Outlines of Economics

Mills

OUTLINES OF ECONOMICS

A Syllabus for Introductory Study

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Within the last few years several excellent text-books in Economics have appeared, each of which has its own points of superiority. These *Outlines* were prepared in 1906 with the intent of guiding the student in using these several books and of making available in unified, systematic form the particular excellencies of the different books. They are in no sense a substitute for text-books. Each student must have for constant use Marshall's *Economics of Industry*, Seager's *Introduction to Economics*, or his *Economics*, *Briefer Course*, and Seligman's *Principles of Economics*. Other very desirable books are Bullock's *Introduction to the Study of Economics*, Fetter's *Principles of Economics*, Gide's *Principles of Political Economy* (2nd Amer. ed.), and Mill's *Principles of Political Economy*.

In the present revision many changes of wording have been made; the treatment of American Monetary History has been much condensed; and the references have been adapted to the newer editions of the works cited. At the appropriate places "Required Readings" in Bullock's *Selected Readings in Economics* have been introduced and nearly the whole of that collection is so included. I am indebted to Miss Emilie Louise Wells, Instructor in Economics, Vassar College, for valuable suggestions and much laborious verification of references.

Lectures to the class will follow these *Outlines*. At the meetings in sections each student will be held responsible for fuller treatment of points indicated in the *Outlines*; for argumentative discussion of debatable questions; and for constant illustration based on reading and personal observation. It is hoped that note taking during the lecture hour will be found unnecessary. Grasp of the thought, reflection and application are more desirable than voluminous but unassimilated notes.

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September, 1906.

Outlines of Economics.

CHAPTER I.

INTRODUCTORY.

1. Definition, Scope and Scientific Character of Economics.

a. Definitions used at different periods of economic study reveal the change in its character.

Adam Smith, 1776: Inquiry into the Nature and Causes of the Wealth of Nations.

Nassau Wm. Senior, 1836: "The science which treats of the nature, the production and the distribution of wealth."

John Stuart Mill, 1848: "Writers on Political Economy profess to teach, or to investigate, the nature of Wealth, and the laws of its production and distribution."

Wilhelm Roscher, 1854: "The starting point as well as the object point of our science is Man."

Luigi Cossa, 1877: "The science of the social ordering of wealth."

Henry C. Adams, 1886: "Political Economy treats of industrial society."

J. N. Keynes, 1890: "The science which treats of the phenomena arising out of the economic activities of mankind in society." "Economic activity may be defined as human

activity which directs itself towards the production and appropriation of such means of satisfying human needs as are capable of being made the subject of exchange."

R. T. Ely, 1908: "The science which treats of those social phenomena that are due to the wealth-giving and wealth-using activities of man."

H. R. Seager, 1908: "The social science of business."

Cossa, *Introduction to Political Economy*, pp. 58-65; Ely, *Outlines of Economics*, (1908) pp. 1-7; Keynes, *Scope and Method of Political Economy*, ch. 3; Seligman, *Principles*, § 3; Fetter, *Principles*, pp. 3-5.

b. "'Money,' or 'general purchasing power' or 'command over wealth' is the center around which economic science clusters; this is so, not because money or material wealth is regarded as the main aim of human effort, nor even as affording the main subject matter for the economist, but because in this world of ours it is the one convenient means of measuring human motive on a large scale."

Marshall, *Principles of Economics*, (5th ed.) Bk. I., ch. 2; Marshall, *Economics of Industry*, Bk. I., ch. 3.

c. Not all subjects of study are sciences. The characteristics of the sciences are ability to classify facts or phenomena in orderly arrangement; and to establish relations of sequence or cause among them. From these follows some possibility of prediction. Sciences have these characteristics in very different degrees.

In spite of the apparent freedom of the individual will, human actions are capable of scientific study, and, when masses are considered, of comparatively accurate prediction. The social sciences are incomplete and in many respects very inexact; but, because it possesses a more accurate measure of the relative strength of human motives, Economics is more exact than the others.

Economics aims to discover truth and must be distinguished as a science from statesmanship, philanthropy, social reform, which, as arts, endeavor, on the basis of the truth discovered by Economics and other sciences, to accomplish results.

Marshall, *Principles*, (5th ed.), Bk. I., ch. 3, *passim;* Marshall, *Economics of Industry*, Bk. I., ch. 4; Gide, *Principles of Political Economy*, 2d ed., pp. 1-7; Cossa, *Introduction*, pp. 40-57; Davenport, *Outlines of Economic Theory*, pp. 1-7; Fetter, *Principles of Economics*, ch. 1, § 3; Keynes, *Scope and Method*, chs. 1-3; Walker, *Political Economy*, 3rd ed., pp. 17-23; Seligman, *Principles*, § 14; Cairnes, *Political Economy: its Character and Logical Method*, pp. 25-42.

2. Economic Law and Method.

Economic laws are statements "that certain action may be expected under certain conditions from the members of a social group" in lines "of conduct in which the strength of the motives chiefly concerned can be measured by a money price."

In Economics as in other sciences the adjective *normal* is used to describe that which is in accord with scientific law.

Like most other sciences Economics uses both induction and deduction in discovering its laws.

Marshall, *Principles*, (5th ed.), Bk. I., ch. 3; Marshall, *Economics of Industry*, Bk. I., ch. 4, § 5 and Appendix A; Seligman, *Principles*, §§ 10, 11; Cossa, *Introduction*, pp. 67-92; Gide, *Principles*, Bk. I., ch. 4; Keynes, *Scope and Method*, chs. 6, 7; Nicholson, *Principles of Political Economy*, Vol. I., pp. 18-20; Seager, *Introduction to Economics*, §§ 31, 32; Seager, *Economics*, §§ 9, 10; Hadley, *Economics*, pp. 23-25; Cairnes, *Political Economy: Its Character and Logical Method*, Lecture III.

3. Relation of Economics to other Subjects of Study.

Economics and the other social sciences are closely related and mutually dependent. Even when we endeavor to decide the appropriate course of social action in lines in which the motives are mainly economic and in which accordingly economic laws will be our chief guide, we get assistance from History, Psychology, Sociology, Law, Politics, Statis-

tics, Finance and other studies which deal with man individually or socially. But Economics having its own special field of investigation should be discriminated from all these other subjects.

Cossa, *Introduction*, pp. 23-39; Seligman, *Principles*, §§ 12, 13; Seager, *Introduction*, pp. 1, 2; Seager, *Economics*, § 2; Keynes, *Scope and Method*, chs. 4, 9, 10; Ely, *Outlines*, (1908) pp. 11-14; Marshall, *Principles*, (5th ed.) Appendix C; Fetter, *Principles*, ch. 1, § 2; Dictionaries and Encyclopædias for definition and scope of the various social sciences.

4. Importance of the Economic Factor in Social Development. "Economic Interpretation of History."

It is asserted by some that since "the existence of man depends upon his ability to sustain himself, the economic life is therefore the fundamental condition of all life." Marx says: "The economic structure of society is the real basis on which the juridical and political superstructure is raised and to which definite forms of social thought correspond; in short, the mode of production determines the character of the social, political and intellectual life generally." This "economic interpretation of history does not exhaust the possibilities of life and progress; it does not explain all the nicities of human development; but it emphasizes the forces which have hitherto been so largely instrumental in the rise and fall, in the prosperity and decadence, in the glory and failure, in the weal and woe of nations and peoples. It is a relative rather than an absolute explanation."—Seligman.

Seligman, *Economic Interpretation of History;* Ghent, *Mass and Class*, ch. 1; Marshall, *Principles*, pp. 1-4; Marshall, *Economics of Industry*, pp. 1-4; Spargo, *Socialism*, ch. 4.

5. Value of the Study of Economics.

The study of Economics gives better understanding of history, deeper insight into our present social organization, guiding principles in connection with nearly all social activi-

ties, deeper sympathy and interest in connection with some profound social and ethical problems, intelligence and discretion with which to temper our feelings in the presence of social evils. It also provides a mental discipline surpassed by few if any studies, since it encourages precision, accuracy, discrimination, clearness of thought and expression. Many of its problems are of such difficulty that they require most intense application. A continued chain of reasoning is frequently necessary as in a mathematical demonstration; but since the forces and factors that must be borne in mind are very numerous, comprehension and grasp in an unusual degree are necessary. It gives a training in that kind of thinking which is necessary for success in every day life and action.

Andrews, *Institutes of Economics*, § 16; Laughlin, *Study of Political Economy*, chs. 2, 3; Cossa, *Introduction*, pp. 93-110; Patten, *American Economic Association Publications*, 5: 473-486. Marshall, *Principles*, (5th ed.) Bk. I., ch. IV., §§ 5, 6; Marshall, *Plea for the Creation of a Curriculum in Economics*.

CHAPTER II.

FUNDAMENTAL CONCEPTS.

1. Definitions Relating to Value.

Utility is capacity to satisfy a want. Value is power in exchange or an estimate of relative utility. Price is value expressed in money. Demand means the quantity that will be taken at a given price. Supply means the quantity that will be furnished at a given price.

Seager, *Introduction*, § 26; Seager, *Economics*, § 5; Bullock, *Introduction*, §§ 107, 111, 112.

2. Wealth.

a. In defining wealth we hold to common usage and discriminate between wealth and welfare even though etymologically and ethically such distinction be unfortunate. Wealth (as used in Economics) does not necessarily mean abundance. Those goods having utility, which are external to the individual, and limited in amount constitute wealth. Wealth is that which has value. Wealth may be private or public (= social or collective). Some valuable sources or conditions of wealth are not wealth. Although from a logical and psychological standpoint there is no difference between the utility of a *service* and the utility of *material wealth*, services are not included in wealth.

b. There has been constant change in the forms of wealth with development of human desires. The forms of wealth at any time and in any country are determined by and reflect the prevailing civilization. A large amount of wealth at present consists of very durable but very indirect means of satisfying wants.

c. Since man's power to devote himself to higher aims and activities depends upon possession of wealth sufficient to satisfy fundamental needs and is often conditioned upon possession of other contributory wealth, wealth is essential to individual and social progress; and the study of Economics is a study of that which conditions science, art and all higher life. Wealth does not necessarily advance welfare or civilization. It is the nature of man, his tastes and interests which determine what things are wealth; but these in turn are affected by his choice and use of wealth.

Seligman, *Principles*, §§ 4, 5; Marshall, *Principles*, Bk. II., *chs.* 1, 2; *Economics of Industry*, Bk. II., chs. 1, 2; Davenport, *Outlines*, ch. 2; Bullock, *Introduction*, pp. 84-87; Fetter, *Principles*, ch. 3; Gide, *Principles*, pp. 46-49; Andrews, *Institutes*, §§ 1, 2, with notes; Clark, *Philosophy of Wealth*, ch. 1; Ely, *Outlines*, (1908) pp. 95-100.

3. Production and Consumption.

Production is the creation of utility; the utility created may be of form, of place, or of time. Consumption is the destruction of utility. Labor is exertion with some other end in view than merely the pleasure involved in the exertion. Productive labor was formerly held to be only that which produced utility in durable form. All labor may be regarded as productive which accomplishes the end in view; that is, which aids in the satisfaction of a want. Individual acquisition is not necessarially social production.

Marshall, *Principles*, Bk. II., ch. 3; *Economics of Industry*, Bk. II., ch. 3; Fetter, *Principles*, pp. 43, 257-260; Seligman, *Principles*, §§ 119, 120; Clark, *Philosophy of Wealth*, ch. 2; Gide, *Principles*, pp. 75-80; Seager, *Economics*, § 6.

4. Income and Capital.

A piece of wealth is desirable because of the utility that comes from it. There is an *income* of benefit. Common usage does not apply this term to the utilities coming from

consumption goods; but does apply it to the utility coming from wealth used in production of further wealth; and also extends the term to any addition to wealth whether coming from use of land, from accumulated wealth used in production, or from human effort in form of wages, salaries or profits. While the income is in reality one of utility or utility-producing wealth, it is commonly thought of and expressed in terms of money. We think of income as a stream or flow—not as a store.

One may sell for a lump sum his right to receive indefinitely an income from a piece of wealth, that is, its income may be capitalized as may any other income. Thinking, then, of such estimated lump-sum or capitalized values of incomes of utility, we may say with Seligman that "the totality of capital is equivalent to the totality of wealth." But usage limits the word capital from the *individual* point of view to that "wealth which he devotes to acquiring an income in the form of money."—(Marshall). Further the usage of economic discussion defines capital from the *social* point of view as "the products of past industry used as aids to further production," (Seager), excluding land. While the particular pieces of capital may be called *capital goods,* the business man thinks of capital as "the complex of capital goods used in connection with each branch of production measured in money."—(Seager).

Capital is classified from point of view of durability as fixed or circulating; from point of view of mobility as specialised or free.

Marshall, *Principles,* Bk. II., ch. 4; Marshall, *Economics of Industry,* Bk. II., ch. 4; Seager, *Introduction,* §§ 60; 69-71; Seager, *Economics,* §§ 8, 43; Seligman, *Principles,* §§ 6; 137; Fetter, *Principles,* pp. 114-117; Bullock, *Introduction,* pp. 131-138; Davenport, *Outlines,* pp. 119-121; Gide, *Principles,* pp. 120-129; Hadley, *Economics,* pp. 5-7; Mill, *Principles,* Bk. I., chs. 4, 6; Nicholson, *Principles,* Bk. I., ch.6, except § 7; Walker, *Political Economy,* Part II., ch. 3; Andrews, *Institutes,* §§ 28, 29; Hearn, *Plutology,* ch. 8, § 1; Palgrave, *Dictionary,* article *Capital.*

CHAPTER III.

NATURE AND DEVELOPMENT OF ECONOMIC SOCIETY.

1. Organic Nature of Society.

A society is not an accidental aggregation of unrelated individuals but is organic in character. It has the power of growth from within; it manifests "differentiation" or specialisation of function, and "integration" or that close interdependence and inter-relation of parts which creates an essential unity. Social evolution is in accord with the general evolutionary tendency from the homogeneous, or generalized, to the heterogeneous, or specialised. An efficient cause of progress has been that "struggle for existence" which results in the "natural selection" of those methods, institutions, structures, groups "which are best fitted to derive benefit from their environment." Social evolution is not merely biological but largely psychical and increasingly self-directed. Whether this evolution results in progress or degeneracy depends upon whether or not it helps create a social environment favorable to that higher personality which is the goal of human existence. In the field of economic structure and activity the highly organic nature of modern society is preeminently apparent.

