truly rich according to what he eateth, drinketh, weareth, or in any other way really and actually enjoyeth. Others are but potentially and imaginatively rich who, though they have power over much, make little use of it, these being rather stewards and exchangers for the other sort than owners for themselves.

"Concluding, therefore, that every man ought to contribute according to what he taketh to himself and actually enjoyeth, the first thing to be done is," etc., etc.

In this view of taxation, so far as any member of the community possesses wealth in forms available

for the future production of wealth, he is regarded as a trustee or guardian, in that respect and to that extent, of the public interests. Just this is said by Arthur Young—taxes "can reach with propriety the expenses of his living only. If they touch any other part of his expenditure, they deprive him of *those tools that are working the business of the state.*"

430. Fallacy of this Doctrine.—But is it only eating, drinking, wearing, or some other mode of personal consumption, which constitutes such an individual appropriation of wealth as to make its use selfish, and thus bring it within the proper scope of taxation? Suppose that a weak, sanguine, vain-glorious, or willful owner of wealth applies it to what are intended to be productive enterprises, but to such as are foolish, unjustified by the existing conditions of industry or trade, likely to result in loss and waste. Let us assume such an investment to have taken place: a canal, for example, for which there was no adequate occasion, to have been constructed.

The theory of the equities of taxation which we are considering maintains that, not when this wealth was first created and became revenue, had the state a right to excise it for public uses, because it had not then been selfishly appropriated to personal enjoyment; not when it was saved out of revenue and became wealth, did the state acquire the right to take any portion of it for public uses, since it had not yet passed into consumption; and that at no stage, from its creation to its final dissipation and disappearance as wealth, did the state obtain any claim upon any portion of it, because no individual

had derived an exclusive benefit from it. And yet the community derived no benefit from it.

431. I do not see but that, if capital, or revenue in excess of personal expenditure, is to be exempted from taxation, on the plea that it has not yet become the subject of individual and exclusive appropriation and is, therefore, presumably held and used in a way which primarily benefits society, the state has a right to inquire whether the use made or proposed to be made of wealth is such as will in fact benefit society, and benefit society, moreover, in the highest degree of which it is capable.

The citizen, using this argument, says to the state, "You must not tax, excise, cut any thing off, this wealth I hold, because I have not yet appropriated it exclusively to myself. Indeed, I am going to use it for the benefit of society." The state rejoins: "Yes, but of that we must satisfy ourselves. We must be the judge whether your use of your wealth will benefit society. Pay your taxes, and you can do with your wealth as you like. Claim exemption on the ground of public service, and you rightfully come under state supervision and control."

432. The Dangerous Nature of this Doctrine.—This doctrine of the trusteeship of Capital is not more irrational than it is socially dangerous. If the owner of wealth is but a trustee; if "his tools are working the business of the state," then the real beneficiary may enter and dispossess the trustee if any substantial reason for dissatisfaction as to the management of the property exists; the state may take the tools into its own hands and "work its business" for itself.

433. Faculty as the Basis of Taxation.—I reach, then, the conclusion that Faculty, the power of production, constitutes the only theoretically just basis of expenditure ; that men are bound to serve the state in the degree in which they have the ability to serve themselves.

I think we shall more clearly see Faculty to be the true natural basis of taxation if we contemplate a primitive community, where occupations are few, industries simple, realized wealth at a minimum, the members of the society nearly on a level, and the wants of the state limited. Suppose, now, a work of general concern, perhaps of vital importance to the community, requires to be constructed : a dyke, for instance, against inundation, or a road, with occasional bridges, for communication with neighboring settlements. What would be the rule of contribution ? Why, that all able-bodied persons should turn out and each man work according to his faculties, in the exact way in which he could be most useful.

In regard to a community thus for the time engaged, we note two things : first, that no man would be held to be exempted because he took no interest in the work which had been decreed as of general public concern ; that he would not be allowed to escape contribution because he was willing to relinquish his share of the benefits to be derived, preferring to get a miserable subsistence for himself by hunting or fishing ; secondly, that, between those working, a higher order of faculties, greater muscular power, or superior skill would make no distinction as to the time for which the individuals

of the community should severally remain at work.

434. The Ideal Tax.—This is the ideal tax. It is the form of contribution to which all primitive communities instinctively resort. It is the tax which, but for purely practical difficulties, would afford a perfectly satisfactory measure of the obligation of every citizen to contribute to the sustentation and defense of the state. Any mode of taxation which departs in essence from this involves a greater or smaller sacrifice of the equities of contribution; and any mode of taxation which departs from this in form is almost certain to involve a greater or smaller departure in essence.

And it deserves to be noted that the largest tax of modern times, even in the most highly organized societies of Europe, the obligation of compulsory military service, is assessed and collected on precisely this principle. In nearly all the empires and kingdoms of Continental Europe the requirement of personal service for an equal period presses alike on rich and poor, high and low. Exemptions are indeed allowed, but always on the theory that the persons exempted will in reality serve the state more to its advantage by remaining in their ordinary professional capacities.

435. The Faculty Tax Impracticable.—But while the tax on Faculty is the ideal tax, it has usually been deemed impracticable as the sole tax in a highly complicated condition of industrial society. As occupations multiply and the forms of production become diversified, it is found that the state cannot to advantage call upon each member by turns to serve

in person for a definite portion of each day or of the year. Hence modern statesmanship has invented taxes on expenditure, on revenues, on capital, not as theoretically just, but with a view to reduce the aggregate burden on the community, and to save production and trade from vexation and obstruction.

436. We Recur to the Tax on Revenue.—The politicians of the existing order, as we have seen, shrink from the effort involved in levying the public contributions entirely, or even chiefly, according to faculty. Next in point of political equity comes the tax on incomes, or the revenues of individuals. That tax, as it stands in contemplation of the writer on finance, is a tax on the revenues of all classes, with exception only of the amount requisite for the maintenance of the laborer and his family, after the simplest possible manner, in health and strength to labor. It is not a compensatory tax, constituting a part of a system in which realized wealth and various forms of expenditure are also brought under contribution, but the sole tax imposed by the state.

437. Exemption of the Actual Necessaries of Life.—It has been said that from such an income tax the necessary cost of subsistence must be exempted. Economically speaking, it is not possible to tax an income of this class. A man in the receipt of such an income cannot contribute to the expenses of government. That income being only sufficient to individual necessities, no part of it can be applied to public uses. Should the state, with one hand, take any thing from such a person as a taxpayer, it

must, with the other, give it back to him as a pauper.

Conceding the exemption, on purely economic grounds, of the amount required for the maintenance of the laborer's family, one of the most vital questions in finance arises immediately thereupon; to wit, shall the excess above this minimum, shall the superfluity of revenue, which may be spent or saved at the will of the owner, be taxed at a uniform rate, or at rates rising with the increase of income?

438. The Question of Progressive Taxation. — The question of progressive or progressional taxation has always been one of great interest while the fiscal policy of states rested with the weathy and well-to-do classes. It is certain to acquire vastly greater importance as political power passes more and more into the hands of the class of small incomes. Upon the question of the equity of progressive taxation writers on finance are divided: one party holding that any recognition of this principle is sheer confiscation: the other admitting that progressive taxation may be carried to a certain point without injury either to the sense of political justice or to the instincts of industry and frugality, some even holding with J. B. Say that "taxation cannot be equitable unless its ratio is progressive." Both parties agree that there is great danger that, under popular impulse, progressive taxation may be carried so far as not only to violate all the equities of contribution but seriously to shock the habits of acquiring and saving property.

The system of progressive taxation prevailed at

Athens. The principle of graduation, or progressive taxation, was a favorite one with the French statesmen of 1793. In 1848, at the Revolution, the idea of progressivity was revived. The provisional government, in a decree, said: "Before the Revolution taxation was proportional; then it was unjust. To be truly equitable, taxation must be progressive."

M. Joseph Garnier, editor of the *Journal des Economistes*, makes a distinction between progressive taxation, properly so called, and progressional taxation. There is, M. Garnier holds, a species of increasing taxation which is rational and discreet, to which he applies the term progressional, which is held within moderate limits, which is collected by virtue of a tariff of duties slowly progressive, and which, at the maximum, cannot pass beyond a definite portion of the income of the individual.

Such would be, he says, a graduated tax which should demand from a revenue of 500 francs, zero; from a revenue of 600 francs, a something; from a revenue of 700 francs, that something and that which in arithmetic we call the ratio of increase; from a revenue of 800 francs, that something and twice the ratio; from a revenue of 900 francs, that something and thrice the ratio; and so on, according to a scale of duties calculated from the lowest to the highest, never passing a moderate maximum. "Thus," he concludes, "taxation can be progressive without being confiscatory."

In Prussia the tax on small incomes, known as the *Klassensteuer*, is levied on a scale of twelve degrees.

In England the principle of progression has never been admitted into the income tax further than is involved in the exemption of a certain minimum. How the subtraction of a constant amount from all incomes, and the taxation of the excess at a uniform rate, causes the rate on the total incomes to rise, from lowest to highest, will appear from the following table.

439. The Effect of Exemptions.—If we suppose the constant amount exempted to be $1,000 and the rate of taxation on the excess to be ten per cent., incomes of different amounts will in effect be taxed as follows:

Income.	Income subject to Taxation.	Amount of Tax.	Rate of Taxation on Total Income.
$1500	$500	$50	3.33+per cent.
2000	1000	100	5 "
2500	1500	150	6 "
3000	2000	200	6.66+ "
3500	2500	250	7.14+ "
4000	3000	300	7.5 "
4500	3500	350	7.77+ "

But while the principle of progressivity has never been admitted into the income tax of England, it has been extensively applied to the so-called "Assessed Taxes;" that is, taxes on carriages, horses, servants, etc.

