Avery's Natural Philosophy. 460 pages. By ELROY M. AVERY, A. M.

The book is an earnest and eminently successful attempt to present the facts
of the ecially
devote nating
judge
Th of ap-
proval . The
other
Th num-
ber, a ried to
make ior.

A RLEY,
Pr ndon.
Th atter,
an IOSES
Co ersity
of

Fo itherto
existe e each
book ne way
of its

In nt pro-
ductic enting
a lead niver-
sity i e had;
a boo others
in thi ties of
the c

Pr e most
distin literary
histor ny suc-
cessf

Pr ofessor
Morle erature
to ad cessful
caree tory of
Amer in this
count nbined
labor in Eng-
lish I

***Hill's Elements of Rhetoric and Composition*.....**

By D. J. HILL, A.M., President Lewisburg University, author of the Science of Rhetoric. Beginning with the selection of a theme, this book conducts the learner through every process of composition, including the accumulation of material, its arrangement, the choice of words, the construction of sentences, the variation of expression, the use of figures, the formation of paragraphs, the preparation of manuscript, and the criticism of the completed composition.

***Hill's Science of Rhetoric*.....**

An introduction to the Laws of Effective Discourse. By D. J. HILL, A.M., President of the University at Lewisburg. 12mo, 300 pages.

This is a thoroughly scientific work on Rhetoric for advanced classes.

Intellectual Philosophy (ELEMENTS OF). 426 pages.....

By FRANCIS WAYLAND, late President of Brown University.

***The Elements of Moral Science*.....**

By FRANCIS WAYLAND, D.D., President of Brown University, and Professor of Moral Philosophy. Fiftieth thousand. 12mo, cloth.

***Elements of Political Economy*.....**

By FRANCIS WAYLAND, D.D., late President of Brown University. 12mo, cloth, 403 pages.

Recast by AARON L. CHAPIN, D.D., President of Beloit College.

No text-book on the subject has gained such general acceptance, and been so extensively and continuously used, as Dr. Wayland's. Dr. Chapin has had chiefly in mind the *wants of the class-room*, as suggested by an experience of many years. His aim has been to give in full and proportioned, yet clear and compact statement, the elements of this important branch of science, in their latest aspects and applications.

FIRST PRINCIPLES

OF

POLITICAL ECONOMY,

CONCISELY PRESENTED

FOR THE USE OF CLASSES IN HIGH SCHOOLS AND ACADEMIES.

BY

AARON L. CHAPIN, D.D.,
PRESIDENT OF BELOIT COLLEGE.

NEW YORK:
SHELDON AND COMPANY,
8 MURRAY STREET.
1880.

I.

FIRST PRINCIPLES
OF
POLITICAL ECONOMY.

One volume. 16mo. 225 pages.

Concisely presented for High Schools and Academies, by AARON L. CHAPIN, D.D., President of Beloit College.

II.

WAYLAND'S ELEMENTS
OF
POLITICAL ECONOMY.

Recast, and revised by AARON L. CHAPIN, President of Beloit College.

FOR COLLEGE USE.

One volume. 12mo. 425 pages.

Electrotyped by Rand, Avery, & Co., Boston.

PREFACE.

FROM several quarters, there came a call for a concise compend of the principles of Political Economy, which could be used as a text-book for advanced classes in high schools and academies. In this little book, the author has attempted to respond to that call. He has not tried to make a book for children, nor to make the science easy for youth of more maturity; but he has endeavored simply and clearly, in as few words as possible, to present the subject for the *study* of persons who have learned something of the power of language, and have been trained to think and reason for themselves.

The "Exercises" thrown in all along are not intended to furnish teachers with questions on the text. Every one fit to teach this and kindred subjects will frame his own questions best. But they are designed, like the problems in arithmetic or algebra, to suggest practical applications of the principles and topics of discussion which will introduce some diversity of opinions, and extend the range of the subject somewhat beyond the limits of the text-book.

The book is a condensed presentation of the matter

contained in the larger work recently issued as a modification of Wayland's Elements of Political Economy; and, for a fuller treatment of the topics noticed, reference is made to that book. It is desirable that every teacher should also have at hand for reference one or more other works of prominent writers, such as those of Adam Smith, McCulloch, Mill, Fawcett, Thornton, and Jevons, of England; Roscher of Germany (an excellent translation of which has recently appeared); and those of Bowen, Perry, Carey, Thompson, Bascom, A. Walker, F. A. Walker, Sumner, and D. A. Wells, of our own country.

Generally the author's aim has been to give a clear statement of principles, avoiding the advocacy of one side or the other of disputed questions. In the last chapter, however, positive opinions are expressed on the issue between protection and free trade, partly as an example of the application of principles to pending questions, and partly to indicate the present strong drift of both philosophical and practical economists on that question. If it shall serve to elicit opposite views for full discussion in the class-room, the author's aim will be best accomplished; for it is his earnest hope that this introduction of this important branch of science to the study of our schools may tend to a more intelligent apprehension of economic laws on the part of our people generally.

Beloit College, Jan. 1, 1880.

CONTENTS.

INTRODUCTION.

DEFINITIONS AND DIVISIONS.

PART I.

PRODUCTION.

CHAPTER I.

SECTION I. — OF LABOR.

CHAPTER II.

OF CAPITAL.

CHAPTER III.

THE CO-OPERATION OF LABOR AND CAPITAL.

PART II.

CONSUMPTION.

CHAPTER I.

INVOLUNTARY CONSUMPTION.

CHAPTER II.

VOLUNTARY CONSUMPTION.

SECTION I. — CONSUMPTION FOR REPRODUCTION.

CHAPTER III.

PUBLIC CONSUMPTION.

PART III.

DISTRIBUTION.

CHAPTER I.

THE REMUNERATION OF LABOR.

CHAPTER II.

THE REMUNERATION OF CAPITAL.

SECTION I. — RENT.

SECTION II. — INTEREST AND DIVIDENDS.

CHAPTER III.

DISTRIBUTION OF PROFITS.

CHAPTER IV.

REVENUES OF THE GOVERNMENT.

PART IV.

EXCHANGE.

CHAPTER I.

NATURE, NECESSITY, AND AGENTS OF EXCHANGE.

CHAPTER II.

MONEY AN INSTRUMENT OF EXCHANGE.

SECTION I. — THE FUNCTIONS OF MONEY.

SECTION II. — SPECIE.

CHAPTER III.

CREDIT AN INSTRUMENT OF EXCHANGE.

SECTION I. — THE FORMS OF CREDIT.

SECTION II. — THE USEFUL FUNCTIONS OF CREDIT.

SECTION III. — THE ABUSES OF CREDIT.

CHAPTER IV.

BANKS AND PAPER-MONEY.

SECTION I. — OFFICES OF BANKS.

SECTION II. — THE UNITED-STATES NATIONAL-BANK SYSTEM.

SECTION III. — PAPER-MONEY.

CHAPTER V.

INTERNATIONAL TRADE.

INTRODUCTION.

DEFINITIONS AND DIVISIONS.

Political Economy is the science which shows how things intended to satisfy our wants are produced, and how they are consumed; how they are distributed among a people, and how they are exchanged one for another all over the world.

The science springs from **four fundamental truths:**

1. God has made men **creatures of many wants,** and filled the world in which they live with **means for satisfying** those wants.

2. The **labor of men** is necessary to draw out the materials of nature, and to fit them for use in meeting men's wants.

3. The exertion of labor establishes for the laborer a **right of property** in the things which he produces.

4. The right of property implies the **right of exchange or sale,** and diversity of labor **necessitates** between men exchanges of the fruits of their labor.

Three desires in men contend for the mastery: —

1. Desire of **ease.** This tends to repress labor.

2. Desire of **present gratification.** This tends to consume the fruits of labor at once.

3. Desire of **means for future gratifications.** This tends to stimulate labor, and to save its fruits.

A man or a nation grows rich only as the third of these desires overrules the other two.

Wealth is **the collective name for all useful things which can be owned and exchanged.** Some things are very useful, yet they form no part of wealth, because they cannot be exclusively appropriated. Such are air, sunlight, and commonly water. Other things, such as bread, salt, cloth, iron, houses, &c., are capable both of satisfying wants, and of being exclusively possessed and exchanged. Only these are properly accounted wealth.

The **original source of wealth** is the bounty of God in nature.

The **secondary source of wealth** is human labor directed to bring forth the bounty of nature in form, in time, and in place, to meet the wants of men.

Wealth is increased only by constant reproduction, i.e., by destroying some useful articles to bring forth others. Thus the wheat that is sown must die, in order that a new crop may spring from it, yielding thirty, sixty, or a hundred fold: the leather in the hide must be cut up to make shoes, in which form it meets wants. If a man consumes all his wheat, he will have none to sow. The tanner prepares his leather, expecting it to be used up for shoes. Abstinence and foresight attend all productive labor. Thus **industry** and **frugality** are indispensable conditions of the increase of wealth.

Value is **purchasing power,** or that quality in an object which gives it **power to command other objects in exchange.** The term supposes always a comparison of two objects with reference to an exchange. Thus value is a relative, not an absolute, quality.

Two things are combined in this quality of value, — first, **utility,** that is, adaptedness to satisfy want or gratify desire; second, **cost,** that is, some labor necessary to produce the object. We can think of nothing which has greater utility than air and light; but they have no value, because they are so freely supplied to all that they cost no labor. If one has spent a day's labor in making a table, he will not give it to his neighbor for air or light which he can have for nothing; nor will he exchange it for a box which he could make with half a day's labor. So, in general, the value of an article is determined very much by the labor which it costs to produce or procure it. Things are exchanged at what is called their **natural value,** when the terms are adjusted by the relative cost, labor for labor.

The utility of an object is its **desirableness for gratification.** This may vary with circumstances, such as individual taste, the fashion of the day, the emergency of the hour, &c. To one who cannot read, a book will have no use; for his own gratification he will give nothing for it. One will readily give a gold watch for a loaf of bread when there is no other means of saving him from starvation; then the value, the purchasing power, of the loaf, rises a thousand-fold above its actual cost.

These two elements thus define the **extreme limits**

of value. The most one will give for an object is determined by his estimate of its utility, or the gratification it will afford him. The least a man will ordinarily take for an object is determined by its cost, or the labor necessary to produce it.

Between these limits value may temporarily fluctuate, as the relations of **supply and demand** vary. When the supply of an object is small, and many persons desire it, the purchasing power of that object is increased by competition among the buyers. When a larger quantity of an article has been produced than is wanted, the purchasing power of that article is diminished by competition among the sellers. But this state of things, in either case, will not continue long; for free competition tends always to settle the value of all things upon the natural basis of **cost.**

Divisions. — Political economy treats of the production of things to satisfy wants. Hence the two leading divisions of the science are **Production** and **Consumption.**

Production is the process of labor applied to objects of nature to adapt them to the satisfaction of wants. We can neither create nor annihilate any part of matter; but we can modify almost every thing so as to impart to it some utility, — that is, we can create value. Under this division, therefore, are considered **the processes and laws by which labor gives value to things.** The substances thus brought out are called **products.**

Consumption is the act of destroying utilities

either for immediate gratifications, or to produce some new utility for future gratifications. The actual destruction of values is necessarily involved. Under this division are considered **the laws which govern the economical use of wealth to satisfy wants or gratify desires.**

There are among men great diversities of capacity for labor. It is therefore good economy of productive effort to unite the labors of many persons on a particular product, so that each may contribute the part which he can do best. Yet each person has a variety of wants, while his own labor is devoted to one thing. He must therefore get what he needs in exchange for what he makes. Hence arise two other branches of our science, logically subordinate to those just mentioned, though practically of the highest importance. They are **Distribution** and **Exchange.**

Distribution embraces questions of equity and practical methods pertaining to the **assignment to different laborers of their respective shares of values produced.** Here are considered the difficult problems growing out of the mutual relations of employers and employed.

Exchange is the act of transferring things from one to another, according to their values. Each individual is busied in creating one utility, and wants a thousand. Each country produces of certain articles far more than it needs, and needs many others which it cannot produce at all. Hence the necessity of universal and ceaseless exchange. Under this division are considered **the instruments,**

the laws, and the processes, which relate to the mutual transfer of values.

The most difficult problems of political economy belong to the departments of distribution and exchange.

EXERCISES.

1. Mention some articles of wealth.
2. Tell what you know of the manner in which they are produced.
3. Name what you can of the utilities of each.
4. Do savages, or civilized men, have the most wants? Why?
5. Why has air no value?
6. When and why may water have value?
7. How does iron exist in nature?
8. State what you can of the processes of labor which render iron useful.
9. If a farmer gives a bushel of wheat for a razor, why is it a fair bargain?
10. Whence comes the great value of the diamond?
11. Why does the value of an article decline as it goes out of fashion?
12. What events in Europe may enhance the value of the American farmer's wheat-crop? Why?
13. Why has cotton less value than wool?
14. What different kinds of labor are represented in a yard of calico?
15. How are the ten cents paid for that yard of calico distributed to the several parties who have labored to produce it?
16. How does a merchant's labor add value to the goods he sells?
17. Why are strawberries and peaches generally cheapest in the market Saturday afternoon?
18. How does foreign commerce benefit our agriculturists and manufacturers?
19. How do railroads help to develop the wealth of a country?

POLITICAL ECONOMY.

PART I.

PRODUCTION.

Production is the process of drawing out means to satisfy human wants by labor applied to natural objects. **Labor** is the first essential. Some products of former labor are also requisite to begin with. To these the name **Capital** is given. This branch of political economy will therefore be best presented under three subdivisions. The first will treat of **Labor,** the second of **Capital,** and the third of the **co-operation of these two factors.**

CHAPTER I.

SECTION I. — OF LABOR.

Labor is the voluntary exertion of human beings put forth to attain some desired object.

The processes of production give scope for the exercise of all the faculties of man. Hence two kinds of labor are to be recognized : —

1. **Physical labor,** in which muscular exertion is the chief thing.

2. **Mental labor,** which engages chiefly the faculties of the mind.

All productive industry combines some physical and some mental effort. Even the day-laborer must exercise his mind to handle his shovel with judgment and skill. In general, labor is effective in proportion as it is directed by intelligent mind.

Physical labor only moves things. It depends on the capacity of living muscle to contract and expand, as governed by the will. But this power to produce motion under the control of intelligent mind gives man unlimited command over the forces of nature to achieve his purposes.

Mental labor is directly concerned in the production of wealth in three ways: —

1. **In investigation** to discover the properties and laws of matter. So chemical research made known the substance phosphorus, and its property of starting into flame under friction.

2. **In invention** to devise methods and instruments by which the properties of matter may be made to meet human wants. So matches were invented, — a very simple instrument, by which phosphorus is used to kindle our fires. So the spinning-jenny and the power-loom were devised to facilitate and cheapen the process of making cloth.

3. **In oversight and superintendence.** In the simplest kinds of labor, mind must direct muscle. Where numbers are joined in labor for a given product, one ingenious mind, superintending, gives effect to the muscular exertions of a score of ignorant workers.

It is obvious, that, in the wide range of productive industry, mental labor is quite as essential as physical labor. Whatever, therefore, quickens the mental activity and promotes the intelligence of a people, tends to the increase of their wealth.

Mental labor is also indirectly instrumental in production, as it is applied to improve the physical health and the mental capacity of individuals, and to maintain order, justice, and security in human society. Here belong the mother's care in nursing and training children; the teacher's labor to develop the minds of youth; the lawyer's counsel and pleadings to define and maintain the rights and obligations of men under the rule of civil law; the minister's efforts, by the truths and precepts of God's word, to form good consciences, and improve the public moral sense; and the varied services of legislators and officers of government to insure stability and order in the very structure of society. Though these labors do not directly bring forth material products, they favor all the productive industry of a people, and are as essential to the best results of its processes as the manual labor of the farmer or the blacksmith.

The Changes effected by Labor applied to matter may all be reduced to three, which are indicated by the three words, **Transmutation, Transformation,** and **Transportation.**

1. **Transmutation is a change in the elementary form of matter.** So, by the labor of the farmer, carbon, gases, and water are changed into wheat;

by that of the chemist, acids and alkalies are changed into salts; by that of the tanner, skins and tannin are changed into leather.

2. **Transformation is a change in the aggregate form of matter.** The shoemaker transforms a hide of leather into shoes; the smith transforms a piece of iron into a horse-shoe; the spinner transforms a bale of cotton into thread, and the weaver transforms the thread into cloth.

3. **Transportation is a change in the place of matter,** as when a cargo of wheat is transported by ship from New York to Liverpool, or ten tons of dry goods are transported by rail-car from New York to Chicago.

In a general way these changes represent respectively the **agricultural,** the **mechanical,** and the **commercial** departments of human industry; and each contributes an important element of utility. He who makes the flour, and he who transports it to the people who need it, render as important services for the satisfaction of wants as the farmer who raises the wheat. These divers forms of labor stimulate and support each other.

These several forms of labor enter in different degrees into the **value** of different articles. Thus butchers' meat and green vegetables derive most of their value from transmutation; clothing, cutlery, &c., derive the greater part of their value from transformation; and the value of bulky articles like coal is determined very much by the cost of transportation. In most articles, however, we see more or less of all these forms of labor combined. By

new devices and increased facilities for either of these forms of labor, production is enlarged and improved, and comforts are multiplied.

EXERCISES.

1. What is the difference between labor and play?
2. What is skill?
3. How are man's muscle and mind and a force of nature combined in driving a nail?
4. What kinds of labor produced the magnetic telegraph?
5. How does that invention aid production?
6. What services do the chemist and pattern-drawer in a calico-mill render?
7. How is the payment of a high salary to the manager of a cotton-mill good economy?
8. How is production favored by the brain-work of students of science, of inventors, of lawyers, of teachers, of legislators, judges, and magistrates?
9. If you buy a pocket-knife for fifty cents, how many and what forms of labor does the price represent?
10. How do good roads favor production?
11. How do the operations of thieves and swindlers affect production?
12. Do gamblers and speculators contribute to the increase of wealth?
13. How does the prevalence of drunkenness affect the industry of a community?
14. Are men who labor in the learned professions fitly called non-producers?

SECTION II. — MEANS FOR INCREASING THE EFFECTIVENESS OF LABOR.

Economy of labor is an important consideration in the increase of wealth. Man's physical power is limited, and his strength is soon exhausted. But there are forces of nature which are stronger than he, and some of which never tire. These he can bring into his service, and so at the same time relieve the burden and multiply the products of his labor.

There is also great difference in the capacities of different men. Some have strong muscles and dull minds. Others have strong minds in weak bodies. Some are specially fitted for one kind of labor, and others for another. The fruits of labor will therefore be increased, if many join hands under a systematic arrangement which sets every one to doing the particular work for which he is best fitted.

There are thus two ways in which the effectiveness of human labor may be increased: —

First, by devices for employing **the agents and forces of nature.**

Second, by a systematic **division of labor.**

1. The agents and forces of nature most available for production are: —

a. The muscular power and instincts of animals.

b. The light and heat of the sun.

c. The force of gravitation, especially in falling water.

d. Moving currents of wind.

e. The expansive force of steam.

f. The explosive force of gunpowder, dynamite, &c.

g. The attractions and repulsions of electricity and galvanism.

h. The action of chemical forces.

To these we must add, for combining and directing all kinds of forces, the mechanical principles or powers; viz., the lever, the pulley, the inclined plane, the wheel and axle, the wedge, and the screw.

The properties of matter embodied in these agents are **the gift of God, and of themselves cost us nothing.** But in most cases, to make them available, some instrument must be employed which has cost labor. Thus, to control animal power, we need yoke or harness, cart or wagon, &c.; a lens enables us to intensify the light and heat of the sun; by means of a water-wheel or pendulum we command the force of gravitation; by a wind-wheel we catch the force of moving air; by a steam-engine we accumulate and direct the expansive force of steam; by a hammer we combine the principle of the lever with the force of gravitation and the density of steel; and the complicated machinery of a cotton-mill is but an adjustment of various means to the great purpose of physical labor, which we have seen to be to produce and direct **motion.**

These instruments, when simple, like a hammer, a spade, a plane, are called **tools.** When complicated, like a fanning-mill, a spinning-jenny, or a steam-engine, they are called **machines.** Some instruments

are required in every kind of labor, for human limbs and muscles and brains unassisted can accomplish but little. The inventions of the last fifty years have introduced elaborate machinery into all branches of industry. One man with a pair of horses, a plough, a drill, and a cultivator, can cultivate ten times as much land as he could with only a spade and hoe.

This use of natural agents increases the effectiveness of labor in two ways: —

First, it enables one man to do the work which must otherwise require a number of persons, and so either **sets free a portion of labor for other occupations,** or **greatly multiplies and cheapens products.**

Second, **it achieves what no amount of labor unassisted could perform.** So the telegraph-machine is a means of instantaneous communication between places a thousand miles apart; the locomotive can propel a train of cars at the rate of forty or sixty miles an hour; a screw-machine will turn out screws by the million, with a uniformity and nicety of finish which could not be attained by hand-work.

The great benefit thus realized is in multiplying the means of satisfying human wants, and bringing them within the reach of all classes of people. An incidental **disadvantage** is, that, with the introduction of labor-saving machinery, many persons are thrown, at least temporarily, out of employment, or are compelled to learn new methods of labor. It involves also the danger of over-production in certain articles, and of a general disturbance of the harmonious relations of different branches of indus-

try. Nevertheless the good results far outweigh the evil; and we may hope that the problem, now before the world, of adjusting the system of labor to the new condition of things, will soon find a happy solution, which shall be equitable and advantageous to all.

2. **Division of Labor applied to production means that different kinds of labor be distributed to different individuals and classes so that all shall do that for which they are best fitted.**

The principle is illustrated on a broad scale in **the peculiar industries of different countries** adapted to their respective advantages. Thus tea is a special product of China, cotton of our Southern States, cutlery of England, silk goods of France and Italy.

In all civilized communities **people take up different trades and professions** according to their several capacities, tastes, and circumstances. The results of labor are both increased and improved when the farmer and the baker, the blacksmith and the jeweller, the weaver and the tailor, the merchant, the lawyer, the doctor, &c., each devotes his energies to the work of his particular calling. This order of things marks the chief difference between savage and civilized life.

But as a technical term of political economy, division of labor has a more specific application to **labor employed on particular products.** Suppose, for example, an establishment for the manufacture of watches is projected. The watch is made up of many different parts. Obviously it will economize

labor to assign each part to one man or set of men. Thus the wise application of the principle involves two things: —

1. An **analysis** of the article to be produced, and of the work to be done, into distinct and simple parts.

2. A **distribution** of these parts to the persons employed, so that each workman shall confine himself as nearly as possible to a single operation.

The system is complete when the several operations keep each other going, — when there are no superfluous hands, and none are kept idle waiting on others' movements, — when the several processes fit into each other like the gearing of smooth-running machinery.

The special advantages of division of labor may be stated as follows: —

1. **It shortens the period requisite for one to become an expert workman.** It is quite evident that one operation can be learned more quickly and more perfectly than ten or twenty.

2. **It saves the time which would be lost in passing from one kind of work to another.** By the law of habit, an operation often repeated becomes easy; mind and muscle adapt themselves to one form of labor, and acquire a capacity for continued exertion. It will take some time to "get brain and hand in" to another operation. Where complicated tools must be adjusted to different kinds of work, this consideration is of more importance. "Time is money," said Franklin. This is especially true in all matters concerning the production of wealth.

3. **It increases the dexterity of the workmen.** Repeated "practice makes perfect." The mind, the eye, the hand, are trained to quickness and precision by the repetition of a single operation. In a boiler-factory the rapidity and precision with which the man plies his hammer to form the rivet-heads is wonderful. He has acquired this dexterity by devoting himself to this single operation.

4. **Division of labor suggests the contrivance of tools** to facilitate operations. Many of our most valuable inventions have originated with workmen whose attention was devoted to particular processes. New improvements are thus continually brought forward.

5. **Division of labor brings into most profitable service all diversities of talent and capacity.** In the manufacture of fine glass-ware, one part of the process requires high artistic genius; another, judgment and skill, the fruit of experience; another, fulness and strength of lungs; and others, the simplest forms of manual labor. It were poor economy to set a raw hand to engrave a delicate pattern, or to send the artist to carry the vessels from the furnace to the annealing-oven. By systematic arrangement each can be kept doing that for which he is best fitted, and for which he receives wages according to its importance.

EXERCISES.

1. How much can a man do for himself without any tools?

2. What force of nature does the Indian's bow bring into service?

3. Is there any definable limit to man's dominion over other animals and the forces of nature?

4. Name the animals which have been subdued to serve man.

5. Name as many as you can of the useful inventions of the present century.

6. What natural agent does the mariner's compass render available, and for what purpose?

7. What natural agents are employed in photography, and by what means?

8. On what agencies of nature do the agricultural crops depend?

9. What is the function of the great balance-wheel in a mill for rolling iron?

10. By what principles is the power of a slowly-moving water-wheel distributed to a hundred whirling spindles?

11. What natural agents and what mechanical powers does an axe combine?

12. Mention some of the purposes to which the natural agent heat is applied.

13. Why are inanimate forces preferable to animal power?

14. State the comparative advantages of water-power and steam-power.

15. Give an illustration of the principle of division of labor, and how it increases the effectiveness of labor.

16. State the various kinds of labor involved in making a pair of shoes.

17. Suppose a man works alone at shoemaking, doing all the parts himself, how can he economize his labor?

18. Why do shoes made in a wholesale way in a factory cost less than shoes made to order?

19. How does the division of labor affect the employment of women and children?

20. How does it develop and employ the highest talent?

21. Do the use of machinery and the division of labor make labor more, or less, respectable?

SECTION III. — LABOR IN GREAT MANUFACTURING ESTABLISHMENTS.

The two means for increasing the productiveness of labor, treated of in the previous section, are so mutually related that the one involves the other. The use of labor-saving machinery unites many persons in the same process of production, and necessitates the distribution of the parts of the process. On the other hand, the division of labor to any great extent is ordinarily impracticable, except in connection with the use of machinery. Both tend to the setting-up of large establishments, in which the full benefit of these means of increased productiveness is realized.

For their successful operation, these establishments require

1. Large investments of capital in machinery, buildings, &c.

2. Large numbers of laborers, of different grades, under one general management.

3. The rapid production of articles in great quantities.

4. An extensive market for the disposal of the products.

5. Great executive ability of two kinds, —

a. In the superintendence of the mechanical processes.

b. In the general financial management of purchases and sales, credits, collections, and sharp competitions on a large scale.

The application of the two principles may be said to be limited by these several considerations. In a new country there is little accumulation of either wealth or population: the demand for particular articles is small; facilities for transportation, which would widen the market, are few; and the first emigrants, though young and energetic, have yet to develop mutual confidence and high executive ability. Hence labor begins with each man's doing by himself all kinds of work with few and simple tools. But in due time diverse industry is developed as naturally as a tree grows. As wealth is accumulated, and population increases, new wants arise, and new means of satisfying them are provided. As roads and bridges are made, and railways push themselves on, the market is widened, enterprise is stimulated, talents are brought forward, and great establishments are set up for production on a large scale. Such a natural growth is far more healthy and sound than the premature development which comes from forced, artificial appliances.

When a large establishment has been started, a deficiency in either of the five particulars named may prove disastrous. If the funds at command are all put into what the English call "the plant," the enterprise may fail for lack of working capital; or skilled laborers may be scarce; or the products may be diminished through insufficient or unfit material; or, on the contrary, the products may be in excess of the demand, with no provision for enlarging the market. Most disastrous of all is the lack of executive ability and wisdom in either the detailed

processes of the manufacture, or the general administration of the business.

When, however, these conditions are fulfilled, by a harmonious combination of all the elements in due proportion, the highest efficiency of labor is attained. The general welfare is thus greatly promoted in several ways.

1. Primarily and chiefly, **products are multiplied and cheapened.** The large establishment economizes labor, as appears in what was said of division of labor. It economizes materials, saving every item of utility in the scraps and odds and ends which in production on a small scale would be thrown away. Thus, in the large packing-houses, the hoofs, the horns, the bones, even the blood and refuse matter, of the animals slaughtered, are utilized. It economizes supervision also; one man of brains being able to oversee and direct the operations of five hundred or a thousand workmen easily and effectively. As a consequence, the cost of articles is reduced, so that thousands instead of hundreds of people can afford to use them. Thus the great cotton-factories have brought down the cost of common muslin from fifty cents to six cents per yard, and all classes of people can use it freely and abundantly.

2. Production on a large scale tends **to increase the variety of objects which minister gratifications.** How many new and beautiful fabrics made of cotton have the great factories given to the world! The article caoutchouc, called India-rubber formerly, because its only known use was to rub out pencil-marks, is now brought out from large establishments

for working it, in a hundred forms, adapted to render most important services. The concentration of labor quickens invention.