Marshall, *Principles*, Bk. IV., ch. 8; *Economics of Industry*, Bk. IV., ch. 8; Fairbanks, *Introduction to Sociology*, pp. 31-44; Small and Vincent, *Introduction to the Study of Society*, pp. 87-96; Ritchie, *Principles of State Interference*, pp. 3-51; *Darwinism and Politics*, pp. 1-83; McKechnie, *The State and the Individual*, pp. 1-26.

2. Characteristics of Modern Industrial Society.

Prominent in modern industry are separation of occupations; division of labor; machine processes; great diversity in

required industrial skill; opportunity for extensive wage employment of unskilled laborers including women and children; large industrial units; trusts; local specialisation of industries; rapidity and cheapness of communication and transportation; wide markets; separation of industrial functions; the wages system; enormous employment of capital; profit as the test of success; money; the credit system with its elaborate machinery; possibility of economic maladjustment; crises and depressions. Economic freedom, competition and recognition of the private property right are general characteristics of modern society that exert profound influence on all its economic and social relations and give rise to many of the more special characteristics mentioned above.

These characteristics are not the result of conscious action or catastrophy but of a long process of evolution.

3. Evolution of Private Property.

From communal ownership is developed individual ownership of weapons, animals, slaves, chattels, land. The origin of individual ownership is often force and fraud; but the development and persistence of the system of private property rights, as distinguished from possession, has its real explanation in the fact that that it encouraged industry, thrift and accumulation of wealth which aided the social groups possessing them to survive. The occupation, natural rights, labor and legal theories of private property have been replaced by the social utility theory. The private property right in its various aspects is, then, limited by this principle of social utility.

Seligman, *Principles*, ch. 9, and works there cited; Hadley, Economic, pp. 26-34; Fetter, *Principles*, pp. 362-369; Gide, *Principles*, pp. 428-437; Ely, *Outlines*, (1893) pp. 257-264; Palgrave, *Dictionary of Political Economy* article *Property*.

4. Evolution of Freedom.

Freedom in the sense of positive capacity for self-determined action was unknown among savages. Subjection to nature, to the strong and to custom was accompanied by extermination of captives. Slavery, serfdom and the wage system, each introduced because of its relative economic superiority, were steps in advance. There is now a considerable degree of freedom as of marriage, movement, occupation, association, consumption, production, contract, trade. Liberty is not an end but a means to that higher development of individuality which is the only real freedom. Liberty except as based on equality and a sense of social responsibility is dangerous; and hence we must by social control restrict liberty to secure freedom. Positive individual freedom is a social product.

Seligman, *Principles*, ch. II.; Hadley, *Economics*, §§ 29-44, 78-82; Fetter, *Principles*, ch. 44; Ely, *Outlines*, p. 42, pp. 267-270; Webb, *Industrial Democracy*, pp. 844-850; *Problems of Modern Industry*, ch. 10; Ritchie, *Principles of State Interference*, pp. 83-151; McKechnie, *The State and the Individual*, pp. 305-321; Ritchie, *Natural Rights*, pp. 135-147.

5. Evolution of Competition.

Competition, a form of freedom, has undergone development. At first largely a rivalry between groups it becomes more and more extensive within the group. Under modern industry competition has tended constantly to replace custom as a determinent of price. While more necessary, it is also more pregnant with danger. It is the cause of progress, selecting those who can best serve society, leading to accumulation of wealth, protecting the consumer, encouraging energy. It is found between commodities, between individuals, between markets, between classes, between countries. It involves dangers and without initial equality of competitors

may not realize its benefits. It is limited and controlled by custom, co-operation, monopoly or government regulation.

Seligman, *Principles*, ch. 10; Marshall, *Principles*, (5th ed.) Appendix A; *Economics of Industry*, Bk. I., ch. 2; Hadley, *Economics*, §§ 76, 77, 87, 97; Fetter, *Principles*, pp. 425-430; Hadley, *Freedom and Responsibility*, ch. 5; Ely, *Evolution of Industrial Society*, pp. 123-163; Palgrave, *Dictionary of Political Economy* two articles on *Competition*.

6. Evolution of Economic Stages.

There have been various explanations of economic development; as, barter, money, credit economies; or from status to contract; or from a militant to an industrial society; or through hunting, pastoral, agricultural, commercial, industrial stages; or stone, bronze, iron, steel ages. Although these are all suggestive and partially true, they are inadequate. From the economic standpoint there are "three great stages known respectively as the self-sufficing economy, the trade or commercial economy, and the capitalist or industrial economy." (Seligman.)

Seligman, *Principles*, ch. 5 and works there cited; Ely, *Evolution of Industrial Society*, pp. 3-73; Bücher, *Industrial Evolution*, chs. 1-3; Conrad, *Grundriss*; (1907), 1er Teil, § 40.

7. Evolution of Industrial Organization.

a. Including under "industrial organization" the relation of the producer to the consumer, of the different classes and occupations of workers to each other, of the different classes of workers to capital and to risks of sale, of hand work to capital, we find constant development of more complex relations.

b. Under the "*family* system" "production was carried on within the family, by the family, for the family." There was no market; no wage; no machinery; little division of labor; little capital; little separation of industrial function. The productive unit was self-sufficing. Transition begins in the

hiring of itinerant or more permanent workmen. This system is exemplified more or less fully in the slave plantation of early Rome, in the mediæval manor, in the frontier farm, in the Southern plantation.

c. Under the "*guild*" or *handicraft* system the producer of a good produces it for others; he owns tools and material; he works by hand; he words at a specific trade; he may employ others but they are "help" on their way to independence and a status like his own; he assumes the risk of finding a market and deals directly with the consumers of his products. In the Middle Ages such producers formed associations or guilds in each trade to promote the welfare of that trade. They came to regulate conditions of work and the character of goods and acquired large civic and political power.

d. Under the *domestic* system the work is done by craftsmen as under the guild system, but distributed and ordered by a capitalist who takes the risks of sale and often furnishes the materials. The typical producer under the domestic system did not own raw material or finished product and tended to rent the more expensive tools. This capitalist is not a hand-worker but an employer or entrepreneur. The market is a comparatively wide one. Means of transportation, of exchange and of handling capital are improved. In the textile industries this system was dominant in England from the sixteenth to the eighteenth century.

e. Under the *factory* system there is an enormous increase in capital in the form of buildings, machinery, power, materials. Not only materials but machinery and place of work are owned or are controlled by employer. To utilize power, machines must be in one place so that many workers are in one factory. The worker is divorced from ownership of the means of production, and his work is narrowly specialized.

There is differentiation of industrial function. The market is greatly widened by enormously improved means of transportation. Exchange and credit are highly organized. This system began in England at the end of the eighteenth century as a result of great inventions in the textile manufacture.

f. The efficient cause of the development of the later systems has been the superiority of each over the preceding in producing goods cheaply. In some lines of work since such superiority has not existed, the development did not take place and we have survivals of older methods.

There is a large amount of literature upon the different phases of industry but many of these books are either too voluminous, too detailed, or too neglectful of essential distinctions to be of use in this course. Seager, *Introduction*, ch. 1; Seligman, *Principles*, pp. 88-95; Ashley, *English Economic History*, passim as Vol. II., pp. 219-222; Bücher, *Industrial Evolution*, ch. 4; Hobson, *Evolution of Modern Capitalism*, chs. 2, 3; Toynbee, *The Industrial Revolution*, pp. 178-202; Veblen, *Theory of Business Enterprise*, chs. 2, 3.

Required Readings: Bullock, Selected Readings in Economics, ch. 5. The Organization of Production before and after the Industrial Revolution.

8. Development of Economic Thought.

a. The economic thought of each age is a reflex of its economic life and economic problems.

b. The prevalence of slavery and the consequent contempt for labor limited the economic thinking of the ancient world to questions of property right, division of labor, usury and money.

c. The predominant religious character of the age and the development of industry and commerce by free labor made the mediæval thinking center around the ethics of price, interest and money.

d. The revival of commerce after the Crusades, changes of price due to money from the New World, debasement of

coinage and particularly the growth of centralized states needing revenues, standing armies and navies, and owning colonies, aroused much practical politico-economic thinking. The resulting *Mercantile System* emphasized the necessity to a nation's welfare of a large stock of money gained from a favorable balance of trade; of manufactures; of shipping; of large population; and of colonies—all as essentials of a successful national policy. To secure these a detailed system of state regulation was developed.

e. The philosophical and political thought of the eighteenth century and the errors of the mercantilist thinking led to a revolt. *The Physiocrats* emphasized food rather than money as wealth; agriculture as the productive industry since it alone was said to give a *net product*; natural rights; natural law; and freedom of all economic activity from governmental control. Laissez-faire. Quesnay, Turgot.

f. Adam Smith was largely influenced by the Physiocrats, expressing the cosmopolitan point of view and proclaiming natural liberty as a means to general welfare. He finds in all industry the source of wealth; and his theory of distribution is a reflex of contemporary economic changes and conditions. He showed the social value of economic self-interest. His *Wealth of Nations* (1776) is the foundation of modern economic thinking.

g. Production for large markets, the necessity of profit, the differentiation of industrial classes, the increase of capital brought to the front problems of value and distribution. These were treated by the English school led by Ricardo, Malthus, Senior and summed up by J. S. Mill. Wealth, competition, non-interference were emphasized.

h. The unfortunate social results of the new industrial system and the dehumanized character of the contemporary economic theory led to revolts on ethical groumds by Ruskin

and Carlyle and on theoretical grounds by the socialists like Karl Marx.

i. The historical school was a reaction from the deductive *a priori* method of the English school, advocating inductive study and insisting upon the relativity of economic theory.

j. The Austrian school of the present returns to the deductive method, but has a new psychological basis in its theory of utility.

k. Contemporary British and American economists, feeling the influence of all these lines of thought, using historical and deductive methods, accepting the theory of marginal utility, show, as Seligman says "how and why social progress and the growth of capital are intimately bound up with the advance of the mass of the workers."

Seligman, *Principles*, ch. 8; Andrews, *Institutes*, §§ 5-15; Marshall, *Principles*, Bk I., ch. 4; Gide, *Principles*, pp. 7-14; Ingram, *History of Political Economy* (more conveniently used in its original form as the article *Political Economy* in Encyclopædia Britannica); Cossa, *Introduction*, Historical Part; articles in Palgrave, *Dictionary*, and in the *International Encyclopædia*; Price, *Short History of Political Economy in England*; Cohn, *A History of Political Economy;* Seager, *Economics*, a lecture delivered at Columbia University.

CHAPTER IV.

WANTS AND THEIR SATISFACTION: DEMAND.

1. The Nature and Economic Significance of Wants.

Human wants vary with race, climate, stage of civilization, individual development physically, intellectually, æsthetically, morally, religiously. They are capable of indefinite expansion; limited in intensity; competitive; complementary; largely matters of habit and fashion. The want is the cause of economic activity. Wants cause activities, but activities cause new wants.

Required Reading, Bullock, Selected Readings in Economics, pp. 236-245, Hearn, Human Wants.

Marshall, *Principles*, Bk. III., ch. 2; *Economics of Industry*, Bk. III., ch. 2; Bullock, *Introduction*, pp. 79-84; Seager, *Introduction*, §§ 34, 37; Fetter, *Principles*, ch. 2; Gide, *Principles*, pp. 40-45; Hearn, *Plutology*, ch. 1; Andrews, *Institutes*, pp. 190-194; Davenport *Outlines*, § 8; Smart, *Introduction to the Theory of Value*, chs. 1-4

2. The Nature of Demand as Based Upon Diminishing Utility.

a. Utility is capacity to satisfy a want and in economic terminology does not necessarily mean productive of well-being. Demand denotes effective desire; i. e., the quantity that will be taken at a given price.

b. "The utilities of additional units of any good to any consumer diminish naturally as his supply of units of that good increases." (Seager).

c. Consequently, although he might use much more of the articles if it were a free good, he ceases his purchases at the point where, in his estimation, the utility of the last addi-

tion to his stock is only equal to its cost. The utility of this last portion acquired is the *marginal utility* of the commodity to him.

d. It follows that, as the price is lowered, the purchase of additional units will be made since their utilities will successively equal the falling price; and, as the price rises, purchases will be diminished, since this rising price will successively be greater than the estimate of the utility of the units previously bought. Hence results the *Law of Demand*, that other conditions remaining the same, the amount demanded increases with a fall and decreases with a rise in price. The larger the supply, the lower the price at which it can be sold.

e. Demand schedules of individuals are different, because the marginal utility of money varies to different persons and because of varying intensity of desire.

f. "Value is not merely the expression of marginal utility; it is the expression of social marginal utility." (Seligman). "Value in industrial society is the result of social valuation. It is not so much man's estimate as society's estimate of marginal utility." (Seager).

g. "Most goods are not simple utilities but bundles of utilities," (Seager) and "value is the expression of the social marginal increments of utility which are bundled together or united in anything, and each of which is marginal to a different class." (Seligman).

Marshall, *Principles*, Bk. III., ch. 3; *Economics of Industry*, Bk. III., ch. 3; Seager, *Introduction*, pp. 81-98; Seager, *Economics*, §§ 12-15; Seligman, *Principles*, ch. 12; Fetter, *Principles*, pp. 21-29; Gide, *Principles*, pp. 52-59; Bullock, *Introduction*, pp. 88-97, 110-113; Flux, *Economic Principles*, pp. 20-25; Pierson, *Principles*, pp. 54-61; Carver, *Distribution*, pp. 1-27; Clark, *Distribution*, ch. 16; Davenport, *Outlines*, pp. 14-16, 35-37; Smart, *Introduction to Theory of Value*, chs. 6, 7.

3. Elasticity of Demand.

Elasticity of demand refers to the degree in which demand responds to changes in price. It varies greatly according to the nature of the article and the income of the purchaser.