440. Progressive Taxation in the Future.—That progressive taxation will be the demand of the International, as it was of the Revolutionists of 1793 and 1848, we already know. That progressive taxation will be urged in the spirit of spoliation and confis-

cation is most probable. The friends of the existing order will do well to be prepared to take their ground intelligently and maintain it with firmness and temper.

441. A Tax on Revenue Impracticable as the Sole Tax. —While, as the sole tax, the tax on revenue has been approved, on grounds of political justice, by many, perhaps most, writers on finance, it has, like the tax on faculty, generally been rejected as impracticable in view of difficulties in assessment affecting incomes both high and low, more indeed the higher than the lower, and difficulties of collection affecting especially incomes of the lowest class.

Revenue, or income, having, then, been abandoned generally throughout modern society as the sole basis of taxation, and only in exceptional cases forming even an important feature of existing tax systems, Expenditure has been resorted to increasingly, in the past and present century, from considerations not so much of political equity as of political and fiscal expediency. By far the greater portion of the revenue of the most advanced states is derived from taxes on consumption, as they are called, and every new demand of the treasury is met mainly from this source.

Yet even now Realized Wealth is still employed in many communities as the sole basis of taxation, the measure of the obligation to contribute to the support of government. It was the preferred form of taxation throughout the American colonies, when the value of land was small and rents were seldom paid by tenant to landlord. It is still the principal form of non-federal taxation in the United States,

as the Grand Lists of townships, cities, and counties testify.

442. The Purely Economic Theory of Taxation.— Mr. McCulloch, the author of one of the few works of value in the English literature of Taxation, boldly proposed to abandon altogether the attempt to follow out the equities of contribution. "The distinguishing feature of the best tax," he said, "is not that it is most nearly proportioned to the means of individuals, but that it is most easily assessed and collected, and is, at the same time, most conducive to the public interests."

The line of reasoning which leads up to Mr. McCulloch's conclusion may be stated as follows: Government springs from injustice, and, in the constitution of things, must commit more or less injustice. It is of no use to attempt to pursue the equities of contribution; they will elude you. It is admitted that it is impossible to distribute equally the benefits of government; why make the hopeless effort to apportion its burdens with absolute justice? Get the best government you can; maintain it at the least expense consistently with efficiency; and collect the revenue for the service by the most convenient, simple and inexpensive means. By undertaking to effect an equitable apportionment of the burden, through complicated methods or by personal assessment, you are not only likely to fail; you are certain, at the best, to add to the aggregate cost of the service, and are in great danger of generating new and distinct evils by disturbing economical relations and obstructing the processes of production and exchange.

443. The Theory of the Repercussion or Diffusion of Taxes.—No well-known writer following Mr. McCulloch has, to my knowledge, fully accepted his conclusion that the best tax is not that which is most nearly proportioned to the means of individuals, but that which is most easily assessed and collected, and, at the same time, most conducive to the public interests. But while writers on finance have insisted that the equities of contribution should govern in assessment, a belief in the so-called Repercussion, or diffusion, of taxes has led economists very generally to give their approval to the system of indirect taxation, the growth of which forms the most marked feature of the fiscal history of the present century.

Let the state, it is said, levy its contribution on such articles of general consumption as are most easily reached, or on such of the processes of production or exchange as lie most open to view, trusting to the operation of the laws of trade insensibly to distribute the burden over the whole body of the population.

This plea raises the question of the Incidence, i. e. the ultimate incidence, of taxation. "I hold it to be true," said Lord Mansfield in his speech on taxing the Colonies, "that a tax laid in any place is like a pebble falling into and making a circle in a lake, till one circle produces and gives motion to another, and the whole circumference is agitated from the center."

444. How do Taxes Tend to Diffusion?—This, which may be called the Diffusion-theory of taxation, rests upon the assumption of perfect competition. It

is true, to the full extent, only under conditions which secure the complete mobility of all economic agents.* So far as any portion of the community are impeded in their resort to their best market by ignorance, poverty, fear, superstition, misapprehension, inertia, just so far is it possible that the burden of taxation may rest where it first falls. It requires, as Prof. Rogers has said, an effort on the part of the person who is assessed to shift the burden on to the shoulders of others.

Not only is that effort made with varying degrees of ease or difficulty; but the resistance offered may be of any degree of effectiveness: powerful, intelligent, tenacious, or weak, ignorant, spasmodic. The result of the struggle thus provoked will depend on the relative strength of the two parties; and as the two parties are never precisely the same in the case of two taxes, or two forms of the same tax, it must make a difference upon what subjects duties are laid, what is the severity of the imposition, and at what stage of production or exchange the contribution is exacted.

It is not, it never can be, a matter of indifference when, where, and how taxes are imposed. "The ability to evade taxation," writes M. Say, "is infinitely varied, according to the form of assessment and the position of each individual in the social system. Nay, more, it varies at different times. There are few things so unsteady and fluctuating as the ratio of the pressure of taxation upon each class, by turns, in the community."

---

* See Pars. 278–281.

445. M. Say's Views.—It has always seemed to me strange that J. B. Say should be cited, as he so often is, as an authority on the side of the diffusion-theory of taxation. Not only in the paragraph from which I have quoted does he recognize the vital importance of the right "seating" of taxes; but in his references to the essay of Canard, which had been crowned by the Academy, he is even more pronounced. Canard had said that it is of little importance whether a tax press upon one branch of revenue or another, provided it be of long standing, because every tax in the end affects every class of revenue proportionally, as bleeding in the arm reduces the circulating blood in every portion of the human frame. To this M. Say rejoins that the object taken for comparison has no analogy with taxation. The wealth of society is not a fluid, tending continually to a level. It is, the rather, an organism like a tree or a man, no part of which can be lopped off without permanently disfiguring and crippling the whole.

446. M. de Parieu's Views.—M. de Parieu has given a chapter of his great work to the Incidence of Taxation. In respect to what he calls taxes levied upon the conditions of every human existence, he reaches the result that they have effects very obscure, and in a still greater degree subject to dispute. Where taxes are levied in cities upon the necessaries of life, he finds no considerable danger of evil effects, since there is a constant intercommunication between the laborers of towns and those of rural districts, and migration will soon restore the equilibrium after the disturbance created by the new impost. It is other-

wise when a new tax is imposed throughout the whole extent of a country. The emigration of laborers to foreign parts is only accomplished against a certain resistance, arising out of their habitudes and affections. It is always, moreover, accomplished at a definite loss and an indefinite risk. To throw taxes on consumption back upon the capitalist or the employer becomes, in M. de Parieu's judgment, a task very difficult and often wholly impracticable.

447. Conclusion.—I reach the conclusion that, in a condition of imperfect competition, we have no assurance that indirect taxes will be diffused equably over the whole community leaving each class and each individual in the same relative condition as before the imposition. Something less, it may be much less, than a proportional contribution must result from the differing strength and opportunities of the several classes and individuals.

The legislator cannot, then, adopt the comfortable doctrine of the indifference of the place and the person where and on whom the burden shall be laid. His responsibility abides for the ultimate effects of the taxes he imposes. Whether with reference to the equities of contribution or to the general interests of trade and production, he is bound carefully to consider the nature and probable tendencies of every projected impost.

XI.

PROTECTION VS. FREEDOM OF PRODUCTION.

448. The Doctrine of Laissez-Faire.—The question of Protection, as against Freedom of Production—not, as it is commonly stated, against Freedom of Trade

—is rarely discussed, on both sides, upon purely economical principles; perhaps has never been, in an actual instance, decided without the intermixture of political or social considerations.

The arguments of those who have favored the policy of so far limiting the territorial division of labor (see par. 55), as to constitute industrial entities corresponding to existing political entities (which I take to be the real intent of what is called Protection) have been of every degree of vagueness; but it seems to me that the confusion of the public mind need not have existed, at least to so great an extent, had not the professional economists taken what I cannot help regarding as an unjustifiably lofty attitude on this subject, practically refusing to argue the question at all as one of national expediency, contenting themselves with occupying the high ground of *Laissez-Faire*.*

*"Now I beg you to remark the strange assumptions that underlie this reasoning. Human interests are naturally harmonious; therefore we have only to leave people free, and social harmony must result; as if it were an obvious thing that people knew their interests in the sense in which they coincide with the interests of others, and that, knowing them, they must follow them; as if there were no such things in the world as passion, prejudice, custom, *esprit de corps*, class interest, to draw people aside from the pursuit of their interests in the largest and highest sense. Here is a fatal flaw on the very threshold of Bastiat's argument; and it is a flaw which no follower of Bastiat has repaired—which for my part, I believe to be irreparable. Nothing is easier than to show that people follow their interest, in the sense in which they understand their interest. But between this and following their interest in the sense in which it is coincident with that of other people, a chasm yawns. *That chasm in the argument of the laissez-faire school has never been bridged. The advocates of the doctrine shut their eyes and leap over it.*" Prof. J. E. Cairnes. [See also par. 290.]

Now the doctrine of *laissez-faire*, although established by the English economists to their own satisfaction, as containing a principle of universal application, and thus deemed by them a conclusive answer to all arguments specially directed to justify restrictions upon international trade, has never been accepted, in the fullness of significance by them given it, throughout any wide constituency, not even by any large proportion of the educated classes, not even generally by publicists, or statesmen, or men of affairs.