3. Such organization of labor increases **the certainty of the steady employment of laborers.** On the first introduction of labor-saving machinery, workmen have been often thrown into a panic lest they should lose employment; but almost invariably, under the augmented production and reduced cost, the demand is so extended that the labor required is increased, instead of being diminished. Thus the actual condition of the English weavers was greatly improved by the introduction of the power-loom. Notwithstanding occasional fluctuations consequent on over-production and financial revulsions, the tendency of large manufacturing establishments is to insure constancy of employment to laborers of all grades.

4. This system of large productive operations helps to maintain **a proper balance between different branches of industry.** Increased production in one department stimulates activity in every other, both by the example of success, and by an actual demand for other products, to meet the various wants of large numbers of people gathered. So, gradually, the use of machinery and the division of labor are combined in large establishments for making all kinds of articles, from friction-matches to locomotive-engines; and some common interests bind all together.

Certain evils incident to the minute division of labor in large establishments must also be noticed.

1. **There is danger that the physical health and vigor of laborers will be impaired.** There is more or less involved, long and close confinement to a single operation, which overtasks one limb or set of muscles, in a posture which cramps and oppresses the vital organs, under exposure to deleterious gases and exhalations, and to the breathing of air bereft of oxygen, and charged with carbonic acid. There are also strong temptations to the confinement and excessive labor of children not full-grown, and to the overtasking of women, unfitting them to be healthy mothers. The vital statistics of large manufacturing towns present painful facts illustrating this evil.

2. **There is danger that the mind will be contracted and enfeebled.** When one's attention and energies are absorbed for ten hours each day in sharpening pins or counting buttons by a machine, his soul must be cramped, and its development hindered, unless special means are taken to counteract the tendency.

3. **The division of labor involves some loss of independence and self-respect.** The number of those who manage business for themselves is diminished; and men dependent on wages lack something of that manliness of character which is gained under the responsibility of a business of their own.

4. **When a large establishment fails, it involves a sweeping disaster.** The fate of great numbers of workmen hangs on the wisdom of one manager. Thus the mischiefs of a general financial crisis are aggravated.

5. **Mutual suspicions, jealousies, and antagonisms are fostered** in large manufacturing establishments. The natural inequality of men is increased. Some chafe under subordination to others; and one restless, jealous spirit may disturb the cheerful labor of hundreds. On the other hand, the possession of power prompts some employers and managers to an imperious disregard of the rights of those under them.

These evils are to be recognized, yet they are not incurable. By many manufacturing companies special pains are taken to counteract them, with favorable results. We may hope for relief to come from the present agitation of the labor-question, and from whatever measures promote intelligence and foster the sentiments of justice and good-will.

EXERCISES.

1. Describe any large manufacturing establishment you may have visited.
2. What natural agents are brought into use by its machinery?
3. How many persons are employed in it, and how is the work distributed among them?
4. How much are the articles produced improved and cheapened?
5. Where do these articles find a market?
6. What special qualities has the superintendent?
7. What is the condition of a people who have no machinery or division of labor?
8. Is it luxuries, or necessaries, that are most produced in large manufactories?
9. Is it the rich, or the poor, who are most benefited by the reduced cost of manufactures?
10. Is it wise, or foolish, for the laborers in Mexico to

destroy reapers and other labor-saving agricultural machinery introduced? Why?

11. Will the setting-up of a large factory in your town affect laborers favorably, or unfavorably? Why?

12. Why are laws needed to regulate the employment of children in factories?

13. How may the danger to the health of laborers in factories be relieved?

14. What can be done to save minds from being dwarfed?

15. Must one necessarily sacrifice a proper spirit of independence and self-respect by becoming an employé in such an establishment?

16. What is the effect of successful enterprise in one branch of industry on all others?

CHAPTER II.

OF CAPITAL.

Its Definition. **Capital is that part of wealth which is employed, or designed to be employed, in production.** Since this word is used vaguely, we need to adhere to a strict definition. Let us notice two or three mistakes which tend to confuse ideas on this subject.

1. **Capital is not synonymous with wealth.** All capital is wealth; but all wealth is not capital. Suppose a farmer's crop this year gives him a hundred bushels of wheat to spare. He may lay it up in his granary for his own future use; or he may sell it for gold, and bury the gold for safe keeping; or he may spend the gold for a fine picture with which to adorn his parlor. In either case it is a part of his wealth; but since, in either case, it will do nothing to increase his next year's crop or income, it is not capital. If, however, he exchanges his surplus wheat for a horse, or spends the avails of it on labor to clear and drain his fields, or buys with it a share of stock in a flouring-mill, he turns this part of his wealth into capital. His wheat is gone, or the money is gone; but in the horse, or the improved land, or the share in the mill, it is to work out for him more wealth next year.

2. **Capital is not synonymous with money.** Money buried in the ground produces nothing. A man intending to start a woollen-mill may need first to turn some of his property into money with which to pay for buildings, machinery, &c. His fifty thousand dollars deposited in the bank for this purpose is his **prospective** capital; but it will not become for him **actual** capital till it is paid out for a building, a water-wheel, spinning-jennies, and power-looms. When his establishment is complete, his money will be all gone; but now he has his capital all ready for service. Money in circulation is an instrument of exchange, and so performs an important function for all productive industry; but it is just a wheelbarrow to pass things from one to another. The confusion of ideas comes from the fact that capital, and indeed all wealth, is estimated in terms of money; but in reality only a small portion of an individual's or a nation's capital is in the form of money; and always the **quality** of money is of far more consequence than its **quantity.**

3. **Capital does not properly include human qualities,** such as strength, skill, judgment, energy, integrity. These are often spoken of loosely as a part of capital. Certainly they are very important elements of production, and are the result of previous productive effort; but they are qualities of **labor,** and so, in the distinctions of our science, are more properly classed under that head, as we have seen.

Varying the form of our definition a little in view of these mistakes, we may say **Capital includes all**

material products devoted to purposes of further production.

The Origin of Capital. **Capital is always the fruit of past labor saved.** A farmer's boy once received as the first wages of his labor an ewe-lamb. He might have sold the lamb, and spent the avails on his immediate gratification; but he chose to keep it, and care for her and her young. The clip of wool and the natural increase from year to year were in like manner saved, till he came into possession of a valuable flock; then he sold the flock, and with the avails commenced business as a merchant. Thus the first-fruit of his labor saved became the nucleus of a capital which fostered the industries of two continents. Such is universally the origin and growth of capital. It begins in **saving,** and grows by the continued exercise of industry and frugality. The first step of the savage towards civilization is to learn **forethought and self-denial.**

In this aspect of the matter, **capital is simply past labor embodied, and reserved for present labor to work with.** Hence we see that labor and capital are not so diverse as many suppose. In nature they are akin, and indispensable to each other in the processes of production; always combined for a common end. They are set in antagonism to each other only through a popular sentiment, or an organization of society radically false and wrong.

Forms of Capital. The products of previous labor appear as capital in many and varied forms, but all may be grouped under four heads: —

1. Implements and machinery by which present labor is made effective. Here are included the cart, the plough, the divers tools, machines, and useful and laboring animals of the farmer; the axe, the plane, the awl, and the hammer of the mechanic; the engines and various machinery of the manufacturer; and the wagon, the ship, the railway and its rolling-stock for the transportation of goods. To this category belong also the land and its improvements by drainage, irrigation, fences or hedges, &c., and buildings for barns, workshops, storehouses, and manufactories. To all of this the general term **Fixed Capital** is often applied. With the activity of invention, and the multiplication of machinery, the amount of capital in this form becomes very large.

2. Materials to which present labor is to be applied. Under this head may be set down the farmer's seed and manure; the manufacturer's raw materials, such as lumber, cotton, iron, wool, leather, &c.; his secondary materials, such as yarn, steel, gold-leaf, &c.; and his auxiliary materials, such as coal for raising steam, chlorine for bleaching, acids, alkalies, and dye-stuffs for coloring. All these come with values, as the products of former labor, to have their values increased by new transformation under present labor.

3. Means of subsistence for laborers. Men must have food and clothing and shelter while they work. This must come from previous labor, as the crops of last year sustain the farmer and his help while this year's crops are maturing. Under this head must be embraced dwelling-houses, as well as all kinds of

provisions and apparel needful for the support and comfort of families. In large establishments the provision made for salaries and wages covers all these items.

4. **Finished products waiting for a market.** The process of production is not completed till the products pass from the producer's hands. A farmer may not choose to dispose of his crop as soon as it is gathered. At certain seasons, the manufacturer may be compelled to accumulate a large stock of his goods, in readiness for a brisk sale when the market opens. For the time, the crop, or the stock of goods, absorbs a portion of capital. This necessity is incident to every line of productive industry, and allowance must be made for it in providing capital for the business.

In civilized society, something in these forms of capital is essential to every kind of production. The blacksmith who works by himself must have forge and anvil, hammer and tongs, for instruments; some iron for material; a home, with some store of clothing and food, for his subsistence; and a few finished horseshoes hanging in his window, ready for the first call. And the capital of a great cotton-factory, though counted by millions, may all be resolved into these four forms.

The Consumption of Capital. Though capital is the fruit of saving, yet it is the fixed law of production that **labor applied to capital destroys value of one kind in order to bring forth a superior value of another kind.**

This change is passing on capital in each of its forms. The instruments slowly and surely wear away by use, the materials are immediately destroyed, food is rapidly consumed, clothing more slowly, and the house more gradually still, but none the less surely; and the finished product sold is lost to the producer, to appear again in new implements, new materials, new means of subsistence, and new products. This is the unceasing round of values destroyed for the sake of greater values produced. The difference between the value consumed and the value produced is the **profit,** — the end steadily aimed at. It matters not in what form the value re-appears, provided only it is greater than that destroyed. If a value is destroyed to produce another only equal to it, we lose our labor. If a value is destroyed, and nothing is reproduced, we lose both labor and capital. Individuals and nations grow rich only as the value created is superior to the value of both the labor and capital consumed.

Mr. Mill says, "The greater part, in value, of the wealth now existing in England, has been produced by human hands within the last twelve months. A very small proportion indeed of that large aggregate was in existence ten years ago; of the present productive capital of the country, scarcely any part except farm-houses and a few ships and machines; and even these would not, in most cases, have survived so long, if fresh labor had not been employed within that period in putting them in repair. Capital is kept in existence from age to age, like population, not by preservation, but by **reproduction.**"

Productive and Unproductive Capital. By our definition, all capital is, or is designed to be, productive. Wealth that is not productive is not capital. But capital is sometimes unprofitably invested, as in a mill or a railway abandoned. Sometimes in a financial revulsion, or in consequence of over-production, the business of a great factory is suspended. In these cases, for the time, **capital is unproductive.** Then it loses its ordinary profit; and, besides, machinery unemployed generally suffers damage quite as fast as when running. Sound economy requires that capital be constantly joined with labor, and so made productive.

Fixed and Circulating Capital. We notice these as terms quite commonly used; but the distinction they indicate is neither very important nor very accurately defined. In general, fixed capital means little more than land, buildings for both business and dwellings, tools, and machinery. Circulating capital means finished products in passage from producers to customers. Thus fixed capital brings out its fruits in circulating capital. And since, in prosperous production, the values produced are greater than those consumed, the surplus of circulating capital is very naturally turned into fixed capital for enlarged operations. A particular article may be set down under the one head or the other, according to its relations. A plough, for instance, in the plough-factory, just finished, or in the hands of the merchant, is circulating capital; held by the farmer for use, it is a part of his fixed capital.

Money, though it circulates more freely than any thing else, must be classed with **fixed** capital. It is an instrument of exchange, which, like a wagon, a ship, or a locomotive, runs to and fro continually, only to move other things.

EXERCISES.

1. Is a workman's coat an item of capital? How is it with his Sunday suit?

2. Is money deposited in a bank for safe-keeping merely capital to the depositor? What if the banker loans that money to a manufacturer?

3. When may a piano-forte be regarded as an item of capital?

4. Suppose a man has great skill as an engraver, but no plates nor tools to employ his skill. Is his skill capital? Can the plates be made productive capital without the skill?

5. Do the savings of a miser increase capital?

6. What risks are involved in putting one's savings into capital?

7. What is the ultimate effect of extravagant living on production?

8. If a seamstress pays for a sewing-machine out of her earnings, what does the machine represent? What advantage does it yield?

9. Illustrate the forms of capital in the case of a cabinet-maker working by himself.

10. Illustrate the same point in any large factory with which you are familiar.

11. What capital is necessary for a wood-chopper who works by the day?

12. If the Pacific Mills pay each week six thousand dollars wages, what items of capital does the sum represent?

13. What items of capital appear in the annual inventory of a shoe-factory?

14. How is the capital consumed in the yearly wear of machinery replaced? In estimating profits, what allowance must be made for this?

15. A farmer paid five hundred dollars for stock in a railway running near his farm. The subsequent sale of the road under foreclosure of bonds made the stock worthless. But the facilities of the road add ten cents a bushel to the price at which he sells his wheat. Is the capital which he put into the railroad productive, or unproductive?

16. When is a threshing-machine fixed, and when circulating capital?

CHAPTER III.

THE CO-OPERATION OF LABOR AND CAPITAL.

In the processes of production, **Labor and Capital are Partners, Co-adjutors for a common end, Sharers in a joint result.** Each is necessary to the other; each is helpless without the other. The most stalwart man can produce nothing without food and clothing, tools and materials, — the fruit of previous labor, i.e., capital. Factories filled with ingenious machinery, warehouses full of cotton, stores of finished goods, capital in whatever form or amount, can do nothing to increase itself. Thus labor and capital are the two necessary and inseparable factors in the production of wealth.

For their co-operation these elements meet most harmoniously in the same person; that is, when the laborer owns capital enough to employ his own labor. Then one will, one self-interest, controls both, and jealousy is excluded. But this adjustment cannot be universal, for three reasons: —

1. **Capital under the application of labor tends to increase,** so that the man soon finds in his hands a surplus, to employ which he must seek another, who has only labor, to work under him. Thus a distinc-

tion between laborer and capitalist, employer and employed, is sure to rise.

2. **The great diversity of capacities and tastes among men** necessitates a separation into two classes. Often the man strongest, and most skilful for labor, has no tact to manage business, and save its returns. On the other hand, men of great financial ability are not infrequently physically weak, and unfit for manual toil.

3. **Certain forms of production must be carried on in large establishments,** where are combined large amounts of capital and great numbers of laborers. The advantages of machinery and the division of labor can be secured in no other way. Some things, like ships and locomotives, can be made only by such combinations; and even such things as pins, buttons, and matches are most economically produced on a large scale.

Thus the two factors are separated: the capital falls to some persons, and the capacity to labor to others. The abstract equality and mutual dependence of the two factors is disturbed, jealousies spring up, and short-sighted self-interest produces antagonism between them. As the parties meet to enter into contract, the capitalist has the advantage, because he has something which he can live on; while the laborer must work, or starve. The capitalist is tempted to use his advantage; and the consciousness of dependence makes the laborer sensitive, and suspicious of wrong. Against their own true interests, the parties are led thus to array themselves against each other.

Conditions on which the Harmonious Union and Effective Co-operation of Labor and Capital depend: —

1. **A general distribution of capital;** that is, such a condition of things, that the capital of a country is in many rather than few hands; that laborers themselves shall have, or be encouraged to secure, some capital. All means which help laborers to save their earnings favor this condition.

2. **The ratio of the amount of capital to the number of laborers.** It is a fundamental principle of Political Economy that **industry is limited by capital,** and every increase of capital demands increase of labor. The grand regulator is free competition on either side, under which the tendency is towards an equilibrium; for nature provides for the steady increase of both capital and labor in some definite proportion.

3. **The certainty that labor and capital shall each have its just reward.** Nobody questions the right of the laborer to a reward for his toil. If we remember that capital is the fruit of past labor saved, the right of its owner to a reward for its use is equally plain. The reward of each must come from the product of their union. To insure this certainty of reward, certain things in the social organization are essential.

a. **There must be division of property,** personal ownership in every thing that can by labor be made an object of value, and appropriated. Without this, capital cannot be. The theory of communism is false to nature, and fatal to industry.

b. **A prevalent moral sentiment and just laws must**

give security to property-rights. These safeguards are needed to prevent robbery and fraud by individuals, and to restrain governments from oppression.

c. **There is needed, for both capital and labor, perfect freedom, unrestricted by monopolies, or special legislation.** The inherent right of every man to do what he will with his own, provided he do no wrong to his neighbor, is not to be questioned. Ordinarily, each will judge best for himself as to the use he will make of both his labor and his capital.

4. **The general intellectual and moral culture of a people** is an important condition of the effective co-operation of labor and capital. Intelligence in the laborer adds to his efficiency. Honesty and integrity are of the highest consequence to the safe investment of capital. With reference to the co-operation of the two, it is important that both parties, as they meet, be able to take broad views of their common interests and mutual dependence. Harmony between the two requires mutual respect; and the basis of this is self-respect on the part of each, which springs from a clear, intelligent understanding of relations, rights, and privileges. Thus means for the general education of a people, and the culture of good consciences by all religious influences, have an economical value which cannot be over-rated.

There is reason to believe that laborers have some occasion to complain of hardships from the oppression of capital; yet the wrong is not all on one side. The agitation of questions at issue between the parties will do good, if it leads to a better under-

standing and a controlling regard for their common interests. But measures which directly increase jealousy between them, organizations which contemplate hostility and violence, can only aggravate the evil, and work damage to both sides. Combinations on either side to rule out fair competition, and repress freedom of individual judgment and action, are positively and only mischievous. Whatever tends to increase the intelligence, and promote the thrift and independence, of laborers, is helpful to hearty and profitable co-operation.

EXERCISES.

1. Illustrate the partnership of labor and capital in the case of a blacksmith who owns his shop, tools, &c., and works by himself.

2. Suppose, at the end of a year, the blacksmith has a surplus of earnings. How can he use it to extend his business?

3. Explain the co-operation of labor and capital when he has a hired man working with him.

4. How are labor and capital partners in a watch-factory, whose capital, valued at a hundred thousand dollars, is owned by a hundred stockholders, and employs a hundred hands?

5. In what ways might a laborer in such a factory turn his surplus earnings into capital?

6. Suppose a skilful workman, with little tact for managing business, and a poor workman, with great executive ability. Is it best that each should attempt to run a small business of his own?

7. Which is best for a country, — to have its land, as in England, owned in large tracts by a few landlords, or to have it, as in our country, held in small farms owned by those who work them?

8. What is the effect on industry of a social organization which divides people into fixed classes, as rich and poor?

9. Show how competition affects the union of capital with labor, when the laborers are few in proportion to the amount of capital, and *vice versa*.

10. Does the world owe any man a living without labor?

11. If the property of a town were all held in common, how would industry be affected?

12. How does the lack of division of property among the Indians hinder their civilization?

13. Can labor and capital meet in successful co-operation where the public sentiment tolerates fraud and robbery? Which party there suffers most?

14. Show the effect on capital and labor of an oppressive government, like that of Turkey.

15. What are monopolies? How do they interfere with the advantageous co-operation of labor and capital?

16. Suppose a government offers a bounty for the production of woollen goods. Who pays the bounty? Is it just and equitable?

17. Is it good policy, by bounties or high protective tariffs, to build up one branch of industry at the expense of all others?

18. When labor is scarce, and the profit of production is large, can any combination of employers to keep down the wages of labor long succeed?

19. When there is no profit on the production of cotton-goods, can a strike on the part of the mill-hands prevent the reduction of wages?

20. What means do you think best adapted to promote justice, mutual confidence, and good-will between laborers and capitalists?

PART II.

CONSUMPTION.

The Nature of Consumption. All the processes of political economy contemplate **actual gratifications** as the ultimate end. This is the legitimate use of wealth. It can be attained only by consuming the results of production. Consumption is thus the counterpart of production, and in its widest signification it is simply **the destruction of value.** By this is meant not the annihilation of material substances, but the extinction of **particular forms of utility.** Thus when bread is eaten, when a coat is worn out, when a tree is felled, when a hide of leather is cut up, the particular utility which each possessed is destroyed. It is in the nature of things an established law, that we can neither create new values, nor gratify our desires, except by the destruction of existing value.

It is to be noted, however, that one act of consumption does not necessarily destroy *all* the utilities of an article. The linen of a worn-out shirt has still an important utility as material for the manufacture of paper. From the ashes of burned wood may be extracted an alkali useful in making soap.

Hence economy in consumption requires effort to **exhaust** the utilities embodied in all objects.

Kinds of Consumption. There are several ways in which values are destroyed by the extinction of utility, all of which come within the range of our broad definition of consumption. Sound economy must make account of all.

A general distinction is made as we speak of consumption as **Involuntary or Voluntary**; i.e., as effected without or with direct design on the part of man.

CHAPTER I.

INVOLUNTARY CONSUMPTION.

Under this head three specifications may be named.

1. **Natural Consumption;** that is, the waste of utility, the destruction of value, which is **the work of nature.** All things tend to decay. Wood and vegetables rot, iron rusts, linen goods become mildewed, woollen goods and furs are moth-eaten, grain in store heats and spoils, flour turns sour, and all things in use, even gold and silver, insensibly wear away. To this head is to be referred also the destruction caused by locusts, chinch-bugs, vermin, &c. "It is estimated that in England the destruction caused by rats, mice, insects, &c., amounts to ten shillings an acre per year, equal to ten million pounds per annum."

The **degree** of this kind of consumption varies with **the climate** of different regions. It appears in

one form under the influence of heat, in another under the power of cold. It is most general and most rapid in tropical countries. It is most within the control of man in the Temperate Zone, but no part of the world and no form of wealth is wholly exempt from this liability.

Sound economy calls for **prudent foresight** and diligent labor to prevent as much as possible this kind of consumption. Yet, after the best that man can do, there will be much of waste and loss from this cause, which must be carefully taken into account in the estimate of wealth and in plans for its increase.

2. **Accidental Consumption.** Under this head may be included those sudden calamities which carry sweeping destruction before them, proceeding sometimes from the carelessness of men, sometimes from the unforeseen and inexplicable action of nature's forces. Such are great fires, railway-collisions, steamboat-explosions, shipwrecks, floods and tornadoes, earthquakes and volcanic eruptions, avalanches and land-slides. The annual destruction of values in these ways is very great. Wealth in every form and in all countries is more or less liable to be thus suddenly consumed. No human art or foresight is competent to prevent it altogether.

To meet this liability various methods of **insurance** have been adopted. But insurance cannot prevent the loss caused by destructive accidents. It only relieves individuals by **distributing** the loss when it occurs. When a house is burned, the destruction of value is absolute; the wealth of the community

is by so much diminished. If it was insured, the impoverishment of the individual owner is prevented only by bringing many to share the damage.

3. Immaterial and Notional Consumption. These terms are used by Roscher to indicate that decline of value which comes from lapse of time or change of fashion. Thus the chief value of a daily newspaper is gone when it is a week old, although in itself it is the same thing as on the day it was issued. So, too, all sorts of fancy-goods, six months after they are brought to market, lose a considerable part of their value by a change of fashion. If we remember that value is simply "purchasing power," it is evident, that, in the light of our science, these causes effect a consumption which is as real as that which comes from the actual destruction of the articles. Manufacturers and merchants and consumers also must take this loss into account.

This kind of consumption varies much in different nations, and with different classes of people. In Germany fashions change much less than in France. In some countries, while the aristocratic and wealthy classes change their dress with the fashion, the common people wear their clothes till they go to pieces. In general, this kind of consumption increases with the advance of civilization.

EXERCISES.

1. Illustrate the relation of consumption to production in a particular instance.

2. Are all men producers? Are all consumers?

3. Illustrate the definition of consumption by the ordinary expenses of a family.

4. Can you think of any gratification which can be attained without some destruction of value?

5. When a barrel of flour is made into bread, what is consumed?

6. When the bread is eaten, what other consumption takes place?

7. When a manufactory stands idle for six months, what kind of consumption is involved?

8. Why is it good economy for a farmer to keep his tools and machines under cover when not in use?

9. The burning of Chicago created a great demand for labor and materials for rebuilding: was the loss occasioned by the fire thereby diminished?

10. A ship and cargo, worth together half a million dollars, were totally wrecked at sea; but thirty days afterward insurance amounting to four-fifths of their value was paid to the owners. What was the total destruction of value involved, and on whom did the loss fall?

11. In Germany, military officers are required to wear buttons marked with the initials of the reigning sovereign: what special effect on the value of their uniforms must follow the emperor's death?

12. When and why is it good economy for a merchant to sell his fancy-goods at less than their cost?

13. Which involves the greater consumption of ladies' dresses, actual wear, or change of fashion?

14. What is the effect of frequent changes of fashion on production?

CHAPTER II.

VOLUNTARY CONSUMPTION.

There are two objects for which men of their own purpose destroy existing values. The one is **the increase of wealth by reproduction**; the other is **immediate gratification.** Reproductive consumption demands care, skill, and labor, while consumption for gratification ordinarily requires neither. Hence the former is more or less irksome; the latter is a present joy.

We can rarely use the same value for these two distinct and opposite purposes. One cannot eat his cake, and have it to sell for something else. A man cannot spend a hundred dollars for a social entertainment, and have the same money as capital in his business. On the other hand, the value invested in tools and materials for production is not available for the supply of food for the table or furniture for the house. These two kinds of consumption may therefore be best presented in distinct sections.

SECTION I. — CONSUMPTION FOR REPRODUCTION.

In presenting the laws of production, it was shown that the creation of values requires a union of capital and labor in which both are consumed. Sound economy respecting consumption for this object prescribes the general rule, that **the destruction of value for the desired product be always the least which will meet the necessity.** This rule is applicable to both capital and labor.

As respects **capital,** the following suggestions are in point: —

a. **The amount of capital should be no greater than is necessary.** In cutting cloth for garments, leather for shoes, boards for furniture, &c., there is opportunity for great saving or great waste of materials. In agriculture, sowing done by drilling saves much seed. Care in the selection and adjustment of tools and machinery may also do much to diminish the cost of products. It is unwise to employ a steam-engine of a hundred horse-power, when only half that amount of power is needed; or to use delicate cutting-tools for coarse work.

b. The **kind of capital employed should be of the lowest value** that will accomplish the purpose. Straw is a cheaper material for paper than rags; yet, for many purposes, paper made partly or wholly of straw serves well. Chemistry applied to the arts has introduced cheaper dye-stuffs for prints. Research and invention are thus constantly economizing

the cost of production, and every manufacturer needs to avail himself of the fruits of such study.

The frequent **adulteration** of articles is an abuse of this principle. In such cases, the aim is to pass off goods, under false appearances, for what they are not; which is simply **fraud,** never to be justified.

c. **Every utility of the substances employed in production should be exhausted.** There are fragments which may be saved. Thus in the manufacture of jewelry, the filings and sweepings of the workroom yield a considerable value. There are secondary utilities which may be developed, as the refuse of a large slaughter-house furnishes materials for soap, candles, and glue. Formerly the seed of the cotton-crop was mostly thrown away; now from the kernel large quantities of valuable oil are extracted; the oil-cake furnishes excellent food for cattle and sheep; the hull of the seed yields soluble phosphate of lime and potash for manure; and the spent hull makes a white and clean paper-stock. By realizing these new values the cost of producing cotton-fibre is reduced.

A chief advantage of production on a large scale is, that it warrants different operations for developing these minor utilities, which in small establishments are wasted.

As respects **labor,** the rule of economy suggests three corresponding points: —

a. **The labor employed should be neither more nor less than will effect the intended result.** A supernumerary laborer wastes both his own time and that

of others. A deficiency in the number of laborers tends to confusion, and precludes the most economical division of labor. The great advantage of machinery is not that it diminishes labor, but that it multiplies the products of a given amount of labor, and so economizes production.

b. **The grade of labor should be carefully adapted to different operations.** All the advantages of "division of labor" come into account here. It is wise, when great skill is required, to employ a man of skill at high wages. It is unwise to put such a laborer upon work which can be as well done by an unskilled workman at less wages.

c. **The labor paid for should be all performed.** To secure this, efficient superintendence is all-essential. "Time is money," says the maxim. Certainly it is money to him who pays money for it. Every hour paid for that is spent in idleness is so much unprofitable consumption, — an absolute loss. Good superintendence often makes all the difference between success and failure in the conduct of business.

From these considerations it is evident: —

1. That the economical consumption of capital and labor depends chiefly on the careful study and accurate knowledge of the nature of the processes of production.

2. That all restrictions on the freedom of capital and labor are opposed to economy of production.

3. Economy of labor and capital in production promotes the general welfare, by saving from destruc-

tion much that may be made tributary to the satisfying of human wants.

EXERCISES.

1. Illustrate the distinction between consumption for reproduction, and consumption for gratification.

2. Suppose a man buys a piano-forte for $500, and then mortgages the piano for $300 with which to buy tools for his business. Does the same value serve the double purpose of gratification and reproduction?