Marshall, *Principles*, Bk. III., ch. 4; *Economics of Industry*, Bk. III., ch. 4; Seager, *Introduction*, pp. 66, 67; Seligman, *Principles*, § 102; Fetter, *Principles*, p. 29; Flux, *Economic Principles*, pp. 25-31.

4. Comparison of Utilities.

"If a person has a thing which he can put to several uses, he will distribute it between these uses in such a way that it has the same marginal utility in all. For if it had a greater marginal utility in one use than another, he would gain by taking away some of it from the second use and applying it to the first." (Marshall). Similarly one's total expenditure of money or effort tends to be so directed that marginal utilities in different lines will be equal.

"The utility of future goods is less to the normal consumer than the utility of present goods of like kind and quality by an amount varying directly with the degree of futurity." (Seager).

Marshall, *Principles*, Bk. III, ch. 5; *Economics of Industry*, Bk. III., ch. 5; Seager, *Introduction*, § 36; Bullock, *Introduction*, § 61; Davenport, *Outlines*, §§ 29-32.

Required Reading: Bullock, Selected Readings in Economics, pp. 245-254; Jevons, The Theory of Utility.

CHAPTER V.

PRODUCTION OF WEALTH: SUPPLY.

A. GENERAL CONSIDERATIONS.

a. Production is the creation of utilities of form, time or place; and is closely related to consumption.

b. Production involves sacrifice and time.

c. The factors of production are nature, labor, capital. Since production is a social process, the efficiency of these factors will depend largely upon the system or organization that brings them together; and upon due appreciation of the significance of the human factor.

Seligman, *Principles*, ch. 18; Marshall, *Principles*, Bk. IV., ch. 1; *Economics of Industry*, Bk. IV., ch. 1; Seager, *Introduction*, §§ 27, 28; Fetter, *Principles*, ch. 28; Bullock, *Introduction*, pp. 115-118; Andrews, *Institutes*, §§ 18-22; Mill, *Principles* Bk. I.,chs. 1, 2, 3; Clark, *Philosophy of Wealth*, ch. 2; Nicholson, *Principles*, Bk. I., ch. 2; *Elements*, pp. 32-47.

B. NATURE.

1. Classification of Nature's Contribution to Production.

2. Influence of Nature Upon Man's Economic Life.

Required Reading: Bullock, Selected Readings in Economics, pp. 1-22; Shaler, The Effect of the Physiography of North America upon men of European Origin.

3. Exhaustion of Natural Wealth.

a. Some natural resources may be permanently exhausted.

b. Some natural resources are incapable of permanent exhaustion.

c. Some natural resources replace themselves more or less completely by growth.

4. Man's Ability to Prevent Exhaustion and Increase Productivity.

a. Minerals cannot be increased. Necessity of economy in utilization. Progress of science makes possible utilization of low grade ores, which practically means an increase in quantity.

b. Fisheries in some cases seem inexhaustible. In other cases much may be done to overcome tendency to exhaustion.

c. Forests. American tendencies. Need of scientific forestry.

d. Limited area of desirable building land. Methods of overcoming this limit. Modern building methods. Rapid transit.

e. Fertility of the soil for agricultural uses may be increased by cultivation; soil mixture; irrigation; draining and clearing; fertilization; artificial climatic conditions.

Required Reading: Bullock, Selected Readings in Economics, pp. 73-103 containing official papers upon American Agriculture.

5. The Law of Diminishing Returns.

a. At any particular time and in any particular stage of soil exhaustion and scientific knowledge, successive equal applications of effort to a given area of land will, after a certain point is reached, yield returns less than proportionate.

b. Because of this fact of diminishing returns, there is a point beyond which a further expenditure of effort or money will be greater than the resulting returns to that added outlay. This is the *margin of cultivation.* In the case of some land this point is reached only after much outlay (many "doses" of capital and labor, as Professor Marshall says);

other land is so poor that no cultivation pays; still other land is on the margin of cultivation since its most ordinary cultivation ("one dose") is just paid for by the product.

c. The law of diminishing returns is frequently erroneously thought to refer to exhaustion of the soil.

d. This law is frequently erroneously thought to refer to successive periods of time.

Marshall, *Principles*, Bk. IV., chs. 2, 3; *Economics of Industry*, Bk. IV., chs. 2, 3; Seligman, *Principles*, §§ 16-19, 88, 132-135; Seager, *Introduction*, §§ 61-66; Bullock, *Introduction*, §§ 76, 96-99; Gide, *Principles*, pp. 86-103; Fetter, *Principles*, ch. 7, §§ ii.; ch. 9; ch. 11; Mill, *Principles*, Bk. I., ch. 12; Andrews, *Institutes*, §§ 23, 24, 34, 39; Hearn, *Plutology*, chs. 5, 6; Nicholson, *Elements*, Bk. I., ch. 6; *Principles*, Bk. I., chs. 4, 10; Kropotkin, *Fields, Factories and Workshops*, chs. 3-5; Seager, *Economics*, ch. 4.

C. LABOR.

1. General Considerations Regarding Labor.

a. Definition. Productive and unproductive labor. (See ch. ii., 3).

b. Labor of different individuals varies greatly in its predominant characteristics—some being largely muscular, some manual, some inventive, so ne supervisory, some protective, etc.

c. Ordinarily every satisfaction of a want involves the performance of labor on the part of some one.

d. Work, which, within certain limits may be pleasure, education and wholesome discipline, becomes, if continued, irksome toil, intellectually stunting, morally debasing and economically less productive.

e. The labor force of a country depends upon its (1) Quantity; (2) Quality.

2. Amount of the Labor Force.

a. The labor force of a country depends directly upon the population. Increase of population depends upon

(1) The birth rate. This is influenced by the marriage rate which is affected by conditions of prosperity. This latter influence is due to the private property right, and to parental rather than social responsibility for maintenance. The number of births per marriage varies greatly with race, nationality, social and economic condition. In recent years it has decreased in the United States, England and some other countries, partly because of an increasing standard of comfort and partly because of certain social tendencies.

(2) The death rate. This is dependent upon many considerations—sanitary, medical, social, industrial and governmental. Other conditions remaining constant, the death rate tends to decrease with increasing prosperity.

(3) Migration. The balance between emigration and immigration is an important influence upon the population of certain countries. In the United States immigration responds quickly to prosperity.

(4) Prosperity tends to increase the rate of increase of population in the United States since it accelerates the birth rate and immigration, and retards the death rate.

(5) It is socially better to maintain a certain increase of population by a low birth rate and a low death rate than by a high birth rate and a high death rate.

Required Reading: Bullock, Selected Readings in Economics, pp. 255-275; Rümelin, Movement of Population.

b. The labor force of a country is affected by the distribution of population by age periods. The number of efficient laborers will be smaller in a country in which there is an undue proportion of young children.

c. The labor force of a country is affected by the distribution of the population between productive and non-productive classes. In the latter are paupers, insane, tramps, idle rich and other drones. It is also decreased if there are too many relatively in certain professions or occupations, so that they are not fully employed. Certain countries suffer because the class of priests is relatively too large, being recruited by non-economic causes.

d. The amount of labor depends upon the number of days in the year and hours in the day devoted to work. Many holidays for religious or other reasons and short working days seriously decrease productiveness in certain countries. However, a lack of holidays and rest days and an excessive duration of the work day exert an unfortunate influence on the efficiency of the laborer and decrease production.

e. An increase in the population may exert an influence on production less than proportionate if it involves pressure on subsistence; or more than proportionate if it allows co-operation and organization to a greater extent than were previously possible.

f. NOTE. Malthus' Theory of Population.

Thomas Robert Malthus in the first edition of his Essay on Population (1798) maintained against Condorcet, Godwin and others, that great progress in human happiness was impossible since population tended to increase geometrically, while food increased only arithmetically; with the result of pressure upon subsistence, except so far as population was limited by other positive checks, such as vice, war, famine. The admission, in a second edition (1803), of the possibility of the preventive check of "moral restraint" made more correct his theory of population, but ruined his argument against the perfectionists. Against Malthus' theory it is urged that there are physiological, social and economic hindrances which prevent the birth rate attaining its maximum;

and that progress in science and the arts reveals almost unlimited possibilities of improvement in raising and working up food supply and raw material. It is also claimed an increasing population is relatively more efficient because of better organization.

Required Reading, Bullock, Selected Readings in Economics, pp. 275-286; Extracts from Malthus' Essay.

Marshall, *Principles*, Bk. IV., ch. 4; *Economics of Industry*, Bk. IV., ch. 4; Seligman, *Principles*, ch. 4 and § 130; Seager, *Introduction*, pp. 283-294; Bullock, *Introduction*, §§ 77-78; Fetter, *Principles*, chs. 20,21; Andrews, *Institutes*, §§ 25, 26, 27, 35; Hadley, *Economics*, pp. 41-51; Gide, *Principles*, pp. 71-85, 666-669; Mill, *Principles*, Bk. I., chs. 2, 3, 10; Nicholson, *Principles*, Bk. I., chs. 5, 11; *Elements*, Bk. I., ch. 7; Walker, *Political Economy*, pp. 301-314; George, *Progress and Poverty*, pp. 81-124; Seager, *Economics*, pp. 205-214.

3. Efficiency of the Individual Laborer.

a. The laborer is as a rule more efficient as he is a well developed man. Muscular strength, nervous energy, intelligence, taste, character affect his productivity, although their relative importance in different occupations varies greatly. Nervous energy, intelligence, character (in the sense of honesty, industry, accuracy, resourcefulness, reliability) are in every line of work important. In some lines muscular strength has become relatively less necessary. One of the serious indictments against our present industry is that it blunts the artistic sense; but there is a growing perception of the need for taste in many lines of manufacture.

b. The qualities which make one an efficient laborer depend largely upon the Standard of Living and respond more or less closely to its changes. The Standard of Living is largely dependent upon income. The quantity, kinds and combinations of food; its preparation and cooking; housing accommodations, reasonable leisure, proper recreations and amusements; time and means for education; avoidance of

improper expenditure for stimulants and narcotics, etc., react sooner or later on efficiency.

b. Hope, freedom, security and incentive affect productiveness. Hence the system of industrial remuneration whether slavery, time wages, piece wages, profit sharing, co-operation, premium-plan, economic independence is significant. The social system and the government have their effect, as have systems of land tenure and the property right.

d. Occupation and industrial conditions affect general vigor, nervous energy, intellectual and artistic development, moral character. This is particularly important in the case of children, since they are in an undeveloped formative condition. Even from the merely economic point of view, child labor is objectionable as a great draft on future efficiency. Compulsory education and factory laws are aids to efficiency.

e. Modern city life has its effect on the productive efficiency of the laborer because of housing congestion, lack of air and play grounds, undue nervous stimulus, spread of contagion, etc. The strongest physique, nervous energy and character of the country tend toward the city and there tend to be exhausted. Such evil tendencies may be largely overcome by social effort.

f. Efficiency is increased by education whether of common school, high or college, whether liberal, manual, trade or technical. Much education comes from other agencies than the school, as the home, the factory or shop, the systematic apprenticeship.

g. The economic efficiency of a worker is largely determined by the economic, intellectual, artistic, political, moral standards and institutions of the society in which he lives and especially of the social class to which he belongs. Man is a social product.

h. An individual's efficiency depends largely upon his finding that place for which he is most fit. Anything which hinders such adjustments, as social and industrial grades, or inequality of opportunity interferes with social efficiency. So far as a greater degree of economic equality is naturally secured, it increases equality of opportunity and hence efficiency.

i. Economic progress, like social progress generally, has depended upon the elimination of the inefficient and the selection of the efficient. Although humanitarian efforts to prevent such elimination may and sometimes do tend to interfere with progress in economic efficiency, we need not conclude that such philanthropy is necessarily uneconomic. Efficiency depends partly upon the acquirement of much race tradition, knowledge, skill. Those naturally prone to elimination but preserved by philanthropy may by such acquirement become efficient. Further the qualities of character necessary for efficiency in a society are not entirely the same as those for a Robinson Crusoe. Philanthropy by cultivating social traits may indirectly promote efficiency.

j. Although those qualities which produce efficiency are partly the result of non-economic causes, still in a large degree economic efficiency is a direct response to the demand for it is as shown in wages, salary and profits.

Marshall, *Principles*, Bk. IV., chs. 5, 6; *Economics of Industry*, Bk. IV., chs. 5, 6; Fetter, *Principles*, pp. 195-201; Seager, *Introduction*, pp. 120-125; Seligman, *Principles*, §§ 126, 130, Mill, *Principles*, Bk. I., ch. 7, Bk. II., chs. 5 9; Hearn, *Plutology*, chs. 3, 4; Hadley, *Economics*, §§ 22-27, 362-368; Nicholson, *Principles*, Bk. I., ch. 5, § 4; Andrews, *Institutes*, § 36. Seager, *Economics*, §§ 40, 41.

D. CAPITAL.

1. Definition and Distinctions. (See chap. ii., 4.)

2. Forms Which Capital Assumes.

Bullock, *Introduction*, pp. 133-135; Seager, *Introduction*, pp. 132-134, Seligman, *Principles*, § 137; Marshall, *Principles*, Bk. IV., ch. 7, §§ 1-3; *Economics of Industry*, Bk. IV., ch. 7, § 1; Andrews, *Institutes*, § 29; Seager, *Economics*, § 46.

3. Advantages of Capitalistic Production.

Although indirect and involving delay, capitalistic production is advantageous since it enables man to employ his strength more effectively or to use natural forces otherwise useless.

Seager, *Introduction*, pp. 125, 126, 134, 135; Bullock, *Introduction*, pp. 131, 132; Seligman, *Principles*, §§ 138, 140; Hearn, *Plutology*, ch. 8, §§ 2-4; Seager, *Economics*, §§ 42, 47.

4. Capital Subject to the Law of Diminishing Returns.

Although capital enormously increases production, it is still true that, at any particular time, with a constant labor force and provided there be no change in industrial knowledge and methods, the law of diminishing returns holds true in the case of successive units of capital.

Seager, *Introduction*, pp. 128, 129; Fetter, *Principles*, pp. 61, 62, 66 72; Seligman, *Principles*, § 168; Seager, *Economics*, § 44.