449. Freedom the Rule; Restraint the Exception.— Although the necessity of making exceptions to the rule of freedom of individual action has been established as completely in respect to industry as in respect to politics, freedom of action is yet so far the condition of health and power and growth, in the field alike of politics and of industry, that those who propose to make exceptions in either are bound to show cause for every such exception; a heavy burden of proof rests upon them; their case is to be made, and made against a powerful presumption in favor of liberty, as that condition which has the promise not only of that which now is, but, in a higher degree, of that which is to come.

There is not and there can never be any positive virtue in restraint; its only office for good is to prevent waste and save the misdirection of energy. There is no life in it and no force can come out of it. That which is called "protection" operates only by restraint; it has and can have neither creative power nor healing efficacy. All the energy that is to produce wealth exists before it and without respect to

it; and just to the extent to which protection operates at all, it operates by impairing that energy and reducing the sum of wealth that might be produced if protection did not exist.

I say, that might be produced, not that *would* be produced. The latter point may fairly be disputed between the free-trader, who should rather be called the free-producer, and the advocate of the system of restricted production. The channel of the river adds nothing to the force with which the water within its banks tends to its level. On the contrary, that force is reduced by the friction between the flowing water and the sides of the channel. Yet it is water confined in rivers, and not water spreading widely over the fields, which yields power to manufacturing industry. The force of the steam at the piston-head is less than the force of the steam in the boiler, less by all that is necessary to conduct it thither from the boiler; yet it is the force of the steam at the piston-head, and not where it is generated, which moves the engine.

450. What the Protectionist has to Prove.—If the protectionist can show that restraints imposed by law upon the industrial action of his countrymen, or the men of any country he chooses to take for the purposes of the debate, have the effect, not, indeed, to generate productive force, for that is impossible and it would be absurd to allege it, but to direct the productive force generated by human wants setting in motion human labor, to act upon the natural agents of production with a better actual result than under the rule of freedom, he will make his case.

451. Why Should Industrial Correspond to Political Entities?—In proceeding to establish the importance of checking the extension of the territorial division of labor at the boundary lines of nationality, the protectionist writers have been seriously embarrassed from the lack of reasons to give why industrial entities ought to correspond to political entities.

A good deal might be said upon the theme that the world-wide extension of the principle of the division of labor needs to be crossed and checked by artificial obstructions to prevent certain economic and social evils. We have shown (Pars. 187–201) that grave industrial mischiefs may originate in this principle, through which producer and consumer are set apart, often by a vast distance, sometimes by half the circumference of the globe; that misunderstandings may arise between producer and consumer which will result in a smaller production of wealth, a lower satisfaction of human wants, and that these misunderstandings are sometimes aggravated by suspicion or panic with the most deplorable consequences. The fact is incontestable. Every great gain is accomplished at the expense of some loss, small or large.

452. But when the attempt is to prove that the principle of the division of labor should be allowed to extend itself freely within the bounds of nationality but not beyond them, difficulties of a grave character are encountered at the outset, in the great and, from the economic point of view, altogether unaccountable irregularity and whimsicalness with which the surface of the earth is divided among independent sovereignties. One

nation comprises two millions of inhabitants, like Denmark, Greece or Chili; another ten, like Mexico, Brazil, or Siam; another thirty, like Italy or Japan; another fifty, like the United States; another eighty, like Russia; another three hundred and fifty, like China. The territory occupied by one nation crosses and includes two, three, or five great river systems; in other cases, one river system embraces the territory of two, three or five nations. A stream which a boy can wade may form the dividing line of two independent States; a third State may collect its revenues across the Atlantic and the Pacific oceans, and its magistracy send their warrants alike to Hudson's Bay and into the South Sea. One people may stretch from North to South across sixty degrees of latitude; another from East to West, through half the daily journey of the sun. One country may be occupied by a population as homogeneous as the inhabitants of some old city; while under the same flag, and subject to the same laws may live the representatives of nearly every race of men known to ethnology.

453. The United States as an Instance.—It will readily appear that the protectionist writers have a difficult task in establishing the necessity of drawing the lines of industrial circumvallation along the boundaries of empire.

Take the United States for example. Here are thirty-eight States trading among themselves with the utmost activity, the exchange of commodities and services being as free as the movements of the air; and in this freedom all good citizens rejoice. But this condition of things is made, by the

doctrine under examination, to be dependent entirely upon the political relations of these States. Were they under different governments, the exchange of commodities and services which now promotes the general wealth and the general welfare would be fraught with mischief and possible ruin.

But for the treaty of 1783, trade between Illinois and Wisconsin, on the east bank of the Mississippi, and Missouri and Iowa, on the west bank, would be prejudicial to some or all of the parties engaged. But for the treaty of 1819, the commercial dealings of Florida and Georgia, now a subject of congratulation so far as they extend, would be the proper object of dread and repugnance to one or both of these States. But for the Mexican war, the exchange of products between California and New York would properly be prohibited, on one side or both, or, if not prohibited, placed under onerous restrictions.

To-day free communication between the United States and Mexico is only advocated by "theorists," who fail to appreciate the importance of protecting American labor against the pauperized labor of the indolent Spanish American, *i.e.*, protecting the strong against the weak. Were Mexico annexed, the abolition of all restraints upon intercourse would be the first duty of Congress. A reciprocity treaty with Canada as a part of the British dominions is esteemed injurious to Maine, Vermont and Massachusetts; but free trade with Nova Scotia, Quebec and Ontario as States of the Union would be a welcome boon to New England.

It is, of course, possible that some new analysis

of the conditions of production may yet disclose the law which thus makes trade within the limits of sovereignty beneficial, and trade across the boundaries of separate states deleterious to one or both parties.

454. Protecting the Strong against the Weak.—I have spoken of the alleged necessity of protecting the strong against the weak. In the old world, the argument for protection is based on the importance of protecting the industrially weak against the industrially strong; Russia strives to protect her labor against the far better paid labor of Germany; Germany, in turn, strives to protect her labor against the vastly better paid labor of England. Among all fully settled countries, the rule, without exception so far as I am aware, is that that country in which the higher wages are paid offers its products at lower prices than the competing products of countries where the lower wages are paid.

In the United States, however, the argument for protection has based itself on the assumed necessity of protecting the strong against the weak. In Australia and Canada it is the same. It is alleged to be essential to the maintenance of the high wages prevailing in these countries, that the products of the "pauper labor of Europe" shall not be sold freely in their markets.

Why is it that the plea of those who desire to check the extension of the division of labor on the lines of nationality, suddenly changes from the necessity of protecting the weak against the strong to the necessity of protecting the strong against the weak, as we pass from old and fully settled countries

to countries but recently, and perhaps still but partially, occupied and cultivated?

455. Why Wages are High in New Countries.—The explanation is found in the fact that the populations of what we call "new countries," that is, countries where an inadequate population is applying progressively to fresh fields advanced methods and machinery, possess an immense advantage in the conditions of living over the populations of "old countries," where the land has long been fully occupied, where the capabilities of the soil are heavily taxed to furnish subsistence to its inhabitants, and where systematic, continuous manuring has to be practiced in order to keep the land in condition.

The enormous profit of cultivating a virgin soil without the need of artificial fertilization, and the abundance of food and other necessaries of life enjoyed by the agricultural class have tended continually to disparage mechanical industries alike in the eyes of the American capitalist looking to the most remunerative investment of his savings, and of the American laborer seeking the avocation which should promise the most liberal and constant support for himself and his family.

456. The Competition of the Farm with the Shop.—It has been the competition of the farm with the shop which has, from the first, most effectually retarded the growth of manufactures in the United States. A population which is privileged to live upon a virgin soil, cultivating only the choicest fields and cropping these through a succession of years without returning any thing to the land, can live in plenty, if not fare sumptuously every day.

If that population possess the added advantage of great skill in the use of tools and great adroitness in meeting the large and the little exigencies of the occupation and cultivation of the soil, the fruits of agriculture will still further be greatly increased.

An abundance of nutritious food is and has been, ever since the revolutionary period, the sure condition of the life of the agriculturist in the United States. The pioneers of Western New York, of Ohio, and of Wisconsin, never knew, at least after the first few years, what it was to lack food, or to be obliged to pinch or scrimp in the use of it.

Now, the mode of living on the part of the agricultural population has necessarily set a minimum standard of wages for mechanical labor. With an abundance of cheap land, with a population facile to the last degree in making change of avocation and of residence, very few native born Americans, and comparatively few immigrants are likely to be drawn into factories and shops on terms which imply a meaner subsistence than that secured in the cultivation of the soil.

457. The Hand Trades.—There are certain classes of mechanical pursuits, however, which, by their nature, secure to those who follow them a minimum remuneration fully up to the standard of the agricultural wages of the region. Such, for instance, are the trades of carpenter, blacksmith and mason, in which the work is of a kind which can only be done upon the spot.

If, then, the farmer will have such services performed, he must admit those who perform them to share his own abundance; he must pay wages or

prices which will attract men, and those, by necessity, men exceptionally intelligent and skillful, into those trades. Hence we find the mason, the plumber, the carpenter, the house painter, the cobbler, in every part of the United States, receiving wages which bear no relation whatever to the wages paid for the same class of services in other countries, but which stand in a very exact relation to the rewards of agricultural labor here.

Nor has it ever been found necessary to encourage or stimulate these trades for the good of the country. What statesman ever introduced into Congress a bill intended to increase the number of carpenters or blacksmiths, or to enhance their wages?