3. Give examples of waste and saving in the materials of production.

4. How do contrivances for the more perfect consumption of fuel in steam-engines favor production?

5. Name an article which has been both cheapened and improved by the use of cheaper materials.

6. Is the use of barytes, instead of white-lead, for making paint, a legitimate economy?

7. Name an instance of a secondary utility secured by productive operations on a large scale.

8. What is the consequence of employing five men on the work of four?

9. Is he always the most economical laborer who works for lowest wages?

10. What need of a foreman at high wages in each department of a cotton-factory?

11. Which is the best regulator of consumption for production, prescriptive law, or free competition? Why?

12. Would it be a blessing to either laborers or the community if labor were restricted to eight hours a day?

SECTION II. — CONSUMPTION FOR GRATIFICATION.

The ultimate end of all industry is to provide for the wants of men, and to minister to their happiness. The products of industry may fitly be consumed on several kinds of gratification.

1. **Gratifications essential to the preservation of health and life.** All men require food, clothing, and shelter. Hence these are called **necessities.** The term is, however, used relatively, not absolutely. The measure and quality of goods needed in this form varies with circumstances, such as climate, grade of civilization, occupation, and social position, and also with the taste, temperament, and education of different persons. A bamboo hut, a measure of rice, and a few yards of cotton cloth, suffice for the pariah of India. A respectable citizen of our country requires values a hundred-fold greater.

2. **Gratifications which delight the senses and tastes.** The mere sustaining of existence comes far short of filling out the measure of men's capacity for enjoyment. Such things as delicacies for the table, beautiful dress and equipage, ornamental furniture, the products of fine art in painting, statuary, architecture, and music, public exhibitions to please the eye and the ear, yield rich gratifications to people of taste. The desires which run in this direction are natural. Their gratification, within due limits, is refining and elevating. Means for these gratifica-

tions may be drawn from the resources of nature, and quite generally distributed. It is morally and socially healthful for people of every class to enjoy some things which they esteem **luxuries.**

At the same time, there are in this direction dangers to be carefully avoided. Appetites unnaturally formed and unduly pampered may gain the mastery, and lead to indulgences which produce misery instead of happiness. These things may minister only to a desire for vain ostentation, which breeds discontent, envyings, and jealousies, — the bane of happiness. And men are sometimes led by a refined taste into ruinous extravagance, which exhausts their means, and robs them of even the necessaries of life. Self-control and prudent forethought should ever regulate both the desires and their gratification.

3. **Intellectual gratifications,** from fit exercise of the mind and the acquisition of knowledge. These affect the higher part of men's nature, and yield a pleasure exceedingly rich and pure, with a consumption of values comparatively small. All are capable of enjoyment in some degree from this source, and the capacity for it increases as provision for it is enlarged.

4. **Social gratifications,** through the exercise of hospitality and all acts of friendliness, in the varied contact of men with one another. By the constitution of our nature we are formed for mutual intercourse and fellowship, and through the good-will which seeks to please others we find a rich gratification for ourselves. Such gratifications bind society by strong and healthful ties, and promote the general happiness.

5. **Moral gratifications,** through the culture of a good conscience toward God and toward men, and the exercise of benevolence. To secure these, some value must be consumed in the support of religious institutions and in gifts of charity. By such expenditures the noblest capacities of our nature are drawn out; and for the expenditure there is returned the richest satisfaction, — a satisfaction not limited to the moment, but abiding for the lifetime of the soul.

The **rule of economy** applicable to consumption for gratification is essentially the same as that laid down for reproduction. It may be stated in a general way thus: **Sound economy dictates that we secure the largest and best gratification at the least practicable consumption of values.** This rule suggests

a. **That the quantity of articles consumed be limited by the actual needs.** Americans may learn economy in this respect from most European peoples. Quite generally our tables are loaded with a profusion of food which is simply wasteful. Ordinarily it is more economical to purchase supplies for the household from day to day, at retail, than at wholesale, though the prices paid are higher. So, too, it is commonly unwise to purchase an article just because it is cheap. The first and main question is always, "Is it needed?"

b. **The consumption should be as perfect as possible, exhausting every utility.** The surplus of a dinner may provide for the next breakfast. An article of clothing outgrown by one child may be made over for a younger. Bad cooking is always

wasteful. Hence it is good economy to provide a house with the best cooking-utensils, with fuel that produces most heat, and with competent servants. Hence, too, a knowledge of domestic economy and a careful superintendence of the operations, on the part of the mistress of a family, is of the highest consequence to home comfort.

c. **Good judgment is to be exercised in the selection of our gratifications.** Of two gratifications that are equal, it is wise to choose the least expensive. That which favors physical health is to be preferred to that which tends to disease. Those which refine, strengthen, and elevate our being are to be chosen, rather than those which degrade and weaken us. In our individual gratifications we have occasion to regard social consequences, and, both for our own sake and for the good of others, choose those which improve, in preference to those which demoralize, society.

In general, intellectual and moral pleasures are inexpensive, as compared with sensual gratifications, and those which minister to fashion and vanity. The cost of an hour of drunken frolic or gluttonous feasting will buy books for a year's higher enjoyment; and the sums spent in the ostentatious display of dress, at the beck of the despot Fashion, would furnish means for many deeds of charity which would fill with perennial joy the hearts of both giver and receiver.

Before leaving this topic, a few things need to be said on **the reciprocal relation between production**

and consumption for gratification. The production of goods is always carried on with reference to their consumption, and rapid and ample consumption is the true stimulus of production. As another has expressed it, **"Material welfare consists in an ample consumption: ample production assures abundance; and, under the law of competition, abundant production assures rapid and more equal consumption."**

Extreme **frugality** would leave goods in the hands of producers uncalled for, and at once throw laborers out of employment and out of the means of living. Extreme **luxury** would consume resources and hinder the accumulation of capital necessary for production. The problem is, to find the golden mean which shall keep the balance that sustains prosperous industry, by a steady demand for its products. The problem can be solved only as each man studies it, and finds the solution for himself by using his means for healthful gratifications, at the same time limiting his gratifications by a due regard to his means.

Where great inequalities of condition prevail, the lavish expenditure of the rich in luxurious consumption is no doubt a blessing, as it gives employment and the means of living to the poor. But for the greatest general good there is a better use of the superfluous wealth of the rich, by its employment as capital in a way to give the poor a chance to increase their means, and at the same time to multiply and cheapen products so that all the people — the rich and the poor alike — may have more of comforts and luxuries within their reach.

EXERCISES.

1. Name what you think are necessaries of life.

2. Name the luxuries enjoyed in your home.

3. Name some articles which are necessaries in one family and luxuries in another.

4. Can you name an article now regarded as a universal necessity, which was unknown two hundred years ago?

5. Illustrate the different wants of people of different classes and of different countries.

6. Is it an extravagant outlay for a rich man of culture to spend twenty thousand dollars for a library? What if his library is kept for show, and seldom used?

7. Illustrate the evil of undue indulgence in luxuries.

8. Are cheap goods always the most economical?

9. When is a large outlay for a social entertainment justifiable?

10. Is there any exception to the rule that one's gratifications should be limited by his income?

11. When is it important to learn how to spend, as well as how to save?

12. Is it desirable that all should restrict their expenditures to bare necessities?

13. How can we dispose of our surplus food-products, unless we use tea, sugar, silk, &c., brought from other countries?

CHAPTER III.

PUBLIC CONSUMPTION.

The Nature of Public Consumption. Under the social instinct mankind gather and live in communities. This gives rise to certain common wants, which are provided for by public agents of the government, using means drawn from those who compose the society or state, by taxation.

These common or public wants can be satisfied only by the destruction of values, just as in individual consumption. It is to be remembered that the values thus destroyed are a part of the property of individual citizens taken for public use. In general, the government has nothing to expend but what is contributed by its tax-paying citizens. In ancient times despotic governments called out thousands of their people to labor directly in building city-walls and other public works, and collected from others the food necessary to sustain them, and the materials to be used. This was a direct and obvious draft on private property for public use. In mediæval times, when a sovereign made war, he called on his vassals to send each his quota of men, furnished with horses and armor, and food for their sustenance. Each individual thus felt immediately the burden of the values destroyed in public con-

sumption. The same thing is involved in the modern system of providing for the public consumption by taxes paid in money. The farmer sells a portion of his grain, and with the money pays his tax; the next day the commissary of an army may take the same money, and buy up the same grain for the use of the government troops. Or, if the process is more complex and roundabout, it comes ultimately to the same thing, — a part of the farmer's crop is consumed, its value destroyed, not for his private advantage, but for a public use.

A clear apprehension of this very simple truth is needed to correct a notion entertained by many, and often expressed, that large public expenditures are a benefit, provided only the money remains in the country. In all public consumption it is goods, real values, that are destroyed. The wisdom of the expenditure is determined by inquiring what proportion the benefit attained bears to the value destroyed. The benefit, however, may appear in an immaterial form, as in the maintenance of justice and the promotion of general intelligence. The thing to be insisted on is that there shall come a real good as large as possible, from a destruction of value as little as possible.

The Purposes to which Public Consumption is properly applied may be specified as follows: —

1. **For the support and administration of government.** Law and order are grand essentials of good society. On them depend the security of private property and of personal enjoyment. To secure

these, legislators, executive officers, and judges must be supported, and buildings furnishing suitable accommodations for these functions of government must be erected at the public expense. It is good economy to pay salaries sufficient to secure the best talent for these services.

2. **For works of public convenience, commonly called public improvements.** Here are included such things as paving, cleaning, and lighting the streets of a city, providing water-works and sewerage, constructing roads and canals, improving harbors, building and sustaining light-houses, &c. These works confer benefits upon the whole community. It is just, therefore, that they should be paid for out of the common treasury. For them, also, it is often necessary that private property be taken for public use, by the right of **eminent domain,** a right peculiar to the government.

3. **For advancing science, and diffusing intelligence for common interests.** Under this head belong exploring expeditions, astronomical observations, geological surveys, coast-surveys, meteorological observations, entomological investigation, and the whole post-office system as a means of diffusing intelligence and promoting social communication. Expenditures for these things yield broad, general benefits of the highest importance. By its system of storm-signals, our National Observatory saves yearly wealth exposed to the dangers of the sea, whose value is a hundred-fold that consumed in its maintenance.

4. **For the promotion of popular education.** The

prosperity of a country depends very much on the intelligence of its people. General education tends to a wise application of industry, and makes it more effective. It brings labor and capital to meet more nearly on an equality, and promotes the harmony of their co-operation. It is of advantage to every honest man to have intelligent men to associate and to deal with. For such a common blessing it is fit that the common funds provide, to some extent, and at the same time, that scope be given for private beneficence to be exercised for the same end.

5. **For the care of classes afflicted by peculiar calamities or deprivations.** Hospitals for the sick and for the insane, and institutions in which the deaf, the blind, and the feeble-minded may by peculiar processes receive an education, are here referred to. Our common sympathies and benevolence prompt such means of relief for the unfortunate. They can be most economically provided by the government. Their benefits must be largely gratuitous because such misfortunes come in largest proportion upon the poor.

6. **For the relief of poverty.** The poor we have always with us. Every encouragement should be given to the exercise of private charity for its relief, because Christian beneficence brings a blessing to the giver as well as to the receiver. But there is necessity also for some public provision for the poor, to meet some cases which fall outside the range of private beneficence, and also to offer some facilities for the poor to do something towards their own support. It is unwise, however, to dispense either

public or private charity in a way to encourage pauperism.

7. **For the nation's defence.** The general good is involved in the nation's life. While selfishness rules human hearts as it does, especially in international relations, exigencies will arise when nothing but military force will save a nation's life. Such exigencies must be anticipated by due appropriations for forts, and armies, and navies, and the various munitions of war. When war is inevitable, then no expense is unreasonable which is necessary to prosecute it with the utmost vigor. Yet it must ever be remembered that war is always destructive, terribly destructive, of both wealth and of men who produce wealth.

With reference to the whole range of public consumption, sound economy dictates two plain and simple rules: —

1. **The style and scale of national expenditures should be such as to command the respect and honorable pride of the people without useless display.**

2. **The methods of national expenditures should be such as to hold all agents of government to a direct and strict responsibility, and to insure the utmost fidelity in the discharge of all trusts.**

EXERCISES.

1. Illustrate the destruction of values drawn from private wealth, in the public lighting of city streets. What benefit accrues therefrom, and who enjoy the benefit?

2. Is fraud in public expenditures less criminal than in

private relations? What false sentiment prevails on this subject?

3. Name the blessings of good government which warrant expenditures for its support.

4. The members of the British Parliament receive no compensation for their services: what objections to applying the same rule to our members of Congress?

5. Why should the general government maintain lighthouses, instead of leaving the citizens of each port to provide their own?

6. Give reasons for or against the policy of railways being built and run by the government.

7. Should the government control the operations of the electric telegraph as it does the postal system?

8. Why is it right for a legislature to appropriate money for a state geological survey?

9. Why is it right that a man who has no children be taxed for public schools?

10. What benefit accrues from monuments, Fourth-of-July celebrations, &c., to justify the outlay of public funds for such purposes?

11. Why should a state maintain special institutions for the care of the insane and the education of the deaf?

12. Why should criminals in a state-penitentiary be compelled to work?

13. Should those whom sickness or calamity has reduced to poverty feel disgraced by accepting public relief?

14. Mention some of the evils of pauperism as it exists in England.

15. How does war stimulate production? Does this fact make war less a calamity?

PART III.

DISTRIBUTION.

We have seen, that, for the production of wealth, labor must be joined with capital; that various kinds of labor and divers forms of capital are involved; that the general industry of a people includes the labor of men of various occupations and professions; and that the protection of good government is essential to prosperous industry. The value of each article produced, estimated by its cost, represents, therefore, a number of different services rendered by different persons.

Thus problems arise respecting the distribution, to each one concerned in the process of production, of his share of the value created. The third division of our science is occupied with these problems, and may be defined thus: —

Distribution is that department of Political Economy which determines the principles on which the proceeds of industry are divided among the parties concerned in their production.

The parties to be recognzied are three: First, **the Laborers of all grades,** whose energies, physical and mental, are directly or indirectly engaged.

Second, **the Owners of the Capital,** the fruit of past labor saved, and now combined with present labor for a joint result. Third, **the Government,** which secures the safety and the rights of all, and which draws on the proceeds of industry generally for its maintenance.

But the stimulus to all industry and enterprise is the anticipation of profits, i.e., a surplus of values produced above those consumed; and the success of industry is measured by its profits. Hence arises a special question of prime importance, respecting the apportionment of the profits.

This department will be treated, therefore, under four subdivisions, viz.: —

1. The Remuneration of Labor.
2. The Remuneration of Capital.
3. The Distribution of Profits.
4. The Revenues of the Government.

CHAPTER I.

THE REMUNERATION OF LABOR.

Terms used. The compensation of labor is expressed by different terms. Mr. F. A. Walker says that "of English-speaking people, three-fourths probably, two-thirds certainly, subsist on **wages.**" This term is applied to manual labor of all grades. It means a stipulated reward for services rendered, rated either by the time occupied or by the work accomplished, by the day or by the piece. It pre-

supposes the relation of employers and employed, bound by mutual stipulations, which may be varied or terminated on short notice.

Salary expresses a fixed sum of money, reckoned usually by the year, for services which involve brain-work and responsible trust. Thus in a large manufactory, the mass of laborers receive wages, but the treasurer, the superintendent, &c., have salaries. Clergymen, teachers, and civil officers are generally compensated by salaries. The term implies an engagement of some permanence, and a grade of service requiring special qualifications and previous education.

Some agents are compensated by **commissions**; that is, a certain rate per cent of the value involved in each transaction. The term is applied to brokers, insurance-agents, collectors, travelling salesmen, and the like. In this case, the employer is responsible only for what is actually done; and the agent's reward depends on his personal enterprise, tact, and fidelity.

Lawyers, physicians, and certain civil officers are remunerated by **fees.** The term originated probably in the gratuity formerly offered by a party benefited for a service done. Hence more or less indefiniteness in this mode of remuneration. The rate is adjusted for each particular service by usage, or by the arbitrary demand of the party rendering the service, or by the good-will of the party served.

The questions respecting **wages** involve the most difficult problems of Distribution, and demand our first attention.

SECTION I. — NOMINAL AND REAL WAGES.

Nominal wages are wages estimated in terms of money.

Real wages are measured by the necessaries, comforts, and luxuries of life, which they will command. It is important to observe this distinction, in comparing the rates of wages in different countries and at different periods. The money-wages of an English laborer may be much less than that allowed an American; but the prices of all things which support life may be so much lower in England than in America as to nullify the difference. The laborer who receives the lowest money-wages may be the best off. In 1843 the rate of wages for an American day-laborer was one dollar per day; in 1865 the nominal rate was doubled: yet the one dollar of 1843 would buy a third more of comforts than the two dollars of 1865.

Several causes tending to produce this difference are worthy of notice.

1. The most influential of all is **the fluctuations in the purchasing power of money.** A sudden increase in the amount of that which passes as money must diminish the purchasing power of each dollar. The fact appears in enhanced prices for all commodities. The use of paper money leads generally to sudden expansions and contractions. The worst mischief of such fluctuations falls on those who live by wages.

2. **The form of payment** often makes a difference

between nominal and real wages. While wages are generally *reckoned* in money, they are not always *paid* in money. With farm-laborers, their board is counted as a part of their wages. Manufacturing laborers are sometimes paid by the **"truck-system,"** as it is called; that is, by orders on stores, where prices are fixed somewhat arbitrarily, ruling out competition.

3. **The greater or less regularity of employment** affects the real value of wages. In agriculture, brick-making, house-building, the fisheries, and the like, labor is in measure precluded at certain seasons and crowded at others. The real remuneration of labor must therefore be estimated not by the wages of one day or one month, but by that rate as qualified by the regularity or irregularity of each occupation.

4. **The duration of the power to labor** must be taken into account in determining the difference between nominal and real wages. Vital statistics show that the number of years during which a man can expect to have strength and vigor to earn wages varies with men of different nationalities, in different climates, and in different occupations. Glass-blowing, and almost all work in mines, are exhausting occupations. Men can continue them but few years. To know the real compensation of labor, therefore, we must estimate the wages of a lifetime.

If the use of machinery tends to depress nominal wages, it tends also to multiply and cheapen the necessaries of life so as to enhance real wages. The laborer of to-day enjoys many comforts which

were hardly known a half-century ago. At the same time the fact of having enjoyed these things freely makes it a hardship now to be in any degree deprived of them.

SECTION II. — THE EFFICIENCY OF LABOR.

Labor, as an element of production, must be estimated not by the time occupied, nor by the rate of wages paid, but by **the efficiency of the labor itself.** With respect to efficiency, men differ greatly. All who have occasion to employ numbers of men know this very well, and must recognize a distinction between the **nominal cost of labor,** indicated by the wages paid, and **its real cost,** estimated by the value of the work done. The English contractor, Mr. Brassey, found that a London bricklayer employed at five shillings a day did more work than two country workmen who were each paid three shillings and sixpence a day.

We may name the following causes of difference in efficiency: —

1. **Peculiar qualities of blood and race.** Physical influences, such as local climate, customary food, and habits of life, continued through many generations, modify the physical structure of a race. Hence come differences in height, weight, muscular strength, and especially in nervous force and spirit. Thus the Chinese and Japanese fall below the average of men in stature, and the Scotch rise above it. The French, without great size or vigor, are more than ordinarily quick and active. The Eng-

lish and Germans have great patience and endurance. Peculiar characteristics become hereditary, and mark whole races.

2. **The quantity and quality of food and clothing.** A man who lives chiefly on potatoes or rice cannot have the strength and vigor of those who have a more varied and generous diet. This matter is carefully studied in the rearing of working-animals: why should it not be as much regarded with respect to working-men? Clothing and food help each other in maintaining the warmth of the body.

3. **Habits respecting cleanliness of person, and purity of air and water.** Whatever depresses a man's vitality must diminish his efficiency. What can more effectually impair health and depress nervous force, than to live, as too many laborers do, crowded in narrow, filthy tenements, where the sunlight is excluded, and the water is contaminated with sewage-matter, and the air is charged with noxious poisons?

4. **Intelligence is an important element of efficiency in a laborer.** One who has learned to read and write has thereby improved his capacity to learn and exercise a trade. Intelligent laborers can think for themselves, and with little superintendence strike for the object aimed at in their labor, at the same time exercising their invention to devise means for increasing the efficiency of their toil.

5. **Technical education and industrial associations increase the efficiency of labor.** Instincts are hereditary; and one gains unconscious tuition by contact and familiarity with organized industry. In asso-

ciation with good workmen, a boy grows into habits of quick observation and manual dexterity, and so learns the best part of his trade before he begins his regular apprenticeship.

6. **Cheerfulness and hopefulness of spirit help much to make labor efficient.** These qualities grow out of self-respect, social intercourse, and the laborer's personal interest in the result of his work. Slave-labor lacks these elements, and is therefore unprofitable. The laborers may be put on starvation-wages, and so reduced to the level of slaves. It is for the interest of employers, as well as of laborers, that wages should be such as to inspire cheerful hope.

EXERCISES.

1. If the annual product of a watch-factory is valued at half a million dollars, among what parties must this sum be divided?
2. What claim has a stockholder of the company on the product?
3. How will the workman who makes only hair-springs get his share?
4. Whence come the means to pay the tax of five hundred dollars laid on the property?
5. How large a portion of the fifty employés will receive wages?
6. Who of them will be paid salaries?
7. How will the salesman who travels to sell the watches be paid?
8. How is the lawyer employed to collect bad debts compensated?
9. Nominal wages are now in 1879 fifty per cent lower than in 1873: how is it with real wages?
10. Illustrate how an increase of money affects real wages.

11. Under an expanding currency, do wages rise as soon or as high as the prices of goods? Why? Which, wages or prices, first go down under a contraction of currency?

12. What objection may a laborer make to receiving his wages in orders on a store, especially if the store belongs to his employers?

13. Why is it right that the nominal wages of a bricklayer should be higher than those of a shoemaker?

14. Do you know any reason why the smelters of lead-ore should be paid higher wages than farm-laborers just by them?

15. What causes combine to make our native American or Yankee laborers peculiarly efficient?

16. Why is it good economy for a manufacturing company to provide neat and convenient tenements for their employés?

17. Is it a wise and just law which compels laborers to send their children to school for a certain portion of their time? Why?

18. What is the advantage of thorough apprenticeship to a trade?

19. Does the habit of singing while at his work impair, or improve, a laborer's efficiency?

SECTION III. — CONSIDERATIONS WHICH DETERMINE THE RATE OF WAGES.

Wages imply a contract between two parties, — a promised reward for promised services. The two parties join in the contract for their mutual advantage, yet each having a separate interest. The wages agreed on must be determined by some regard to each of these separate interests.

1. On the side of the laborer, the first consideration is the **cost of living.** The man depends on his wages to provide for himself shelter, food, and clothing, that he may be kept in health and vigor, fit for work. More than this, since man is short-lived, children must be reared, in order that the stock of laborers may be continued. There must be also some provision for the laborer in his old age, when he is too feeble to work. Whatever is essential to the support of the laborer and family, must thus be taken into the account; and this consideration determines what some writers term **necessary wages.** Its chief force is to define a limit below which wages cannot be set to continue long without inducing misery, and reducing the number of laborers.

The cost of living varies in different climates, and, to some extent, according to the habits of different races and classes of people. Hence in warm countries wages may be lower than in cold. The habits of the Chinese enable them to live on less wages than Americans. It is, however, a bad sign

for a people's prosperity and happiness, when wages are pressed down to this lowest limit. The compensation of labor should be such as to give the diligent and thrifty a chance to multiply their comforts and improve their condition.

2. On the side of the employer, the main consideration is **the value of the products.** The employer embarks his energy and capital in a branch of productive industry, expecting from the sale of the products to have a surplus for his own reward, after paying wages and all other costs. His power to pay wages depends on the purchasing power of these products. When their price in the market rises, he can afford to pay higher wages; when it declines, he may be compelled to stipulate for reduced wages. The value may be so reduced that he will have no alternative but to close his operations, and extricate his capital as best he may.

The chief force of this consideration is to define a limit on the other side, — a limit above which wages cannot rise to continue long without ruining the business. The laborer comes to the negotiation, asking at least such wages as are necessary for his support. The employer comes, offering at most such wages as he thinks the value of the products will enable him to pay. The actual agreement will strike a point between the two extremes, fixed by other considerations hereafter to be named. These two considerations suggest this general statement.

The minimum limit of wages is the rate necessary for the support of the laborer and his family. The maximum limit is the rate determined by the market-

value of the products. The mere will of either party cannot safely change these fixed limitations.

3. **The customary rate of wages** is a consideration of some force in determining the rate that shall be. There is always a presumption in favor of existing usage, which, in the negotiation, may be pleaded on one side or the other with some effect. This consideration resists any contemplated change. Thus, when, in 1865, an inflation of the currency in the United States had increased the cost of living, and at the same time increased the prices of products, there was need that wages be advanced; but employers clung to the old rates, and yielded very reluctantly to the rightful demands of their employés. Ten years later the condition of things was just the opposite. Both the cost of living and the prices of all productions were greatly reduced, and employers were constrained to reduce wages accordingly. But then the laborers clung to existing rates, and resisted the proposed reduction, often with violence. This is, however, a qualifying, rather than a determining consideration. Like the law of inertia in physics, it resists or impedes all changes of wages.

4. **Competition is beyond all others the controlling consideration, determining the rate of wages.** The other considerations named have some weight. This, while it cannot nullify, does overbear them.

Competition is the struggle of two or more persons to gain the same thing at the same time. Many laborers are seeking wages, and high wages, at the same time. Many employers are seeking profits as large as possible at the same time. Competition becomes

active just in proportion to the comparative numbers on either side. If the number of laborers is large in proportion to the employment offered, a sharp competition arises between those seeking work. Each, rather than lose his chance for wages, will lower the rate at which he will contract. If the number of employers is large, with a large amount of capital in proportion to the number of laborers, a sharp competition arises among employers. Each, rather than lose his chance for anticipated profits, will raise the rate of wages he is willing to pay.

If, for any reason, the wages in a particular branch of industry rise above the ordinary rate, a speedy rush of laborers into that employment intensifies competition till the wages are brought down. On the other hand, if a particular branch of production yields profits above the ordinary rate, there comes a rush of employers with their capital into that business; wages are raised, and products are multiplied and cheapened till profits are brought down to the ordinary level. Competition thus tends to bring wages and profits to an equilibrium most favorable to the interests of all. In the nature of things, competition is inevitable: it has a blessing in it, and it is simply absurd to ignore or condemn it.

If competition were universally **free and fair,** it would do much to remove present inequalities of condition, and the burdens and the benefits of human industry would be equally distributed. But overreaching selfishness is continually interfering with competition to make it neither free nor fair. We

cannot rule out all competition. It would be neither just nor wise to do so if we could. But much may be done to resist abuses of the principle, and to give full scope for its natural and beneficent function.

5. **The Golden Rule of Christ,** "Whatsoever ye would that men should to you, do ye even so to them," presents a consideration which both Political Economy and Christian Ethics may fitly recognize and enforce in its application to the question of wages. Genuine self-interest, as distinct from rank selfishness, dictates the adoption of this rule. There are pleasing indications that it is in increasing measure regarded in the mutual relations of labor and capital. Men like Mr. Bright in England, and corporations like the Pacific Mills in our country, acting on this principle, show clearly how it tends to soften animosities, to inspire mutual confidence, and to effect genial co-operation, so as to increase the efficiency of industry, and give all an equal share in its products.

Certain **combinations to resist competition** must be noticed in this connection. Combinations on th part of laborers take two forms, strikes and trades unions.

A strike is a mutual agreement of a number of workmen to stop work until their employers accede to certain prescribed terms. It must be admitted that laborers have a right to define terms of the contract with their employers, and to refuse to work except on those terms. It is their right also to

combine in counsel and effort to maintain their common interests, and earnestly to press their claims. But one set of workmen have no right to interfere with the freedom of others who do not choose to join the strike. The first, the most sacred, the dearest right of every laborer, is **the right to do what he will with himself, his time, his strength, his skill.** Yet since the strike, in order to be effective, must rule out all competition, threats and violence, instead of simple persuasion, are resorted to as means of preventing other laborers willing to work from doing so. This is a flagrant outrage on the most precious right of freemen.

As a strong and determined assertion of a reasonable claim, a strike may do good service; but the claim is **reasonable** only when the necessities of the laborers require, and the prices of products permit, the increase of wages, or whatever better terms are insisted on. Then there is a better way: it is by a frank and open negotiation between the parties. In prosperous times, there is little occasion for strikes. In adverse times, strikes can accomplish only disaster to all parties. For, as Mr. Brassey says, "Strikes against a falling market always fail."

Trades-unions are combinations of laborers of particular trades in permanent organizations to promote the general interests of their respective fraternities. These associations often perform the functions of mutual benevolent societies. Contributions are made for the relief of sick, disabled, and distressed members; and measures are employed to promote sympathy, social enjoyment, and

mental culture. They thus render beneficial service, and are worthy of praise and encouragement.