5. Capital Involves "Abstinence" or "Waiting"; and its Accumulation Depends upon

a. *Ability* to save, or surplus of income above expenditure.

b. *Willingness* to save which is encouraged by family affection, political and economic security, a high rate of interest, intelligence, and morality. Since a future utility is regarded as less desirable than a present one, saving is largely dependent upon a rate of interest high enough to overcome the superior attractiveness of a present good. Some saving, however, is regardless of the rate of interest, having in view a sum rather than an income, while in other cases the determination to secure a certain income results in greater saving with a low than with a high rate of interest.

Marshall, *Principles*, Bk. IV., ch. 7, §§ 4-10; *Economics of Industry*, Bk. IV., ch. 7, §§ 2-6; Bullock, *Introduction*, pp. 140, 141; Fetter, *Principles*, ch. 19; Seligman, *Principles*, § 139; Gide, *Principles*, pp. 688-692, 129-131; Mill, *Principles*, Bk. I., ch. 11; Nicholson, *Principles*, Bk. I., ch. 12; *Elements*, Bk. I., ch. 8; Hearn, *Plutology*, ch. 9; Seager, *Economics*, § 116.

6. Methods of Accumulating Capital.

a. By saving and investing.

b. By borrowing and investing.

c. Accumulation of capital is much facilitated by modern financial methods and institutions, such as banks, savings banks, insurance companies, building and loan associations, etc., and by the representation of ownership by transferable stocks and bonds.

Seager, *Introduction*, pp. 130-132, Seager, Economics, § 45; Bullock, *Introduction*, p. 139; Gide, *Principles*, pp. 692-694, 697-700; Hamilton, *Savings and Savings Institutions*.

7. Social Utility of Saving Capital.

Economic (and hence social) progress has been largely dependent upon the accumulation of capital, since the amount of wealth production is largely determined by the quantity and form of capital. But wealth production is even more dependent upon the skill and training of the members of society. Social progress depends upon due proportion between saving and wise consumption.

Hamilton, *Savings and Savings Institutions*, ch. 1; Gide, *Principles*, pp. 694-697; Hadley, *Economics*, p. 147; Hearn, *Plutology*, ch. 8, §§ 5-8; Hobson, *Evolution of Modern Capitalism*, pp. 182-209.

8. Supply Price of Capital.

There is a direct response of the supply of capital to the demand for it as revealed by changes in the rate of interest.

Required Readings: Bullock, Selected Readings in Economics, pp. 301-306, The Doctrine of Mill, and pp. 318-324, Hobson, Criticism of the Doctrine of Saving.

E. INDUSTRIAL ORGANIZATION.

1. Production a Social Process.

Production is not individual but a complicated social affair involving much "differentiation" of occupation, of process, of function, of locality. This differentiation involves interdependence of the parts of the industrial organization. While this enormously increases the efficiency of production, it involves serious maladjustments and makes an injury to a part the concern of all.

Marshall, *Principles*, Bk. IV., ch. 8; *Economics of Industry*, Bk. IV., ch. 8; Hearn, *Plutology*, pp. 291-305.

2. Division of Labor: Co-operation.

a. The productive efficiency of a people is much increased by the co-operative efforts of workers. Co-operation even without differentiation of work often promotes efficiency, but the economic gain is most apparent when each instead of being a Jack-of-all-trades becomes a specialist.

b. The cause is found in the economic advantage of a lowering of cost of production. This is due to (1) increased dexterity; (2) shortening of apprenticeship; (3) saving of time in changing work; (4) stimulus to invention; (5) economy of ability; (6) economy of material; (7) economy of tools and machinery.

c. Against the immediate economic gain are alleged social disadvantages some of which are in the long run causes of economic loss. Such are physical injury, monotony leading to intellectual deterioration, dependence because of the narrowing of the field of employment, excessive employment of women and children, destruction of the aesthetic and constructive faculties. These are in part preventable by protective labor legislation, shortening of the hours of work and an increase of educational and cultural opportunities outside of working hours.

d. The application of the principle of division of labor depends directly upon the size of the market, which is determined by the growth of population and the increase of transportation facilities.

e. In modern industry there is a tendency, as a particular process comes to be mechanical and monotonous, for a machine to take it over. Frequently these separate machines are combined or replaced by a perfecting machine so that instead of many specialized laborers there are a few high grade laborers controlling and tending a complicated piece of mechanism.

Smith, *Wealth of Nations*, Bk. I., chs. 1, 2, 3; Marshall, *Principles*, Bk. IV., ch. 9; *Economics of Industry*, Bk. IV., ch. 9; Gide, *Principles*, pp. 173-182; Seager, *Introduction*, pp. 137-142; Seager, *Economics*, § 48-52; Bullock, *Introduction*, pp. 143-147; Seligman, *Principles*, §§ 127-129; Mill, *Principles*, Bk. I., ch. 8; Fetter, *Principles*, pp. 201-204; Nicholson, *Principles*, Bk. I., ch. 7; *Elements*, Bk. I., ch. 3; Hearn, *Plutology*, chs. 12, 13; Andrews, *Institutes*, pp. 69-73; Walker, *Political Economy*, pp. 56-59; Ely, *Outlines*, (1908) pp. 127-131; Hobson, *Evolution of Modern Capitalism*, ch. 4, §§ 3-7; Plato, *Republic*, Bk. II., 369-371; Commons, *Labor Conditions in Slaughtering and Meat Packing*, *Quar. Jour. Econ.*, 19: 1—Same article in Commons, *Trade Unionism and Labor Problems*, pp. 223-228; see also pp. 324-329; Palgrave, *Dictionary*, article Division of Labor.

Required Reading: Bullack, Selected Readings in Economics, ch. 10, containing extracts from Adam Smith and Jevons.

3. Localization and Specialization of Industry.

a. Not infrequently a considerable proportion of an industry is localized in a district, city or town. In some cases a large proportion of all the industrial activity of a region or city is occupied in one industry. The former is called localization of industry and the latter specialization of industry.

b. The original cause of such localization or specialization is usually the presence of raw material; favorable soil or climate; transportation facilities; sources of cheap power; racial qualities.

c. When an industry has once established itself, new concerns tend to the same place because of its advantages, such as trade knowledge prevalent there; a local market for skill; subsidiary trades; ability to utilize by-products; specialized machinery; general good trade repute. Specialization involves some disadvantages, as too exclusive a demand for one kind of labor, severe trade depressions, serious labor troubles.

d. Localization and specialization are limited by size of the market and hence have tended to increase with improvement of transportation facilities.

e. Since social and economic conditions of localities are subject to change, industries once localized may migrate to new centers.

Twelfth Census of the United States, 1900, VII., pp. cxc-ccxiv.; Marshall, *Principles*, Bk. IV., ch. 10; *Economics of Industry*, Bk. IV., ch. 10; Hobson, *Evolution of Modern Capitalism*, pp. 24-30, 105-116, Hearn, *Plutology*, pp. 305-314.

Required Reading: Bullock, Selected Readings in Economics, pp. 165-184, containing extracts from Reports of the Twelfth Census.

4. Size of the Business Unit.

a. Efficiency of production is contingent upon the adjustment of the size of the business unit in each trade to its particular needs. The tendency in typical modern industries has been toward enormously large establishments employing thousands of laborers and millions of capital. In many lines of trade and manufacture the small establishment still prevails.

b. Advantages of the large producer:

(1) On the manufacturing or productive side. Economy of fixed capital; of circulating capital; of technical skill; of materials. Subsidiary industries may be maintained by large concerns.

(2) On the commercial side. The large producer buys cheaply, gets favorable transportation rates, handles freight cheaply, saves in selling expenses and advertising, often gets trade through a wide spread reputation.

(3) On the side of general policy. The large producer can study markets, fashions, trade tendencies, development of localities.

(4) Size itself gives power in the competitive struggle.

c. Advantages of the small producer:

(1) On the manufacturing side. In some trades a small factory has all possible efficiency coming from specialized machinery and division of labor. The owner can watch all processes carefully and prevent waste of labor and material. Subsidiary industries help the small producer while trade journals spread knowledge.

(2) On the commercial side. His advantages here are partly compensated for by alliance with expert jobbing and wholesale houses. In lines in which taste and individuality are desired the small producer has, at least, an even chance.

d. The actual result in any line of business depends upon the relative importance therein of the above considerations. Examples will easily suggest themselves.

Marshall, *Principles*, Bk. IV., ch. 11; *Economics of Industry*, Bk. IV., ch. 11; Hobson, *Evolution of Modern Capitalism*, pp. 81-121; Seager, *Introduction*, pp. 149-152; Seager, *Economics*, § 56; Bullock, *Introduction*, pp. 170-178; Seligman, *Principles*, §§ 143-145; Gide, *Principles*, pp. 161-172; Mill, *Principles*, Bk. I., ch. 9, §§ 1, 3, 4; Nicholson, *Principles*, Bk. I., chs. 8, 9; *Elements*, Bk. I., chs. 4, 5; *Twelfth Census of the United States*, 1900, VII., pp. lxxii-lxxv.

Business Management.

a. There is a distinct economic function of management. The *entrepreneur* or undertaker of business establishes the business; brings together and organizes labor, capital and natural resources; assumes the risks; gets the profits. Even

though he works with his hands and owns the capital, the function of management is distinct.

b. The successful *entrepreneur* must have knowledge of his trade, its materials, processes, machines, market tendencies. He must be able to select, organize and control labor of all grades without friction. He must have financial ability, foresight, caution, decision and energy.

c. The forms of management are

(1) Individual ownership. This secures unity of purpose and direction; but in typical modern industries one individual rarely possesses the varied talents necessary for success, frequently lacks capital, and may not care to risk all in one line.

(2) The partnership increases capital and combines varied abilities. It sometimes means friction, divided policy and indecision.

(3) The corporation or joint-stock company ensures large capital, continuity of existence, limited liability, publicity when desirable, utilization of small capitals, and diversion of capital into competent hands. There is often lack of personal interest on part of managers, and stockholders may be defrauded by those in control.

(4) Co-operation, or managing ownership by workers or consumers, means direct personal interest; but lacks great managing ability and involves friction and divided responsibility.

(5) Public ownership is another form of management.

d. Sharp competition is continually eliminating those methods of management and persons that have not ability, and, on the other hand, bringing needed capital to those who show success. There is a response of business ability to the demand for it.

Marshall, *Principles*, Bk. IV., ch. 12; *Economics of Industry*, Bk. IV., ch. 12; Bullock, *Introduction*, §§ 90, 91; Seligman, *Principles*, § 41; Seager, *Principles*, §§ 82-84; Seager, *Economics*, §§ 53-55; Fetter, *Principles*, ch. 29, ch. 30, § 1; Andrews, *Institutes*, § 46; Nicholson, *Principles*, Bk. I., ch. 8, § 4; *Twelfth Census of the United States, 1900*, VII., pp. lxvi-lxviii.

Required Reading: Bullock, Selected Readings in Economics, pp. 184-192, being an extract from a Report of the Twelfth Census.

F. FUTURE OF PRODUCTION.

The efficiency of wealth production in the future depends upon the combined influence of all the factors considered in this chapter. The law of diminishing returns, exhaustion of natural resources and anything that affects unfavorably the efficiency of the worker or the accumulation of capital, are unfavorable. Increasing efficiency of the worker; growing wealth; invention; application of science to agriculture, industry and transportation; more efficient organization possible with larger population, etc., etc., are favorable to increasing per capita production.

Marshall, *Principles*, Bk. IV., ch. 13; *Economics of Industry*, Bk. IV., ch. 13; Fetter, *Principles*, pp. 558-563; Mill, *Principles*, Bk. IV., ch. 1; Nicholson, *Principles*, Bk. I., ch. 10, § 5, ch. 11, § 4.

Required Readings: Bullock, Selected Readings in Economics, pp. 193–235; Taussig, The Iron Industry in the United States; and Helm, An International Survey of the Cotton Industry.

CHAPTER VI.

EXCHANGE. BALANCING OF DEMAND AND SUPPLY. VALUE.

1. Development and Advantage of Exchange.

a. Exchange has been a gradual development increasing with the change from a self-sufficing to a capitalist economy. It has been encouraged and shaped by natural transportation routes; and is both a result and a cause of modern efficiency of transportation.

b. Exchange makes it possible "to utilize wealth which would remain unused"; it increases utility; it increases productivity by allowing specialization; it generally benefits both parties.

Bullock, *Introduction*, §§ 104, 105; Gide, *Principles*, pp. 184-186; 197-200; Andrews, *Institutes*, §§ 51, 52, 53; Fetter, *Principles*, pp. 30-31; Nicholson, *Principles*, Bk. III., ch. 1, §§ 3-6; Ely, *Outlines* (1908), pp. 158, 159; Pierson, *Principles*, pp. 67-72.

2. Markets.

a. Market formerly meant a place of sale. It now means those "buyers and sellers who are in such free intercourse with one another that the prices of the same goods tend to equality easily and quickly." (Cournot.)

b. Markets are continually widened by rapid and cheap transportation and communication. That a commodity may have a very wide market, it must be large in amount, extensively desired, portable, and capable of grading and exact description.

Marshall, *Principles*, Bk. V., ch. 1; *Economics of Industry*, Bk. V., ch. 1; Bullock, *Introduction*, § 108; Fetter, *Principles*, pp. 36,37; Seligman, *Principles*, p. 223; Nicholson, *Principles*, Bk. III., ch. 3; *Elements*, pp. 217-219; Hadley, *Economics*, § 88; Flux, *Economic Principles*, ch. 3.

Required Reading: Bullock, Selected Readings in Economics, pp. 325-340, Defoe's accounts of a Fair and a Market in the Eighteenth Century, and an official description of the grain trade in the United States at present.