458. Personal and Professional Services.—But, again, there are certain classes of services, of a personal or professional nature, which have also secured for those rendering them a participation in the abundance enjoyed by the tillers of the soil in the same region. The remuneration received by the members of these classes, whether called the wages of domestic servants, or the fees of physicians and lawyers, or the salaries of schoolmasters and clergymen, or the profits of retail trade, has been out of all relation to the remuneration of similar services in other countries, and has amounted to just what I have termed it, *a participation in the abundance enjoyed by the agricultural population.* Since these services could only be performed upon the spot, the agriculturists have been obliged, if they would have the services rendered, to pay for them, out of the large surplus of their own produce, at least enough to make these professions and avoca-

tions equally desirable with their own, and consequently, there has never been any call for Congressional action to secure the requisite number of lawyers, physicians, clergymen, schoolmasters, domestic servants or retail tradesmen.

459. The Factory Industries.—But now we note that there are still other important classes of services to be rendered, respecting which the rule changes.

The services referred to are such as can be performed without respect to the location of the consumer of the product. They are nearly identical with what we call, in the technical sense of the term, manufactures.

Whenever the American farmer wants a pane of glass set, or a pair of boots mended, or a horse shod, he must pay some one of his neighbors enough for doing the job to keep him in his trade and to keep him out of agriculture, in the face of the great advantages of tilling the soil in New York, or Ohio or Dakota, or wherever else the farmer in question may live; but how much he shall pay the man who makes the pane of glass, or the pair of boots, or the set of horseshoes, will depend upon the advantages of tilling the soil, not where he himself lives, but where the maker of horseshoes, of boots, or of glass may live.

If he will have the work done he must pay some one, somewhere, enough to keep him in his trade and out of agriculture: but not necessarily out of New York agriculture, or Ohio agriculture, or Dakota agricultnre; but, perhaps, out of English agriculture, or French agriculture, or Norwegian agriculture, such as that may be, with the advantages,

no less and no more, there enjoyed by the cultivators of the soil, under the requirement of constant fertilization, deep plowing and thorough drainage, and subject to that stringent necessity which economists express by the term, "the law of Diminishing Returns."

460. Now, to offset and overcome the inducements to engage in agriculture, even in Merry England, is a different thing, a very different thing, from keeping a man in his trade and out of agriculture in the United States.

I have already quoted Prof. Fawcett as saying that it is impossible for the agricultural laborer in the West of England to eat meat more than once a week. The American who works upon the land eats meat twice a day, and freely at that.

The American agriculturist, having large quantities of grain and meat, of cotton and tobacco, left on his hands, after providing ample subsistence for his family, and even after hiring the carpenter, mason and blacksmith, the schoolmaster, lawyer and doctor, for as much time as he requires their respective services, and still further, after putting a good deal into farm implements and increase of stock, is desirous of obtaining with the remainder sundry articles more or less necessary to health, comfort and decency. To him, it makes no difference whether the articles he requires are made on one side of the Atlantic or on the other; but it makes a great difference what he is obliged to pay for them; how much of his surplus grain and meat, tobacco and cotton must go to secure a certain definite satisfaction of his urgent and oft-recurring

wants. If he must needs pay some one to stay out of American agriculture and do this work, his surplus will not go so far as if he were allowed to pay some one to stay out of English agriculture to do it.

461. What the State Can Do.—But here the State enters and declares that it is socially or politically necessary that these articles, these nails, these horseshoes, this cotton or woolen cloth, or what not, shall be made on this side of the Atlantic, and not on the other. That necessity the agriculturist, as consumer, cannot be expected to feel; he does not care where the things were made; he only wants them to use. He does not care who makes them; he does not even care whether they are made at all; they would answer his purpose just as well were they the gratuitous gifts of nature, spontaneous fruits of the soil, or the sea, or the sky. He will not, of his own motion, pay more for an article because it is made on his side of the Atlantic than he could get an equally good article for, bearing the brand of Sheffield or Birmingham or Manchester.

But if the State says he must, he must; and consequently the American maker of this article is by force of law admitted to a participation in the abundance enjoyed by the American agricultural class. The tiller of the soil is now compelled, by the ordinance of the State, to share his bread and meat with the maker of nails or of horseshoes, of cotton or of woolen cloth, just as he was before compelled, by the ordinance of nature, to share his bread and meat with the blacksmith, carpenter and mason, the schoolmaster, lawyer and doctor.

It is perfectly true, therefore, as the protectionist

asserts, that a tariff of customs duties upon foreign goods imported into new countries may create and maintain high rates of wages in the factory industries. But for protective duties, those articles which, in their nature, can be readily and cheaply transported will be produced predominantly in countries where the minimum standard of mechanical wages is set by agricultural conditions far less favorable than those which obtain in the United States, in Canada, or Australia.

But while the law may thus create high rates of wages in factory industries, it does not and it can not create the wealth out of which that excess of manufacturing wages over those of older countries is paid. That wealth is created by the labor and capital employed in the cultivation of the soil.

THE END.

INDEX.

INDEX.

[THE REFERENCES ARE TO PARAGRAPHS—NOT TO PAGES.]

THE AMERICAN SCIENCE SERIES.

The principal objects of the series are to supply the lack—in some subjects very great—of authoritative books whose principles are, so far as practicable, illustrated by familiar American facts, and also to supply the other lack that the advance of Science perennially creates, of text-books which at least do not contradict the latest generalizations. The scheme systematically outlines the field of Science, as the term is usually employed with reference to general education, and includes ADVANCED COURSES for maturer college students, BRIEFER COURSES for beginners in school or college, and ELEMENTARY COURSES for the youngest classes. The Briefer Courses are not mere abridgments of the larger works, but, with perhaps a single exception, are much less technical in style and more elementary in method. While somewhat narrower in range of topics, they give equal emphasis to controlling principles. The following books in this series are already published:

THE HUMAN BODY. BY H. NEWELL MARTIN, Professor in the Johns Hopkins University.

Advanced Course. Large 12mo. Pp. 655. $2.75.

Designed to impart the kind and amount of knowledge every educated person should possess of the structure and activities and the conditions of healthy working of the human body. While intelligible to the general reader, it is accurate and sufficiently minute in details to meet the requirements of students who are not making human anatomy and physiology subjects of special advanced study. *The regular editions of the book contain an appendix on Reproduction and Development. Copies without this will be sent when specially ordered.*

From the CHICAGO TRIBUNE: "The reader who follows him through to the end of the book will be better informed on the subject of modern physiology in its general features than most of the medical practitioners who rest on the knowledge gained in comparatively antiquated text-books, and will, if possessed of average good judgment and powers of discrimination, not be in any way confused by statements of dubious questions or conflicting views."

THE HUMAN BODY—*Continued.*

Briefer Course. 12mo. Pp. 364. $1.50.

Aims to make the study of this branch of Natural Science a source of discipline to the observing and reasoning faculties, and not merely to present a set of facts, useful to know, which the pupil is to learn by heart, like the multiplication-table. With this in view, the author attempts to exhibit, so far as is practicable in an elementary treatise, the ascertained facts of Physiology as illustrations of, or deductions from, the two cardinal principles by which it, as a department of modern science, is controlled,—namely, the doctrine of the "Conservation of Energy" and that of the "Physiological Division of Labor." To the same end he also gives simple, practical directions to assist the teacher in demonstrating to the class the fundamental facts of the science. *The book includes a chapter on the action upon the body of stimulants and narcotics.*

From HENRY SEWALL, *Professor of Physiology, University of Michigan:* "The number of poor books meant to serve the purpose of text-books of physiology for schools is so great that it is well to define clearly the needs of such a work: 1. That it shall contain accurate statements of fact. 2. That its facts shall not be too numerous, but chosen so that the important truths are recognized in their true relation. 3. That the language shall be so lucid as to give no excuse for misunderstanding. 4. That the value of the study as a discipline to the reasoning faculties shall be continually kept in view. I know of no elementary text-book which is the superior, if the equal, of Prof. Martin's, as judged by these conditions."

Elementary Course. 12mo. Pp. 261. 90 cts.

A very earnest attempt to present the subject so that children may easily understand it, and, whenever possible, to start with familiar facts and gradually to lead up to less obvious ones. *The action on the body of stimulants and narcotics is fully treated.*

From W. S. PERRY, *Superintendent of Schools, Ann Arbor, Mich.:* "I find in it the same accuracy of statement and scholarly strength that characterize both the larger editions. The large relative space given to hygiene is fully in accord with the latest educational opinion and practice; while the amount of anatomy and physiology comprised in the compact treatment of these divisions is quite enough for the most practical knowledge of the subject. The handling of alcohol and narcotics is, in my opinion, especially good. The most admirable feature of the book is its fine adaptation to the capacity of younger pupils. The diction is simple and pure, the style clear and direct, and the manner of presentation bright and attractive."

ASTRONOMY. By SIMON NEWCOMB, Professor in the Johns Hopkins University, and EDWARD S. HOLDEN, Director of the Lick Observatory.

Advanced Course. Large 12 mo. Pp. 512. $2.50.

To facilitate its use by students of different grades, the subject-matter is divided into two classes, distinguished by the size of the type. The portions in large type form a complete course for the use of those who desire only such a general knowledge of the subject as can be acquired without the application of advanced mathematics. The portions in small type comprise additions for the use of those students who either desire a more detailed and precise knowledge of the subject, or who intend to make astronomy a special study.

From C. A. YOUNG, *Professor in Princeton College:* "I conclude that it is decidedly superior to anything else in the market on the same subject and designed for the same purpose."

Briefer Course. 12mo. Pp. 352. $1.40.