But often these associations attempt to regulate wages, by resisting competition, in two ways: First, **by promoting and sustaining strikes,** in which they are likely to aggravate the evils already referred to, because under them the strike is better organized and more domineering. They are apt also to insist on **uniformity of wages irrespective of the varying abilities and efficiency of different workmen,** which involves injustice to superior artisans as well as to employers. Second, by **restricting apprenticeship,** which is simply an attempt to rule out free competition, and give to a limited number of persons a **monopoly** of certain forms of skilled labor. This involves the injustice and mischief which are inherent in the very principle of monopoly. If generally carried out, it would set the various branches of industry in antagonism to each other, and tend, as Mr. Brassey says, **"to establish that subdivision of caste** which has been the great curse of India." When managed for these ends, trades-unions involve heavy taxes on the members, and often subjection to selfish and reckless leaders, who seek their own personal interests rather than the common good.

On the other side, **combinations of employers** are often formed to resist competition. Such combinations sometimes attempt to regulate the prices of products, creating a monopoly in the general market. Their action in this form belongs to the department of exchange. They attempt also to

regulate wages by agreements not to pay above certain rates. While the right to enter into such agreements cannot be questioned, the actual combination involves an abuse of the power of capital to tyrannize over labor and dictate terms. It produces in the laborer a sense of injury, and incites antagonism and attempts at retaliation, which prevent the cheerful co-operation of the two great factors of industry.

Such combinations seldom succeed in controlling wages except for very brief periods. To be effective, the combination must embrace all who are engaged in a particular industry, and also all the capital likely to be drawn into it. If the wages fixed by the combination are so low as to make the profits larger than those of other forms of business, free capital will rush in and bid for laborers by raising wages, thus renewing competition, and defeating the end sought.

Experience shows that combinations on either side, to prevent free competition, cannot, for any long time, materially influence the rates of wages. Such attempts interfere with the natural law of supply and demand, which is the grand regulator of wages for the best interest of all concerned. When issues arise between the parties to the labor-contract, the surest way to a fair adjustment is by frank mutual explanations, or, in the last resort, by joint reference to just arbitration. In most cases, the occasion of difficulties may be forestalled by the culture of mutual good-will in active co-operation for the common good, intelligently apprehended and prosecuted on both sides.

EXERCISES.

1. Can either party, employers or employed, arbitrarily fix a rate of wages for labor?

2. Can the government, by law, fix a rate which will stand? Why not?

3. Why ought not laborers to be content with wages which suffice for their bare support?

4. Illustrate the effect of climate on the scale of living, and by consequence on the rate of wages.

5. When the cost of living is increased, are laborers to be blamed for demanding higher wages?

6. Are manufacturers to be blamed for reducing wages when the prices of their products decline?

7. When business is depressed, is it right that high dividends to stockholders should be maintained by reduced wages?

8. Illustrate the conservative influence of custom on wages in some one trade.

9. Why is the rate of wages generally higher in a new than in an old country?

10. Illustrate the effect of a financial panic on wages.

11. What reason have laborers to think that free competition bears most hardly on them?

12. If over-population by sharp competition reduces wages to the starvation limit, can a strike relieve the case? How can such a case be relieved?

13. State the results, good or bad, of any strike which you have known about.

14. State what benefits and what evils you have known to come from membership in a trades-union.

15. What consequences would follow if the policy of limiting the number of apprentices were carried out in all forms of industry requiring skill?

16. What is there to prevent the application of "the Golden Rule" in the mutual relations of laborers and their employers?

SECTION IV. — CAUSES OF VARIATION IN THE REMUNERATION OF LABOR.

Evidently all kinds of labor are not compensated alike. Competition tends to produce uniformity of compensation. Whatever, then, diminishes the intensity of competition, opens the way for other causes to produce variation. Several circumstances thus affecting competition may be named: —

1. **The ease or difficulty, the agreeableness or disagreeableness, of the employment.** For easy work, many are ready to compete; but from hard work, many draw back, and the number able to put forth great muscular effort is small. Mining-work under ground is disagreeable; the number willing to engage in it is much less than of those ready to do pleasanter work on the surface: hence only a better compensation will induce any to go below. It is not an uncommon thing for a gentleman to pay a male cook more than his private secretary; the dignity attached to the one office, and the menial character of the other, accounting for the difference.

2. **The skill required in the operation.** Here we note the difference between simple labor and educated labor. Skill can be acquired only by practice and training, which cost both time and money. It becomes thus an investment, for which the possessor may justly ask a compensation. Unusual skill supposes unusual natural endowment, the rarity of which precludes sharp competition.

3. **The amount of trust involved in the occupation.** In services about banks, or which in any way involve the handling of money; in manufactures where, as in the case of jewelry, the precious metals are put into the hands of workmen as materials; in railway operations, where the safety of many persons and of large amounts of property depends on the conduct of a single engineer, — in these and similar cases, good judgment and incorruptible integrity, as well as skill, are required. This combination of qualities is comparatively rare. Hence, while the demand is imperative, the supply is small, and competition for such places is restricted. For such positions, it is good economy to pay trustworthy men extraordinary compensation.

4. **The constancy or inconstancy of employment.** In out-door occupations, such as those of the carpenter and bricklayer, work is interrupted by bad weather, rainy days, and the winter-season. The compensation for the working time must be larger than ordinary, to cover the time when work must be suspended.

5. **The probability or improbability of success.** This consideration applies more to what are called the professions than to ordinary trades. He who learns the trade of a carpenter may be almost sure of finding employment at some compensation; but one who studies for the profession of a lawyer has hardly an even chance of being able to live by his profession, and, at best, must persevere through years of unremunerated toil, to establish a reputation which will assure him full success. The high

remuneration for successful practice is the prize which sustains one in the earlier stages of the race.

The remuneration of labor by salaries, commissions, and fees, involves some peculiarities which must be noticed.

1. The labor which is thus compensated is generally of a kind that requires both **superior natural gifts, and special and expensive education.**

2. It is also true of it, that on the one side, **personal character and reputation,** and on the other, **the respectability, dignity, and permanence** of the service, are highly estimated.

These considerations, more or less, rule out ordinary competition, and put the mutual contract in each case on special grounds. The whole number of those whose labor is thus compensated is small, compared with the great body of those who receive wages; and, to the few so favored, a large share of the proceeds of industry is actually distributed. This seems like injustice; but it must be remembered that it is chiefly public and administrative services that are compensated by salaries and fees. In any productive enterprise, — a woollen-mill or watch-factory, for instance, — **a wise and vigorous executive administration** is essential to make the business profitable. It is for the interest of every one in the establishment who receives wages, that, for the place of high trust, the best talent should be secured by a salary sufficient to command it. So, too, all private interests are promoted when public affairs are guided by **men of ability and integ-**

rity. For offices of government, which require men of more than ordinary capacity, it is right, therefore, that more than ordinary compensation should be provided.

The apparent injustice is entirely relieved, if the way is open for every one to make the most of himself, and to rise in position and emolument according to his real merit. This is illustrated in the case of George Stephenson. He began his career as an engine-boy at the lowest wages. As his mechanical genius was developed, he was made an engine-wright, and put upon a salary of a hundred pounds a year, when he thought his fortune was made. But by patient study and labor he invented the locomotive-engine, and became **"the father of railways."** Then the services of his later years received munificent remuneration. The world, enjoying unspeakable benefits from his achievements, pronounces that remuneration justly and worthily bestowed.

In the learned professions, especially those of law and medicine, men of highest ability and repute receive extraordinary remuneration, simply because such men distance competition and custom. Where great interests are at stake, it is sound economy to employ the best legal talent at any price. In a crisis of life or death, the best medical counsel is cheap at any cost. After the reputation has been achieved, lawyers like Webster and Choate, and physicians like Mott and Parker, would be overwhelmed with business if they did not limit it by high charges. It is not unusual for members of these professions to agree upon a scale of fees to

be charged. But such agreements can fix only the minimum limit, leaving an open range above for compensation to be increased according to each one's ability and reputation. These higher rates are the prizes which stimulate the efforts of young aspirants in these professions.

The difference of remuneration is most marked **in the departments of literature and fine art.** A few lines from the pen of a Bryant or a Longfellow, a few strains of music from a Jenny Lind or a Kellogg, a painting done by a Church or a Bierstadt, a statue from the chisel of a Thorwaldsen or a Powers, command prices that seem to common folk absurdly extravagant. But these products are inimitable fruits of highest genius, which sets those who have it above all competition, in the enjoyment of an unrestricted monopoly.

Generally men in all callings and professions insist on the highest remuneration they can command. But often the honor, dignity, and permanence of certain positions are considerations of weight on the other side. Thus a lawyer, whose practice would yield an income of twenty-five thousand dollars, may accept a place for life on the bench of the United States Supreme Court at a salary of ten thousand dollars.

Men devoted to scientific research, clergymen, and teachers, are, as a whole, confessedly underpaid, when compared with men of equal ability and attainments in other professions. But with many of them, delight in the study of truth, and devotion to the work of Christian beneficence for the well-

being of mankind, which find satisfaction and joy in the service itself, go far to balance, in their estimation, the meagreness of their pecuniary reward.

The remuneration for women's labor in most employments is less than that of men for similar services. The fact is apparent on every hand. In present circumstances, the following reasons, though they may not altogether justify it, account for the fact.

1. **It is a prevalent opinion, that for miscellaneous labor, women are by physical and mental constitution inferior to men in the qualities essential to highest efficiency.** In the spinning-room of a cotton-factory, men are employed almost entirely, because women have not the strength to handle the jennies. In the weaving-room, two or three men work with a hundred women. The women tend the looms as well as, or better than, the men; but for oversight, the men are needed to meet exigencies for which women are supposed to be unequal.

2. **In the order of nature and in the constitution of society, the sphere of activity for most women is ordained to be in the home,** each the solace and help of a husband, and the nourisher and mentor of their children. This fact tends to rule out women from many occupations, and to create the impression that it is unwomanly to enter them.

3. **The wages of men are adjusted to the presumption that each has or will have a family to provide for; and those of women, to an anticipation that each will in due time, by marriage, be relieved of her own**

support. A very large proportion of the women who to-day depend on their own labor are young persons who are passing, one after another, into new relations, where they are to be cared for by men's earnings.

4. **Productive industry is now organized on the assumption that women's work is to receive less compensation than men's.** In most cases, the greater cheapness of female labor is the chief reason for employing it. The prices of all commodities into which this kind of labor enters are diminished thereby. If the rule is a false one, it cannot be suddenly changed without deranging the entire systems of production and exchange.

5. **There are feminine instincts which prompt women to draw back from many occupations because they are coarse, or involve too rough jostling with the world.** These instincts are natural; and when they are crushed out, the charm of womanhood is gone. Yet the prevailing tendency is to make them excessive, so as to produce a morbid sentiment of false delicacy.

The foregoing considerations limit the number of occupations open to women; and these are so crowded, that competition is intense, and low wages are inevitable.

6. **This competition is made sharper by the fact that many women who seek employment are partly or wholly supported by other resources than their own labor.** These can and often do underbid others who have nothing but their wages to depend on. Not infrequently, too, the fact of their better

circumstances, their better appearance, and, it may be, their superior intelligence, secures for them the preference.

Notwithstanding all this, there are exceptional cases even now, where women of superior energy or genius command for their services a remuneration equal to that accorded to men for like work. This is especially true of women's work in fine art. The female stars in music and the drama, such as Kellogg and Siddons; in painting and sculpture, such as Rosa Bonheur and Harriet Hosmer; in poetry and light literature, such as Mrs. Browning and Mrs. Stowe, — receive from an admiring public ample compensation for their productions. Occasionally, too, a woman possessed of great executive ability for managing business wins for herself a full reward. But these exceptions are so few as to prove, rather than controvert, the rule.

As the case now stands, good judgment must accept the following conclusions: —

a. In the nature of things, there are reasons why, in general, the remuneration for women's work should fall somewhat below that of men. Absolute equality between the sexes in this respect is not likely to be attained.

b. This inequality, as a present matter of fact, is much greater than is either right or necessary. The distress that comes from it cries out in the name of justice and philanthropy for relief.

c. The needed relief can come only as the sphere of competition is widened, and its intensity relieved, by opening for women free access to all fit occupa-

tions. The chief obstacle to this is the ban imposed by women themselves on one another, under the tyranny of fashion and prejudice and mawkish sentimentalism. There is no good reason why with women, as with men, honest work well done should not be always respected and honored. A change of opinion on this point, in female circles, will be a change of public opinion.

d. In the quiet sphere of domestic life, woman renders to society her noblest, most blessed service, — a service whose worth cannot be estimated in terms of current money. Her position of queenly power in that sphere must ever be carefully guarded.

On the whole, the outlook of to-day is full of hope for the success of a conservative reform, which shall correct existing wrongs without impairing those most sacred rights of woman which centre in the home.

EXERCISES.

1. Why pay a glass-blower for five hours' work more than a porter in the same establishment for a whole day?

2. Why are extraordinary wages paid to men who work at rolling iron?

3. Why do men working in a powder-mill expect higher wages than they would ask in a flouring-mill?

4. If a man spends five years learning the engraver's art, how is he to be compensated for his outlay of time and money?

5. Illustrate how a trustworthy character may have a money-value.

6. Why is a higher price charged for a coat made to order than for one of a wholesale stock?

7. Why are the wages of a locomotive-engineer higher than those of a fireman whose work is harder?

8. If seven out of ten who study law fail of success, what inducement is there to seek the profession?

9. Why is it right that the general scale of salaries should be higher than that of wages?

10. On what grounds may an eminent surgeon charge a fee of a thousand dollars for an operation which occupies but two hours?

11. Is it unjust for an artist like Powers to ask what he will for the products of his genius?

12. Is it wrong for a clergyman to change his place for an increased salary?

13. Why do women prefer to live in a garret, and earn a pittance with the needle, rather than to go into domestic service in comfortable homes at good wages?

14. What would be the consequences, good or bad, if the salaries of female teachers were made the same with those of males of the same grade?

15. Is it desirable that women should engage in field-work, or in the legal profession?

CHAPTER II.

THE REMUNERATION OF CAPITAL.

Justice requires that the owner of capital should be compensated for its use. Capital is a necessary partner with labor in the production of wealth. Its two most important forms are: first, the "**plant,**" i.e., the buildings, tools, and machinery to work in and to work with; and, second, the **materials** to work upon. Labor and skill can do nothing till these are provided.

Capital is the fruit of past labor preserved by self-denial. One's right of property in that which he has earned and saved is the same as his right to his present power to labor. No man expects to put forth his powers in present labor without some reward. Why should one be expected to give the use of the fruits of his past labor and self-denial without reward? The hope of such reward is the special inducement to diligence and saving. Suppose James Brown has health and strength and skill as a blacksmith, but no shop, no tools, no iron. John Smith has by previous labor and thrift become the independent owner of a shop and its appurtenances, but, broken in health, is unable to work. Each is helpless without that which the other can furnish. Both will derive advantage from the union

of these two properties, the power to labor, and the capital. This union may be effected in either of three ways, — Smith may hire Brown to work with his shop and tools and iron, and pay him **wages**, taking the surplus of the proceeds for himself; or Brown may hire Smith's shop and tools, and pay him **rent** for their use, taking for himself the surplus of all he can earn; or Brown may buy of Smith the shop and tools, giving him, since he has no money, a note and mortgage for their value, on which he is to pay **interest** every year. Can anybody question the rightfulness of either of these transactions? They are but three modes of doing one and the same thing, — that is, of bringing labor and capital into partnership. The first establishes the relation of employer and employé; the second, that of landlord and tenant; the third, that of creditor and debtor. Each involves a simple sharing of the joint product of industry.

This simple case illustrates the equitable grounds of the remuneration of capital in all its aspects. The principle is the same, if Brown borrows money for the purchase at the bank, and pays the interest there; or if ten persons contribute means for the purchase, and so make a stock company, each to receive dividends on the profits of the business instead of interest.

For the fuller presentation of the subject, it may be considered under three heads; viz., Rent, Interest, Dividends.

SECTION I. — RENT.

Rent is the compensation paid for the use of land and its appendages, commonly called real estate. It implies ownership of land, and a right on the part of the owner to receive a compensation for its use when he lets it to another.

In Great Britain and other countries, where the influence of the old feudal system is still felt, the problems of rent are many and complicated, because the titles to lands are encumbered by entails and mortmains. But in our country lands are held in **fee-simple,** which makes the ownership absolute, and the transfer by sale or lease easy and simple.

For agricultural purposes, the amount of rent which land will command must depend mainly on its **productiveness,** which is determined by the **fertility of the soil,** and the **situation** with reference to a market for the produce. Fertile lands near to a good market command the highest rent, because the farmers are assured of both good crops and good prices. With reference to a new country inland, the opening of railways and other facilities for tranportation enhances rents: first, by virtually bringing the lands near to the old markets; and, second, by favoring the emigration of population to build cities and develop varied industries, and so to form new markets.

Beauty of situation, good neighborhood, and proximity to schools and churches, are also minor con-

siderations of more or less weight in determining the rents of agricultural lands.

In this country, farms are quite commonly rented "*on shares;*" that is, the landlord receives in compensation for the use of his land a certain proportion of the crops. The capitalist thus shares with the laborer the risks as well as the profits of the business.

In cities, rents for lots and buildings are determined almost entirely by **location,** with respect to centres of business, the character of the neighborhood, and the freaks of fashion. A store in the centre of business will rent for much more than one half a mile off, because a merchant there will sell ten times as many goods as in the other location. A residence in a respectable or fashionable quarter of the city commands the highest rent, because it secures pleasant surroundings, or gratifies pride and vanity. With the growth of cities, the centres of business and the fashionable quarters are subject to change from time to time, so as materially to vary the rent-value of property; and this fact needs to be considered when capital is invested in that form.

Generally, except in the favorite locations of great cities, rents are fixed at a lower percentage on the market value of the property than the average rate of profits from business, and less than the average rate of interest. The chief reasons for this are the greater security of capital in real estate, and the probability, that, with the advance of society, the value of real estate will be increased. Property

in land cannot be run away with, nor destroyed, nor fraudulently disposed of; and not infrequently, by the mere rise of value, a small capital in this form grows into a fortune.

EXERCISES.

1. What would be the effect on industry if a rule were established, that an owner of capital could have no compensation for its use when loaned to another?

2. Under such a rule, which would suffer most, laborers, or capitalists?

3. If it is right for one to borrow capital for his own advantage, is it wrong for the lender to claim a share in that advantage?

4. What does the term "real estate" include?

5. Could the resources of the earth be developed to advantage, if there were no private property in land?

6. Why will a poor farm near a seaport command higher rent than one of richer soil a hundred miles away?

7. How has the opening of railways to the West affected the value of New-England farms?

8. Why does the character of its neighborhood affect the value of a farm?

9. Illustrate the great inequalities in the rate of rent for city property, and the reasons therefor.

10. Why should the average rent for real estate be but five per cent on its value, when the average interest for money is eight per cent?

11. Can you give an instance, and the facts, of a fortune made by the purchase and management of real estate?

SECTION II. — INTEREST AND DIVIDENDS.

Interest is the compensation paid for the use of capital estimated in money. This is to be preferred to the more common definition of interest as **"the price paid for the use of money,"** because it covers the whole ground. Money as the medium of exchange is the most convenient form in which loans can be made. When credit is extended in any way, the value is set down in terms of money on which interest may be reckoned as the parties agree, or as the law may prescribe. But it should always be borne in mind that what the borrower wants is not the money, but the capital which it represents, or for which it is immediately expended.

Thus one may buy land for a site, and have a building erected on it, and purchase a steam-engine and machinery for a mill, and cotton to be worked up, at each step giving his note for a part of the value, to be paid at a future date with interest. Or, instead of doing this, he may borrow of a friend or at the bank money enough to meet his deficiency, giving his note for the whole with interest; and then set up his establishment complete, by purchases made for cash. The transactions are essentially the same. In the first case, the loan is made of the capital directly, without passing any money; in the other case, the money is only a means of reaching the capital. The land, the mill, the engine, the machinery, and the cotton are what the manufacturer

wants, and what he actually borrows as capital for his business.

Interest is reckoned at a certain per cent of a certain value defined in terms of money, which is called the **principal.** The percentage is called the **rate,** and is usually stated as the rate per annum, though often payable at shorter intervals than a year.

The word **interest** is a Latin verb, and means, **"it is of advantage."** The term implies **a mutual advantage** to borrower and lender, and thus recognizes the natural and necessary partnership of capital and labor. It is for the advantage of the skilful laborer to borrow, at a reasonable interest, as much as it is for the advantage of the capitalist to loan. Were there no money-lenders, there could be no money-borrowers; and, were there no money-borrowers, the industrious artisan would be the greatest sufferer. The parties come together for their mutual advantage. Why, then, should it be thought any more odious for one **to lend** for his own advantage, than for another **to borrow** for his own advantage? So far as the transaction itself is concerned, both must be regarded as equally honest and honorable. This mutual advantage marks the chief difference between a **loan** and a **gift.** A gift implies **benevolence:** a loan implies **interest.** A giver sacrifices his own advantage for the benefit of the receiver: a lender and a borrower confer each a benefit on the other, adjusted as equitably as possible. Lenders are sometimes avaricious, exacting, oppressive. So, too, borrowers are sometimes profligate, negligent, fraudulent. These are abuses which selfishness

thrusts into this, as into all business transactions. They ought not to impeach the legitimacy of the transaction itself rightly conducted.

Some people think it wrong that interest should be taken, because under the name **usury** the Scriptures denounce it, and our Saviour prescribes it as a rule of Christian love, that men should lend, hoping for nothing in return. But the cases contemplated in the Scriptures are loans made to relieve pressing necessities of the needy, not loans of capital made with a view to profitable industry. The law of Christian charity, which bids us give to the poor, looking for no return of either principal or interest, is still binding; but it does not apply to loans which are only a means of uniting labor and capital in a common enterprise, for their mutual advantage. It seemed necessary to say so much to correct certain false ideas which are put forth and are gaining currency in these days. Interest, properly understood and regulated, involves no extortion, works no injury, but confers great and important benefits, by encouraging both saving and the judicious employment of capital saved.

The Rate of Interest is determined chiefly by four considerations, viz., **risk, convenience of investment, profits of industry,** and the **ratio between supply and demand of capital.**

1. **Risk.** When one makes a loan, he puts a portion of his property out of his own hands into the control of another. There is a chance that it may never come back to him. His compensation

must be proportioned to that chance. If he holds pledges which make him secure, he will be content with a small interest; if he has no security, and the borrower proposes to embark in a doubtful enterprise, he can be induced to make the loan only by the promise of a large compensation.

The risk depends upon several circumstances.

a. **The personal character of the borrower** qualifies the risk. The character that can safely be trusted involves industry and sobriety, skill, good sense, pecuniary ability, and moral integrity. Where these are combined in the borrower, the probabilities are strong that he will succeed, and honestly fulfil his promise to pay; and the lender runs but little risk.

b. **The character of the business** in which the borrowed capital is to be employed affects the risk. Capital invested in a powder-mill is in great danger of sudden destruction; in farming operations it is almost absolutely safe. Money loaned to a speculator in mining-stocks is put into bubbles that a breath may burst; loaned to an industrious mechanic, it may not move so fast, but it is sure to come around in time, with increase.

c. **The character of the government** affects the risk incurred in lending capital. A despotic government, which plunders its citizens by irregular and oppressive taxation, makes all private property and all industry insecure. Thus in a country like Turkey a great risk attends all pecuniary contracts, and the rate of interest is high. Where the laws are bad, or are inefficient to maintain justice, for lack of force in their execution, there is great risk in loaning

capital. We do not wonder that in mediæval times the Jewish money-lenders charged enormous rates of interest, when we understand that the laws furnished no safeguards for their protection: they and their contracts were subject to the caprice of petty lords, who were little better than robbers by profession. So, too, the **stability** of a government is an important consideration. A revolution often dissolves contracts, dissipates securities, and renders obligations valueless. Hence in Mexico the rate of interest is very high, while in Great Britain it is very low for both public and private loans.

2. **The convenience of the investment** has an important bearing on the rate of interest. Three points have here to be considered.

a. **Facility of transfer.** One who loans his capital likes to have it so invested that he can easily command it for his own use in case of need. A bond of the United States, or a certificate of stock in a well-established bank, may be easily transferred and made available.

b. **Permanency of investment.** A lender at the same time desires that a good investment should run on undisturbed as long as practicable, unless he has occasion to recall his capital. A government-bond that runs twenty years will for this reason be taken up at a less rate of interest than one that runs only five years.

c. **Punctuality in the payment of interest.** Those who loan their capital wish to count with certainty on their interest, and to secure it without trouble. A well-secured bond, with interest-coupons attached,

given by a prompt business man, will ordinarily command money at a low rate of interest, because of this convenience.

British consols, which represent the consolidated debt of England, run at from three to four per cent interest, because they combine these three advantages in the form of investment they offer. For the same reason our United-States bonds are eagerly bought up at a premium, though they bear only four or four and a half per cent interest.

3. **The profits of industry** vary at different times and in different countries, and affect the rate of interest. Here we look at the matter from the standpoint of the **borrower.** He must consider what he can afford to pay, and that evidently must depend on the profit he can gain by the use of capital. If, as sometimes happens, a business yields so large profits that the capital is doubled in a year, one can well afford to pay twenty-five or even fifty per cent for capital to be employed in such a business; whereas, if through any cause a particular industry yields only three per cent of profit, one cannot afford to pay even six per cent for capital to be embarked in that business.

4. **The ratio between supply and demand of capital,** more than any other one cause, determines the rate of interest. This is only a recognition of the principle of competition acting here as elsewhere. When the number of borrowers is large, and their wants are large, but the amount of capital available is small, the competition is sharp on the side of the borrowers, and they bid up on the rate of interest.

When the conditions are reversed, the competition is sharp between the lenders, and they bid against each other by offering loans at lower rates of interest.

The best adjustment of supply and demand depends on **the freedom of capital**; that is, the unfettered liberty of every man to employ his capital in any innocent way he pleases. Such freedom tends always towards a healthful equilibrium, which supports industry by securing to both partners a fair and satisfactory reward.

In a new and prosperous country interest is always high, because the profits of industry are large, and the supply of capital on the ground is small, while to distant capitalists the risk seems great. But the constant tendency of civilization is to reduce the rate of interest, because wealth increases rapidly both by immigration and by the natural fruits of industry, and because risk is diminished by more perfect securities. This process goes on by certain fixed laws. The natural development is healthiest. The action of those laws is only marred and hindered by the untimely interference of legislation.

Usury Laws. **These are laws designed to restrict the rate of interest by a defined limit.** They interfere with the freedom of capital, and are in conflict with the first principles of sound political economy, as several considerations show: —

1. **They violate a right of property.** A man has the same right to the market-rate for the use of his capital in money, as he has to the market-rate for

the rent of his house, or the hire of his horse, or the charter of his ship.

2. **The civil law cannot fix a price for the use of capital,** any more than it can fix a price at which flour, or iron, or any other commodity, must be sold. In all these matters, the law of competition is superior to the civil law.

3. **The price of capital is more variable than that of other commodities.** This is made evident in the great marts of business, by daily quotations of the rate of interest.

4. **These laws, instead of diminishing, actually increase the burden of interest to the most needy borrowers.** The lender must be compensated for the additional risk from the penalty of the law.

5. **Such laws are never fully enforced,** as is obvious from the daily newspaper reports just referred to. Men who want money will pay what they please for it, and those who have it to loan will get what they can. Such laws only put law-abiding capitalists at a disadvantage, or drive them out of the market for the benefit of unscrupulous sharpers and Shylocks.

Money is a necessary of life in active industry and trade, and for that reason it ought to be left free to the action of the natural law of supply and demand. In active commercial centres this is coming to be understood. Every State should have a statute defining a legal rate of interest for cases in which the contract indicates no specific rate. Beyond this, legal sanction and security for all reasonable contracts in loaning capital, under free

competition, constitute the surest safeguard against excessive interest. It is a hopeful sign that in Great Britain, and in Massachusetts and other American States, usury laws have been abolished.

Dividends. This term denotes **the remuneration of capital invested in stock companies.** These companies unite contributions of capital from a number of persons for large operations, such as cotton or woollen factories, banking, insurance, railways, telegraphs, &c. The whole capital is divided into shares, usually of one hundred dollars each, which are freely bought and sold in the stock-market. With a company honestly managed, as the business runs on, accounts are balanced semi-annually, and the proceeds are ascertained. The surplus of these proceeds, after providing for all expenses, and laying aside a reserve to meet emergencies, is divided to the stockholders, giving a certain percentage to each share.