3. General Considerations Upon Value.

a. A prominent central fact in modern economic life is exchange of goods. Such exchange is conditioned upon a valuation accepted by buyer and seller. How is this value determined in the market of the moment? Since such values are frequently obviously temporary, how are more natural values determined? How are the departures of market from normal values to be explained? What effect may monopoly have on value? How are such values related to wages, interest, profit and rent? Such are fundamentally the problems of value.

b. Nature does not produce in unlimited quantities the commodities we desire. To secure them requires labor or sacrifice. To secure greater and greater quantities (which to the individual have diminishing utility) requires more labor, which becomes irksome. Diminishing pleasure costs increasing pain. When the utility is equaled by the disutility, one stops effort to secure it. To the individual, marginal cost equals marginal utility.

c. As value is determined by *social marginal utility* (see ch. 4, 2, f) so it is determined by *social cost*—not individual cost. Varying estimates of utility give the individual a surplus of total utility above total cost. This surplus does not affect value; nor does the fact that a thing might cost a certain individual more than the social cost affect its value. Value is a social problem.

d. Utility determines value; cost determines value; but neither alone determines value. "We cannot speak of mar-

ginal utility without implying cost; we cannot speak of marginal cost without implying utility." (Seligman).

e. Progress in civilization depends upon increasing the surplus of utility above cost, upon the just distribution of this surplus, and upon its wise consumption.

f. Value being the ratio between the things valued, a general rise or fall of values is impossible, but a general rise or fall of prices is constantly taking place.

g. In studying the causes of market value and of normal value acute competition is assumed to exist—as it usually does in wholesale markets. In section 6 of this chapter some of the forces modifying competition in retail markets are mentioned.

Seligman, *Principles*, ch. 13; Seager, *Introduction*, §§ 47-53; Marshall, *Principles*, Bk. III., ch. 6; Bk. IV., ch. 1; Bk V., ch. 2, § 1, ch. 3, § 7; *Economics of Industry*, Bk. III., ch. 6; Bk.V., ch. 2. § 1, ch. 3, § 7; Fetter, *Principles*, ch. 4; ch. 24; § 3; Gide, *Principles*, pp. 49-64; Clark, *Philosophy of Wealth*, ch. 5; Nicholson, *Principles*, Bk. III., ch. 2; Bullock, *Introduction*, § 95; Smart, *Introduction to Theory of Value*, ch. 8-9.

4. Market Value. Temporary Balancing of Demand and Supply.

a. Buyers are influenced by the urgency of their needs (demand schedules), by the amount of money available (marginal utility of money), by their estimates of the course of prices in the immediate future. Sellers are influenced by the urgency of their need of money, by the amount of their stock, by their estimates of future prices.

b. If there are one buyer and one seller, there is no sale unless buyer's maximum equals seller's minimum. If it is higher, then price will be fixed between these limits according to relative skill in bargaining.

c. If there are several buyers and one seller, the most eager buyer will get the article if he meets the seller's mini-

mum ; if there are several units, each may be sold separately or a price may be fixed just sufficient to sell all.

d. If there are several sellers and one buyer, competition will enable the buyer to get the article at the minimum of the most eager seller, or at a price just below the minimum of the next most eager seller, or somewhere between these two.

e. The most typical case is that of several buyers and several sellers. Here, as in preceding cases, the essential fact is not the number of persons who buy and sell (as implied in some text books), but the quantities offered and taken. Sellers compete as a class with buyers as a class, but further each seller competes with other sellers and each buyer with other buyers. If the lowest price of the most eager seller is higher than the highest price of the most eager buyer, there will be no sale. At a price which may be called the equilibrium price the same quantity will be offered and taken, and equilibrium will be established; for at a higher price more will be offered than buyers will take, and competition among sellers will reduce the price, each reduction decreasing amount offered and increasing amount taken. Should price fall below equilibrium price conditions are reversed.

f. "Under free competition there can be at a given time and place only a single price for the same commodity." "In case of competition the market price is always the one at which the greatest number of exchanges can be effected." (Seligman).

Seligman, *Principles*, ch. 15; Seager, *Introduction*, §§ 55-58; Seager, *Economics*, §§ 30-32; Marshall, *Principles*, Bk. V., ch. 2; *Economics of Industry*, Bk. V., ch. 2; Bullock, *Introduction*, §§ 110-116; Fetter, *Principles*, ch. 5; Gide, *Principles*, pp. 186-196; Andrews, *Institutes*, §§ 61-64; Hadley, *Economics*, §§ 84-96; Nicholson, *Elements*, Bk. III., ch. 2; *Principles*, Bk. III., ch. 4; Hobson, *Economics of Distribution*, ch. 1; Smart, *Introduction to the Study of Value*, chs. 10, 11; Pierson, *Principles*, pp. 72-75; Davenport, *Outlines*, ch. 4.

5. Normal Value. Balancing of Normal Demand and Normal Supply.

a. Normal value or price "is the price which, apart from exceptional conditions, is expected to prevail, and to which actual prices seem constantly striving to adjust themselves." (Fetter).

b. Real cost of production consists of the efforts and sacrifices necessary to production. The money that must be paid to call forth these efforts and sacrifices is the money cost or expenses of production. Cost of production means *socially necessary* cost of *re-production.*

c. Expenses of production consisting of prices of materials, wages, interest, wear and tear, earnings of management, etc., constitute the supply price "required to call forth the exertion necessary for producing any given amount of a commodity." (Marshall). By the Principle of Substitution producers are continually trying to substitute a less expensive method of securing certain results for that in use.

d. At a given time cost of production is "the marginal cost of production; that is, it is the cost of production of those goods which are on the margin of not being produced at all, and which would not be produced if the price to be got for them were expected to be at all lower." (Marshall.)

e. "While the normal value is at any given moment at the point of maximum cost, it is under a condition of progress continually moving in the direction of minimum cost." (Seligman).

f. When the demand price is greater than the cost of production, the attempt of sellers to reap resulting profits leads to an increased supply which can, however, find a market, other things being equal, only at a lower price. When price is below cost of production, conditions are reversed. In either case price tends to equal marginal cost of production.

"When we say that price is fixed by the cost of production, we really mean that it is fixed *at* the cost of production." (Seligman).

g. The longer the period of adjustment as compared with the length of the period of production of a commodity, the more closely will price approach cost of production. But in actual life equilibrium is rarely attained, since in a progressive society cost of production constantly changes.

h. In general it may be said that both market and normal values are determined "by demand and supply, but in the case of reproducible goods the permanent equilibrium between demand and supply tends to adjust itself to the cost of production."

i. In the case of certain commodities increasing demand means permanently higher cost of production; in the case of others it means constant cost; and in the case of still others it means lower cost. Normal values are correspondingly affected.

j. "Not only in the case of wages and interest but in the case of economic relations and of concrete commodities, reproducible as well as non-reproducible, prices depend on marginal efficiency" which is the universal explanation of value.

k. Selling value is a capitalization of estimated future uses.

Seligman, *Principles*, §§ 103-109, 112-114; Marshall, *Principles*, Bk. V., chs. 3, 5; *Economics of Industry*, Bk. V., chs. 3, 5; Bullock, *Introduction*, §§ 117-122; Fetter, *Principles*, ch. 30, ch. 43, § 3; Clark, *Philosophy of Wealth*, chs. 5, 6; Hobson, *Economics of Distribution*, ch. 3; Nicholson, *Principles*, Bk. III., chs. 4-6; Carver, *Distribution of Wealth*, pp. 25-52; Flux, *Economic Principles*, ch. 4; Pierson, *Principles*, pp. 61-66.

6. Influences that Hinder or Complicate Determination of Value.

a. In studying value competition has been assumed to exist. Anything that interferes with competition interferes

with the ordinary determination of value. The following are the more important causes of such interference:

(1) Custom. This implies absence of competition. There may be competition in quality, however, even though prices be customary.

(2) Ignorance. Competition is based upon intelligence. Misdirected production is the result of ignorance.

(3) Lack of Freedom.

(4) Authoritative regulation.

b. Large fixed capital. Certain elements of cost change proportionately with the quantity of product; other elements are more or less independent of output. The former may be called *prime*, the latter *supplementary* costs. Supplementary costs are largely due to fixed capital. Since it is often wise to manufacture for some time, even if supplementary costs are only partially or even not at all covered, the adjustment of of price to total cost of production may be delayed until the fixed capital is adjusted. Also, since fixed capital cannot always be quickly supplied, price may remain above cost of production until capital is adjusted. There is here no new principle—only delay; but this condition is one of increasing practical importance.

c. Rarely is the supply or demand for an article disconnected from that of other articles.

(1) *Joint demand* is a demand for the various factors necessary to produce an article. One of these joined factors may have its price much raised by a check to its supply if it is an essential but relatively small part of a much desired commodity, and if the other factors are elastic in demand.

(2) *Composite demand* is a demand for an article for various uses. The working of the laws of value is in such a case sometimes obscure, since a radical change in the demand for one use may have but slight effect on the total demand.

(3) *Joint supply* is the supply of certain articles which are inevitably common products of a process. Some of these are called by-products and they are of increasing practical importance. In such cases the cost is a joint cost of the whole and the normal price of all the parts together adjusts itself to the joint cost.

(4) *Composite supply* is the meeting of a certain want by several rival articles that may be substituted for each other. A change in the cost of production of one may seriously affect values of rival products.

Marshall, *Principles* (5th ed.), Bk. V., chs. 4, 6, 7; *Economics of Industry*, Bk. V., chs. 4, 6; Bullock, *Introduction*, §§ 123-129; Seligman, *Principles*, § 107; Hadley, *Economics*, § 101; Andrews, *Institutes*, § 69; Mill, *Principles*, Bk. III., ch. 16; Walker, *Political Economy*, pp. 104-111; Nicholson, *Principles*, Bk. III., ch. 5, § 6; *Twelfth Census of the United States*, X., pp. 725-748; Flux, *Economic Principles*, pp. 65-69.

Required Reading: Bullock, Selected Readings in Economics, pp. 354-363 on relation of retail to wholesale prices.

7. Monopoly Value.

When monopoly exists, value does not tend to equal marginal cost. Value tends to be fixed at that point which will give the greatest net returns, having due regard to the effect of this price upon the volume of sales and profit on the unit.

Marshall, *Principles*, (5th ed.), Bk. V., ch. 14; *Economics of Industry*, Bk. V., ch. 8, § 2; Seligman, *Principles*, § 110; Bullock, *Introduction*, § 201; Seager, *Introduction*, §§ 112, 113; Seager, *Economics*, § 77; Fetter, *Principles*, ch. 33, § 3; Andrews, *Institutes*, § 67; Nicholson, *Principles*, Bk. III., ch. 7; *Elements*, Bk. III., ch. 4, §§ 3-6, Flux, *Economic Principles*, pp. 69-78.

CHAPTER VII.

DISTRIBUTION OF WEALTH.

A. PRELIMINARY CONSIDERATIONS.

1. The Problem of Distribution.

Natural resources, labor, capital and managing ability co-operate to produce goods and their values. The owners of each of these must be rewarded in order that its aid may be secured. How is the value of a good divided among the co-operating agents? How are wages determined? Why do they vary among individuals and over periods of time? What are the normal tendencies around which market fluctuations take place? How are interest and its differences determined? How are rent and profits fixed? These are questions of function—not of individuals, since the same individual may combine two or three functions. This problem is of fundamental economic and social importance.

Marshall, *Principles*, Bk. VI., ch. 1, § 1, *Economics of Industry*, Bk. VI., ch. 1, § 1; Seligman, *Principles*, § 151; Seager, *Introduction*, §§ 30, 89, 90; Smart, *Distribution*, Bk. II., ch. 1; Clark, *Distribution*, ch. 1; Andrews, *Institutes*, §§ 97-99; Nicholson, *Principles*, Bk. II., ch. 1, §§ 1, 2; *Elements*, pp. 96-100; Sidgwick, *Principles*, Bk. II., ch. 1.

2. National Income is the National Dividend.

"The national dividend is at once the aggregate net product of, and the sole source of payment for, all the agents of production within the country: . . . It constitutes the whole of them, and the whole of it is distributed among them, and the larger it is, the larger, other things being equal, will be the share of each of them." These shares are: wages, or the remuneration of labor; interest, or the earnings or product of capital; profits, or the income from business enter-

prise; rent, or the income that accrues or is paid to owners of natural resources for the use of them.

Marshall, *Principles*, Bk. VI., ch. 2, § 6; *Economics of Industry*, Bk. VI., ch. 2, § 5; Bullock, *Introduction*, §§ 248-250; Smart, *Return to Protection*, ch. 1.

3. All Incomes Paid from Capital Goods but not out of Capital.

"All but the small part of income which is produced immediately befores it is consumed comes . . . from the products of previous days' industry stored up as capital goods." But since a part of the product is constantly replacing these capital goods the fund of capital is kept intact.

Seager, *Introduction*, §§ 89, 93.

Required Reading, Bullock, Selected Readings in Economics, pp. 513-532; Taussig, Present Work and Present Wages.

4. Normal Static Laws Underlie Dynamic Conditions.

In actual economic life, especially in modern industrial countries, constant changes are taking place which disturb the equilibrium that competition would tend to establish. Population increases as does capital; skill of labor and efficiency of capital goods improve; methods of agriculture, manufactures, trade constantly progress; climate is variable; and consumption is constantly changing. Further, competition is far from perfect because of monopoly, ignorance, immobility. Consequently changes in the shares in the Distribution of the National Dividend are constant; but there are working underneath these changes tendencies which in an unchanging society would result in normal, static distribution.

B. NORMAL DISTRIBUTION.

1. Hypothetical Static Society.

Imagine a society like our own except free from change in amount of capital, in method, in skill, in fertility, in habits of

consumption; and one in which competition is free and universal. Capital goods would be exactly replaced, prices would be normal and "the net product and the real income of consumable goods would be identical. . . . Real incomes will consist in such a society of the net product, ... the services of capital being to enable those who take part in production to secure at once in consumable form the equivalent of what they produce." (Seager). Unreal as such a society is, it is enough like the actual so that "we may say that real incomes come virtually from the net products of industry."

Seager, *Introduction*, §§ 92, 93; Clark, *Distribution*, ch. 25; Marshall, *Principles*, Bk. VI., ch. 1, §§ 2-5; *Economics of Industry*, Bk. VI., ch. 1.

2. Profits in a Static, Perfectly Competitive Society.

In such a society profits, except as equivalent to the wages necessary to secure management, would disappear, since all gains due to change and fortuitous conditions would be absent and competition would prevent any individual getting, for any length of time, more than that fair reward for actual effort which another might get.

Seligman, *Principles*, pp. 354-356; Seager, *Introduction*, § 99; Carver, *Distribution*, pp. 286, 287; Clark, *Distribution*, pp. 70, 111, 112, 179, 290, 291, 405, 410, 411.