Aims to furnish a tolerably complete outline of the astronomy of to-day, in as elementary a shape as will yield satisfactory returns for the learner's time and labor. It has been abridged from the larger work, not by compressing the same matter into less space, but by omitting the details of practical astronomy, thus giving to the descriptive portions a greater relative prominence.

From THE CRITIC: "The book is in refreshing contrast to the productions of the professional schoolbook-makers, who, having only a superficial knowledge of the matter in hand, gather their material, without sense or discrimination, from all sorts of authorities, and present as the result an *indigesta moles*, a mass of crudities, not unmixed with errors. The student of this book may feel secure as to the correctness of whatever he finds in it. Facts appear as facts, and theories and speculations stand for what they are, and are worth."

From W. B. GRAVES, *Master Scientific Department of Phillips Academy:* "I have used the Briefer Course of Astronomy during the past year. It is up to the times, the points are put in a way to interest the student, and the size of the book makes it easy to go over the subject in the time allotted by our schedule."

From HENRY LEFAVOUR, *late Teacher of Astronomy, Williston Seminary:* "The impression which I formed upon first examination, that it was in very many respects the best elementary text-book on the subject, has been confirmed by my experience with it in the classroom."

ZOOLOGY. By A. S. PACKARD, Professor in Brown University.

Advanced Course. Large 12mo. Pp. 719. $3.00.

Designed to be used either in the recitation-room or in the laboratory. It will serve as a guide to the student who, with a desire to get at first-hand a general knowledge of the structure of leading types of life, examines living animals, watches their movements and habits, and finally dissects them. He is presented first with the facts, and led to a thorough knowledge of a few typical forms, then taught to compare these with others, and finally led to the principles or inductions growing out of the facts.

From A. E. VERRILL, *Professor of Zoology in Yale College:* "The general treatment of the subject is good, and the descriptions of structure and the definitions of groups are, for the most part, clear, concise, and not so much overburdened by technical terms as in several other manuals of structural zoology now in use."

Briefer Course. 12mo. Pp. 334. $1.40.

The distinctive characteristic of this book is its use of the *object method.* The author would have the pupils first examine and roughly dissect a fish, in order to attain some notion of vertebrate structure as a basis of comparison. Beginning then with the lowest forms, he leads the pupil through the whole animal kingdom until man is reached. As each of its great divisions comes under observation, he gives detailed instructions for dissecting some one animal as a type of the class, and bases the study of other forms on the knowledge thus obtained.

From HERBERT OSBORN, *Professor of Zoology, Iowa Agricultural College:* "I can gladly recommend it to any one desiring a work of such character. While I strongly insist that students should study animals from the animals themselves,—a point strongly urged by Prof. Packard in his preface,—I also recognize the necessity of a reliable text-book as a guide. As such a guide, and covering the ground it does, I know of nothing better than Packard's."

From D. M. FISK, *Professor of Natural History, Hillsdale College:* "The 'Briefer Courses' of Packard and Martin have been adopted, and for these reasons: 1. *They are brief;* the lessened mechanical labor of mastering a text leaves time for more observation and for comparison of authorities. 2. *They are clear;* the work of cutting away needless nomenclature has been done with skill. 3. *They are authoritative;* serious students can have confidence in even brief and dogmatic statements, knowing they come from a master, and not from a mere compiler. 4. *They are fresh;* fossils are good in their places, but a fossil text-book in science is a fraud on youth."

ZOOLOGY—*Continued.*

Elementary Course. (*In press.*)

In general method this book is the same with those just described, but, being meant for quite young pupils, it gives more attention to the higher organisms, and to such particulars as can be studied with the naked eye. In everything the aim has been to make clear the cardinal principles of animal life, rather than to fill the pupil's mind with a mass of what may appear to him unrelated facts.

BOTANY. By CHARLES E. BESSEY, Professor in the University of Nebraska.

Advanced Course. Large 12mo. Pp. 611. $2.75.

Aims to lead the student to obtain at first-hand his knowledge of the anatomy and physiology of plants. Accordingly, the presentation of matter is such as to fit the book for constant use in the laboratory, the text supplying the outline sketch which the student is to fill in by the aid of scalpel and microscope.

From J. C. ARTHUR, Editor of *The Botanical Gazette*: "The first botanical text-book issued in America which treats the most important departments of the science with anything like due consideration. This is especially true in reference to the physiology and histology of plants, and also to special morphology. Structural Botany and classification have up to the present time monopolized the field, greatly retarding the diffusion of a more complete knowledge of the science."

Briefer Course. 12mo. Pp. 292. $1.35.

A guide to beginners. Its principles are, that the true aim of botanical study is not so much to seek the family and proper names of specimens as to ascertain the laws of plant structure and plant life; that this can be done only by examining and dissecting the plants themselves; and that it is best to confine the attention to a few leading types, and to take up first the simpler and more easily understood forms, and afterwards those whose structure and functions are more complex. The latest editions of the work contain a chapter on the Gross Anatomy of Flowering Plants.

From J. T. ROTHROCK, *Professor in the University of Pennsylvania*: "There is nothing superficial in it, nothing needless introduced, nothing essential left out. The language is lucid; and, as the crowning merit of the book, the author has introduced throughout the volume 'Practical Studies,' which direct the student in his effort to see for himself all that the text-book teaches."

CHEMISTRY. By IRA REMSEN, Professor in the Johns Hopkins University.

Advanced Course. 8vo.

The general plan of this work will be the same with that of the Briefer Course. already published. But the part in which the members of the different families are treated will be considerably enlarged. Some attention will be given to the lines of investigation regarding chemical affinity, dissociation, speed of chemical action, mass action, chemical equilibrium, thermochemistry, etc. The periodic law, and the numerous relations which have been traced between the chemical and physical properties of the elements and their positions in the periodic system will be specially emphasized. Reference will also be made to the subject of the chemical constitution of compounds, and the methods used in determining constitution.

Introduction to the Study of Chemistry. 12mo. 389 pp.

The one comprehensive truth which the author aims to make clear to the student is the essential nature of chemical action. With this in view, he devotes the first 208 pages of the book to a carefully selected and arranged series of simple experiments, in which are gradually developed the main principles of the subject. His method is purely inductive ; and, wherever experience has shown it to be practicable, the truths are drawn out by pointed questions, rather than fully stated. Next, when the student is in a position to appreciate it, comes a simple account of the theory of the science. The last 150 pages of the book are given to a survey, fully illustrated by experiments, of the leading families of *inorganic* compounds.

From ARTHUR W. WRIGHT, *Professor in Yale College* :—The student is not merely made acquainted with the phenomena of chemistry, but is constantly led to reason upon them, to draw conclusions from them, and to study their significance with reference to the processes of chemical action—a course which makes the book in a high degree disciplinary as well as instructive.

From THOS. C. VAN NUYS, *Professor of Chemistry in the Indiana University* :—It seems to me that Remsen's "Introduction to the Study of Chemistry" meets every requirement as a text or class book.

From C. LES MEES, *Professor of Chemistry in the Ohio University* :—I unhesitatingly recommend it as the best work as yet published for the use of beginners in the study. Having used it, I feel justified in saying this much.

CHEMISTRY—*Continued.*

Elements of Chemistry. 12mo. 272 pp.

Utilizes the facts of every-day experience to show what chemistry is and how things are studied chemically. The language is untechnical, and the subject is fully illustrated by simple experiments, in which the pupil is led by questions to make his own inferences. The author has written under the belief that "a rational course in chemistry, whether for younger or older pupils, is something more than a lot of statements of facts of more or less importance; a lot of experiments of more or less beauty; or a lot of rules devised for the purpose of enabling the pupil to tell what things are made of. If the course does not to some extent help the pupil to think as well as to see it does not deserve to be called rational."

CHASE PALMER, *Professor in the State Normal School, Salem, Mass.*: —It is the best introduction to chemistry that I know, and I intend to put it into the hands of my pupils next Fall.

A. D. GRAY, *Instructor in Springfield (Mass.) High School*:—Neat, attractive, clear, and accurate, it leaves little to be desired or sought for by one who would find the best book for an elementary course in our High Schools and Academies.

GENERAL BIOLOGY. By WILLIAM T. SEDGWICK, Professor in the Mass. Institute of Technology, and EDMUND B. WILSON, Professor in Bryn Mawr College. *Part I.* 8vo. 193 pp.

This work is intended for college and university students as an introduction to the theoretical and practical study of biology. It is not zoology, botany, or physiology, and is intended not as a substitute, but as a foundation, for these more special studies. In accordance with the present obvious tendency of the best elementary biological teaching, it discusses broadly some of the leading principles of the science on the substantial basis of a thorough examination of a limited number of typical forms, including both plants and animals. Part First, now published, is a general introduction to the subject illustrated by the study of a few types. Part Second will contain a detailed survey of various plants and animals.

W. G. FARLOW, *Professor in Harvard University, Cambridge, Mass.*: —An introduction is always difficult to write, and I know no work in which the general relations of plants and animals and the cell-structure have been so well stated in a condensed form.

POLITICAL ECONOMY. By FRANCIS A. WALKER, President of the Massachusetts Institute of Technology.

Advanced Course. 8vo. 537 pp.

The peculiar merit of this book is its *reality.* The reader is brought to see the application of the laws of political economy to real facts. He learns the extent to which those laws hold good, and the manner in which they are applied. The subject is divided, as usual, into the three great branches of production, exchange, and distribution. An interesting and suggestive "book" on consumption is added, which serves to bring in conveniently the principles of population. The last part of the volume is given to the consideration of various practical applications of economic principles.