This form of compensation for the use of capital is marked by two peculiarities: First, **the remuneration depends altogether on the success of the industry** in each case. Second, **the dividend embraces two elements; viz., interest and profits.** If the mill, the railway, or whatever, has barely paid other expenses, capital will have no remuneration; if it has earned enough to pay the capital ordinary interest, the dividend is identical with interest; if it has earned more, so as to make dividends of ten or twenty per cent annually, the capital receives extraordinary remuneration. The chance or expectation of such

extraordinary remuneration, and the convenience of investments in that form, are the chief inducements for putting capital into stocks.

The mismanagement, frauds, and defalcations which attend the operations of stock-companies, involve great sacrifices. A careful estimate of the results of such investments would probably show average returns much less than ordinary interest.

EXERCISES.

1. Show the rightfulness of interest in the case of a farmer, who, growing old, sells for ten thousand dollars the farm he has worked for forty years, and loans the money at eight per cent, expecting the interest to support him for the rest of his days.

2. Illustrate the advantage to a young skilled mechanic, of borrowing capital to set him up in business.

3. If a manufacturer sells a farmer a reaping-machine, taking his note for payment to be made in three annual instalments, why is it right to charge interest on the deferred payments?

4. Why should a grocer sell his goods at a less price for cash than if he gives the buyer six months' credit without interest?

5. If it is right for a machinist to take a note with interest in part payment for a steam-engine, is it wrong for a banker to take a like note with interest, for money loaned, that the buyer may pay for the engine at once?

6. What considerations induce capitalists to prefer to invest in government bonds which pay four and a half per cent, rather than in notes and mortgages at eight per cent?

7. Why is it that the government of Chili can hardly borrow money at ten per cent, while the British government borrows all it needs at three per cent?

8. How could a poor man, who in 1843 pre-empted government land in Wisconsin at $1.25 per acre, afford to pay,

a year after, fifty per cent interest for money to complete his purchase of the government?

9. What reasons combine to cause a high rate of interest in our young Western States?

10. Account for the decline of interest in Illinois since 1840, from twenty-five per cent to eight per cent. How much has direct legislation done to cause that decline?

11. When is a high rate of interest a sign of prosperity? when of adversity?

12. State some of the ways in which usury laws are evaded. What is the moral effect of laws thus openly disregarded?

13. Can a stock-company be justified in declaring dividends not earned, and borrowing money to pay them?

14. Why are stock-companies specially exposed to frauds?

15. What do you understand by the "bulls" and "bears" of Wall Street?

CHAPTER III.

DISTRIBUTION OF PROFITS.

WRITERS on Political Economy have used the term **profits** with much looseness and ambiguity. Many define it to mean **the remuneration paid for the use of capital.** Mill says profit embraces the three items, **interest, insurance,** and **wages of superintendence.** Mr. Walker represents profits as **the share which falls to the employer or manager.** This loose and varied use of an important term is not scientific. Our science requires the term with a specific meaning, properly expressed, we think, in the following definition: —

Profits are the net proceeds, — the surplus of values, after all necessary expenses of production have been deducted.

According to the principles laid down in previous chapters, the following items are to be included in necessary expenses: —

1. **Wages** paid for common and skilled labor of all grades.

2. **Salaries** paid for oversight and management, including all superintendence and administration, mechanical and financial.

3. **Interest on capital invested.**

4. **Insurance** to guard against certain risks.

5. **Taxes** paid for protection from the government.

If the products of an industrial establishment provide for these expenses, and nothing more, the business just sustains itself, but it yields **no profits.** In such a case, since all parties get their legitimate compensation, they may be satisfied to run on so for years. But in general the expectation of profits is the necessary stimulus of enterprising industry, and the aim is to make profits as large as possible.

When one combines in himself the functions of operative, manager and capitalist, wages, salary, interest and profits if there be any, all come to him. No question of distribution arises; but even in such a case, it is well for one to keep his accounts so as to define what is properly to be reckoned as wages for labor, salary for management, and interest for capital: only so can the profits of the business be accurately estimated.

Though a common usage, it is yet a serious error, **to express the measure of profits in a business, by a percentage on the capital invested,** as though the profits belong exclusively to the capitalist. In many cases, the labor is of more account than the capital. A shoemaker with a capital of five hundred dollars may, by untiring industry through a year, make his proceeds count a hundred per cent on that amount, and yet receive an insufficient return for his labor. Twenty per cent on five hundred thousand dollars invested in a great manufacturing establishment may pay well for labor and management and ordinary interest on capital, with a large margin for profits. Hence it is often better for one to work

for wages or a salary in connection with a large establishment, rather than attempt an independent business. So with truth is it said, "It is in the nature of trade and manufacture that **great capital drives small capital out of the field**: it can work for smaller returns."

It is evident that, according to our definition, profits can be legitimately increased only in one of two ways, either **by reducing expenses, or by increasing the amount and the value of the products.** It is for a wise and faithful manager carefully to study both sides of the problem; and hence his is the most important service, and it deserves the highest compensation. But it does not follow, therefore, that the entire profits should be appropriated to the manager, or "*entrepreneur*," as the French term him.

For a fair distribution of profits, there must be combined with these views of the nature of profits, a full recognition of that **partnership** which we have seen to be a fundamental principle of productive industry. In this partnership there are three members, — **the capital, the executive capacity, and the labor.** Each is entitled to a fair compensation for the service rendered, and each is entitled to a share in the surplus fruits of their co-operation. We may not say either an *equal* share or *equal* compensation; because capital takes the greater risk, and is liable to the heaviest losses, and it is fair that this chance of greater loss should be balanced by a chance of greater gain; because, also, the amount

of profits is due chiefly to the executive wisdom and energy of the manager, and he is entitled to a proportionately larger share in the returns. After due allowance for these considerations, however, there is a share which justly belongs to the labor, and which should be distributed among those who make up this third member of the firm, according to each laborer's merit and grade in the service rendered.

The rising antagonism between labor and capital will be best counteracted, we believe, by measures adapted to secure a fairer distribution of profits on this basis. To devise the best measures for this will require much earnest study, and experiments carefully conducted with good-will and patience on both sides. No doubt it will be found that measures must be varied to suit different cases and circumstances. What works well in one case may not do so in another. Tact and common sense must be used to apply the principle which is one and common. There are obstacles in the way of the immediate adoption of such measures. False ideas on the part of both workmen and their employers must be corrected, mutual confidence must be established, and common usage must be changed. These are things not to be accomplished in a day. Yet there is good reason to believe that if attention is turned earnestly on the study of this specific object, obstacles will be overcome, measures will be defined and successfully applied, and the result will be more of justice, harmony, and efficiency, in the actual operations of industry, and abiding relief from dangers which threaten the peace and prosperity of the nation.

Co-operative associations are designed to secure a more equitable distribution of profits in the interest especially of workmen. Their ordinary plan is for a number of workingmen of some one branch of industry to join their means and their hands to carry on business, expecting to divide the entire proceeds among themselves by some defined rule of equity. Some such organizations have succeeded for a time, but most of them have soon ended in failure. The reasons are obvious. There is apt to be a deficiency of capital, which puts the association to a disadvantage in competition with other establishments. Again, jealousies among the members are apt to spring up, and prevent the harmony and unity of action which are essential to best results. A greater difficulty is to secure the managing ability, on which, after all, success mainly depends. A majority-vote in mass-meeting cannot fulfil the function of a "captain of industry" of judgment and will-power to plan and direct. Such associations, it has been said, aim to dispense with the "*entrepreneur*," and divide his proper remuneration. This means only that the laborers are trying to appropriate all the profits to themselves, which involves essentially the same mistake as when the capitalists or managers try to take the whole. The partnership heartily entered into, vigorously maintained, and so conducted as to insure the rights of each class of members, is most likely to establish an equitable distribution of profits.

EXERCISES.

1. A cabinet-maker with a capital of $15,000 employed six men, the average of whose wages was $12 each per week; paid a bookkeeper a salary of $600, and managed the business himself. He paid for rent, taxes, and insurance, $1,200, and legal interest was seven per cent. After replacing capital consumed, the proceeds of the business for a year amounted to $12,000. Allowing $2,000 for his compensation as manager, what were the profits for the year?

2. For the subsequent five years the proceeds averaged $15,000 per year, and ten per cent of the profits were annually distributed to the employés in addition to wages and salary: what amount of profits fell to each of the parties during that period?

3. The next year, by sharp competition, increased cost of lumber, and dull trade, the proceeds were reduced so as barely to meet expenses, as before defined: why would it be worth while to keep on in such a case?

4. Then came a financial revulsion; and for three years the proceeds annually came $2,000 short of meeting expenses, and the pay of all employés was reduced ten per cent: what was the actual loss to the several parties?

5. With the return of better times, $5,000 added capital was invested in the introduction of steam-power and machinery, by which the annual products were doubled in amount; and for the next five years the annual proceeds rose to $20,000: what were the annual profits? Distributed as before, what share fell to each of the parties?

6. Estimate the profits of the business for the whole period of fifteen years.

7. If the whole establishment had been burned up at the time of greatest depression, with insurance to the amount of only two-thirds the value, whose would have been the loss?

8. Suppose a blacksmith, working by himself with a capital of $300, earns in a year $400: has he made any profits?

9. If a great cotton-factory produces annually 20,000,000

yards of cloth, and the superintendent contrives to reduce the cost of production one mill per yard, how much will the profits thereby be increased, supposing prices are unchanged?

10. The cost of production remaining the same, suppose the market-price to advance one cent a yard: how much will the profits be increased?

11. What effect on the efficiency of labor, and economy in the use of materials, may be expected from allowing laborers a share in the profits?

12. State the main features of any co-operative association you know of, and its results.

CHAPTER IV.

REVENUES OF THE GOVERNMENT.

Good government, efficiently administered, is essential to prosperous industry and social enjoyment. Every citizen derives a benefit from such a government, and may fitly be called on to contribute a portion of his wealth for its maintenance. The government represents a common public interest superior to any private interest: its claims therefore justly take **precedence** of all others. Since the public revenues must be drawn from the proceeds of a people's industry, the consideration of this topic comes properly under this division of our science which treats of distribution.

Taxation is the means employed to gather from a people the revenues of its government. To devise and apply an equitable system of taxation, is one of the most difficult problems of legislation, — a problem which should be studied in the light of political economy, with reference to its one object; viz., **the raising of a revenue for the state.**

In despotic governments, the will of the ruler determines arbitrarily both the measure and the methods of taxation, and great inequality and oppression prevail. It is a fundamental principle of

free and just government, that **taxes shall be imposed by representatives of the people** through reasonable and proportional assessments on all estates, and that they shall be collected by agents acting under defined powers and direct accountability.

Adam Smith's Maxims. The father of modern political economy laid down four rules of equitable taxation as follows: —

1. **"The subjects of every state ought to contribute toward 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.**

2. **"The tax which each individual is bound to pay ought to be certain, and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person.**

3. **"Every tax ought to be levied at the time and in the manner in which it is most likely to be convenient for the contributor to pay it.**

4. **"Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state."**

These maxims embody leading principles of equity, by which all schemes of taxation may be tested.

Direct and Indirect Taxation. According to Mr. Mill's definitions, "A direct tax is one which is demanded from the very persons who it is in-

tended or desired should pay it. **Indirect** taxes are those which are demanded from one person, in the expectation and intention that he shall indemnify himself at the expense of another." A poll-tax, a tax on land, live-stock, tools, furniture, &c., and an income tax, are examples of direct taxes. Duties on imported goods, and excises on home manufactures, are examples of indirect taxation; the importer or manufacturer who pays the tax, adding the amount of the tax to the price of the goods, to be ultimately paid by the consumers.

Direct taxation fairly applied conforms most fully to the principles embodied in the maxims just stated. But it involves labor and expense in collection, prompts concealment and evasion, especially with respect to personal property, and provokes dissatisfaction, because men, when they pay the tax, know and feel the full force of the burden.

Indirect taxation violates nearly all of Mr. Smith's maxims, and imposes the burden unequally, each one paying not according to his ability, but according to his *necessities*, so that a poor man with a large family often contributes in this way for the support of the government much more than his neighbor with ten times his wealth. But indirect taxes, being laid in gross on goods at the port of entry or at the manufactory, are easily collected, and are cheerfully submitted to, because no one thinks of the tax he pays when it is hidden in the price of the goods he buys. Direct taxes are certainly most in harmony with the genius of a republican government whose strength lies in the intelligent support of a free

people. **Such a people ought to know what taxes they pay, and when and how they pay them,** that they may watch with becoming jealousy over the public expenditure, and make their voice heard in all legislation on matters of finance. It must be confessed, however, that no nation has yet attained to such a standard of general intelligence, honesty, and patriotism, as warrants the dispensing with the convenient and easy method of raising revenues by indirect taxation. We have need, therefore, to give it some further consideration.

Tariffs. This term signifies strictly the lists of imported articles subject to tax, with the duties laid on each class. **Protective tariffs,** designed to encourage certain home manufactures, will be considered in another place. The tariff is noticed here only as a **revenue measure,** — one form of indirect taxation.

Duties are imposed in two forms, **specific** and **ad-valorem. Specific duties** are taxes laid on articles by **the piece, the pound, the yard, the gallon,** &c., without reference to their value. Ad-valorem duties are indicated by a **defined percentage of the value** of each class of goods. Specific duties are **simple and clear.** The collector needs to know only the quantity of the goods, and easily reckons the duty to be paid. But in this case the tax is **unequal.** Suppose a duty of ten cents per pound laid on tea. The value of the tea consumed by the poor is thirty cents a pound, while that used by the rich is valued at a dollar or more: hence the poor man pays a tax

of thirty-three and one-third per cent, while the rich man pays only ten per cent on the valuation. Ad-valorem duties lay the tax more equally, but involve more difficulty in collection, since the value as well as the quantity of the goods must be ascertained. This opens the way to fraud by means of false invoices: hence the government is compelled to employ a host of appraisers, who come into altercations with importers, and sometimes take bribes, and sometimes refuse to recognize an invoice that is honest and true.

For revenue purposes, the best tariff is one that lays **a specific duty of moderate amount on a comparatively short list of articles which are not produced at home.** In many countries, the heaviest duties are laid on commodities, such as intoxicating liquors, the consumption of which is regarded as injurious. As a check on immorality, the measure is of little avail, for experience shows that the consumption of such articles is not materially diminished by the tax; but, as a source of revenue, it is found to yield large results.

National and State Taxation. The Constitution of the United States authorizes Congress to impose taxes in every form, subject to the qualifications that direct taxes must be apportioned to the several States according to their respective populations, and that all duties, imposts, and excises must be uniform throughout the United States. It expressly forbids any State to lay any imposts or duties on imports or exports, except for executing

its inspection laws. Hitherto, the National government has been sustained for the most part by **indirect** taxes, in the form of **duties on imports,** while the State governments depend on **direct** taxes. To provide for the expenses of the recent war of the Rebellion, however, the general government adopted four other forms of taxation, which deserve a brief notice: —

a. **Excises.** Congress laid taxes on certain articles of domestic manufacture, to be collected by the sale of stamps, which must be affixed by the manufacturer, or by an officer of the government, to the goods, before they were thrown on the market. This is an indirect tax, which involves great expense in collection, since the government must keep agents in every part of the country to guard against evasion of the tax. From a large list of articles thus taxed at first, only liquors and tobacco are now taxed in this way.

b. **Stamps.** This, too, is an indirect tax, levied by requiring stamps to be attached to various instruments and forms of business in order to give them legal force. By this means the postal service is almost wholly provided for at a very slight charge to the people. It was also applied to bank-checks, deeds, notes, wills, &c. It is an economical and equitable mode of distributing the public burdens, for it touches directly the wealth of the country **in transition,** and at points where it needs government protection to insure security. Great Britain raises over fifty millions of revenue each year from the sale of stamps.

c. **Licenses.** This is a tax imposed by requiring men to buy, at specified rates, government certificates authorizing them to engage in certain kinds of business. It is objected to such taxation, that it discriminates unequally among industrial occupations. In its favor, it is urged that it draws from parties such as peddlers, insurance-companies outside the State, and some professional men who could not otherwise be reached, a just return for the protection of the government which they enjoy.

d. **Income tax.** This is a form of direct tax levied by imposing a certain percentage on the annual incomes of individual citizens. Theoretically, this is the most equitable of all taxes, since it touches men exactly according to their abilities. If, however, the percentage is uniform for all incomes, it must bear heavily on those whose incomes are small. To relieve this, two measures are adopted. The first is to exempt all incomes below a certain amount; the other is to establish two or three grades, and make the percentage greatest on the larger incomes. The chief objections to an income tax are the difficulty of ascertaining men's real incomes, and the labor and cost of collecting it. The British government has nevertheless, employed this method of taxation for forty-five years so successfully, that nearly one-sixth of the annual revenue of the kingdom is derived from this source. The United States collected an income tax for ten years, from 1863 to 1872. In 1866 the amount thus collected was about sixty-one millions. Actual experience under the law tended to relieve difficulties and objections.

Under State authority, all taxes are **direct,** laid on **persons** by poll-taxes, on **property** by assessment, and on certain kinds of **business** by licenses. The **poll-tax** is ordinarily a small amount levied on every male citizen who has attained his majority. It recognizes the protection which the government extends to persons, and is often made in theory a condition of the electoral franchise.

Taxes on property are imposed in all the States by essentially the same method. Assessors are elected in every town and city, who estimate the value of all property subject to taxation. Real estate is commonly set down at from twenty-five to thirty per cent less than its market value. Personal property is sometimes returned in prepared lists by the owners, and sometimes estimated by the assessor. In the first case, the owners may be required to make oath to the completeness and truthfulness of their returns; in the other, if the owner thinks the assessor's estimate too high, he may "swear it down" to what he believes to be the true amount. The original assessments are in most of the States referred to **boards of equalization** appointed for each county; and their judgment is subsequently reviewed by a general board for the State. Upon the basis of the valuation of property so determined, the taxes for State purposes are apportioned to each county, city, and town. Each county, city, town, and school-district is authorized to levy taxes for its local purposes. These also are apportioned on the basis of the State valuation, except in case of certain city improvements, such

as opening, paving, and lighting streets, which are charged upon the adjoining property. Sound economy dictates that all these taxes be collected in each town or city-ward at one time by one collector, furnished with a tax-list covering all.

If other means fail to secure the taxes, goods may be seized, and lands may be sold, to make up the amount required, the title thus given being made complete after a certain period allowed the original owner for redemption.

Equitable taxation requires property of every kind to be assessed. In actual experience, however, property in the form of real estate bears the larger share of the burden. Personal property can be easily concealed or removed by those who wish to evade their share of the taxes; and, with men of weak consciences, the temptation is strong to make false returns, and even to commit perjury, when detection is almost impossible.

Property in railways, banks, &c., is usually taxed as a whole by the State within whose jurisdiction it lies. If each individual stockholder is also taxed for his share, there is evidently a double taxation on that property.

The same thing happens often when one is required to pay a tax on the evidences of debt which he may hold, such as notes, bonds, mortgages, &c. These things are only symbols, whose multiplication makes no increase of real wealth. Suppose A B holds his neighbor's note for two thousand dollars, secured by mortgage on a farm worth four thousand. The property is one, the farm. The note and mort-

gage only indicate that A B has a lien on that property for one-half its value. The credit given and received has added nothing to that value. The one property is justly subject to taxation. Who shall pay the tax? In strictest equity, each of the parties should pay a half; but, in the very terms of the mortgage, the mortgagor engages to pay all taxes that may be levied on the land. This is a part of the contract, and the interest is adjusted to that usage. If the mortgagor is taxed for the whole farm, and the mortgagee is also taxed on the mortgage he holds, there is evidently a **double taxation** on two thousand dollars.

These cases show the difficulty of adjusting a system of taxation in accordance with strict equity. A perfect system seems an unattainable ideal; but it will be approximated just in proportion as **sentiments of honesty and patriotism** are cultivated among a people, and as legislators apprehend and apply in their action on this subject the fundamental principles of Political Economy.

EXERCISES.

1. What source of revenue has our government other than taxation?

2. What was the effect on the people of Rome, when the government was wholly maintained by the plunder of the provinces, without taxation at home?

3. Is it desirable that a people should be altogether relieved from contributing to the support of their government?

4. On what grounds are the public taxes made a first lien on all private property?

5. Is it right that an aristocratic or priestly class should be exempt from taxation?

6. Can you tell how the Turkish government levies its taxes, and what is the effect on the industry of its people?

7. What question respecting taxes was a prominent issue in the war of the American Revolution?

8. Can you state the mode of collecting taxes in France in the eighteenth century, by "farmers-general," and the wrongs that attended it?

9. How does taxation by duties on imports conflict with the first and second maxims of Adam Smith?

10. Why is the close of the year generally chosen in our country as the time for collecting taxes?

11. Is that an economical kind of tax of which half the amount is consumed in the cost of collection?

12. Illustrate the difference between specific and ad-valorem duties.

13. Can you state some of the complications and absurdities of our American tariff in this year, 1879?

14. If by requiring stamps of small amounts on bank-checks, notes, deeds, wills, &c., a revenue of several millions can be raised, with no expense for collection beyond the cost of printing the stamps, is there any good reason why the measure should not be adopted?

15. What good reasons can be urged by honest and patriotic men against a moderate income tax?

16. Is it a good sign for our nation, that the people seem averse to direct taxation, the measure and pressure of which they can exactly know and feel?

17. Is it any less dishonest, by evasion, to cheat the government out of a legitimate tax, than to cheat a laborer out of his wages, or a creditor out of his dues?

17. Illustrate the method of assessing and collecting State taxes, by the case of a tax-receipt from the collector of your own town or city.

19. What is the meaning of a "tax-title" to land?

20. State any instance of double taxation which you know of.

21. On what grounds may school and church property be exempt from taxation?

PART IV.

EXCHANGE.

WEALTH is transferred from producers to consumers by manifold exchanges. The division of labor which increases production necessitates exchange. With advancing civilization the processes of exchange are systematized into a very complicated and extensive social machinery, — how complicated, one may see if he will try to trace the cotton in the shirt he wears back to the field on which it grew; how extensive, will appear if one will consider how many parts of the world contribute to the sum of daily comforts with which his table and his home are furnished. Hence, in the science of Political Economy, exchange holds the place of highest importance; and some have proposed to adopt, as a title for the science, the term **Catallactics, the science of exchanges.**

A full but concise presentation of the first principles of this part of our subject will be given in several distinct chapters. Only by a clear apprehension of these principles can the hard problems of economics be solved.

CHAPTER I.

THE NATURE, NECESSITY, AND AGENTS OF EXCHANGE.

As a specific act, **exchange is a transaction in which two parties voluntarily transfer to each other the right of property in certain items of wealth which are regarded as equivalents.** Observe that the transfer must be **voluntary,** else it involves robbery: it must convey on each side **a right of property,** else it is fraud.

It is often said that exchange may be either of **commodity** for **commodity,** as when one gives a table for a pair of boots; or of **commodity** for **labor,** as when one gives fifty pounds of flour for a day's work at mowing; or of **labor** for **labor,** as when a mason gives a day's work in exchange for a carpenter's work for a day. This is proper enough to indicate the precise form of the transaction; but in reality it is not the labor itself, but the **value** in some form of wealth, the product of the labor, which is contemplated.

Value is thus the central term of this branch of our science. Just here let the student turn back to the definition and explanations of value as given on pages 7 and 8. From the views there given we

derive the following formula, applicable to all exchanges: —

Value = cost + or — the effect of the ratio of demand to supply.

The general arena of exchange is called **the market,** a term which signifies not so much a locality, as the actual relation of demand to supply at the place and time contemplated for making exchanges. By **demand** is meant the extent of desire for an article. **Supply** expresses the quantity of the article at hand to meet that desire. Between these two factors competition works continually variations in the value of commodities. When demand is great in proportion to supply, value is enhanced by competition among the buyers. When supply is great in proportion to demand, value is reduced by competition among the sellers. So, for the variation of value under the law of demand and supply, we have another simple formula, as follows: —

Value rises directly as the demand, inversely as the supply.

The tendency of **free competition** is to produce an equilibrium between supply and demand (see p. 79), and so to make **cost** the general standard of value. Mr. J. S. Mill distributes all things that are bought and sold into three classes.

First, **There are things of which it is physically impossible to increase the quantity beyond certain narrow limits.** Such are ancient sculptures, paintings of old masters, rare books or coins, and wines produced only under peculiar conditions of soil, climate, and exposure.

Second, **There are things which at a moderate outlay of labor and capital can be multiplied indefinitely.** With laborers and machinery enough, such things as cotton and woollen goods, shoes, hats, &c., might be multiplied a thousand-fold, or at least till the limit of the earth's capacity to yield materials is reached.

Third, **There are things which can be produced in limited quantity at a given cost, but to increase the quantity involves a much greater proportional cost.** Such are the agricultural products of a defined area of land. A field that yields twenty-five bushels of wheat to the acre may be made to yield forty bushels, but the cost will be more than doubled.

With these distinctions in mind, the following fundamental principles of exchange, as presented for the most part by Mr. Mill, are plain and almost self-evident.

1. **Value is a relative term.** All goods sold are paid for in goods of another kind. Whoever sells a thing becomes in the act a purchaser of some other thing, and the value of each is simply what it brings in the trade. The values of all things can never, therefore, rise or fall at once. A rise of value on one side implies a fall on the other side.

Here the distinction between value and **price** must be observed. Price is value expressed in terms of the single article **money.** If the amount of money in a country be suddenly increased, as was the case in the United States in the years from 1861 to 1865, the prices of all things will rise together, because money is cheapened. The prices of wheat and

broadcloth may thus be doubled at the same time without changing the value of either: it will take the same amount of wheat to buy a yard of broadcloth as before. If it takes twice as much wheat to buy a hat this year as it did last, the fact implies a change of value on one side or the other. If the hat holds the same relation to all other articles as before, it is evident that wheat has for some reason declined in value. If all other articles must be doubled to buy the hat, it is evident that the hat has risen in value.

2. **The temporary or market value of a thing depends on the demand and supply;** rising as the demand rises, and falling as the supply rises. As a thing grows cheaper, however, under an increased supply, the demand increases in greater proportion; because every step downward in the value widens the circle of those who are able to buy the article.

3. **Things have also a permanent, or, as it may be called, a natural value,** to which the market value, after every variation, tends to return; and the oscillations compensate for one another, so that on the average commodities are exchanged at about their natural value.

4. **The natural value of some things is a scarcity value;** but most things naturally exchange for one another **in the ratio of their cost of production,** or at what may be termed their **cost values.**

5. The things which are naturally and permanently at **a scarcity value are those of which the supply cannot be increased** at all, or not sufficiently to satisfy the whole demand which would exist for them at their cost value.

6. **A monopoly value means a scarcity value.** Monopoly cannot give a value to any thing, except through a limitation of the supply.

7. Every commodity of which the supply can be indefinitely increased by labor and capital exchanges for other things proportionally to the cost necessary for producing and bringing to market **the most costly portion** of the supply required. **The natural value is synonymous** with the cost value; and the cost value of a thing means the cost value of the **most costly portion of it which the market demands.**

8. If competition be free, the perturbations of value caused by variations of demand and supply continue only during a period which cannot exceed the length of time necessary for increasing or diminishing the supply. Under the pressure of competition, demand and supply rush towards an **equilibrium**; but the condition of stable equilibrium is when things exchange for each other **according to their cost,** or at what is fitly called **their natural value.**

The Necessity of Exchange springs from **the diversity of nature's resources, the diversity of human capacities and tastes,** and **the wide reach of human desires,** all of which prescribe for human industry the principle of **division of labor.** As men advance in intelligence, their desires are multiplied; at the same time, by discovery and invention the resources of nature are unfolded in full proportion. Desire stimulates invention, and successful invention wakes new desires. There is no assignable limit to the

development of either men's desires or nature's resources.

Out of man's social nature spring sympathies, attractions, interests, which widen his associations, and multiply his opportunities, as both a giver and receiver of good things. Hence comes a law of **interdependence,** which forbids that any man should live either for or by himself alone. Thus human industry is varied; and each does that for which he is best fitted, or which he likes best, while mutual exchanges enable each to get what he wants by giving what he can spare.

Where the diverse labor of many is combined to produce a single object, **exchange is the indispensable means of breaking up and distributing the value,** so that each may receive his share, and use it to meet his wants. The little screws which a man in a watch-factory makes by the thousand will not themselves feed or clothe him. The part which each one of a hundred men contributes to the building of a steam-engine is of no use apart from the whole, and yet no one can rightly appropriate the whole. But the complete watch or engine may be exchanged for food and clothing and other things which are desirable and exactly suited to the needs of all concerned.