3. Wages in a Static, Perfectly Competitive Society.

In such a society wages would equal final productivity of labor (marginal productivity) of the particular grade, since "if there is free competition and if all the laborers do their allotted tasks equally well, the share of the product ascribable to any of the workmen must be equal to the additions made by the last, or marginal, laborer actually at work." (Seligman). "Each individual laborer gets as wages approximately the equivalent of the amount which he individually can add

to the product of the group to which he belongs." (Carver). Marginal, productivity itself, however, depends upon numbers. Where will this margin be located? Assuming what would quite certainly be true, that in such a society a certain standard of living will be held quite tenaciously through an acceleration or retardation of the marriage and birth rate; and recognizing that the cost of producing a certain efficient supply of labor is equal to this standard, it may be said that the normal tendency of wages is to equal the cost of securing or producing labor.

Marshall, *Principles*, Bk. VI., ch. 1, §§ 3-8, 10; ch. 2, §§ 1-3; *Economics of Industry*, Bk. VI., ch. 1, §§ 2-6, 8; ch. 2, §§ 1, 2; Seligman, *Principles*, § 175; Flux, *Economic Principles*, pp. 118-135; Carver, *Distribution*, pp. 135-158; Clark, *Distribution*, chs. 7, 8; Fetter, *Principles*, ch. 23, § 3; Gide, *Principles*, pp. 509-514.

4. Interest in a Static, Perfectly Competitive Society.

In such a society interest would equal the final productivity of a unit of capital, since each "will push the investment of capital in his business in each several direction until what appears in his judgment to be the margin of profitableness is reached." (Marshall). Were there perfect mobility of capital, the marginal productivity of capital in all trades would be the same because of the immediate transfer of marginal capital from less to more productive uses. Marginal productivity itself, however, depends upon the amount of capital. Were capital unlimited, there could be no interest. Where will this margin be located? Obviously at that point where the marginal productivity (or interest) is a sufficient reward to induce people to save that amount which will have this marginal productivity. That is, interest is fixed at that point which covers that which may be called a metaphysical cost of producing capital. Each piece of capital goods must as a rule produce not only enough for its own replacement, but also an amount sufficient to induce that social abstinence or forbearance which results in capital. Much saving is not

under the incentive of interest, but marginal saving is. Interest tends to be fixed by a balancing of productivity and reward of forbearance—by demand and supply.

Marshall, *Principles*, Bk. VI., ch. 1, § 9; ch. 2, § 4; *Economics of Industry*, Bk. VI., ch. 1, § 7; ch. 2, § 3; Seligman, *Principles*, §§ 167, 168; Carver, *Distribution*, pp. 220-256; Clark, *Distribution*, ch. 12; Gide, *Principles*, pp. 573-577.

5. Division of the Whole Product in Such a Society.

In such a society since capital and labor not only co-operate, but compete; and since marginal quantities of either are readily substituted for marginal quantities of the other when more efficient in proportion to cost, their marginal prices are relative to their efficiencies. "The law which determines the division of the product between labor and capital in competitive industries for a society in a state of normal equilibrium is, therefore, that each receives the share that it produces." (Seager).

Seager, *Introduction*, §§ 149, 150; Marshall, *Principles*, Bk. VI., ch. 1, §§ 6, 7, 8; *Economics of Industry*, Bk. VI., ch. 1, §§ 6, 7, 8; Clark, *Distribution*, chs. 11, 12.

6. Summary of Normal, Static Distribution.

The same tendencies hold for the prices of productive factors as for the prices of commodities, that is, wages and interest tend to equal marginal productivity; but wages and interest in a static society would have a close relation to cost of securing the supply of labor and of capital. "Supply price and demand price tend to be equal: wages [and interest] are not governed by demand price nor by supply price, but by the whole set of causes which govern demand and supply." (Marshall). The "National Dividend is at once the aggregate net product of, and the sole source of payment for, all the agents of production within the country; . . . the larger it is, the larger, other things being equal will be the share of each of them." An increase in the amount of any

one agent will be an advantage to all by increasing the national dividend; but may be disadvantageous to the particular agent, since the lowering of its marginal productivity may more than offset its share of the increased total production.

Marshall, *Principles*, Bk. VI., ch. 2, §§ 6-10; ch. 11; *Economics of Industry*, Bk. VI., ch. 2, §§ 5-10; ch. 11.

C. PROFITS. CONDITIONS WHICH PREVENT THE REALIZATION OF STATIC CONDITIONS AND NORMAL DISTRIBUTION.

1. Changes in Economic Conditions.

a. The hypothetical results described under "B" are conditioned upon the attainment and maintenance of equilibrium. In actual life there are constant changes taking place, some gradual, some radical, which prevent such equilibrium, so that actual distribution only *tends* toward the method described. Such changes are increases in population and in capital; improvement in skill of labor and the efficiency of capital goods; better organization of labor and capital; changes in habits of consumption; variability in climate and season; and exhaustion of natural resources.

b. There result changes in prices which make market prices higher or lower than the normal prices composed of wages and interest. Hence appear, even under sharply competitive conditions, *entrepreneur's* gains or losses. Such gains are profits in the strict sense and continue a long or short time according as competition can quickly or slowly restore normal conditions.

Seager, *Introduction*, pp. 169-173; 177-187; Seager, *Economics*, ch. 8; Marshall, *Principles*, Bk. VI., ch. 7, § 1; ch. 8, §§ 6-8; *Economics of Industry*, Bk. VI., ch. 7, § 1; ch. 8, §§ 5, 6; Seligman, *Principles*, §§ 152, 153; Carver, *Distribution*, pp. 268-278; Bullock, *Introduction*, § 291; Clark, *Distribution*, chs. 5, 25; Sidgwick, *Principles*, Bk. II., ch. 2.

2. Monopolistic Conditions.

a. Normal distribution depends upon the existence of competition. Since competition is frequently restricted by combination, some prices are determined in accordance with the law of monopoly value above normal value. Hence result monopoly profits.

b. These monopoly profits, so far as they are due to prices higher than those which would prevail without monopoly, affect cost of living and diminish the real incomes of other factors of production.

Seager, *Introduction*, §§ 109-113; Seager, *Economics*, ch. 9; Seligman, *Principles*, § 156; Bullock, *Introduction*, § 292.

D. WAGES.

1. Definitions and Discriminations.

a. "Wages include all earnings assigned to men for their work from lowest piece wages to highest annual salaries and 'wages of management.'" They also include the return which comes directly to a man for his labor.

b. *Time wages* are paid for a quantity of time. *Piece wages* are paid for a quantity of result. The term *efficiency wages* may be used to describe "earnings measured—by the exertion of ability and efficiency required of the laborer." The relative advantages and disadvantages of time and piece wages depend upon the conditions of the particular trade, factory or job. The labor-cost under each tends to be the same. Efficiency wages tend to be equal in the same district unless much expensive machinery is used.

c. "Real wages of labor may be said to consist in the quantity of the necessaries and conveniences of life that are given for it; its nominal wages in the quantity of money." Real wages depend upon the nominal wages as modified by changes in the value of money, trade expenses, allowances,

privileges, supplementary earnings, regularity of employment, certainty of success.

Marshall, *Principles*, Bk. VI., ch. 3; *Economics of Industry*, Bk. VI., ch. 3; Bullock, *Introduction*, §§ 277-279; Seager, *Introduction*, § 135; Fetter, *Principles*, ch. 23, §§ 1, 2; Andrews, *Institutes*, § 113.

2. Industrial Grades.

There are infinite variations of efficiency from that of the most worthless of the "residuum" up to that of the ablest "captains of industry." For convenience five classes may be recognized: unusual managing, artistic and professional ability; ordinary business, artistic and professional ability, and highly skilled mechanical ability; ordinary mechanical and clerical ability; unskilled manual labor; the inefficient. Throughout history and over a great part of the world at present each grade has been recruited largely from its own children. In modern industrial democratic countries and especially the United States this is not so true; but it is debatable whether movement from grade to grade is now as easy as in our earlier history.

Seager, *Introduction*, §§ 131, 138; Marshall, *Principles*, Bk. IV., ch. 6; *Economics of Industry*, Bk. IV., ch. 6, § 5.

3. Demand and Supply Determine the Wages of These "Non-Competing Groups."

Transition from one grade to another being difficult and slow, wages are determined by the demand for and supply of labor of each grade. These grades cannot easily compete with each other. Thus are explained alike the wages of a great corporation president and of a laborer displaced by a machine. In all cases the ultimate cause is the demand of the consuming public. Competition and substitution tend to adjust rewards to efficiency, working, as Professor Marshall says, *through* the independent business manager in the case of wages

of employees and *on* him so far as his own wage-income is concerned.

Seager, *Introduction*, pp. 228, 240; Bullock, *Introduction*, § 286; Cairnes, *Leading Principles*, pp. 57-73.

4. Causes of Differences in Real Wages.

Competition moving labor from less to more productive trades, processes and regions, would tend to produce equality of wages were it not for certain hindrances and peculiarities in the action of demand and supply in reference to labor. Such are :

a. Differences in native ability which, with full allowance for environmental influence, are most striking.

b. Immobility of labor. In spite of growing ease and cheapness of transportation, unwillingness of laborers to leave certain regions leads to relative over-supply and under-supply in certain districts and trades.

c. The efficiency which enables men to enter the more highly paid trades depends largely upon the investment of wealth in giving right training ; but this expenditure must be made largely by those who will not benefit by the result.

d. Labor is perishable. The laborer must sell his labor at the best price obtainable or lose it entirely. His urgent need leads to bad bargains.

e. Labor is at a disadvantage in bargaining as compared with the employer in respect to reserve power, competitive skill and knowledge of the market.

f. Supplies of labor are slowly produced so that a relative deficiency is slowly made up and a relative over supply slowly removed. This is an effective cause of difference in proportion as the period necessary for acquiring the requisite skill is short or long.

Marshall, *Principles*, Bk. VI., chs. 4, 5; *Economics of Industry*, Bk. VI., chs. 4, 5; Seager, *Introduction*, § 134; Seager, *Economics*, §§ 89-94; Seligman, *Principles*, p. 413; Bullock, *Introduction*, § 294; Pierson, *Principles*, pp. 332-340; Mill, *Principles*, Bk. II., ch. 14; Nicholson, *Principles*, Bk. II., ch. 11; *Elements*, Bk. II., ch. 7; Smith, *Wealth of Nations*, Bk. I., ch. 10.

5. Further Causes of Differences in Money Wages.

Even when the net advantages and disadvantages of wages in different trades are the same, nominal differences may result from the following causes:

a. Cost of living. A large money wage may yield no more than a small one if the expenses of living are large.

b. Cost of learning trade.

c. A trade may have relatively small money wages because of the leisure or other attractions connected with it.

d. Supplementary earnings.

e. Danger incurred. A high wage may be partly compensation for risks involved in the calling.

f. Social esteem. Social esteem or prejudice may account for difference in wages.

g. A high money wage for the day, week or year may not involve high wages for the entire life of the worker, if work be irregular or if the length of effective working life be short.

h. A low nominal wage may be accounted for by unusual chances for great success or certain promotion.

Seager, *Introduction*, § 136; Seager, *Economics*, § 95; Marshall, *Principles*, Bk. VI., ch. 3, §§ 3-8; *Economics of Industry*, Bk. VI., ch. 3, §§ 3, 4; Bullock, *Introduction*, § 287; Seligman, *Principles*, § 178; Carver, *Distribution*, pp. 179-184; Adam Smith, *Wealth of Nations*, Bk. I, ch. 10.

Required Reading, Bullock, Selected Readings in Economics, pp. 543-563; Adam Smith on Differences in Wages.

6. Reasons for the Continuance of Difference In Real Wages.

a. Differences in marginal productivity tend to fix wages. These differences in productivity are due to unequal abilities which are the result of all those facts of heredity and environment which affect efficiency. In the environment may be emphasized such influences as home surroundings and standard of living, length and character of school training, child labor, caste and social prejudice, and all those influences considered in chapter v., C., 3.

b. The continuance of a certain standard of wages is largely due to these wages which fix the standard of living, which in turn largely determine efficiency upon which productivity and, in the long run, wages depend. Such is the circle of influence.

Seager, *Introduction*, §§ 137, 138; Seager, *Economics*, §§ 96-98.

7. Influence of Wages on Supply of Labor.

Wages in a static society would be determined by supply as well as by demand. Does the supply of efficient labor respond in real life to changes in demand as shown in wages?

a. Increased remuneration stimulates to increased exertion.

b. Increased remuneration stimulates to better preparation and hence greater efficiency.

c. Increased wages, so far as they improve the standard of living, not only increase efficiency but increase the number of the population surviving to productive age.

d. Increased wages tend over a great part of the world to accelerate marriage and to increase the birth rate, although in modern industrial countries this seems to be a cause of fluctuation about a gradually decreasing birth rate that has come with higher standards of material comfort.

e. All things considered, then, an increase in wages above the prevailing standard of living (which is in a sense the cost of production of labor) tends to increase the supply

of efficient labor. This standard of living is not, however, a fixed minimum of existence but a more or less elastic standard held with varying degrees of tenacity by different groups and individuals. Trade Unionism tries to raise this standard of living and to make it universal. It tends steadily upward largely because of social action.

Marshall, *Principles*, Bk. VI., ch. 2, §§ 1-3; *Economics of Industry*, Bk. VI., ch. 2, §§ 1, 2; Seager, *Introduction*, §§ 160-164; Seager, *Economics*, §§ 113, 114; Seligman, *Principles*, §§ 174, 177; Carver, *Distribution*, pp. 164-179; Bullock, *Introduction*, § 284; Smart, *Distribution*, Bk. II., chs. 14, 16, 17, 18; Fetter, *Principles*, ch. 21; Pierson, *Principles*, pp. 315-331; Webb, *Industrial Democracy*, pp. 632-643; Ely, *Outlines* (1908) ch. 22.