From RICHMOND MAYO SMITH, *Professor in Columbia College, N. Y.:*—In my opinion it is the best text-book of political economy that we as yet possess.

From WOODROW WILSON, *Professor in Princeton University, N. J.:* —It serves better than any other book I know of as an introduction to the most modern point of view as to economical questions.

Briefer Course. 12mo. 415 pp.

The demand for a briefer manual by the same author for the use of schools in which only a short time can be given to the subject has led to the publication of the present volume. The work of abridgment has been effected mainly through excision, although some structural changes have been made, notably in the parts relating to distribution and consumption.

From ALEXANDER JOHNSTON, *late Professor in Princeton University, N. J.:*—Using the "Briefer Course" as a text-book, suited to any capacity, I am able at the same time to recommend the "Advanced Course" to those who are better able to use it as a book of reference, or more inclined to carry their work further.

Elementary Course. 12mo. 323 pp.

What has been attempted is a clear arrangement of topics; a simple, direct, and forcible presentation of the questions raised; the avoidance, as far as possible, of certain metaphysical distinctions which the author has found perplexing; a frequent repetition of cardinal doctrines, and especially a liberal use of concrete illustrations, drawn from facts of common experience or observation.

QUESTIONS

SUPPLEMENTARY TO

WALKER'S POLITICAL ECONOMY.

FOR USE OF CLASSES IN THE

MASS. AGRICULTURAL COLLEGE,

AMHERST, MASS.

AMHERST, MASS:
C. F WALKER, PRINTER.
1890.

QUESTIONS IN POLITICAL ECONOMY.

PART I. 1. What is Political Economy? 2. What is wealth? 3. Define value. 4. What is implied in this definition? 5. What is the relation of value to gratuity? 6. Distinguish wealth from property. 7. Give the premises of Political Economy as stated by Prof. Cairnes. 8. Give Prof. Senior's definitions of Political Economy as a science and as an art. 9. Should the economist treat Political Economy as a science or as an art? 10. What is the relation of Political Economy to other sciences? 11. To Political Equity? The habit of French writers? 12. How far must the Political Economist consider the sentiments of himself and others? 13. State and discuss the three obstacles that Political Economy encounters.

PART II. Chapter 1. 1. Define the production of wealth. 2. State and describe the there classes of value. 3. What are the three primary agents in production? 3. Who were the Physiocrats? What, when, and where did they teach? 4. State and illustrate the law of diminishing returns in Agriculture? 6. The ratio of decrease and the extent of the law. 7. What is the relation of this law to manufacturing, and does it effect all kinds of manufactures equally. 8. What is the relation of the soil to the welfare of the race? 9. What statement of fact regarding the exhaustion of the soil does Prof. Johnston make? 10. Give the relation of the exhaustion of the soil to the controversy as to free trade and protection? 11. Name the two facts that tend to impair the force of the argument for protection derived from the exhaustion of the soil.

Chapter 2. 1. What are the four stages in the developement of the second agent of production? 2. What two factors constitute the labor power? 3. State five elements on which the efficiency of individual laborers depends. 4. State and illustrate the relation of food to industrial efficiency. 5. What is the diet of the working man in France, Holland, Belgium, the west of England; and who are the authorities for these statements? What is the importance of these facts? 6. What is the relation of the sanitary conditions of labor to its efficiency in America and in foreign lands? 7. What constitutes the intelligence of the laboring man? 8. Give four reasons proving the value of intelligence to labor. 9. What are the facts regarding the use of machinery in Turkey and Greece; in the United States and English Colonies; and in other parts of the world? 10. Discuss the effect of cheerfulness and hopefulness in labor, bond and free; in the wage worker, and the man who works for himself. 11. What are the facts regarding Scotch and Irish industry *vs.* indolence? 12. What are the facts regarding the varying efficiency of labor in England, India, Russia, France, and the

United States? 13. What is the second factor in the labor power of a community? 14. Trace the development of division of labor from that of primitive society to the present time. 15. Give five ways in which division of labor increases production. 16. Give the origin and the significance of the phrase, "The territorial division of labor." 17. Give three elements of industrial organization that tend to greatly increase production. Define and describe them. 18. What are the advantages and disadvantages of industrial organization? Which are the greater?

Chapter 3. 1. Define the third great agent in production. 2. What three conditions of production are to be distinguished from capital? 3. Illustrate the original office and increase of capital. 4. Illustrate the rise of new economic desires. 5. Give a full statement of the law of capital as to its origin, its maintenance, its power, its rates of increase, its effects upon labor. 6. State, in their order, the three forms of capital, and define each. 7. Into which one of these forms may the three be resolved?

Chapter 4. 1. How is the productive capability of any community determined? 2. Tell the difference between manufactures and agriculture as related to the law of diminishing returns. 3. What is necessary to the solution of the question "Why the actual production of wealth in any community falls so far short of its productive capacity"? 4. Define accurately the term "industrial structure". 5. What is the importance of this? 6. What is partial immobility of labor and capital? 7. State and illustrate what is meant by the misdirection of labor. 8. Give the six conditions of production in which there is no need of the *entrepreneur* class. 9. What are the conditions which demand the master of industry? 10. Specify the duties of the *entrepreneur*. 11. How is the power of the *entrepreneur* multiplied? 12. What is the position of the *entrepreneur* today as emphasized by co-operative attempts in England, France, and America? 13. What are the dangers of this system? 14. What are the facts relating to the destruction of wealth in the United States, and what is their relation to the question of production?

PART III. Chapter 1. 1. In the department of exchange, what is the question to be discussed? 2. Out of what does exchange arise? 3. What gives rise to the exchanging class? 4. Specify different agents of exchange, and state their relation to production. 5. Distinguish price and value. 6. Distinguish value and utility. 7. Distinguish useful and beneficial. 8. What is the relation of labor to value? 9. Define and illustrate monopoly value. 10. What is the relation of value to the cost of production or reproduction?

11. What is the importance of the element of time in this question? 12. Does value always depend on the cost of reproduction? 13. State the law of supply and demand, and define its terms. 14. Define competition and tell what it implies. 15. Mention three things to which competition is opposed. 16. Define and illustrate Prof. Jevon's idea of final utility. 17. What is the relation of market price to utility? 18. How many prices may there be for any article in the same market, at the same time, perfect competition being supposed? 19. Explain what is meant by a market. 20. Specify the conditions constituting a good market for an article. 21. Define normal price, and show its relations to final utility. 22. Define market price, and show its relations to normal price, and to final utility. 23. State three causes for the deviation of market price from normal price. [*See pars. 101, 106, 107.*] 24. Define and distingnish stock and supply. 25. Explain the relation of stock to fluctuations of production. 26. What effect does the substitution in use of one commodity for another have upon the price of each? 27. What is the relation of liability to deterioration to price. 28. What is the relation of the organization of industry and the existence of plant to price? 29. Show how custom will cause market price to differ from normal price. 30. What is the influence of habit and mental inertia upon price. What four characteristics constitute enterprize? 31. What is the relation of moral and intellectual characteristics to demand and supply in the retail and in the wholesale trade? 32. State and criticise Mill's idea of the friction of retail trade.

Chapter 2. 1. Give a clear and adequate statement of Mill's theory of international trade, discussing the causes of importation of goods, distinguishing domestic and foreign trade, defining international values, and stating the equation of international demand. 2. What is Prof. Cairnes' theory of non-competitive groups?

Chapter 3. 1. Recapitulate the points concerning the relation of exchange to division of labor and production. 2. Explain the economic function of money. 3. How does money facilitate exchange? 4. What are the three functions of money? [*See par. 122, 142, 144.*] 5. Define money. [*page 101.*] 6. What is the relation of money to civilization? 7. Give ten historical forms of money, and the places where used. 8. State what metals have been used as money, and by what nations. 9. State why the precious metals are best adapted for use as money. 10 Define, describe, and characterize coinage. 11. What determines the value of money? 12. What is the demand for money, and by what is it not determined? 13. What is

the effect of discredit upon the money demand? Give instances. 14. Define price. 15. What is the supply of money? 16. What two factors constitute money force? 17. Upon what does the rapidity of the circulation of money depend? 18. Describe and illustrate the international distribution of money? 19. State and criticise Gresham's law. 20. State the common doctrine of the measure of value together with the author's idea. 21. What is meant by a standard of deferred payments? 22. What are the facts relating to the stability of the value of grain and of different metals? 23. What other standards of deferred payments have been used or suggested?

Chapter 4. 1. What two degrees of seigniorage are there? 2. Define and distinguish gratuitous coinage from free coinage, and give the arguments for and against it. 3. Give the history of seigniorage in various countries. 4. State the effect of seigniorage upon the purchasing power of coin, giving the illustration and the principle as stated by Ricardo. 5. Criticize it. 6. Is depreciation the necessary result of debasement? Prove your answer. 7. What is the cause of depreciation? 8. When will debased coin be turned into bullion? 9. Define inflation.

Chapter 5. 1. What is the relation of inconvertible paper money to seigniorage? 2. Name the paper money states and those which use bank money. 3. State with examples the origin of inconvertible paper money, and also its characteristics. 4. State and prove the three uses of paper money. 5. What determines the value of paper money? 6. Is depreciation a necessary consequence of inconvertibility? 7. Give the moving cause of the issue of inconvertible paper money. 8. State the author's position concerning inconvertible paper money. 9. Give the purpose for which governments have issued this money. 10. Is it good money as well as cheap? 11. Is it a good standard of deferred payments? 12. Give the domestic effects of inflation. 13. Give the relation of inconvertible paper money to foreign exchanges. Give the experience of France.