The same principles apply with equal force to exchanges between different **nations.** In many cases **the aptitudes of different nations** for the creation of peculiar products is fixed by unchangeable geographical and physiological law. Moreover, a nation **at one period of its history** is best adapted to produce certain articles. It is obviously best that each

nation should devote its energies to the production of those things for which it has the greatest facilities, and by exchange with other nations make the surplus of its own products provide the products of other countries which its people need. Through the mutual intercourse of nations for trade, civilization is developed, and the happiness of the human race is increased. Thus **the conditions of our being demand the processes of exchange as imperatively as the processes of production.**

The Agents of Exchange. Exchange is a distinct department of useful industry, by which commodities are transferred from the producers to the consumers, in such places, at such times, and in such quantities, as are most convenient. It involves labor, and so adds to the **cost** of objects; it adds also to their **desirableness,** by bringing them within the reach of those whose wants are to be gratified. Thus in both ways it enhances their **value** to the benefit of both parties. By it the producer is helped to dispose of his products, and the consumer gets things just where and when and as they will best meet his wants. Obviously this labor will be most economically performed by persons who devote themselves exclusively to it, receiving a fair compensation for their service. This compensation is made up by a percentage charged on the values transferred, of which each party pays a portion; that is, the producer sells his products to the exchanger for something less than he would ask of the consumer directly, and the consumer pays the ex-

changer a little more than if he bought directly of the producer. But the expense of conducting the exchanges is far less than it would be without such intervention.

Merchants is a general name for those who devote themselves to the business of exchange; but the term embraces a great variety of agents. We can attempt only a concise exposition of a few names and services. In the commerce of every community are to be recognized two great currents of trade, — **an outgoing current** and **an incoming current.** The outgoing current bears away what a people have to spare; the incoming current brings back what a people want. In a new country a **retail merchant** stands at the turning-point where these currents meet. He gathers up in small quantities the surplus products of his neighborhood, and starts them on the current of outgoing trade, to float, it may be, half round the world to find their ultimate consumers; in exchange for these, he dispenses to his neighbors small quantities of foreign products which they need.

As population increases, and products are multiplied, another agent appears on the ground, called **a middle-man, a produce-buyer, a commission-dealer.** By arrangement he buys up for some house at a commercial centre the grain, the cotton, the wool, the pork, the butter, or whatever of one kind or of many kinds of produce may be ordered, and is paid by a percentage on the values purchased. With the introduction of railways come in the **warehouse-men,** doing the same thing at every station. From these the goods are sent to the **consignee** or **produce-broker**

in the interior city, — Chicago or Buffalo, for instance. They pass on the goods to the **shipping-merchant** in the great seaport, like New York or Baltimore, thence to be exported to the ends of the earth.

In former times, when manufactured articles were made by hand, in a small way, at the homes of workmen, they were gathered and thrown on the current of trade in much the same manner. But since the use of machinery has concentrated manufacturing in large establishments, these products are passed out upon the currents of trade through the agency of **factors or commission-merchants,** each factory or mill having its own agent of this kind at the commercial emporium, who manages the sale of its goods in the general market, and is compensated sometimes by salary, oftener by a percentage on the amount of sales. A **domestic** factor renders this service in the country in which the goods are made; a **foreign** factor attends to the business in another country.

The incoming current of trade may be best traced by taking a stand at a port of entry, — say New York. Here the agency of the **importer** is first to be noticed. He studies the wants of his own country, and the products and prices of foreign countries generally, with respect to a particular class of commodities, and imports what he thinks the people will use. These goods he sells generally in bulk, by sample, to **wholesale merchants** in his own and other cities. They in turn open them more fully, and sell by bale or case to **jobbers.** Of them the **retail**

merchants buy by the piece or small package, to be passed to individual consumers in such quantities as they desire, and the distribution is complete.

To this list of agents must be added **bankers, brokers,** &c., — the whole class of those who have to do with **money** and **credit,** the instruments of exchange; also those who as **underwriters** and **insurers** distribute the risks, by land and by sea, involved in trade.

Thus in outline we get a view of the manifold processes and agencies of exchange. Their complications are intricate; yet by a hidden law of self-adjustment the machinery works out its legitimate result, so that the wants of men are met with little waste of the products of industry. Rapid exchange is the necessary stimulus to production. When trade is dull, all industry languishes: when it is brisk, labor works on with cheerful hope, assured of its reward. The legitimate service of exchangers adds something to the utility of all things that pass through their hands. It tends to cheapen every thing offered in the market, and to enrich the market by a thousand-fold multiplication of comforts and luxuries for the life of man. How absurd, then, the outcry sometimes made against merchants, that they **produce nothing,** and are but drones and leeches of society!

Nevertheless sound economy requires that the number and expense of these agencies be reduced as far as practicable, consistently with the end to be attained. There is also good reason to protest against the **abuse** of a necessary instrumentality

sometimes witnessed, when a trader or a company of traders combine to produce an **artificial scarcity,** that by suddenly raising prices they may rob the people, and enrich themselves. Those operations which produce **corners in wheat,** and the like, outrage the first principles of justice and honesty. Too many of our so-called "boards of trade" tolerate and encourage such abuses of trust and power.

EXERCISES.

1. Trace the exchanges through which the material of your knife has passed, from the iron-ore in the mine, to your hand.

2. If you pay a hundred dollars for a stolen horse, why is it not a valid exchange?

3. What two elements define the extreme limits of value?

4. Why does a merchant need to study daily the newspaper-list of current prices?

5. How does the failure of the crop in England increase the value of American wheat?

6. When we have a large American crop and no foreign demand, how is the value of wheat affected?

7. What gives the extraordinary value to a genuine painting done by Raphael?

8. If it required eight bushels of wheat to pay for a ton of coal last year, and only six bushels this year, how can you tell which article has changed in value?

9. When will a change of *price* indicate a change of value?

10. The introduction of the power-loom increased the supply of cotton-cloth a hundred-fold. What effect had this on the value of the article? What effect on the demand?

11. What is the effect of a patent-right on the value of a patented article?

12. What does the maxim, "Competition is the life of trade," mean? Is it true?

13. What useful functions do merchants perform?

14. By which of the three occupations, agriculture, manufacture, or commerce, do men grow rich fastest? Which involves the greatest risks?

15. When the commerce of a nation is prosperous, which will have the greater value, its exports or its imports?

16. Why is it right that the retail merchant should charge a higher percentage on the price of the goods he sells than the wholesale merchant?

CHAPTER II.

MONEY AN INSTRUMENT OF EXCHANGE.

We have seen that the processes of production are much facilitated and improved by the use of proper instruments or tools. Proper instruments are no less necessary for the processes of exchange. **Barter,** that is, the direct exchange of one commodity for another, involves many inconveniences and serious difficulties.

For instance, a man has made a table which he wants to exchange for bread, shoes, and a hat. His product is one thing, and indivisible: the things he wants are many and diverse. How can he effect the desired exchange? It will take a builder, with six hired carpenters, three months to build a house: how shall he provide his workmen with daily food, &c., unless by some device he can draw on the value of the house before it is finished? When a man does nothing but make rivets for knife-handles, how is he to subsist by exchange in kind?

A yet greater embarrassment in exchange by barter comes from the difficulty of **adjusting the equation of value between different articles.** How is it to be determined whether a shovel is a fair equivalent for a pair of boots, or a bushel of wheat for a book? By what rule shall it be settled that a farm-laborer

is fairly compensated for a month's work by a suit of clothes?

Under the pressure of these difficulties, men have been driven to invent means of relief. Savages have adopted certain pretty shells, which they called wampum, as counters for exchanges. By a common instinct, civilized peoples of different ages and countries have used silver and gold as a medium of exchange.

In the complicated operations of modern commerce, **money** and **credit** are the two great instruments of exchange. In the order of both time and importance, money comes first; and without it the other has no meaning. Yet credit, though only a symbol of money, is the grand instrument which accomplishes the greater part of the world's exchanges; when properly regulated, rendering a service whose value cannot be measured, but, when abused, causing unspeakable convulsion and disaster.

The nature and functions of these two instruments will be presented in this and the next chapters.

Money is some useful product of labor, universally desired, to which all other commodities are referred as a measure of their relative values; which is employed also as an intermediary instrument for the actual exchanges of different kinds of wealth for each other.

It is of the highest importance that all which is embraced in this long definition be clearly apprehended. To unfold and illustrate the chief points, we present them in two sections.

SECTION I.—THE FUNCTIONS OF MONEY.

Our definition indicates two functions of money.

First, Money establishes a universal **standard of value.**

Second, Money is a **medium for the exchange of values.**

As a **standard of value,** money performs an office like that of a pound-weight, or a yard-stick, or a gallon-measure. These instruments are adjusted to measure each a certain quality, viz., weight, or length, or bulk. Just so the money-dollar is adjusted to measure the quality called **value.** Obviously, whatever is used to measure a quality in another thing must itself possess that quality. Hence, **only a thing of value can measure value.**

But, according to the definition of value heretofore given, two elements combine in the value of any object; viz., **utility,** or desirableness, and **cost,** the exponent of labor. Whatever substance, then, is used as money, must be desired as a means of gratification; and, the nearer it comes to being **always and everywhere desired,** the better is it fitted for its purpose. It must be also a substance which can be obtained only by labor; and, the more **uniform** the amount of labor necessary to obtain it, the better will it serve its purpose as money. It is indispensable that these two elements be combined. Hence our definition says money is "**some useful product of labor,**" for nothing else can have value.

Furthermore, it is important that any standard of measurement be **fixed with exactness, and kept as invariable** as possible. An India-rubber yard-stick would be a very uncertain standard of length. The French metric system has for its base the ten-millionth of the quadrant of a terrestrial meridian, called a **metre.** It cost seven years of great labor to determine it with exactness; but, once ascertained, it stands forever unchangeable, and furnishes a standard unit of measurement for all the material qualities, length, surface, volume, and weight. Nature furnishes no such absolutely fixed and invariable unit of value; but certainly, for their standard of value, men need to select the thing in nature which is most stable and unalterable in the elements of utility and cost.

Such a substance, once adopted and generally accepted, determines by comparison with itself **a price** for every thing; and then, in the transactions of trade, all things are exchanged directly or indirectly by these prices. But let it be ever remembered, that the price of a thing is simply its **value measured by money;** and, just in proportion as the value of money is **variable,** all operations of exchange must be attended with uncertainty and confusion.

In its second function, as a medium of exchange, money performs an office like that of a basket, or a wheelbarrow, or a cart, — it is simply an instrument of transfer. The real object of all trade is to effect an exchange of commodity for commodity. The

difficulty of doing this directly by barter has been already noticed. Money comes in to relieve that difficulty. By means of it, two simple exchanges readily accomplish what could not be effected by one. Thus the man can sell his table for money; that is, he puts the value of the table into money, just as the farmer puts his eggs into a basket. The money is easily divided; and the baker, the shoemaker, and the hatter are ready, each for a portion of the money, to give him the bread, the shoes, and the hat he needs. In all the manifold and complicated operations of trade, money, as it passes from hand to hand, is fulfilling this simple office of a vehicle of transfer, or, as it is better termed, a medium of exchange. One silver dollar may thus effect twenty different exchanges in a day, just as a wheelbarrow may be used to transport twenty different loads.

Such a common medium of exchange must have three essential qualities.

First, **Precision and stability of value**: the same qualities which we saw to be essential for the first-named function of money.

Second, **Universal acceptableness,** so that it will be readily received by everybody for things offered in sale.

Third, **Divisibility** into parts, representing, without loss of value, different degrees of value, so as to furnish an exact equivalent of any required amount.

We can conceive that one substance might be adopted as a standard of value, and another em-

ployed as a medium of exchange; but this would involve many practical inconveniences. For the wide and varied operations of exchange, it is quite necessary that **the same substance should fulfil these two functions,** combining in itself the qualities essential for both.

This does not imply, however, that money must be actually used as a medium in every exchange. With a standard of value once fixed, commodities can be measured by it, and have their price fixed, and then be directly exchanged for each other. Thus the farmer's wife brings her basket of eggs and her firkin of butter to the village grocer. The price for these articles is fixed in terms of money; the prices of the grocer's tea and sugar and spice are fixed in the same way. Then, by a simple comparison of prices, the one class of articles is set over against the other, and the trade is consummated without any payment of money on either side. Just this thing is going on all the time in the commerce between New York and Chicago. By processes hereafter to be explained, car-loads of goods are balanced off against car-loads of wheat, to the amount of millions of dollars, without any actual payment of money. Thus most of the world's trade is really exchange in kind. At every step **the reckoning is kept in terms of money, and in the last settlement the balance must be paid in money.**

In the multifarious transfers of trade, money comes into close identification with all wealth; for **every thing that has value comes at some time to have its price, that is, to be estimated in terms of money.**

Hence the great mistake, to which thousands of men still cling, of **regarding money as the most desirable of all things to be brought into a country.** This mistake can be best corrected by a clear apprehension of the fact that money is but **an instrument of exchange,** itself forming but a very small part of the world's wealth, and capable of increasing wealth only as it carries every other kind of wealth where it is most needed to satisfy human wants.

Any article which has value may perform the functions of money. Thus, by different nations, and in different ages of the world, various articles have been employed. Peoples who live by hunting use **skins** as money. In the territory of the Hudson Bay Company the beaver-skin is the unit of value, and their money-table runs thus: "Three martens are equal to one beaver, one white fox to two beavers, one black fox or bear to four beavers, a rifle to fifteen beavers." Pastoral nations use **cattle** as an instrument of exchange. Homer tells us that the armor of Diomede cost nine oxen. The Greeks and Romans stamped their earliest coin with the figure of an ox or a sheep. Hence the Latin word for money, *pecunia*, from *pecus*, cattle. In ancient Syracuse and Britain, money was made of tin; in Sparta, of iron; in Carthage, of a preparation of leather; in Burmah, of lead; in Russia, of platinum. In Scotland, formerly, nails were used; among the Chinese, pieces of silk; in Tartary, cubes of pressed tea; in Abyssinia, salt. Slaves passed as money among the old Anglo-Saxons, tobacco in Virginia,

codfish in Newfoundland, bullets and wampum in the early history of Massachusetts, logwood in Campeachy, sugar in the West Indies, soap in Mexico. But from the time of Abraham, who paid to the children of Heth "three hundred shekels of silver, current money with the merchant," until now, silver and gold have been the chief money of the civilized world. It should be noted, however, that, when any thing used as money is devoted to another use, its functions as money cease. Gold or silver coin turned into plate, just as really as tobacco or sugar passed to a consumer, is no longer money.

We have seen that whatever is used for money must be a thing universally desired. If a nation were isolated from all others, so that its exchanges were wholly **internal,** it would be enough that **its money be acceptable to its own people alone.** But with the advance of civilization, more and more does the stream of each nation's trade flow outward to meet and cross and blend with the streams from every other nation, in the great ocean of a world-wide commerce. Hence **the necessity that the substance adopted for the standard of value and the medium of exchange be the same and uniform in all countries, the world over.**

The most profitable exchange for any country is to export what is most abundant and therefore least valuable at home, and to import what is most wanted and therefore most valuable at home. Money may accumulate in one country so as to be lower in value than other commodities. Then it is of advantage

to send away the money, and in exchange to bring in needed commodities. This can easily be done, if the money of each country is the same with that of every other.

Such a uniformity of money throughout the civilized world would tend to prevent that **fluctuation in the value of money** which disturbs and deranges all operations of exchange. With freedom for money to flow out or to flow in to one and another country, as a temporary surplus or deficiency may demand, universal commerce becomes a great reservoir, to maintain its value at a common equilibrium everywhere, just as the ocean maintains the sea-level uniform for the world.

It is obvious that the adoption by any community or state of a kind of money that is not acceptable in other countries must **exclude that people in great measure from the commerce of the world.** Hence the mischief of an irredeemable paper money, or of a standard of specie at variance with that of other commercial nations. For a country which adopts these expedients, the result is inevitably to impede trade, and to impair industry.

EXERCISES.

1. Show how division of labor creates a special necessity for money to aid exchanges.

2. Illustrate the special difficulty which a painter would find, under strict barter-exchange, in disposing of a fine picture that cost him two months' labor.

3. Can you conceive of the conditions of trade, if there were no means of fixing prices for commodities?

4. If there were no money, what inducement would

there be for one to produce more than he needed for himself, or how could one accumulate wealth by saving?

5. It has been said, "There is no machine which saves as much labor as money does." Is the statement true? Show how money is a means of saving labor.

6. Why might not the pebbles of a gravel-hill be used as money? How are slips of pictured paper any better for the purpose?

7. What qualities for use as money have precious stones, such as rubies, sapphires, and diamonds? What important quality do they lack?

8. A farmer sold fifty bushels of wheat for $50. He then bought a suit of clothes for $20, paid $10 for a gown for his wife, and $10 for shoes for his children, and bought $10 worth of sugar, rice, tea, and coffee. Illustrate the two functions of money in the transactions.

9. What would be the effect on trade, if gold and silver coin were liable, as formerly, to be debased at the arbitrary will of a sovereign?

10. The values exchanged during a single day In New York have been reported as high as $400,000,000. In what respect was money concerned with them all, and in what respect with but a small part of the exchanges?

11. Can you account for the fact that during this year (1879) the foreign trade of the United States brought home large amounts of gold and silver money?

12. How will the importer in New York decide whether to send out wheat, or money, in payment for his goods bought in Liverpool?

13. Is it good policy for a government to forbid the exportation of specie, when that will buy the goods wanted from abroad to better advantage than any thing else?

14. For what utilities besides their service as money are gold and silver desirable? Would they be used as money, if they could be used for nothing else? Are they still money, when wrought into gold-leaf or silver spoons?

15. The Spartan government tried to guard the people from avarice and luxury by making iron money for the country: can you tell with what result?

16. If other leading commercial nations make gold the one standard of value, what will be the consequence if our government insist on making silver the standard for this country?

SECTION II. — SPECIE.

The precious metals, **gold** and **silver,** possess certain qualities, peculiarly combined, which give them special fitness to fulfil the functions of money. Hence, when prepared and marked for that purpose, they are called **specie.** These qualities may be particularly noticed as follows: —

1. **Gold and silver have an intrinsic utility.** Their brilliancy, their malleability, their resistance of corrosion, and their permanence, make them desirable for personal ornaments, for plate, and for the manifold decoration of temples, houses, and equipages. For this reason they have always had a charm for all sorts of people. Their use as money only enhances, and makes more constant and steady, their general desirableness.

2. **These metals are obtainable only by labor; and the amount of labor necessary to obtain them is more invariable than that which pertains to other substances.** Now and then one has stumbled upon a nugget of pure gold of great value; but ordinarily, gold and silver are obtained by labor in long and patient search, in washing sands, breaking rocks, reducing ores, and separating the pure metals from other substances. The amount produced is dependent on the labor employed.

In respect to the two elements of value, **desirableness,** and **cost measured by labor,** gold and silver are permanent and uniform beyond any other products.

Hence their **value is more stable** than that of any thing else.

3. **These metals concentrate a large amount of value in a small bulk.** They are conveniently portable. One may easily carry in his pocket the value of a wagon-load of wheat or a car-load of cattle when put into the form of gold.

4. **These substances are capable of minute division without loss.** A gold eagle or a silver dollar may be divided into ten equal parts, and each part will have the value of just one-tenth of the original coin. Not so with diamonds, which also concentrate value. A large diamond is worth many times its weight in small diamonds; and, once broken into pieces, its original value can never be restored.

5. **These metals are of uniform quality.** Pure gold or silver is the same always and everywhere; readily alloyed to make the coin harder, but easily restored to its original purity without loss.

6. **The value of a definite portion of these substances can be easily verified.** They are malleable, easily wrought into any shape, and capable of receiving and retaining a distinct impression. Their lustre, uniform weight, and resistance to the action of acids, make it easy to detect adulteration.

7. **These metals are nearly indestructible by accident or use.** No ordinary fire consumes them; they are not decomposed by atmospheric influences; they wear away very slowly.

8. **These two metals are adapted to each other for the different exchanges, large and small, which the trade of the civilized world requires.** Gold too mi-

nutely divided would be counted with difficulty, and easily lost. For large exchanges silver would be inconvenient, on account of its great bulk. They are thus well adapted in use to supplement each other.

These metals are employed as the money of the world, not because ordained to this by authority of human governments, but because in the ordinance of nature they possess in peculiar degree those qualities so essential to represent precise amounts of value, and are ever exchangeable for the same amounts of value. In the strictest sense, these metals coined constitute the only **real money** universally recognized.

There is nevertheless **a legitimate agency of government with respect to money.** Men use money in exchanges for the same reason that they use hammers in driving nails, — because they thus save time and labor, and the work is thereby better done. Yet the convenience of money may be increased by the action of the government in two ways.

First, **By indicating a uniform instrument of exchange**; that is, by establishing the precious metals as a **legal tender.** If I owe a man for a hat, and he will not take the silver I offer in payment, but demands beaver-skins, I may not be able to procure them: if, on the other hand, I offer him leather, and refuse to give him any thing else, he may be defrauded. To prevent disputes, the government needs to enact a law, specifying what shall be a

full and valid discharge of such an obligation when nothing definite has been agreed upon. Such a law need not interfere with special contracts for the exchange of particular objects.

Second, The government can, better than any other party, prepare the metals used as money for the purpose by **coining.** It is evident that the coining of money cannot be safely intrusted to individuals. It would present temptations to dishonesty, too great for ordinary human virtue. Hence, in all civilized countries, the coining of money is regarded as the **sovereign act of the government** through carefully selected agents. In our country, this, with all other rights of full sovereignty, is vested in the National Government alone. Congress has the exclusive power to coin money.

In the coinage three things must be regarded: —

First, **The quality of the coin.** The metal of the coinage must be of uniform purity. It is of advantage to mingle with the pure metal some portion of alloy, to make the coin harder, and the better to set the standard of purity at an exact point. But the precise measure of this adulteration should be fixed by law, invariable and clearly made known.

Second, **The size of the coins** should be adjusted to the convenience of exchange. If too large, they cannot well be carried about, nor fitted to different values; if too small, they are liable to be lost, and increase the trouble of counting. Also, different pieces should be adjusted to each other so as to be conveniently enumerated. For this, the decimal system, as adopted in the United States and in France, is probably preferable to any other.

Third, **The form of the coins** should be such that each piece shall indicate definitely its value at sight. For convenience in counting and piling, flat coins are best. To diminish friction, some thickness is requisite. The surface should bear a well-marked impression; common so far as to indicate the nationality of the coinage, differing so far as to distinguish different pieces, and in full relief so as to make apparent any filing or wearing-away of the metal. The same end is subserved by milling the edges, and raising the rim. It is advisable, also, that the amount of pure metal be stamped on the face of each coin.

Since the manufacture of coins requires labor with expensive machinery, and since the act of coinage does impart a slight addition of value to the metal, **it is right that the owner should pay for the service rendered.** The charge made for coining bullion brought to the mint is called **seigniorage.** At the United-States mint the seigniorage for gold coins is only one-fifth of one per cent.

In continual use, coin becomes worn, its impression is effaced, and its value is diminished. Being thus unfitted for circulation, it is but fair that **the government should repair the loss,** and not leave it to fall wholly on the last holder. Accordingly our government provides that gold coins of the United States may be received at the treasury at their denominational value, provided that, after a circulation of twenty years, they are not reduced in weight more than one-half of one per centum.

The government has also authority to control the

circulation within its own territory of **foreign coins.** Otherwise, worn and depreciated coin of other countries may come in, and drive out its own superior money. Thus some years ago, our government ordered that worn Spanish and Mexican silver coins should be received only at a discount of twenty per cent on their face-value, though they were really depreciated only ten per cent. This made the old coins worth more as bullion than as coin; and they were collected and melted.

The heterogeneous monetary systems of different countries involve troublesome fractional operations in reducing the coinage of one country to that of another. It is therefore very desirable that the attempts to secure a system **of correlated international coinage** for the civilized nations of the world should succeed. A slight change in the systems of the leading commercial nations will secure uniformity. If with this change a uniform system of weights and measures could also be adopted, the exchanges of the world would be greatly facilitated.

Governments have often transcended their legitimate powers in legislation about money. Thus **laws forbidding the exportation and importation of money, laws arbitrarily changing the value of the coinage,** and **laws making any thing but gold and silver a legal tender,** involve injustice, mischief, and often absurdity.

The Question of a Double Standard. The use of both gold and silver as money is highly advantageous, almost indispensable; but the question is

raised and much agitated, **Should the standard of value be defined in terms of each metal, and both be made legal tender to an unlimited extent?** If the relative value of the two metals were constant, so that they would always rise or fall together, there would be no objection to the double standard. But in the nature of things this is impossible; for each metal has its independent sources of supply, and value, as we have seen, varies with the fluctuations of supply. When two kinds of money of different valuation are thrown into the trade of a country together, **it is a law, as fixed as the law of gravitation, that the cheaper money, of inferior value, will drive out the dearer money, whose value is greater.** If the government comes in often to adjust the relations of the two metals, this interference disturbs the operations of trade. This difficulty would be relieved in measure, if all commercial nations were to adopt the double standard; but even then some international congress would need from time to time to define the relative value of the two metals.

For its function as a standard of value, it is of the highest importance that the value of money be as invariable as possible. Thus far in the history of the world, **gold has been the more stable** of the two metals. It would seem, therefore, most advantageous that **gold should be adopted** as the **main standard, with a wide range for the employment of silver as subsidiary coin.** In that case, the advantages of the two metals would be secured; each would become the complement of the other, fulfil-

ling its function as money in a sphere to which the other is not adapted.

The views given of the nature and functions of money warrant the following propositions as inferences or corollaries: —

1. **In every exchange, the cost of the money employed is to be regarded as equal to the cost of the article for which it is exchanged.** If ten dollars is the price of a barrel of flour in Lima, it is because the cost of producing so much silver there is equal to the cost of producing the flour and its transportation. This is the natural law of exchange, varied only by incidental circumstances and artificial appliances, which temporarily affect the supply of money or of goods.

2. **The universal freedom of commerce, and the use among all nations of the same kind of money as the instrument of exchange, must tend to equalize any variations in the cost or in the supply of money.** The commerce of the world is the great reservoir, the ocean encompassing the globe, into which all contributing streams of money flow; and its level is essentially the same everywhere. By a law as simple and constant as that of the tides, the money-market will regulate itself, provided **trade is free and money real and the same everywhere.**

3. **The amount of money in any country and in all countries is very small in proportion to the whole amount of wealth and of values exchanged.** As a standard of value, money **regulates** all exchanges. As a medium of transfer, **it is actually employed in**

but few. It performs its office best when it moves rapidly. It flows from one country to another only in the process of equalization just spoken of.

4. **It is of no advantage to increase the amount of money in a country, unless it is demanded by an increase of production and of active trade.** Money is only an instrument like a plough or a power-loom. It is of no advantage to a community to have a hundred ploughs when only fifty can be used, or forty looms when twenty will do all the work. In a city isolated from the rest of the world, to double the amount of money will merely double prices. If its trade with other places is free, the superfluous money will float away on the tide of commerce to some place where it is needed, just as a surplus of wheat or cotton goods must do.

5. **The abundance or scarcity of money in a country is not of itself a trustworthy index of prosperity or adversity.** We must look back of the fact to its cause. A scarcity of money, caused by an increase of products and great activity of trade, is a sign of prosperity. Money abundant because business is stagnant, and exchanges are few, indicates adversity.

6. **The maxim, "It matters not what becomes of property, so long as the money is in the country," is false and delusive.** Labor and capital valued at a million dollars were expended on a great manufactory which proved an utter failure. So much property was lost, none the less so because the money paid out in setting up the establishment is still circulating among the people. The money was in that

case but the instrument of throwing away so much of value. It cannot bring back the values lost. If a thief should empty your storehouse in the night with a wheelbarrow, it would not relieve your loss to find the wheelbarrow in the morning, left for some honest use.

The minds of many are mystified on this subject by the complications of **credit** with money. A great part of the apparent variations in the value of money in different countries and at different epochs is due to the same cause.

Real money held to its rightful functions is one of the most useful inventions ever devised. One says, not extravagantly, "Money, in a nation's economy, is what the blood is in the life of the animal. It is, so to speak, the common reservoir in which all food is first dissolved, and by which, at a later stage, the elements of nutrition and preservation are distributed to the several organs. There is indeed no machine which has saved as much labor as money."

EXERCISES.

1. Specify some of the purposes, other than money, for which gold and silver are used.

2. Is the absorption of the precious metals for these purposes a benefit, or an injury?

3. In estimating the cost of gold, what must be set off against the good fortune of some who obtain rich lumps with only the labor of picking them up?

4. If gold should become as abundant and as easily obtained as iron, how would its fitness for money be affected?

5. Platinum is a rare and useful metal: why is not it as well fitted for money as gold?

6. What means are adopted to test the genuineness of gold and silver coins?

7. We have coins made of copper and nickel: what qualities of real money do they lack?

8. Could a mere enactment of government prevent the use of gold and silver for money?

9. Could a law of Congress cause circles of leather, stamped, to pass as money? Why not?

10. Illustrate the necessity that the government should define some legal tender.

11. When Jesus was asked whether the Jews ought to pay tribute to Cæsar, what was the pertinence of his asking in reply, whose image the coin of the country bore?