8. Conclusion as to Wages.

In our actual dynamic society wages *tend* as in an imaginary static society to be fixed by productivity and the standard of living; but very slowly and inaccurately. Since the economic changes of modern times are constantly following one another, even that adjustment which might be brought about slowly is never realized. Many wages are higher or lower than our only standard of justice, merit, would set. Even though men are rewarded according to the values they produce, these values are, because of social changes, variable and even fickle in some lines of production. Though the tendency is for men to be rewarded according to the efforts they put forth and according to the skill they have acquired, they frequently are not. Here then is the basis for the charge that our distribution involves social injustice. But these changes "largely neutralize one another . . . and cause the actual form of society to hover much nearer to the theoretical static form than would be possible if these influences worked separately." (Clark.) Further, it is the profits resulting to *entrepreneurs* from these changes which are the incentive to economic improvements, the results of which, in the long run, go very largely to labor.

Clark, *Distribution*, ch. 25; Marshall, *Principles*, Bk. VI., ch. 2; ch. 5, §§ 4-7; *Economics of Industry*, Bk. VI., ch. 2; ch. 5, § 4; Seligman, *Principles*, §§ 176, 179; Seager, *Introduction*, §§ 155-157; Smart, *Distribution*, Bk. II., entire, but especially chs. 13, 19, 28.

9. Wages Not Arbitrary.

The departures of distribution from the principle of reward according to merit are not due to arbitrariness but to general social influences. Wages are social assessments of worth as judged at the time—often capricious and fickle, but very largely on a sound basis.

Smart, *Distribution*, Bk. II., chs. 1-13, and especially ch. 1, an entertaining piece of sound argument.

E. INTEREST.

1. Definition and Discrimination.

a. Interest, in form paid for the use of money, is really paid for the use of capital which the money represents. In Economics the term refers to the earnings of capital, whether a loan be involved or not.

b. The rate of interest on ordinary long loans is not affected by the supply of money, but in financial centers, since actual cash is often needed to meet obligations, the rate of interest on loans is directly affected by supply.

c. That which seemingly is a high rate of interest some times conceals wages of management or insurance.

Seligman, *Principles*, pp. 392, 395; Seager, *Economics*, §§ 100, 101; Bullock, *Introduction*, pp. 389, 396-398; Marshall, *Principles*, Bk. VI., ch. 6, § 4; *Economics of Industry*, Bk. VI., ch. 6, § 2; Fetter, *Principles*, ch. 16; Andrews, *Institutes*, §§ 108, 111; Gide, *Principles*, pp. 568-572; Pierson, *Principles*, pp. 225-232.

2. Normal Tendency of Interest Approximated in Actual Society.

Since the mobility of capital is much greater than that of labor, actual interest approximates the normal much more closely than do wages. The transfer of capital from less to more productive employments is brought about mainly by the

direction of the replacement fund. Capital goods which do not earn, in addition to their replacement fund, current rates of interest are not replaced, and the portion of capital thus set free is turned into capital goods of the sort that promise the greatest earnings. Because of this mobility of capital, there is an approximation of interest rates in different employments to a general rate.

Seager, *Introduction*, §§ 142, 147, 156; Seager, *Economics*, §§ 102, 103; Carver, *Distribution*, pp. 214-215; Clark, *Distribution*, pp. ch. 18.

3. Differences in Economic Interest.

a. In spite of this tendency toward a general rate of interest, different capital goods are earning different rates because, an investment of capital once having been made with any degree of specialization and permanency, it cannot be withdrawn immediately. Any change in economic conditions may make the rate above or below the current rate.

b. Differences in risk may also require larger earnings to attract necessary capital, although this apparently higher rate of interest is commonly a larger replacement fund. So social disrepute of a trade may require a higher rate of interest to attract capital to it, although such higher rate is almost universally composed partly of wages of management.

c. There are differences in marginal productivity of capital in different localities because of the limitation of supply of capital in certain regions.

Seager, *Introduction*, §§ 143-145; Seager, *Economics*, §§ 104, 105; Flux, *Economic Principles*, pp. 90-96.

4. Differences in Loan Interest.

Competition tends to make a uniform rate of interest prevail in the same loan market. So perfectly does competition work that a difference of rate on loans of the same duration is evidence of difference in security. In addition to differ-

ences due to risk there are differences in loan rates in different regions. The money market is an international one.

Seager, *Introduction*, § 146; Seligman, *Principles*, § 166; Bullock, *Introduction*, pp. 394-395; Marshall, *Principles*, Bk. VI., ch. 6, §§ 4, 5; *Economics of Industry*, Bk. VI., ch. 6; Andrews, *Institutes*, §§ 109, 110.

5. Tendency of Interest.

a. With progress in civilization (which involves increase of wealth and capital, not only absolutely but relatively to labor and natural resources) the total product of capital increases, but its marginal productivity decreases. The rate of interest tends downward, but the quantity and quality of capital are bettered to the advantage of the other factors in production.

b. There is no reason to think that interest will fall to nothing, because every decrease in the rate increases demand for capital; and because every decrease in the rate tends somewhat to discourage saving.

Seligman, *Principles*, §§ 169, 170; Seager, *Introduction*, § 302; Seager, *Economics*, § 239; Gide, *Principles*, pp. 577-581; Pierson, *Principles*, pp. 213-217.

6. Regulation of Interest.

Interest, prohibited in the Middle Ages, was at first allowed in certain contingencies and then generally with a limitation of the rate. Such regulation still prevails in many American states, but is contrary to the general tendency toward economic freedom. It is not only easily evaded, but tends actually to increase the rate to the necessitous borrower. Where equality in bargaining does not exist, regulation seems to have some justification.

Seligman, *Principles*, § 171; Bullock, *Introduction*, § 268; Fetter, *Principles*, p. 135; Hadley, *Economics*, §§ 155-157; Andrews, *Institutes*, § 112.

7. Justification of Interest.

For varying reasons in different ages objection has been made to the rightfulness of interest. Consideration of this topic is not within the scope of this course, but it should be noted that interest is now justified on the ground of social utility. The capital which is essential to progress would not be accumulated without the incentive of interest. Although the motive of saving is personal gain, the result is general advantage.

Bullock, *Introduction*. § 268; Seager, *Introduction*, § 299; Ely, *Outlines* (1908), pp. 416-426.

F. RENT.

1. Definition and Discrimination.

Rent is the share of income that goes to the owner of any natural agent. *Economic rent*, or the real earnings of a natural agent, must be distinguished from *contract rent*, or the sum that one pays in return for the right to receive the earnings of a natural agent. The term rent is frequently extended to the sum paid for the use of other things than natural agents.

Seager, *Introduction*, § 119; Seager, *Economics*, § 81; Seligman, *Principles*, § 159; Fetter, *Principles*, ch. 8; Nicholson, *Principles*, Bk. II., ch. 14, § 1; *Elements*, Bk. II., ch. 10, § 1.

2. The Basis of Rent.

a. There would be no rent were there a superabundance of best land.

b. There would be no rent if unlimited applications of capital and labor to land produced the same proportionate return.

c. Because of the scarcity of best land and because of the fact of diminishing returns, the necessary food and raw material demanded by increasing population can be secured only by resort to poorer lands or by less productive applications of

labor and capital to the best land. The effective motive in either case is the higher price of the produce of land resulting from increasing demand.

d. Since all equal units of a crop will have equal value in the same market, the price, fixed at the marginal cost of production, will yield a surplus on that part of the crop raised at relatively greater advantage. This surplus arising from superior productivity of land above the extensive or intensive margin or cultivation is economic rent.

e. The income of permanent improvements obeys the same law as income ascribable to the land itself.

Seager, *Introduction*, §§ 63, 120-122, 127; Seager, *Economics*, §§ 82, 83; Bullock, *Introduction*, §§ 272, 273; Seligman, *Principles*, § 160; Marshall, *Principles*, Bk. IV., ch. 3; §§ 2-6; Bk. VI., ch. 9; *Economics of Industry*, Bk. IV., ch. 3, §§ 2-5; Bk. VI., ch. 9; Carver, *Distribution*, pp. 185-202; Gide, *Principles*, pp. 582-590; Davenport, *Outlines*, pp. 75-85; Pierson, *Principles*, pp. 84-92; Flux, *Economic Principles*, pp. 97-105; Mill, *Principles*, Bk. II., ch. 16, §§ 1-5; Nicholson, *Principles*, Bk. II., ch. 14; *Elements*, Bk. II., ch. 10; Walker, *Political Economy*, pp. 193-200; Ely, *Outlines* (1908), pp. 348-359.

3. The Relation of Rent to Prices.

a. Generally speaking, rent is the result of price—not price the result of rent.

b. In the case of a crop raised in part on actual no-rent land, rent (that is, the disposition of the surplus) does not increase price, although this surplus, being a part of supply, helps fix the price.

c. "More commonly the marginal land for any particular use itself affords a rent because, though marginal for the given use, it is above the margin for some other use to which it might be applied." (Seager.) In such a case the marginal rent is an element in price, but the differential rent due to the use of better land for this particular purpose does not increase price.

d. The intensive margin of cultivation is a no-rent margin. The price of the commodity thus raised intensively is not increased by the payment of rent, but is determined by wages and interest at the margin.

e. Wages and interest are necessary to secure the supply of labor and capital. They are therefore necessary elements in cost of production. "Rent, however, is wholly a result of production," and not a cause.

Seager, *Introduction*, § 127; Seligman, *Principles*, § 161; Bullock, *Introduction*, § 274; Marshall, *Principles*, Bk. V., ch. 8-11; *Economics of Industry*, Bk. V., ch. 3, § 8, and Appendix C; Carver, *Distribution*, pp. 206-210; Smart, *Distribution*, ch. 26; Clark, *Distribution*, ch. 23; Pierson, *Principles*, pp. 93-99; Flux, *Economic Principles*, pp. 109-114; Mill, *Principles*, Bk. II,, ch. 16, § 6; Hobson, *Distribution*, ch. 4, pt. i.; Andrews, *Institutes*, § 105; Walker, *Political Economy*, pp. 200-202.

4. Rent of Water Power and Mines.

These rents are determined similarly to that of land. In the case of water power the marginal power used must yield a return large enough to pay interest on the investment of capital necessary for utilization. The rent of water-power is constantly limited by the cost of the possible substitutes for it.

In the case of mines the product does not renew itself. Hence the marginal mine ought rationally to be one which paid not only working expenses but enough to compensate for exhaustion of the deposit. Practically on account of the speculative nature of most mining there are no-rent mines and "the rent of better mines is measured up from them as a no-rent margin." (Seager.)

Seager, *Introduction*, § 123; Seager, *Economics*, § 84; Marshall, *Principles*, Bk. V., ch. 10, 6; Flux, *Economic Principles*, p. 108; Nicholson, *Principles*, Bk. II, ch. 14, § 5; *Elements*, Bk. II., ch. 10, § 7; Walker, *Political Economy*, pp. 212-216.

5. Qualifications of the Law of Rent.

a. The rotation of crops complicates but does not contradict the law of rent. The product of the entire period of ro-

tation must be divided among the years to find the annual product.

b. The variations of weather and price affect returns for a year; but in stating law of rent the average return is assumed.

c. Situation, transportation facilities or any other characteristic that affects utility, is as important as fertility in determining rent.

Seager, *Introduction*, §§ 124, 65; Seager, *Economics*, § 85; Bullock, *Introduction*, § 271.

6. Rent and the Land Owner.

a. If the land is rented, contract rent tends to approximate the economic rent more or less closely according to the extent that competition prevails. Custom, a feeling of obligation on part of the owner or other cause may leave part of the rent in the hands of the worker.

b. If the land is worked by the owner, the economic rent accrues to him. It is not always differentiated by him from other parts of his income.

c. The capitalization of the rent at the current rate of interest fixes the selling price of land.

d. In some regions rents are not competitive, but are fixed by custom. Such are the system of farming on shares and the *metayer* system.

Marshall, *Principles*, Bk. V., ch. 9, § 3; ch. 10; *Economics of Industry*, Bk. VI., chs. 9, 10; Seager, *Introduction*, §§ 126, 128; Seager, *Economics*, §§ 86, 87; Bullock, *Introduction*, §§ 270, 275; Seligman, *Principles*, § 163; Fetter, *Principles*, ch. 15; Gide, *Principles*, pp. 606-613; Flux, *Economic Principles*, pp. 114-117; Ely, *Outlines*, pp. 359.

7. Tendency of Rent.

Other things remaining the same, an increase of population or of the standard of living raises rents. This is true both of rural and urban lands. This tendency may be checked by

improvements in production or transportation which increase supply.

Seligman, *Principles*, § 162; Bullock, *Introduction*, § 276; Gide, *Principles*, pp. 590-593; Davenport, *Outlines*, pp. 86-92; Flux, *Economic Principles*, pp. 112-114; Pierson, *Principles*, pp. 107-120; Ely, *Outlines*, pp. 360-363.

8. Justification of Rent.

Private property in land rent is attacked by different classes of social critics. "The question of the justification of rent is not one of its existence but of its disposition." While from the individual point of view there seems much ground for objection to individual appropriation of that which is in part the gift of nature and in part social product, long experience shows private ownership of land has all in all advanced social welfare. Some of the "unearned increment" (not, however, peculiar to land) might be heavily taxed with social advantage.

Seligman, *Principles*, § 164; Seager, *Introduction*, § 299; Seager, *Economics*, § 236; Smart, *Distribution*, pp. 306-308; Gide, *Principles*, pp. 593-600; Ely, *Outlines*, pp. 363-366.

G. CONCLUSION AS TO ACTUAL DISTRIBUTION.

a. The rewards of the factors of production are derived from and depend upon the values of the commodities they produce. But in a more fundamental sense the values of commodities depend upon these rewards of the factors of production. The values of commodities and the shares in distribution are but two ways of regarding the same sum. The National Dividend is the National Income.

b. The same fundamental principles determine the values of commodities and of the factors of production. In each case it is the marginal utility; but the margin is fixed by the forces of supply, or in other words, by the cost of production.

Both in the case of commodities and of the factors of production, the departures of market, or actual, values from normal values are to be explained similarly.

c. Even in our actual changing society distribution is not accidental or arbitrary; nor is it under the control of the powerful; but tends to approximate to the principle of reward according to deserts. But the rapid changes in modern society, the interference with the perfect working of competition, the monopolistic conditions that prevail and the immobility of labor due largely to its not being a mere commodity, result in many departures from a desirable result. There is, then, opportunity for social effort to minimize these departures from an ideally just distribution. The Labor Problem deals with such topics.