Chapter 6. 1. Give the characteristics of bank money. 2. Give its origin. 3. Give its relation to the specie reserve, Adam Smith's illustration in American history. 4. State fully the theory of bank money, as expounded by Mr. Tooke. 5. State the opposing view of bank money. 6. State the author's position as to the currency principle *vs.* the banking principle.

Chapter 7. 1. What are the evil possibilities involved in the division of

labor? 2. Define and describe the three stages in industrial development. 3. Distinguish two sorts of fluctuations in production. 4. Describe the latter and show its relation to production. 5. State the question suggested by hard times and describe the condition of things during the panic of 1873 and following. 6. Give the explanation, distinguishing two classes of products, pointing out the initial shock, describing the necessary effect, showing how far it may be carried and how long it may last.

PART IV. Chapter 1. 1. What is the inquiry to be answered under the title of distribution? 2. When is it simple and when is it complex? 3. Give the illustration of the product, the parties, and the shares in distribution. 4. State again the question at issue. 5. Distinguish exchange of services and of commodities. Who has confounded them? Give the quotation from the Duke of Argyle, and the comments upon it. 6. What is the nature of the contest between the parties to distribution? 7. Who are the parties in distribution, individuals or classes? Are they the same in all countries? From the industrial organization of what nation are the parties chosen for the purposes of the present discussion taken?

Chapter 2. 1. Give *verbatim* the definition of rent. 2. What is meant by the term land, or natural agents? 3. Illustrate the origin of rent: specifying the things assumed, describing the ante-rent stage, the emergence of rent in the second stage and its relation to the law of diminishing returns in Agriculture, the increase of rent in the third stage, and its effect in the fourth stage. 4. Give a *verbatim* statement of the law of rent. 5. Give the effect of cost of transportation upon rent; the discovery of a new continent. 6. What important principle is deduced from the law of rent as to Agricultural products? Prove it. 7. Give the relation of rent to the price of land. Why do these vary? 8. How far is the doctrine of rent applicable to actual conditions? 9. Give the facts concerning rents in the United States and in England. 10. On the continent of Europe. 11. In Ireland prior to 1844. 12. Contrast competition in Ireland and in the United States. 13. Name three classes of conditions that effect the question of actual *vs.* theoratical rents. 14. Give three kinds of water privileges and what determines the rent for the same. 15. What determines the rent of building lots? 16. Of mines? 17. What determines the so called rent of buildings? 18. State the question concerning the unequal increment of land.

Chapter 3. 1. Define interest. 2. Is interest paid for the use of money?

3. How is the rate of interest determined? By the increase of money? 4. Does the rate of interest tend to rise or fall? Prove it. 5. Contrast interest and rent. 6. Is there a minimum rate of interest? 7. Distinguish interest from insurance of capital. 8. How are extra hazardous risks determined? 9. Describe wreckers of trade. 10. What is double interest? 11. Account for different rates of interest in the same market at the same time. 12. Is the money market ever a good market? Is competition perfect? 13. Account for different rates of interest in different markets. Illustrate.

Chapter 4. 1. Define profits. 2. Specify the conditions which demand the *entrepreneur*. 3. From what class do they come? 4. Give their relation to the capitalist and to the laborer. 5. Will the time come when the functions of this class shall be divided so that one man shall be a master of workmen and another shall be a master of capital and all industry shall result from co-partnership involving profit sharing between these? 6. Give the common definition of profits in England and America. 7. Give the author's criticism of the foregoing. 8. Give Whately's view of rent as endorsed by the author. 9. Distinguish carefully rent and interest. 10. State the author's proposition concerning profits. 11. Is opportunity or ability most essential to the *entrepreneur's* success? 12. What three suppositions are taken as the basis of the no profit stage? 13. How many classes of *entrepreneurs* are there? Give the characteristics of each. 14. Who are the no profit *entrepreneurs*? 15. Prove that profits do not enter into the price of manufactured goods. 16. Prove that profits do not diminish wages. 17. Discuss the estimate the working man places upon the no profit entrepreneur as compared with the one who makes profits: which is really his friend? 18. Name the causes that increase the number of incompetent employees. 19. What is co-operation? Give the date of its birth.

Chapter 5. 1. Define wages. 2. Distinguish the two kinds of wages. 3. Specify five causes of the difference between real and nominal wages. 4. Give four reasons for greater regularity of employment in some industries than in others. 5. Give the statistics relating to the duration of the labor power in different avocations. 6. Distinguish between nominal and real cost of labor. 7. Prove that the best labor is the cheapest. 8. Why are wages to be discussed last in distribution? 9. Prove that rent, capital, and profits must be first deducted from the product, before the laborer can secure his wages. 10. Prove that the laborer is the residual claimant to the product of industry. 11. Give Prof. Jevon's position on this doctrine. 12. What, in fact, is done by the laboring class to make their claim good.

13. In what two ways do they do themselves an injury? 14. Is competition ever wholly a failure? 15. State the facts presented by Adam Smith regarding the immobility of labor. 16. By Prof. Fawcett. 17. By Prof. Cairnes. 18. Do children adapt themselves to supply the demand for labor? State the facts given by the author. 19. State the law of competition and its place in the economic universe. 20. Show how this law of competition benefits others. 21. What is the main office of competition? Illustrate. 22. Define the economic harmonies. [*Par.* 281.] 23. Competition failing, what antagonistic law acts, and with what effect? 24. What is the remedy of the *laissez-faire* school for the evils of imperfect competition? 25. May restrictions in the end produce more freedom? Illustrate in three ways. 26. What is the nature of the question of restriction? 27. Prove the effect of public opinion upon wages. 28. Recapitulate the author's doctrine of wages, stating his six propositions. 29. In what two ways in the failure of competition can the working class be injured? 30. Give a full statement of Prof. Cairnes' criticism of the doctrine of *laissez-faire*. 31. Explain the phrase, "residual claimant upon the product of industry". 32. Would improvement in the laborers tend to diminish interest and profits? 33. What would be the effect of inventions upon wages? 34. Suppose increased production should increase demand for land and for capital; what would be the effect upon profits and wages? 35. What two things must deprive the laborer of increase of wages? 36. Give the relation of this doctrine of wages to Henry George's theory.

Chapter 6. 1. Under what head in Political Economy should taxation be discussed? Give arguments for and against the answer. 2. State the five questions regarding taxation and tell to what they shall be assigned for discussion. 3. Describe and distinguish the stipend class, with illustrations. 4. Under what head should this class be discussed? 5. Describe and characterize the speculating class. 6. What two things may be said of speculations, and what is the economic function of speculation? 7. What is an efficient cause which increases speculation?

Chapter 7. 1. What affects the relation of actual to possible amount of production? 2. Discuss the reaction of distribution upon production. 3. Does diminution of rent or of profits, of interest or of wages affect most the amount of production? 4. Give the opinion of English and American economists. 5. Point out the errors of Prof. Cairnes and Perry. 6. Give the possible effects of a considerable reduction of wages. 7. Give the facts in Europe. 8. Give the moral effects of the reduction of wages. 9. Why

do employers reduce wages to starvation limits?

PART V. Chapter 1. 1. Define consumption. 2. Why should we discuss consumption? 3. Give the primary use of wealth. 4. Give the next use of wealth. 5. To the maintenance of what, is the third use of wealth devoted? 6. What effects follow from increase of the family? 7. What means does nature take to restore equilibrium between the size of the family and subsistence? 8. What antagonizes the principle of the survival of the fittest from its full effect upon the human race? Explain it fully. 9. State, explain, and illustrate the law of Malthus concerning population. 10. Does the fear of poverty check the increase of population? Illustrate your answer by facts in Ireland, China, and India.

Chapter 2. 1. What other check upon the increase of population is there? 2. Specify five or six different economic desires. 3. What effect do these have upon population: in what three ways do they act? 4. Which desire is the most efficient in reducing population? Give the principle deduced. 5. Define decencies: show their relation to the increase of population. Give their range. 6. Give their effect in England, France, and the United States.

Chapter 3. 1. Give McCulloch's ideas of cheap *vs.* dear food, together with the author's criticism. 2. Give the claim in behalf of government expenditures. 3. Give examples from India. 4. What does the London *Times* say? 5. What is the danger and what is the profit of the policy? 6. What are the two popular fallacies regarding hard times? 7. Show the two absurdities involved in "over production." 8. Show the two absurdities of "under consumption" 9. What then, is the grain of truth in the phrases? 10. State and refute the fallacy concerning the destruction of wealth. Give the illustration. 11. In what cases may distribution increase production?

Chapter 4. 1. Give the chief cause of the difference between the actual and the possible amount of production. Illustrate. 2. What question in consumption still remains to be answered?

PART VI. State eleven topics to which economic principles are to be applied.

Chapter 1. Why does the economist discuss usury? 2. What is the history of the origin and overthrow of the condemnation of interest in England, America, and the world? 3. Shall the borrower be protected by law?

4. How are usury laws evaded? 5. May usury laws influence the rate of interest? 6. What two reasons are in favor of the repeal of usury laws?

Chapter 2. 1. Specify the seven functions of banking. 2. What can you say of banking in ancient times? 3. In modern times, what were the first banks, and where were they found? 4. Describe the bank money of Amsterdam, and distinguish it from that of today. 5. Describe cancellation of indebtedness. 6. Explain and illustrate exchange. 7. What is the fifth banking function, and how did it arise? 8. What is the chief function of banks? Explain and characterize it. 9. Is the issue of paper money a necessary function of a bank? 10 How many and what are the kinds of banks?