12. Why would not little solid globes of silver, such as the Chinese use, answer the purpose of money as well as our coins?

13. Why do the manufacturers of silver prefer silver coins for the material of spoons, &c.?

14. Where large amounts of specie are transferred, is the transfer made by count, or by weight? Why?

15. When Germany was composed of a great number of petty sovereign states, what inconvenience did travellers meet with respect to their money? How is that inconvenience now removed?

16. If commercial nations should adopt a uniform standard and system of coinage, and uniform weights and measures, how would the study of arithmetic in our schools be affected?

17. Can any act of Congress keep the ratio of value between gold and silver permanent?

18. If silver dollars are worth more than gold dollars, which will disappear?

19. How is it determined that you must give a silver dollar for a good pocket-knife?

20. The great fire in Chicago consumed property valued at $200,000,000, but scarcely any of the money in the city was destroyed: was the loss any less because the money remained?

CHAPTER III.

CREDIT AN INSTRUMENT OF EXCHANGE.

In its broadest sense, **credit is confidence in the truthfulness and integrity of a fellow-man.** Some exercise of it is essential to the very existence of human society. The simplest services cannot be interchanged without credit. If you hire a laborer for a day's work, you trust him as one able and faithful to do the work, and he trusts you for his pay till the end of the day. Civilization advances with the growth of such mutual confidence.

As a technical term of Political Economy, **credit is trust in the promise of an equivalent to be rendered at a future time, for values immediately transferred.** In the processes of exchange, credit becomes a **substitute** for money, and so a distinct and indispensable instrument for effecting all kinds of exchanges. A very small part of the exchanges of the world's commerce is effected by the direct agency of money. Credit is the instrument employed for all the rest. Its utility can hardly be over-estimated. At the same time it is a dangerous instrument, because so liable to abuse.

In treating the subject, we need to notice severally, the **forms** of credit, the useful **functions** of credit, and the mischievous **abuses** of credit.

SECTION I. — THE FORMS OF CREDIT.

The leading forms in which credit enters into the operations of exchange are, —

1. **Book-accounts.** A seller extends credit to a buyer by simply charging the value of his purchase to him on his book. The butcher wants the baker's bread, and the baker wants the butcher's meat. Each makes his morning purchase of the other, to be charged in account. On the day of settlement the two accounts are summed up, and the difference on the one side or the other is paid in money, or carried forward to new account. So, too, a farmer anticipates the returns of his harvest by a running account at the store. In either case the direction to make the charges implies the **promise** to pay.

2. **Loans.** A lender trusts the promissory note of the borrower, engaging to pay with interest, at a definite date in the future, the money now loaned, or the money-value of the goods now sold. The borrower may give security for the promise of his note by a chattel-mortgage, or a mortgage on real estate.

3. **Mercantile paper.** In this case the promise takes the form of a **negotiable note,** given by a jobber to a manufacturer or importer, or by a retailer to a jobber for goods bought to be sold again. The note runs for a short time, — thirty, sixty, or ninety days, — to be provided for by the avails of a second sale. Such paper is often passed to second hands,

and may itself become a marketable article in the community, subject to the regular dealings of brokers.

4. **Bank-deposits.** The depositor gives his banker credit for money put into his hands to be paid on his order, and accepts a certificate of deposit, or an entry on his bank-book, as the promise, the voucher, for the transaction. The orders by which the deposits are drawn out are called **checks.** These may float about, with a limited circulation, as tokens of credit at home. Or, on a wider range, taking the form of **bills of exchange,** the credit thus originated may reach round the globe, doing good service in the exchanges of individuals and of nations.

5. **Stocks.** A number of persons wishing to combine their capital for manufacturing, banking, building a railway, or whatever, form a stock-company. Each gives credit to the company for the capital he puts in, and accepts a **certificate of stock** as the promise, or voucher. These stock-certificates are transferable; and credit in this form becomes an article of merchandise with a current price, more or less variable, from causes natural or artificial.

6. **Bonds.** These are issued by corporations, cities, states, and nations, as evidences of debt. Whoever holds these gives credit to the body corporate or politic, whose promise is embodied in the bond. These, like stocks, are made articles of merchandise, and are sought by many for the investment of money. They are also often made the sport of wild and reckless speculation, and so credit furnishes instruments for stock-gamblers to play with.

7. **Promissory notes,** issued by banks or governments, and designed to pass from hand to hand as **currency.** Such are our United-States "greenbacks" and national-bank notes. In this category are included all forms of "**paper money.**" The public, receiving and using these, gives credit to the governments or banks, and confidence rises or falls with all causes which affect the ability or the stability of the promissor. In this form credit flies everywhere, and attaches itself to every transaction of business; safe and helpful, or liable, like a bubble, to sudden inflations and collapses, which shake and unsettle all trade and all industry.

It is believed that all forms of credit in use may be classed under one or other of these heads. In all cases the true **basis** of credit is **real wealth,** existing or prospective, supposed to be at the command of the party trusted. Its **essence** is confidence in the **ability, truthfulness,** and **integrity** of the party trusted.

SECTION II. — THE USEFUL FUNCTIONS OF CREDIT.

As we take up this topic, a few words are needed in the outset to correct some false notions quite common.

Credit is not capital. It is only a means of transferring capital from one person who cannot use it, to another who can. If a man has borrowed ten thousand dollars to set up a flouring-mill, giving

his note for the amount, there is but one capital, and it is all in the mill. The note which the lender holds is a simple symbol of the one capital, indicating that it belongs, not to the miller, but to the holder of the note.

Credit does not of itself create capital. It has no magical power to make something out of nothing. Wealth does not grow by the mere act of passing from hand to hand. It can be increased only by union with labor. Credit transfers it for such a union: it can do no more.

The same capital cannot be used by both the borrower and the lender at the same time. A farmer who has lent a neighbor his plough, cannot at the same time use the plough on his own field. No more can B use for his own purposes the thousand dollars which he lent to A. He may get a thousand dollars by selling the note to C at its face value, and C may sell it to D, and so on till it gets to Z; but each move only changes the lender of the one original sum. In the end the whole series of transactions will be settled by one act, when A pays Z, and takes up the note.

But credit, when held to its legitimate functions, renders important services to all departments of industry.

1. **Credit brings wealth into the form of capital, and makes it available for the increase of wealth.** Widows, minors, aged persons, professional men, otherwise occupied, and unfamiliar with manufactures and trade, are often the owners of property from which they need an income; but they cannot,

by their own labor, make it productive. By means of credit this wealth is made productive capital for the benefit of all parties. Credit also gathers up the small savings of many, and puts them into union with labor for profitable use.

2. **Credit gives efficiency to the industrial talent of a people.** By means of it many a poor man, of strength and skill, obtains the needed capital by which alone his powers can be employed and developed. A large portion of the most successful business-men in our country have begun with only their own faculties and energies, and a character to command confidence, and bring them capital on credit.

In the light of these two of its functions, credit is indispensable, both to **the full drawing out of the capital** of a country, and to **the full development of its industrial talent.** Thus it touches both the springs of productive industry, — capital and labor.

3. **Credit quickens exchanges.** The crops of the farmer stored in his granary, and the products of the manufacturer waiting for purchasers, are capital lying idle. By selling to the middle-man or the jobber on credit, this wealth is set moving at once towards the consumers who need it, and the producers have means for new products. Rapid exchanges turn over capital often, and with every turn wealth is multiplied. The most important functions of credit fall within the sphere of exchange.

4. **Credit serves directly as an instrument of exchange.** This is evident in **book-accounts.** A buys of B, and B buys of A; the values being entered in the account on either side. On settlement there

may be a small balance to be paid in money. But for the greater part of the transfers, the credit-entry has sufficed. The aggregate of exchanges thus effected is very large.

The same thing is done on a larger scale by credit in the form of **bank-deposits.** Suppose four men do business at the same bank. A pays B a hundred dollars for a horse, by his check on the bank. B may make a payment of the same amount on the same day and in the same way to C, and C to D, and D again to A. The four checks are passed into the bank. On each of four accounts in the bank corresponding entries are made. At the close of the day the accounts stand as they did at the beginning. But those entries have effected four exchanges, without drawing out or even counting a dollar of money.

The New-York Clearing House is a central bank of deposits for all the banks of the city; and the scale on which credit fulfils the function we are speaking of is illustrated by the fact that transactions of exchange for one day, amounting to more than two hundred million dollars, are settled in the space of one hour, requiring the transfer of only a few thousand dollars in money to provide for small deficiencies here and there.

Credit fulfils a like office in adjusting exchanges between **distant cities.** The sales and purchases of every community, as well as of every individual, must be substantially equal. The agricultural products sent from Chicago must pay for the goods brought from New York. The chief instrument of

this exchange is credit, in the form of drafts, passed through the banks of the two cities. Thus produce-dealer A in Chicago ships five thousand dollars' worth of wheat to B, his consignee in New York, and makes a draft on B for the amount, which he deposits in his Chicago bank. The bank forwards the draft to the bank in New York with which it deals, and the same day sells to C, a Chicago merchant, its draft on the New-York bank for five thousand dollars, to pay for goods he has received from a New-York importer. The return of the drafts all around closes the transactions; and credit has effected the exchange of wheat for dry goods, with only the labor of making a few ledger-entries, and writing two or three letters.

The case is essentially the same between **the chief trading cities all over the world.** The foreign trade of Boston is mainly **an account-current** with all the cities of the world with which she has commerce. Provisions sent from Boston to the West Indies are made to pay for tea imported from China, by means of credit in the form of **bills of exchange,** passed through Liverpool as an intermediate centre of trade.

5. **Credit, to a limited extent, may be safely put into the form of currency** or **paper-money.** It is a rule of sound economy, to use the cheapest tools which will serve the desired purpose. If promissory notes of banks, to an amount equal to double the specie they hold, will effect exchanges well and safely, the real value of half the gold and silver, fixed in money, may be devoted to other purposes.

So far the instrument of exchange is cheapened, to advantage. This use of credit, however, runs close upon the line of danger, and needs careful restrictions.

For all these functions of credit **a basis of sound money is indispensable.** Nothing but real money made of gold and silver can furnish the universal standard of value required. This is the ballast of the ship of trade. Credit furnishes the sails. Any ballast that easily shifts in a storm brings danger to the ship. The credit which circles the world, and binds all civilized nations together by the common interests and mutual service of universal commerce, must be sustained by the all-pervading presence of money, whose value is uniform and stable.

SECTION III. — THE ABUSES OF CREDIT.

Credit is in its nature illusory, since it springs out of men's hopes, and rests on prospective rather than real wealth. Hence there is an element of danger always in close connection with its legitimate use, and it is especially liable to abuse. Some of its abuses may be named, as follows: —

1. **Credit is abused when too freely granted.** Thus the thriftless spendthrift runs up an account, never to be paid. In his eagerness to trade, the New-York jobber trusts his goods to a swindling adventurer, who runs to some little Western city, rushes off the goods at less than cost, and disappears just as his notes fall due. Too often bankers have to mourn over their too easy allowance of **overdrafts.**

2. **Credit is abused by the wild speculation of borrowers.** One who does business with borrowed capital is bound to avoid great risks. But often men working with the capital of others embark recklessly on uncertain ventures, in which they would not risk their own property. Thus the capital of banks is sometimes involved in gambling operations of the stock-exchange.

3. **Credit is abused by the extravagant living of debtors.** It is said that of those who enter the mercantile profession, ninety-nine of every hundred fail. Nine-tenths of these failures are due to rash ventures and extravagant expenses, incurred without regard to pending debts.

4. **Credit is abused by confidence-operations.** The term includes schemes of speculation, which have only credit for their basis, whether organized under a temporary illusion, like the operations in Western lands in 1836, or with a fraudulent purpose, like many mining-companies. The commercial history of the world is full of instances of the strange facility with which the imagination and credulity of men are imposed upon.

5. **Credit is abused by the betrayal of trusts.** Cashiers and bookkeepers conceal their thefts by false entries; presidents perjure themselves, swearing to false statements; stockholders' notes are counted as cash capital; trusted agents run away with funds of their employers. Such acts are possible, and all too common, under loose methods of credit.

6. **Credit is abused by the over-estimate of assets,**

sometimes for purposes of fraud, sometimes through simple self-deception; every man desiring to see the bright rather than the dark side of his business-prospects.

7. **The most sweeping and mischievous abuse of credit appears in the excessive issue of paper-money.** This touches all the processes of exchange with disturbing force, and is the source of panics and commercial crises.

Some of the **mischiefs** caused by these abuses of credit may be mentioned.

a. **They cause ruinous fluctuations of prices.** Mr. Mill says, "In a state of commerce in which much credit is habitually given, general prices at any moment depend much more on the state of credit than on the quantity of money."

b. **Honest men are compelled to pay for the losses which proceed from bad debts.** The profits of the merchant must be enough to guard him from loss in the risks he runs, and these come from his paying customers.

c. **These abuses of credit tend to turn all trade into a game of chance.** Here and there a splendid prize is won, and it dazzles men's eyes.

d. **Through familiarity with failures and frauds, the moral sense is deadened with respect to a debtor's obligations.** How can it be otherwise when a bankrupt's settlement with his creditors at fifty cents on the dollar is a common fact?

e. **The abuse of credit tends to relax the bonds of law for the enforcement of contracts.** As a matter of fact, under this influence, the collection

of debts by legal process has become difficult, almost impossible.

These evils call for earnest and persistent efforts to raise the tone of public sentiment and common practice respecting credit. The honest part of the debtor class are most of all interested in securing such a reform.

EXERCISES.

1. What would be the effect on the social life of men, if mutual distrust prevailed? Illustrate.

2. Illustrate by an actual or supposed case each of the forms of credit named: viz., book-accounts, loans, mercantile paper, bank-deposits, stocks, bonds, and circulating promissory notes.

3. A bought fifty dollars' worth of goods of B; B bought nothing of A, but bought fifty dollars' worth of C, and C bought fifty dollars' worth of A; corresponding charges are made on the several book-accounts: how can the whole be settled by credit, without the payment of any money?

4. Explain a usage common with banks, called "discounting mercantile paper."

5. Suppose you buy twenty-five dollars' worth of books in New Haven, Conn., and send in payment a draft for the amount made by a Kenosha bank on a New-York bank: explain the functions of credit in the transaction.

6. B holds a certificate for a thousand dollars of the stock of the First National Bank of Chicago: what does that certificate mean? What is meant by the expression, "hypothecating stock"?

7. A grocer pays a farmer a five-dollar United-States greenback for a firkin of butter: is it a money-payment or a credit-payment? Prove your answer.

8. Suppose Congress at its next session should order a hundred million dollars additional greenbacks to be issued: would the act add that amount to the capital of the country?

9. Suppose, instead, a hundred million gold dollars should be issued from the mint: would the capital of the country be increased by so much?

10. How does a savings-bank increase capital?

11. How does credit help a manufacturer to anticipate the sale of his products for the payment of his employés?

12. Can you explain the "letters of credit" which many use to provide for their expenses in travelling in Europe?

13. Is it a wrong to a man to ask for some evidence of his character before extending credit to him?

14. Is it right for one who is doing business on borrowed capital to embark in doubtful speculations?

15. What is the real cause of most of the defalcations which so often occur?

16. Is it generally either unjust or unkind to insist on the prompt and faithful fulfilment of pecuniary obligations?

17. Is it advisable to restore the laws of imprisonment for debt which were in force in all our States sixty years ago?

18. Why should not defalcation be classed with theft and robbery as a grave crime?

CHAPTER IV.

BANKS AND PAPER-MONEY.

THE word **bank** is of Italian origin. In the infancy of European commerce, the Jews in Italy were wont to assemble in the market-places of the principal towns, seated on benches, ready to lend and exchange money: hence the term "bank," from *banco*, a bench. When any of these money-lenders failed, his bench was broken, and so we have the word **bankrupt.**

In the system of modern commerce, **banks are the chief agents of credit.** Credit, as we have seen, holds an important place in the processes of exchange. The principle of division of labor requires that some persons should make it their special business to direct and manage its complicated machinery. In banking institutions, men devote themselves to **the systematic administration of credit** for the manifold service of trade and industry, a service which is indispensable and invaluable. Like all other good agencies, this may be abused and misdirected. This danger will be best guarded against, when the legitimate functions and uses of banks are well understood by all classes of people.

SECTION I. — THE OFFICES OF BANKS.

Banks fulfil four distinct offices: —

1. **The collection and custody of money-deposits** to be the basis of credit in trade. If all the exchanges of a community were to be effected by money alone, every business-man must have in his own keeping a considerable amount of money. To guard this from robbery and loss, would involve no little pains and expense. In doing any large business, the mere counting of the specie paid and received would require much labor. It is an important office of a bank to relieve these risks and labor, by establishing, in a convenient locality, a safe central repository for the specie of a community, and charging a cashier and other officers with the responsibility of its safe keeping and transfer. Then, as individuals deposit what they receive, and draw for what they pay, credit is made, in the manner heretofore described, to effect a great part of each day's exchanges, while the money lies secure in the vaults prepared for it. It would be good economy to make such an arrangement, even if all who enjoyed its benefits had to contribute directly to pay the banker for his service. But the compensation derived from their other offices enables the banks to do all this gratuitously.

2. Closely allied to this is **the office of banks in negotiating money-exchanges.** The coin issued by one nation does not pass freely in another country

where it is not known. A German immigrant coming into New York will need to turn the thalers he brings from his native land into American dollars. At the bank he can do it safely by paying a small fee, for there the relative value of the two coinages is well understood; and the next day, perhaps, some one going abroad will call on the bank for exchange the other way. But a more important and extensive business of this kind is needed to provide for payments to be made in distant and foreign places, by drafts and bills of exchange. A genuine draft on Chicago is acceptable in all the North-western States. A draft on New York is good in any part of our country. A bill of exchange on London will command money for its possessor in any city of the civilized world. Banks, through the credit they have with each other, are prepared to furnish their customers with orders of this kind as they may desire, their payment being for the most part actually made by the exchange of goods shipped to and fro. This resolves the commerce of the world into barter-exchange. The banks charge a slight **premium** for exchange of this kind, the rate varying with the balance of trade between different places. The daily newspapers of leading cities give the prices-current for exchange as they do for goods bought and sold.

The quotations for British exchange are peculiar, and need explanation. The premium for exchange on London will be seen ordinarily stated at from nine to ten and a half per cent. This apparently high rate is due to the fact, that, at the time our

government was formed, the old Spanish milled dollar was in use, and $4.44 was fixed as the rate at which the pound sterling must be computed at our custom-houses. Since then our American coinage has been changed; and the relative value of gold and silver has changed, so that now a pound sterling equals $4.86 of American coin, but the old mode of computation is continued: hence British exchange in New York is at par when it is quoted at nine and a half per cent premium, the difference between $4.44 and $4.86. This needs to be borne in mind in all calculations of the cost of bills on London.

3. **To make loans and discounts** is another office of banks. The union of capital and labor is necessary to produce wealth. But often one has the capital, and another the capacity to labor. A bank, as an agent of credit, brings the two elements together in the most expeditious and convenient way. He who has capital puts it into the bank to be loaned for him. He who needs capital can go to the bank, and borrow. The banker, devoting himself to this occupation of loaning, becomes expert in the negotiations, keeps himself informed as to the character and responsibility of borrowers, and understands all the legal forms essential for a valid contract.

The terms **loan** and **discount** indicate two different modes of lending, adopted by different classes of banks. **Savings banks** receive on deposit the small savings of great numbers of people, make loans for long time secured by real estate or other

ample securities, and collect the interest semi-annually as it accrues. **Commercial banks** gather funds of the wealthy as their capital, and the temporary deposits of men in active business, and make their loans for short time, sixty or ninety days, on personal security, taking interest in advance as a **discount** or deduction from the principal sum borrowed.

4. A fourth office performed by many banks is **to issue promissory notes** for general circulation as a substitute for specie. This creates one kind of paper-money, which will be treated of in a subsequent section. A few words here will suffice to indicate the manner in which such notes are thrown into circulation. A portion of specie is set apart as the basis of the issue. Thus the bank loans not the specie which it holds, but its own notes payable in specie, receiving in return the notes of individuals guaranteed by indorsers for the amount loaned, to be paid at a future day. Really, the bank loans its own credit. The notes thrown out are mere symbols of value, not representatives of it as specie is. If the amount issued is just equal to the amount of specie in the vaults, the holders of the notes have a double security; viz., the specie in the bank, and the obligations of those to whom the notes were loaned. The security might be considerably reduced with safety, by issuing notes somewhat in excess of the specie in reserve, since they could never be all presented at once. But, without well-devised checks, this course leads to danger. This office is not necessarily associated with the others named.

In the fulfilment of these offices, banks, as public corporations of known character, offer inducements for the introduction of **foreign capital.** This incidental benefit is of great importance to the advance of a new country.

Through these offices, banks render important services **to the finances of sovereigns and states,** steadying and strengthening the bands of government, and furnishing timely aid in the emergencies of war and of great national enterprises.

SECTION II. — THE UNITED-STATES NATIONAL-BANK SYSTEM.

The limits of this work do not give place for a history of banking, or any notice of foreign banks. The present bank-system of our own country must, however, be briefly presented.

This system was established by Act of Congress in 1863. It is under the charge of a bureau of the Treasury Department, the chief officer of which is the comptroller of the currency.

Under this act a national bank may be organized by any number of persons not less than five, the capital in any instance to be not less than $100,000, except that in cities containing a population not exceeding six thousand, banks may be established with a capital of not less than $50,000; in cities having a population of fifty thousand or more, the capital of each bank must be not less than $200,000.

Not less than one-third of the capital must be invested in United-States bonds, upon the security

of which circulating notes may be issued equal in amount to ninety per cent of their current market-value, but not to exceed ninety per cent of the par value of the bonds deposited. The notes, officially certified by the Treasurer of the United States and the Register of the Treasury, are receivable at par in the United States in all payments to and from the government, except for duties on imports, interest on the public debt, and in redemption of the treasury-notes. They are redeemable on demand in lawful money of the United States.

A subsequent act of Congress laid a tax of ten per cent on the circulating notes of previously existing State banks, in consequence of which most of those banks re-organized under the national system. Thus our present bank-currency consists of notes of national banks, which are of uniform value in all parts of the country, the payment of which is guaranteed by the government. Provision is made for frequent visitation of the banks by government officials, to investigate their operations; stated reports are called for; and the comptroller of the currency may appoint a receiver to wind up any bank which is in an unsound condition.

The national banks may receive deposits, sell bills of exchange, and loan money at the rates of interest allowed by law in the States where they are located. For the circulating notes this system provides all the security which the credit of the United States can give. But it provides no security for deposits and other liabilities, except that all shareholders are held individually liable to the extent of

the amount of their stock, in addition to what they have paid for their stock. The law now fixes no limits to the number of banks that may be organized, or to the total amount of notes that may be thrown into circulation. The circulation has ranged from three hundred to three hundred and fifty million dollars. Of the more than two thousand national banks which have been organized, very few have failed, and the public has incurred no loss on the currency.

From Feb. 25, 1863, to Nov. 1, 1879, there had been organized 2,438 national banks. Of these only 81 had been placed in the hands of receivers to be closed, 307 had gone into voluntary liquidation; leaving 2,050 in operation at the last-named date, with capital $455,240,000, deposits $713,400,000, and circulating notes outstanding $337,181,418.

The system will be further illustrated by a statement of the **liabilities**, the **resources**, and the **profits** of the banks.

The **Liabilities** are as follows: —

1. **The capital stock.**
2. **The circulating notes.**
3. **Deposits.**
4. **Balances due to other banks,** especially from banks in the great cities to those in the country.
5. **Surplus funds and reserves,** held to strengthen the banks against contingencies, which are a virtual addition to the capital, and belong to stockholders.
6. **Undivided profits and unpaid dividends.**

7. **Miscellaneous liabilities,** small obligations not classified.

The **Resources** embrace the following items: —

1. **Loans,** which represent the chief business of the bank.

2. **United-States bonds deposited with the comptroller.**

3. **United-States bonds and other stocks and bonds** held as **investments.** The reserves take this form.

4. **Balances due from other banks.**

5. **Real estate,** a place for business and property taken for debts.

6. **Exchanges and cash items,** — bills of exchange, drafts, &c., on hand.

7. **National-bank notes and legal-tender notes,** held to meet daily calls for currency.

8. **Legal-tender notes and specie,** for the redemption of circulation.

9. **Miscellaneous resources,** small items not classified.

In a regular bank statement the liabilities and resources thus presented balance each other, and the items on either side show the actual condition of the bank.

The sources of **Profits** of banks are, —

1. **Interest,** from several distinct sources.

a. Interest on United-States bonds deposited with the comptroller.

b. Interest on circulating notes loaned.

c. Interest on the remaining capital and reserves loaned, or held in productive stocks.

d. Interest on a portion of the deposits also loaned.

2. **Premiums** on exchange.

3. **Commissions for collections.** Claims from abroad are often sent to a bank, as an agent of established character, for collection.

With prudent management the profits of banking are sure, and compare favorably with those of any other business. The undue expansion of loans, in order to increase profits, involves the danger of throwing the centre of gravity outside the base, with a consequent downfall.

Private banking-houses exist in all parts of the country, and fulfil all the offices named except the issue of circulating notes. Some of these have gained a character and standing which command a world-wide confidence. Their credit rests upon personal integrity, wise management, and large resources accumulated through years of devoted industry.

Savings banks, mostly without capital, simply receive and loan deposits. The savings banks of our country, 673 in number, thus manage funds amounting to over $750,000,000, drawn from some millions of depositors.

In May, 1879, the entire banking business of our country was represented by 6,360 institutions, whose aggregate capital was $656,500,000, and which had credited on their books deposits amounting to $1,893,500,000.

The comptroller of the currency, in his report dated Nov. 1, 1879, estimates the circulating medium of our country as follows: —

Treasury-notes (greenbacks) outstanding	$346,681,016
National-bank notes outstanding	337,181,418
Gold in the treasury	157,960,193
Silver in the treasury	50,078,620
Coin in the banks	42,173,741
Estimate of coin held by the people	231,478,515
Total	$1,165,553,503

SECTION III. — PAPER MONEY.

Real Money is made of the precious metals, and is capable of representing all kinds of values, because it has value in itself. But on account of its bulk, its weight, and its costliness, some more convenient instrument is desirable for many operations of exchange. The ancient commercial nations felt this need, and took various measures to meet it. The Carthaginians adopted a symbolic money, made of any object of the size of a coin, enclosed in a leather envelope, and stamped with the seal of the state. The Doge of Venice, and other sovereigns of the middle ages, issued leather money as a promise of future payment. The Chinese, as far back as the seventh century A. D., had various kinds of paper money which they called "flying coins." The necessity is acknowledged to-day, and all commercial nations are using some kind of paper money.

Roscher notes well a distinction to be made between **paper money** and **money paper.** The latter term embraces drafts, bills of exchange, certificates of stock, bonds of cities, states, &c., and like forms on paper, which are definite calls for money, titles of ownership, evidences of debt. These are bought

and sold, and so, in a sense, circulate; but, like substantial goods, they require money to circulate them. Paper money, on the other hand, is intended for **circulation,** in the place of money. It must be itself ever afloat, as a means of floating every thing else. It is made up of promises to pay money, but to no definite person, in no definite place, at no definite time; good for the functions of money in purchases and sales, just so far and just so long as men believe the promise.

Several kinds of paper money may be specified.

1. There is what Mr. Walker terms **mercantile currency.** This signifies promises of banks to pay certain amounts of money on demand; the bank holding the full amount of coined money or bullion in reserve to fulfil the promise of every bill issued. Such were the notes of the Bank of Amsterdam as first issued; such are, and have been for more than two hundred and fifty years, the notes of the Bank of Hamburg. Such are the gold-certificates of the United-States Treasury. These involve only truthfulness and integrity on the part of the bankers or officers of the government to insure entire credit. Such notes combine the **convenience** of paper with the **security** of specie. Its basis is solid and immovable. It is paper money resting on real money.

2. There is our **national-bank currency,** which consists of bank-notes secured by a reserve of government-bonds instead of specie; the government holding the securities, guaranteeing the fulfilment of the promises, and requiring the banks to hold specie in readiness, sufficient to make payments

when called for. Here the strength of the security is measured by the credit of the nation. It is paper money resting on money paper.

3. **Mixed currency.** This is composed of written promises to pay specie on demand, issued by banks in excess of the actual amount of specie held for their redemption. It is called **mixed** because its basis is partly coined money, and partly credit in the notes of their customers discounted by the banks. The notes of the Bank of England and of the Bank of France are of this character; and such were the notes of the old State banks and of the United-States Bank in our country. The strength of the security in this case depends on the proportion of specie to credit. When so-called "wild-cat" banks were started, with no capital except the notes of stockholders, and no specie, there was nothing but credit to sustain the circulation, and banks and circulation soon collapsed together.

4. **Credit currency.** This consists of engraved notes, bearing promises of a government to pay specified sums of money. The Continental money of Revolutionary times, and the present United-States treasury-notes, are examples of this kind of paper-money. On the face of the greenback we read, **"The United States will pay the bearer ten dollars."** On its back we read, **"This note is a legal tender at its par value for all debts, public and private, except duties on imports, and interest on the public debt."** This engraved slip of paper is, then, only an **evidence of debt.** The **legal tender** clause on its back forces men to take it in payment

of goods. But as it passes from hand to hand it simply **transfers debts: it cannot pay them.** You owe your butcher ten dollars, and give him a greenback in payment. You are released thereby, but the government is now the debtor in your place. It is not itself, as a gold eagle would be, a *quid pro quo* for the butcher's meat: yet it will serve as a medium of exchange, while men have faith in the government. But let the suspicion arise that the government can not or will not fulfil its promise, and the purchasing power of these paper slips at once declines, and quickly comes to nought, as did the Continental money and the paper money of the Confederate States.

5. **Paper money secured by real estate.** Such were the assignats of France. In the Revolution of 1789, large estates of the Church, and of wealthy nobles who had fled from the country, were confiscated, and made the basis of paper money, made up of promises of the government for a certain number of francs, each note being at the same time a certificate of title to a certain amount of land of the same value. But the troublous times caused the value of lands to depreciate; and, when the amount of assignats issued rose to more than forty-five billion francs, the promise and the assigned land-title became worthless.

From this view of what paper money is, the following statements are evidently true. They are also confirmed by actual experience.

1. It is a very **convenient** instrument of exchange.

2. As respects its material it is **economical**; so far as it can safely be used in place of real money, it sets free, for other uses, the more costly gold and silver.

3. It has in it always **the element of credit.** Even a gold-certificate is nothing to me except as I credit the statement that the treasurer holds the gold ready to pay it. The managers of the Bank of Amsterdam betrayed their trust; and, as soon as the fact was known that the gold was gone from its vaults, its notes were good for nothing.

4. While paper money may be a convenient **medium of exchange,** it can never serve as **a standard of value.** Its promise must be expressed in terms of real money, **dollars**; and a dollar means a specified number of grains of silver, a defined, substantial value. The paper note must carry with it the vision and the hope of a silver dollar, at some time to be realized, or it can have no purchasing power. If our government should say, by word or act, that the actual redemption of its greenback promise is not to be expected, its treasury-notes would drop to the ground like autumn leaves, utterly worthless.

5. Paper money **can ordinarily circulate only in the country where it is issued.**

6. Paper money is itself liable **to fluctuate in value.** It will be always compared with gold; and if, by increased issues, it is out of proportion to the standard, gold will be at a premium, which means always that paper is depreciated.

7. By the expansion and contraction of its issues, paper money tends to keep the prices of all commodities fluctuating.

8. Governments, whether republican or monarchical, when once they have begun to issue paper money, **are under strong temptation to go on increasing its volume, till its redemption is impossible.** It is said that no paper money issued by a government on its own credit alone has ever been redeemed. It is to be hoped that our nation will prove an exception to this statement, and give to the world an example of truthfulness and honesty worthy to be imitated.

9. A law, like our "legal-tender act," making the circulation of the government's paper money **compulsory, simply forces a loan from a people.** In its exigency the United States wanted guns, ships, provisions, &c. It ordered them of the manufacturers, and paid in promises, which was, in effect, borrowing instead of purchasing. Then, to relieve the manufacturers, it passed a law compelling the people to take the promises, and so to carry the loan.

10. The expansion and contraction of paper money disturbs all the functions of credit, and is to a great extent the real cause of commercial crises, panics, and hard times.

11. The instability of paper money tends to resolve all commercial transactions, and especially credit transactions, into games of chance, — losing games for the many.

12. The promises of paper money unfulfilled tend to blunt and deaden the public conscience, and to demoralize a people.

The upshot of all is, not that paper money is to be altogether banished, for that is impossible, but

that its issue and its use must be carefully restricted by all the appliances of wise legislation and sound public sentiment.

EXERCISES.

1. What inconveniences would be experienced in the business of a town of six thousand people without a bank?

2. How does a bank increase the capital of a community?

3. What benefit do farmers derive from banks?

4. If you have a doubtful coin, why do you take it to the bank to be tested?

5. What is the effect of a large shipment of grain from Chicago to New York on the premium charged in Chicago for New-York exchange?

6. What advantage is it to the owner of capital to loan his money through a bank?

7. What advantage is it to the borrower to get his loans from a bank?

8. Which involves the larger outlay for interest, a private loan for a year of $10,000, at eight per cent, or the same amount taken from the bank by discount, renewed every sixty days through the year? Calculate the difference.

9. In what respects is our national-bank system more advantageous than the former system of State banks to the general business of the whole country?

10. Is it as profitable to the bankers?

11. In the bank-statements of liabilities and resources, which are the items, on either side, of chief consequence, as indicating the soundness of a bank?

12. Which are most important with reference to its profits?

13. What profit has a national bank from its circulating notes?

14. What embarrassment may they cause to the bank?

15. If another war should compel our government to

double the amount of its bonded debt, what would be the effect on our national banks?

16. Explain the relation between sound and prosperous banking, and the general prosperity of business.

17. State in detail the conveniences of paper money.

18. State in detail its evils or dangers.

19. Which kind of paper money named in the text is safest?

20. Which involves the greatest risks?

21. What is the special danger of paper money issued by governments?

22. What caused the rapid advance in prices from 1863 to 1870?

23. How were the profits of business affected by that inflation?

24. Was the re-action from 1873 to 1879 avoidable? Was it healthful to business, though trying and painful?

25. If no attempt had been made to resume specie payments, what must have happened to our paper money? What to business generally?

26. Who get the advantage of fluctuations incident to the too free issue of paper money? Who suffer most from its disastrous effect?

27. Read the story of the "Mississippi Scheme," and state John Law's fallacy. Is not the same fallacy involved in the reasoning of those who advocate the continued and unlimited issue of American paper money? Are not like consequences probable?

28. What would be the effect of prohibiting the issue of circulating notes of less denomination than ten dollars? How is it in England and in France?

CHAPTER V.

INTERNATIONAL TRADE.

1. The nations of men are of one blood, and constitute one family.

2. All the face of the earth, with its great diversity of resources and productions, is given to the one human race.

3. The blessings which the earth has to yield are developed in largest measure as the people of every land devote themselves to the production of those forms of wealth for which their country is best adapted.

4. The happiest distribution of those blessings is secured by intercommunication and mutual exchanges, made as free as possible between all nations.

Accepting the first of these propositions as the teaching of Christianity, confirmed by reason and common sense, the other three embody the first principles of Political Economy in their broad application to the highest welfare of mankind. After the lapse of centuries, the world is now fast coming to act on the practical belief of these simple fundamental truths. Within the last hundred years the discoveries of science and the activity of invention combined have astonished the world by the new

facilities furnished to give extension and freedom to the mutual intercourse and trade of nations. All civilized people hail with joy the beneficent changes which have come to each country and to the world by the introduction of steam to give speed and certainty to navigation, of the locomotive and rail-car to shorten distance as measured by time, and of the electric telegraph, which annihilates time and distance, and permits contracts and all commercial negotiations to be adjusted to present facts in all parts of the world. The common sense of men, expressed by their instinctive, prompt adoption of these inventions, pronounces universal freedom of trade a common blessing. In accord with this principle, the civilization of the world is advancing with rapid strides.

Until a comparatively recent period there was nothing which could properly be called **international** trade. We do indeed read in history, as far back as its records go, of overland merchantmen, like the caravan of Ishmaelites to whom Joseph was sold; of cities like Tyre and Carthage, and some of the Greek cities, which grew rich and great by a sort of world-wide commerce; and in the mediæval time of the Italian cities, Venice, Genoa, and others, whose trade swept the seas, and brought in to individual merchants and to the coffers of the state wealth untold. But those merchant-caravans and fleets of commerce were mere go-betweens for peoples who stood aloof, in antagonism towards each other. These traders went everywhere, buying whatever they could at the cheapest, and selling

what they could at the dearest, and took the chief advantage to themselves. They grew rich out of their contact with all, but they awakened no common interests between the different peoples they visited. They left only the incidental benefit of furnishing each with some things they did want, and carrying away some things they did not want. That trade fostered no international good-will, and gave rise to no free international intercourse.

False doctrines then prevailed, as, that "Nations are natural enemies to each other;" "In trade, one nation can gain only what another nation has lost;" "A nation's wealth is increased only as **money** is brought in and held fast;" "Better to give two dollars which remain in the country for a commodity, than only one dollar which goes out of the country." These false doctrines led to the most harassing restrictions on all commercial intercourse. Different trades were organized as rival guilds, each guarding carefully its own secrets, and eager to secure special privileges. Tolls were collected at every city's gates on all goods brought in. Each nation sought to build up its own industry by breaking down that of others. Strange and absurd laws were enacted, defining what things the people should and what they should not consume, and resisting or distorting all the natural laws of trade.

Happily, other and better views have now, in great measure, supplanted the old false doctrines, and the absurd regulations have for the most part disappeared from the statute-books. One theory, however, which originated in the mediæval ideas

of feudal isolation, still lingers with tenacious hold on many minds, and with power to sway the policy of states, our own free Republic especially, against the principles of sound economy. It is that which is known as the theory of **protection,** carried out in the enactment of **protective tariffs.** The limits of this work do not admit of an extended discussion of this theory. We cannot, however, do less than to attempt a concise statement of the question as it now agitates the public mind, in the light of those first principles of our science which we have been studying.

The Theory of Protection distinctly stated is, that, **in order to promote home industry, the importation of certain articles, from countries where they can be produced cheaper than at home, should be prohibited or restricted by heavy duties.**

In direct opposition to this, —

The Theory of Free Trade affirms that **a nation's wealth and prosperity are best promoted by maintaining the utmost freedom for the exchange of all commodities among its own people, and with the people of other countries.**

The mere statement of the principles suggests two conflicting economic systems. In practical legislation two corresponding policies have been in conflict through all the history of our nation. There seems no place for compromise: truth and wisdom must lie on one side or the other.

In the discussion of each department of our science, **freedom** appears as the natural law of industry

and trade. But on the face of it the theory of protection involves an interference with freedom; an interference which affects all of the four departments, — production, consumption, distribution, and exchange, though applied most directly to the last-named. Is it not plain, then, that the presumption is against the theory that the burden of proof is laid over upon its advocates? What are the arguments urged to sustain it? We can notice only the three most important and plausible. It is said, —

1. **Protection is necessary to secure that variety of industry and that balance of different industries which are essential to a people's prosperity.** This is the broad proposition which underlies and includes all arguments for the system. In form the argument is logical. It gives for a major premise the affirmation that a varied and balanced industry is essential to a people's prosperity. The minor premise is that protection is **a necessary means** to varied and balanced industry. If the premises are admitted, the conclusion is sound: a protective policy must favor a people's prosperity.

The truth of the major premise cannot be questioned. On the other hand, it is worthy to be presented in full force, resolved into several particulars, as a kind of summary of economic principles.

a. Every country has **a great variety of resources,** and the development of all its resources conduces to its greatest wealth.

b. Among the population of every country there is a corresponding **diversity of native talent, and**

labor is most effective when every one has scope for doing that for which he is best fitted.

c. **The actual wants of men are equally diverse,** and the highest happiness of a people depends on the degree in which these varied wants are provided for.

d. A diversity of occupations **makes a home-market** for all sorts of products, saving cost of transportation, favoring division of labor, and binding all classes together by ties of mutual helpfulness and common interests.

e. Varied industry favors **the social and moral advancement** of a people, quickening and broadening minds, enlarging hearts, and impelling to noblest action in the lines of rectitude and benevolence.

These statements will be readily accepted by all candid minds. As bearing on the question under consideration, they need but a single qualification. It does not follow that a people must **hasten by all means to develop** every source of wealth existing among them, or **maintain at all hazards every possible form of industry.** The people of Barbadoes have ample facilities for raising table-vegetables, but they have greater advantages for raising sugar. Hence it may be good policy for them to produce mainly sugar, and get the other provisions from other countries, where the cost of raising them is greater, perhaps, than it would be on their own soil. Many such cases do exist, but they are exceptions which prove the rule.

The real issue is joined on the second or minor premise, — **protection is necessary to secure diversi-**

fied industry. This proposition is met by a flat denial, and the positive affirmation that **there is a better and surer way of reaching that result.** Where no interference or obstruction is allowed, there comes a spontaneous development which is safe and constant, because it is in accordance with nature's law. This thought may be unfolded in a few distinct, yet connected, propositions.

a. **There is a natural growth of human industry,** the laws of which are as fixed and certain as those which pertain to the growth of a tree.

b. **Free competition** is the healthy **stimulus** to that growth.

c. Under the natural law of development, industry will be applied to the several native resources of a country **as fast as the increase of labor and capital will warrant.**

d. **Men's instinct for accumulation,** following diverse individual capacities, tastes, and predilections, is **the safest guide** to determine the order in which labor and capital shall be applied to those various resources. Under it, whatever promises a profit will be undertaken as soon as it can be **without sacrificing a greater profit elsewhere.**

e. The attempt to force labor and capital into certain employments before their time **deranges the order of nature, and produces re-actions** which hinder the desired result.

f. At any stage of this development, if exchange is free, **foreign products are purchased with the fruits of a people's most effective labor,** that is, with those articles which they can then produce to the best

advantage; which they can best afford to part with, because they are obtained at the least cost. By all such advantageous trade, capital, the prime element of varied industry, is increased, and labor is sustained.

g. When, by this natural progress, a people come to take up a new industry for which they have natural advantages and God-given capacity, **no foreign competition can crush it**; for, even in its infancy, it is charged with the nation's life and strength.

h. An industry which is not indigenous, which has no natural advantages, or which is prematurely set up and fostered by artificial means, **can have only a sickly, uncertain life, and is supported at a wasteful expenditure of a nation's resources.**

The strong reason urged on the other side to prove that protection is **necessary** is thus presented: —

"**Foreign competition crushes out the home production** of all but the rudest and coarsest articles of manufacture, and prevents the establishment of a varied industry, unless the government interfere, as the personification of the nation and its co-ordinating power, to restore the equilibrium by discouraging imports."

If the question is raised, how foreign competition is able to do this, the answer must be that the foreign country has either **superior natural resources,** or **more abundant capital,** or **laborers in greater numbers, and better skilled for the work to be done,** or possibly all these advantages combined. If this be so, it may be asked again, how can government interference, discouraging imports, counterbalance

these advantages? It is quite evident that protection **cannot add to the natural resources of a country.** It can never give to France the coal-fields of England, nor bring to the prairies of Illinois the water-powers of New England, nor secure to Germany the cotton-raising facilities of our Southern States. Obviously a protective tariff **cannot create capital.** Capital springs and grows only by industry and frugality. It is the fruit of **saving.** And certainly legislation has no power to **create men, or endow them with skill.** Population increases both by births and by immigration, according to the abundance of the necessaries of life which are furnished; and a people grow in skill as they grow in intelligence, and bring their faculties into active exercise.

All that protection can do is to concentrate capital and labor on one employment, and for this it lays a special burden on all others for the benefit of the favored occupation. The advocates of this policy keep out of sight the fact that **it can do nothing more than to change the direction of capital and labor,** and that **the duty is a tax** laid upon the many for the benefit of a few. When articles of foreign production are imported, they are to be paid for by the products of home-labor and capital; and the question of economy is, Which is the cheapest? Which will bring the largest returns for a certain amount of labor, — to make these articles ourselves, or to make something else with which to buy them? Left free from government interference, home labor and capital will lay hold of whatever natural re-

sources a country possesses, and, with reference to both home wants and foreign wants, produce the things most feasible and desirable at the cheapest possible rates. The surplus of these products will pay for the foreign goods. Capital will be increased by both the productive industry and the trade; and, as a people grow strong in capital and in men, it is not possible for foreign competition to restrict their industry, or to prevent their taking up all the variety of industry which their needs require, and the facilities of their country favor. Competition, free and fair, is ever the strongest and healthiest stimulus of both productive industry and wide-spread active trade.

2. It is strongly urged that **protection is a necessary means of maintaining national independence.** This is a specious argument, because the phrase "national independence" has a patriotic ring, to which the popular ear and the popular heart are peculiarly sensitive. But, as it stands in the proposition before us, it simply covers a subtle sophistry.

For individuals and for nations there are two kinds of independence. One may withdraw from his fellow-men to a cave in the wilderness, and thus keep himself alive, and possibly find interest and enjoyment in a hermit-life. He may glory in his **independence.** But is there any thing noble in such isolation? Is it the way for a man to make the most of himself? The independence of genuine manhood is of another sort. It is **individuality of capacities, acquisitions, and character,** which is able

to stand on its own basis **in full and free relations with fellow-men.** It is, in the midst of society, a distinct personality, giving and receiving, supporting and supported, blessing and blessed, through the varied intercourse which nature prompts, and by which the completest development of the man and of the race is advanced. So of nations, there is an independence of **isolation,** such as China and Japan until recently maintained. But that independence which is the strength and glory of a nation is of another kind. It is **an individuality of national resources and character** which stands up in the full brotherhood of nations, and in the consciousness of its own strength enters into all offices of mutual dependence through which nations grow, and civilization makes progress.

The policy of protection fosters the narrower kind of independence. It is a **restrictive policy.** Carried out to its logical conclusion, it leads to isolation. The sophistry referred to consists in the concealment of this fact, while the term "national independence" is put forth in its broader, nobler sense.

In an economic point of view, the real independence of a nation is **commercial independence.** That means, not that it does not need or will not have the productions of other nations, but that it is able to command them. The basis of such independence is the home-production of wealth. The way to increase wealth is to use to the best possible advantage the gifts of nature, and then, in the world's great mart, sell where things can be sold on the best terms, and buy where things can be bought on

the best terms. The nation is strongest and most complete in her independence, which can open most freely every avenue for the wealth of the world to flow in upon her, because, as the fruit of her own vital energies, freely exerted, she has wealth in abundance to give a fair equivalent.

A nation comes to this full maturity by a steady **natural growth,** just as a child comes to full manhood. In both cases **freedom** is the law of growth. Fair competition helps a nation's growth both in general wealth and in particular industries, just as the wrestling of a boy with one older and stronger than himself helps to develop in him particular muscles, and the pluck and vigor of a whole manhood. When at times worsted and thrown, the boy may rise and say, "You beat me now, but I don't give up the contest. Let me get my growth, and I'll show you what I can do." The effort by protection to hasten a nation's independence is like binding an infant's limbs in splints, that he may sooner stand alone. The artificial appliance may develop prematurely a single function, but it is at a wasteful expense of general vigor, and is quite sure to induce chronic weakness and deformity.

3. **The advantages of a home market for agricultural products are often urged in favor of the protective system.** It is certainly an advantage to a farmer to find, in a manufacturing village near, a market for his produce. But, if this market is made and sustained for him by a protective tariff, he must pay for tools, for salt, for dry-goods, for many of

the manufactured articles he needs, from twenty to fifty per cent more than they would cost under the rule of free trade. This adds to the cost of producing his crops, and offsets what he may save in the expense of transportation to the distant commercial city.

But here, as in the first case, we take issue directly on the main point. **The assumption that protection creates the home-market is a fallacy.** These centres of varied industry grow up naturally and healthily with the increase of population and wealth. Mechanical genius, the investigating turn of mind, the energy of will-power, managing capacity, — these qualities come not of protective tariffs. They are the gifts of God to men. Left to themselves, and stimulated by competition, they spontaneously lay hold on all gifts of God in nature, and, using all available capital, set up the workshops of industry, wherever best opportunities are presented.

Furthermore, the term "home market," in this discussion, has force only as it implies the production at home of **all manufactures wanted,** and the consumption at home of **all agricultural produce raised,** — a condition of things attainable, if at all, only after the lapse of centuries. Meantime a people must buy the things they cannot produce, by selling the surplus of that which they can produce. For a long time to come this country will have a large surplus of breadstuffs, cotton, petroleum, silver and gold, to dispose of. We can sell to others only as we give others a fair chance to sell to us. Domestic commerce and foreign commerce

are necessarily interlocked. The prices of agricultural products in our home markets are determined by the prices in markets abroad. Where trade is freest, the prices will, on the average, be the best. Hence **free trade is the essential condition of a sound and healthy home market.** Of all classes, those devoted to agriculture bear the heaviest share of the burden laid by the protective tariff, while they reap no direct benefit from it.

There are positive **objections** to the system of protection, which may be concisely stated as follows: —

1. **Protection introduces and fosters antagonism between the different industries of a country.** The idea of giving protection to every branch of industry is absurd. The theory implies special encouragement to certain manufactures by taxing all other interests in their behalf. The duty which protects the woollen-manufacture increases the cost of the wool-grower's clothing, while the competition of cheap wools from abroad keeps down the price of his product. A tariff on the foreign wools will enhance the cost of material to the manufacturer. So two parties whose interests are really one are set against each other.

2. The unnatural stimulus given by protective legislation leads to over-production, and consequent **stagnation and failure.** The first effect of a high duty is to raise prices, and increase the profits of the protected industry. This causes a rush into that branch of production, till it is quickly overdone, and a disastrous **re-action** comes.

3. **Protection diminishes the legitimate revenues of the state, at the same time that it lays a heavy tax on the people.** Just so far as the tariff is protective in its operation, it reduces the imposts from which the government gets its income; yet, just so far as prices of the protected article in the market are enhanced by the tariff, all consumers pay a special tax for the benefit of the favored producer.

4. **In its application, the policy of protection must be unstable, disturbing the course of industry by frequent changes.** This follows inevitably from the conflict of interests just referred to. When the duty on iron is high, all who use iron as the material of their industry clamor against it. So new candidates for the special favor press their suit for a change of the tariff in their interest. With every session of Congress movements are made for some change of the tariff. A protective tariff can never be made fair and equal to all; for its fundamental principle is an **unjust favoritism,** against which those not favored instinctively protest and contend.

5. **Protection tends to demoralize our national legislation.** The lobby of the Capitol is thronged with representatives of certain manufactures, seeking to obtain or to perpetuate special protection. Money is freely used, and bargains are made to combine the friends of separate measures, when votes are given. Proposed acts come thus to be judged of not by their real merits, but by their relation to personal interests.

6. **Protection tends to corrupt the public morals and the public service.** It offers strong temptations

to the violation of law by **smuggling.** The resistance of men's consciences to this temptation is slight, because the tariff-law rests on no ground of absolute right. The nice sense of honor and right is deadened; and the making of false invoices, the swearing of false oaths, and direct bribery at the custom-house, are regarded as **venial sins.** Officials of the government come into collusion and partnership with these crimes, and betray the sacred public trusts with which they are charged.

Until within the last half-century, the protective policy has ruled the industry and trade of the world, with only here and there an exception, like Holland in her best days. Free trade has had scarcely a chance to try its experiment. **Its principles are, however, illustrated and sustained in the hundred years' history of our nation's independent life.** The States of our republic, in their extent of territory, their diversity of resources, the varied races and endowments of their people, and their distinctive interests, constitute a world by themselves. Fortunately our Constitution forever forbids the protective policy to restrict their trade with each other. Here is a broad arena for the experiment of free trade. For nearly forty years the writer has watched the course of that experiment in the unfolding growth of a young Western State. Her chief industry was at the first, and must long continue to be, agriculture. But as population poured into the prairies and groves, and agriculture yielded a surplus of home capital, and a basis of credit was laid

for the introduction of Eastern capital, every kind of industry suited to her climate and conditions has been successfully established. Her mines have been worked, her water-powers have been utilized, villages and cities have sprung up suddenly, and the diverse genius and taste of her sons have found ample scope and stimulus for profitable exercise. According to the theory of protection, the competition of New-England manufactures, brought in freely by the best facilities for cheap and rapid transportation, should have "crushed out the home production of all but the rudest and coarsest articles of manufacture." But the facts are all against the theory. Woollen-factories, cotton-factories, shoe-factories, iron-works, machine-shops, paper-mills, establishments for making agricultural implements, all have been set up and carried on with a success that promises to be abiding and expanding. This result of a brief but fair experiment of the principle of free trade confirms every phase of that doctrine, and shows that **what is philosophically sound and true is also practically safe and wise.**

The Golden Rule of Christ is full of wisdom and righteousness in its application to the intercourse of nations. We cherish the fond hope that the day is not distant when the nations will conform their policies to the rule, and "do each to others as they would have others do to them." Then the theory of protection, with its false ideas of antagonism and selfish isolation, will have no place; but, instead, the brotherhood of nations as well as of individual

men will be recognized, and the broad philanthropy which Christianity inculcates, and aims to make universal, will have free scope to work out the world's emancipation from all wrong and evil. In such a state the first principles of sound Political Economy will find their consummate application.

EXERCISES.

1. Illustrate the effects of steam applied to navigation on the commerce of the world.

2. What benefits have accrued therefrom?

3. What effect had the opening of the Erie Canal on the condition of the early settlers of Western New York, as respects the wheat they raised? as respects the goods they needed?

4. Did that improvement help, or hinder, the increase of their wealth? Did it hasten, or delay, the introduction of manufactures in the region?

5. If it is expedient to restrict the importation of goods from abroad, why should so much expense be laid out in removing obstructions to free communication?

6. How is the department of production affected by the policy of protection?

7. How does it affect consumption?

8. How does it affect distribution?

9. How does it affect exchange?

10. Explain the difference between a revenue tariff and a protective tariff.

11. Show how a tariff of forty per cent on iron will tax the farmers.

12. Will such a tariff yield much revenue to the government? Who gets the benefit of the tax?

13. How and when is it expected that the farmers will get an indirect benefit from the tariff?

14. If a farmer can buy a suit made in England for ten bushels of wheat, is there any justice in compelling him to pay fifteen bushels for a suit of American manufacture?

15. If the tariff excludes a great part of English manufactures, can we expect the English to buy freely our corn and pork? If we expect to sell to a foreign country, must we not also buy of them?

16. If capital is accumulated by agricultural industry, and labor grows abundant, is any artificial means needed to turn it to the setting-up of manufactures?

17. While capital and labor applied to farming are yielding satisfactory returns, is it expedient to turn them to some other employment not so profitable?

18. Is Robinson Crusoe's independence a thing to be desired?

19. Does Chinese isolation, as it was, meet your ideal of national prosperity?

20. Explain how a high tariff tends to over-production in the industries protected.

21. Why might not a tariff be adjusted to favor all branches of industry alike?

22. Can you tell any thing about corruption in the custom-house in New York?

23. How would a low rate of duties, uniform on all imported goods, relieve that corruption?

24. Has any protective tariff in our country been allowed to continue long without changes?

25. Can you tell how the iron interest in our country has been affected by such frequent changes of the tariff?

OLNEY'S SERIES OF MATHEMATICS.

Olney's Primary Arithmetic Illustrated.....
Olney's Elements of Arithmetic Illustrated...
Olney's Practical Arithmetic .....
Olney's Science of Arithmetic.....
Olney's Introduction to Algebra .....
Olney's Complete Algebra .....
Olney's Book of Test Examples in Algebra...
Olney's University Algebra.....
Olney's Elements Geom. & Trigonom. (Sch. Ed.)
Olney's Elements of Geometry. Separate.....
Olney's Elements of Trigonometry. Separate..
Olney's Elements of Geometry and Trigonometry. (Univ. Ed., with Tables of Logarithms.).....
Olney's Elements of Geometry and Trigonometry. (University Edition, without Tables.) .....
Olney's General Geometry and Calculus.....

The universal favor with which these books have been received by educators in all parts of the country, leads the publishers to think that they have supplied a felt want in our educational appliances.

There is one feature which characterizes this series, so unique, and yet so eminently practical, that we feel desirous of calling special attention to it. It is

The facility with which the books can be used for classes of all grades, and in schools of the widest diversity of purpose.

Each volume in the series is so constructed that it may be used with equal ease by the youngest and least disciplined who should be pursuing its theme, and by those who in more mature years and with more ample preparation enter upon the study.

PHYSIOLOGIES.

Hooker's First Book in Physiology. For Public Schools.

Hooker's New Physiology. Revised, corrected, and put into the most perfect form for text-book use. By J. A. SEWALL, M. D., of the Illinois State Normal University.

A few of the excellencies of these books, of which teachers and others have spoken, are: 1st. Their clearness, both in statement and description. 2d. The skill with which the *interesting* points of the subject are brought out. 3d. The exclusion of all useless matter; other books on this subject having much in them which is useful only to medical students. 4th. The exclusion, so far as is possible, of strictly technical terms. 5th. The adaptation of each book to its use, the smaller work preparing the scho

plied in a great variety of examples in every-day life, for practice in Book-keeping,

Palmer's Blanks to do. (5 numbers).

Palmer's Practical Book-Keeping. By JOSEPH H. PALMER, A.M., Instructor in New York Free Academy. 12mo. 167 pages.

Blanks to do. (Journal and Ledger),

Key to do.