Chapter 3. 1. What two benefits does the laborer expect from co-operation? 2. Besides these two, what three other benefits would be secured? 3. Give two kinds of co-operation. 4. Give the history of consumptive co-operation in England and in America. 5. Of productive co-operation in England, France, and America. 7. Give the difficulties and the future prospects of co-operation.

Chapter 4. 1. Give the objects of trades-unions. 2. May trades-unions promote the interests of labor? 3. Describe the early English strikes and their effect. 4. Compare strikes and insurrections and point out the effect upon both parties. 5. What is a failure of strikes? Compare the suppression of the revolt of the peasantry against Richard II. 6. Give the conditions of industry in the United States that should make us ashamed of strikes. 7. What are the factory acts? 8. What should determine their expediency? 9. What were the conditions of the laboring classes at the beginning of the present century? 10. Give an account of the English factory legislation. 11. What position was taken by economists regarding this legislation?

Chapter 5. 1. State the equities of rent between landlord and tenant, landlord and agricultural laborer, and landlord and community. 2. What is Mill's argument concerning the right to the unearned increment of land? 3. What was the remedy demanded by the land reform association? 4. Distinguish a tax on rent from a tax on produce. 5. Give the author's criticism of Mill's doctrine, specifying four points endorsed. 6. Prove Mill's remedy to be inexpedient by five arguments.

Chapter 6. 1. Define and distinguish political and economic money.

2. What is the test of political institutions? 3. To what two injurious effects does political money tend? 4. What are the motives which operate to produce expansion of political money? 5. Give Burke's idea of the relation of real and of political money to trade and to the necessities of the state. 6. Of its relation to the scaling down of debts. Illustrate by the history of New England. 7. Discuss the views of Chevalier and of McCulloch regarding the gradual depreciation of money, from age to age. 8. Give the difference between such depreciation and that caused by political money.

Chapter 7. 1. Characterize the question of bi-metallism. 2. Name and describe the gold using countries. 3. The silver using nations, and the wages in each. 4. What is proposed by the bi-metallist? 5. Give two advantages claimed for the system. 6. Explain and prove the value of the first; of the second. 7. Can the government affect the supply or demand for gold or silver? 8. What would tend to prevent the divergence of value of gold or silver used as a legal tender? 9. Do facts prove it? Give the testimony of Chevalier and Cairnes; Bagehot and Jevons. 10. How long can the equilibrium between gold and silver be maintained by a single state; by a group of states?

Chapter 8. 1. Give the policy of nations regarding the support of the poor. 2. Why should we discuss pauperism? 3. Why does the laborer work at all? 4. Give, with dates, the history of the English pauper system. 5. Give the state of pauperism in 1832; its effect upon chastity; upon labor; upon taxation. 6. Describe the poor law reform. 7. What principle should govern in the relief of the poor?

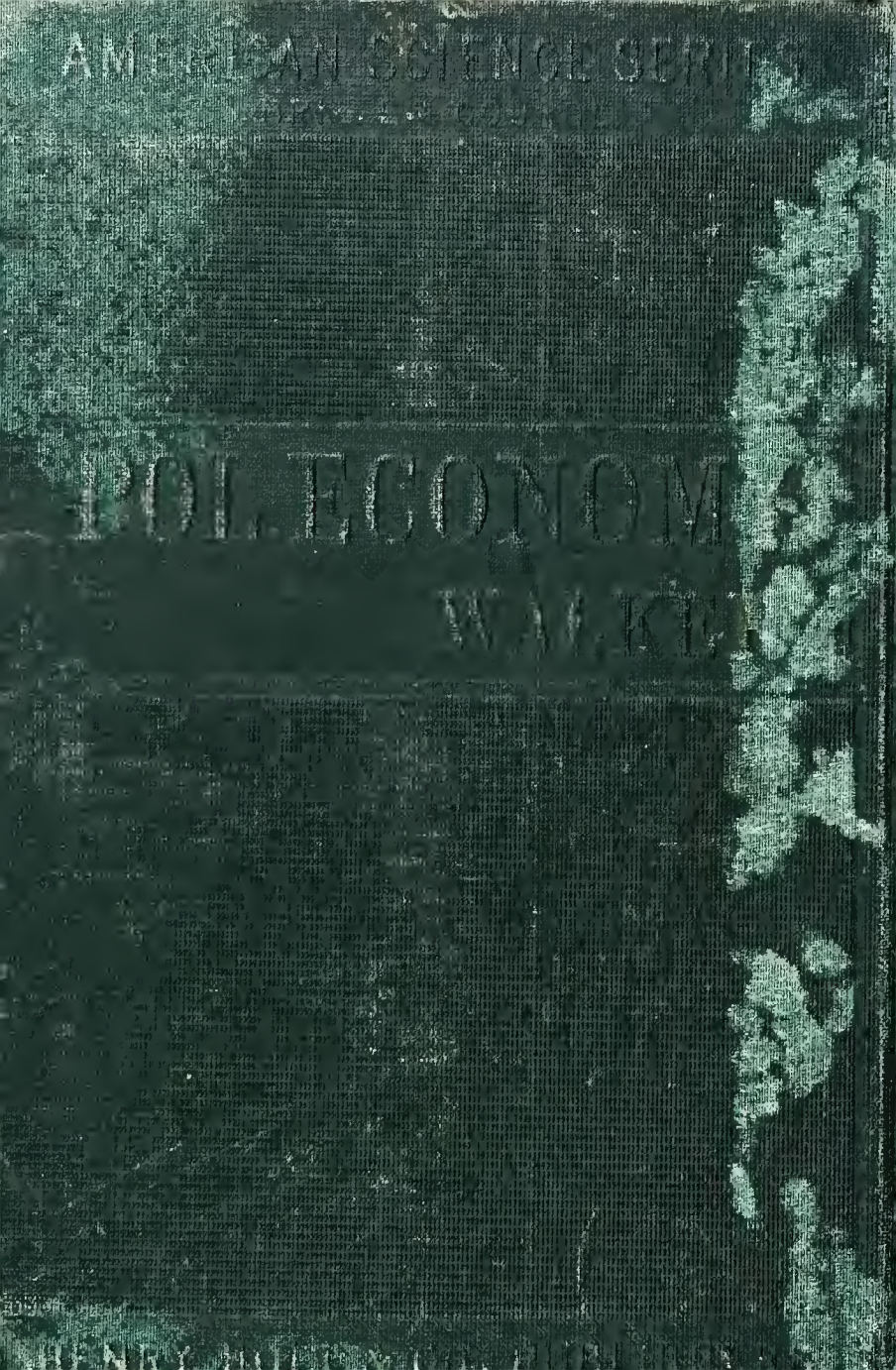
Chapter 9. 1. From what four sources may the revenue of the state be derived? 2. To what extent from voluntary contributions? 3. Name the various sources of revenue derived from public property, prerogatives, and state enterprize. 4. Explain each. 5. Give the history of fines and forfeitures. 6. Discuss revenue from state domains; the experience of England, Russia, Germany, etc. 7. What success has the state met with as *entrepreneur*? Give examples. 8. Give six forms of quasi taxes. Define or explain them. 9. Characterize the literature of taxation.

Chapter 10. 1. Give Adam Smith's maxim of taxation. 2. Criticize it. 3. Give the social dividend theory of taxation. 4. Is the income received a just measure of one's ability to pay taxes? 5. What is the "leave them

as you find them" basis of taxation? Mention four grounds. 6. What injustice is involved in taxing realized wealth? 7. Give the objections to taxing revenue. 8. State the theory of making expenditure the basis of taxation. Give Sir William Petty's idea, etc. 9. Show the fallacy of the trustee theory. 10. Point out the danger of the doctrine, that the owner is simply a trustee of his wealth. 11. Give the only theoretically just basis of taxation. Illustrate. 12. Is it practicable? 13. What tax comes nearest to tax on faculty. 14. Prove that exemption of a certain share of revenue from taxation is expedient. 15. State the question of progessive taxation. 16. Give its history in France, Germany, and England. 17. Give Garnier's distinction between progressive and progressional taxation. 18. What effect does exemption of a certain sum have on progressive taxation? 19. Give the attitude of the International toward progressive taxation. 20. Is a sole tax on revenue practicable? 21. What has been, in this century, the basis of taxation? 22. State McCulloch's economic taxation theory. How far shall we accept this? 23. Give the repercussion theory of taxation. 24. What does this doctrine take for granted? 25. In failure of competition, what follows? 26. Give M. Pariew's views. 27. Give the author's conclusion.

Chapter 11. 1. State the question of free trade *vs.* protection. 2. How has it been discussed? 3. To what extent are economists responsible for the confusion of the public mind on this question? 4. As set forth by Prof Cairnes, under what assumption does the doctrine of *laissez-faire* come? 5. Has *laissez-faire* been universally accepted? 6. Of freedom and restraint, which is the rule and which is the exception. Prove and illustrate. 7. What must the protectionist prove? 8. Should division of labor be limited by national boundaries? 9. Give the difficulties of proving the affirmative. 10. As to the United States, for instance? Give the historical facts. 11. Give the facts as to the necessity of protecting the strong against the weak in Germany, Russia, England, and the United States. 12. Why are wages high in new countries? 13. Describe the competition of the farm against the shop. 14. How should hand trades be maintained among a rich farming community? 15. Personal and professional services. 16. Is it expedient for the farmer to maintain factories in the same way; to pay the artisan enough to keep him out of American Agriculture instead of English or European? 17. What is the power of the state in this question?

THE END.


AMERICAN SCIENCE SERIES
POL. ECONOMY
WALKER