CHAPTER VIII.

CONSUMPTION.

(References will be found at the end of the chapter.)

1. Definition and Discrimination.

Consumption is the destruction of utility. The purpose of production is consumption and the purpose of much consumption is production—an incessant cycle. Economic consumption is the destruction of utility for the sake of advantage; is is either *unproductive* of wealth or *reproductive* of wealth. Uneconomical consumption is waste.

2. Dependence of Consumption on Utility.

a. A thing has utility because of the psychological condition of the consumer. Hence the consumption of a person depends upon his psychological organization and character.

b. "The art of consumption consists in knowing when to leave off in one thing and begin in another. The ideal of consumption is attained when the marginal utilities of the articles consumed are all equal." (Nicholson).

3. Dependence of Consumption on Price.

a. Consumption is directly dependent upon price and therefore constantly limited or stimulated by all changes in methods of agriculture, manufacture, transportation and communication.

b. This dependence of consumption on price frequently leads people to be affected unduly by prices. Useless things and articles of poor quality are bought because of low nomi-

nal price. The desirability of intelligence and self-control are evident.

c. Price, however, has significance only when compared with income. Normally, income not only does but should fix consumption, since income represents a person's production of utility as socially estimated. Ought a person to consume more utility than he produces? It should be remembered that many most valuable social services are not directly paid for.

4. Dependence of Consumption on Distribution.

The degree of equality in distribution in a social group shapes its consumption. The same group income on an ante-bellum plantation and a Brook Farm would produce very different results. Communal or social consumption is economical of wealth; but economy is not desirable at the expense of broader social considerations.

5. Effect of Consumption on Production and Its Methods.

a. The stimulus to economic progress and industry is found in wants. A large proportion of all consumption tends directly or indirectly to further production of wealth.

b. Where capital and labor are not fully employed, demand for commodities may increase employment of labor.

c. Ordinarily, demand directs rather than employs labor. The mere destruction of wealth does not produce wealth. The consumer determines the form of wealth produced. Demand for luxuries is no more a demand for labor than any other expenditure. The direction of labor into certain lines results in a *permanent* means of further production or enjoyment, in contrast with that which is merely transitory. The consumer determines whether a beautiful or an ugly thing shall be produced. He chooses between a rapid or slow destruction of wealth.

d. Consumers determine the numbers employed in each occupation. Some of these occupations are educational and tend to encourage development of productive skill; while others are debasing and not productive of wealth.

e. Consumers determine industrial methods. Whether it be sweatshop or factory, child labor or skilled adult labor, hand or machine, craftsmanship or highly specialized labor, is for the consumer to decide. The department store and the trust are due to the patronage of the public.

Required Reading: Bullock, Selected Readings in Economics, pp. 307-318; Bastiat, The Seen and the Unseen.

6. Relation of Consumption to Accumulation.

Saving is in reality the accumulation of wealth, most of which becomes, by investment, capital. If all should save in an extreme degree, there would be a falling off in demand for the very goods which the saving would help produce. The right proportion between saving and consumption is attained automatically through price, wages and interest. At present the greatest need is an increase of expenditure for the promotion of efficiency in workers.

7. Wasteful Consumption.

There is much waste of wealth due to the choice of the perishable rather than the durable; to imperfect utilization; and to individual rather than social ownership of certain forms of wealth. Not all high prices involve great cost.

8. Ethical Aspects of Consumption.

a. Because of the reaction of the use of wealth on character, it is a profoundly ethical question what one buys and consumes.

b. Even more important is the effect of one's consumption on the lives of others. Because of the complicated

nature of our productive system, the purchase of an article which may in no way injure its consumer, may involve physical, intellectual, artistic and moral debasement to others. Although for the most part unconsciously, there is, perhaps, no way in which the average person influences the lives of others more constantly than by his expenditure. Unnecessary personal service, degrading occupations, long hours and bad sanitary conditions in store and factory, the sweatshop, child labor and many other industrial evils could not exist were consumers aroused to their ethical obligations and organized so that they might be informed. The Consumers' League aims to meet this need. Labor Legislation and the Trade Union Label are further forces in this direction. As Democracy in its social sense, or as Miss Addams puts it, "identification with the common lot," prevails, the aroused conscience of the consumer will be a great force working for social advancement.

9. Consumption Reflects Social Progress.

The civilization of every period is largely shown by its consumption—its buildings, weapons, utensils, objects of art, clothing, etc. The costumes of the different classes in the middle ages were a reflection of the constitution of the society of the time. The disappearance of these distinctive caste costumes is a part of our democratic tendency. That alleged "aping of their superiors" which leads those of small incomes to dress like the well-to-do is but a striving to realize that Christian Democracy which most profess.

Statistics of consumption throws much light on the question of the progress of the working classes.

Seligman, *Principles*, § 228; Seager, *Introduction*, §§ 43-46; pp. 294-295; Seager, *Economics*, §§ 16-23; Marshall, *Principles*, Bk. III, ch, 6, §§ 4, 5; *Economics of Industry*, Bk. III, ch. 6, § 3; Fetter, *Principles*, chs. 40, 41; Gide, *Principles*, Bk. V.; Bullock, *Introduction*, §§ 65-68; Andrews, *Institute*, §§ 50, 124-131; Davenport, *Outlines*, pp. 330-344; Ely, *Outlines*, (1908) pp. 113-120; Walker, *Political Economy*, Pt. V.,ch. 3;

Mill, *Principles*, Bk. I., ch. 3, §§ 4-6; Hadley, *Economics*, pp. 318-335; Bastiat, *Essays on Political Economy*, Essay, "That which is seen and that which is not seen;" Palgrave, *Dictionary*, articles, *Consumption* and *Luxury*; Conrad, *Handwörterbuch*, articles, *Konsumption* and *Luxus;* Leslie Stephen, *Social Rights and Duties*, Essay on Luxury; de Laveleye, *Luxury*; *Elements of Political Economy*, pp. 243-264; Thompson, *The Purse and the Conscience;* Stevenson, *Lay Morals*, ch. 4; Fawcett, *Manual of Political Economy*, pp. 19-29; Ruskin, *Time and Tide*, Lecture 2nd; *Munera Pulveris*, ch. 6; *Crown of Wild Olive*; *A Joy For Ever*; *Unto This Last;* Morris, *Architecture, Industry and Wealth*, chs. 3, 4; Say, *Treatise on Political Economy*, Bk. III., chs. 4, 5; Smart, *Studies in Economics*, chs. 8, 9, 10; Taylor, *Exercises in Political Economy*, ch. 9; Richardson, *The Woman Who Spends;* Veblen, *Theory of a Leisure Class;* Blatchford, *Merrie England*, ch. 23; Ely, *Problems of To-day*, ch. 15; Devas, *Political Economy*, pp. 6-7, 21, chs. 6, 7; Roscher, *Principles of Political Economy*, Vol. II., pp. 221-252; Allen, *Democracy and Diamonds*, Contemporary, 59 : 666; Addams, *The Social Ministry of Wealth*, Int. Jour. of Ethics, 4, 173; Davidson, *Luxury and Extravagance*, Int. Jour. of Ethics, 9, 54; Devas, *The Moral Aspect of Consumption*, Int. Jour. of Ethics, 10 : 41; Greg, *What is Culpable Luxury?*, Contemporary, 21 : 216; Smith, *Mr. Greg on Culpable Luxury*, Contemporary, 22 : 126; de Laveleye, *Morals of Luxury*, Pop. Sci. Mon., 28 : 669; Leroy-Beaulieu, *The Office of Luxury*, Pop. Sci. Mon., 47 : 25; *The Social Function of Wealth*, Pop. Sci. Mon., 48 : 829; Martin, *Is Lavish Expenditure of Wealth Justifiable?*, 19th Century, 44:1024; Moran, *The Ethics of Wealth*, Am. Jour. Sociology, 6:823; Sidgwick *Luxury*, Int. Jour. of Ethics, 5 : 1 : Simey, *Luxury, Ancient and Modern*, Econ. Rev. 12 : 146; *Luxury in America*, Spectator, 82 : 482. *The Duties of the Very Rich*, Spectator, 78 : 168; *Culpable Luxury*, Spectator, 77 : 511; Ward, *The Use and Abuse of Wealth*, Forum, 2 : 549; Reports and Pamphlets of the Consumers' League and of the National Consumers' League,

CHATER IX.

MONEY.

1. Origin.

a. The division of occupations made necessary exchange which was at first carried on by barter. Barter has serious disadvantages, since each article must be valued in terms of all others; since many articles are not subdivisible; and since there is such limited correspondence between needs and goods.

b. Gradually certain articles, very generally desirable, were selected instinctively as media of exchange. These articles were frequently connected with the industry of the time. Skins, cattle, wheat, tobacco, salt, nails, cloth, wampum, are a few of the articles which have served as money.

c. The qualities necessary for a satisfactory money are general desirability, durability, divisibility, adaptability to coinage, high value in proportion to bulk, steadiness of value. Copper, iron, lead, zinc, have served as money, but silver and gold have replaced all others except for very small coins. The very elastic demand for the precious metals and the constancy of their supply, composed of the accumulations of centuries, are the cause of the stability of value of gold and silver.

d. Government, then, does not arbitrarily select the money commodities, but recognizes actual usage. Government gives certainty and definiteness to money by establishing a standard of weight and fineness. Government also declares certain money *legal tender*, which must then be received in payment of debt.

Seager, *Introduction*, §§ 168, 170; Seager, *Economics*, §§ 118, 120; Seligman, *Principles*, p. 451; Fetter, *Principles*, ch. 13, § 1; Bullock, *Introduction*, §§ 131, 132, 133, 135; Gide, *Principles*, pp. 213-218; Andrews, *Institutes*, §§ 72-75; Hadley, *Economics*, §§ 205-207, 209; White, *Money and Banking*, Bk. I, ch. 1; Scott, *Money and Banking*, pp. 15-20; Jevons, *Money and the Mechanism of Exchange*, chs. 1, 4, 5, 6, 8, 9; Walker, *Money*, ch. 2; *Political Economy*, pp. 120-126; Mill, *Principles*, Bk. III, ch. 7.

Required Reading: Bullock, Selected Readings in Economics, pp. 387-405; The Natural History of Money.

2. Coinage.

a. Coinage has undergone a long process of evolution. At first the quality of the metal was attested by the seal of a ruler. Then the weight was stamped on the coin. Successive changes have by gradual selection resulted in the present form of coin.

b. Coins are "ingots of which the weight and fineness are certified by the integrity of designs impressed upon the surface of the metal." Jevons. Coinage endeavors, then, to fix with exactness the weight and fineness of the metal and to make alteration of the coin impossible without detection.

c. "*Free Coinage*" means that anyone may bring any amount of bullion to the mint and have it coined. If this work of coinage is done without charge the coinage is said to be *gratuitous*. A charge for coinage equal to the expense involved is called *brassage*. If more metal is kept by the government than is sufficient to cover cost, this deduction is called *seigniorage*. If seigniorage is deducted from legal tender coin the money is said to be *debased*.

d. Mobility of the precious metals from monetary to other uses and *vice versa* is secured by free and gratuitous coinage. Desirable as this is in the case of standard coins, it involves expense and inconvenience without compensating advantage to have the lesser coins turned into bullion without loss. Limited issues of small coins having less than their propor-

tionate share of metal are therefore made and called *subsidiary* or *token* coinage. Such coins are usually legal tender to only a limited amount.

e. The "mint price" is the amount of money which a given amount (usually an ounce) of metal will produce when coined. The mint price of gold in the United States is $20.67 per ounce. The bullion value of a silver dollar would equal the face value if silver sold at $1.29 an ounce. The difference between the face and the bullion value of a silver dollar is seigniorage.

Seager, *Introduction*, § 171; Seager, *Economics*, § 121; Seligman, *Principles*, (3rd ed.) § 188; Fetter, *Principles*, ch. 45, § 1; Bullock, *Introduction* §§ 134, 147; Hadley, *Economics*, §§ 208, 210, 211; White, *Money and Banking*, Bk. I., ch. 2; Johnson, *Money and Currency*, pp. 177-187, p. 12; Scott, *Money and Banking*, pp. 69-83; Jevons, *Money and the Mechanism of Exchange*, chs. 7, 13; Walker, *Money*, chs. 9, 10; *Political Economy*, pp. 126, 127, 143-147; Nicholson, *Money and Monetary Principles*, pp. 35 52; *Principles*, Bk. III., ch. 12; ch. 13, §§ 3, 4; Ely, *Outlines*, pp. 217-221.

3. Functions of Money.

a. The word money is used in different senses as the point of view is scientific, popular, financial, legal, or figurative. It may be defined as "a generally accepted material means of payment and medium of exchange." (Fetter.)

b. Money serves as a medium of exchange, a measure of value and a standard of deferred payment.

c. As a large part of all business is based upon credit and carried on by credit instruments, an important function of money is to serve as a cash reserve to insure solvency.

Seager, *Introduction*, § 168; Seligman, *Principles*, § 187; Bullock, *Introduction*, § 146; Hadley, *Economics* § 202; Fetter, *Principles*, ch. 13, § 2, 3; Johnson, *Money and Currency*, pp. 11-17; Scott, *Money and Banking*, ch. 1; Walker, *Money*, ch. 1; Jevons, *Money, etc.*, ch. 3; Nicholson, *Principles*, Bk. III., ch. 9; *Money and Monetary Principles*, pp. 13-23.

4. Value of Money.

a. The value of money is its power in exchange. It is high when prices are low; low when prices are high.

b. The value of money is determined by the demand for and the supply of money. Other things remaining equal, diminishing marginal utility decreases the value of money as its quantity increases. "Demand for the money commodity depends (*a*) on the use of the commodity for other than monetary purposes, (*b*) on the amount of business, and (*c*) on the need for money as a reserve for credit operations. The general law of the value of money may thus be expressed in the equation; the volume of money multiplied by the rapidity of circulation is equal to the number of transactions in cash that are effected at a given price level." (Seligman, p. 456.)

c. Cost of production is related to the value of money as it is to any other value, but its influence is felt slowly because the existing stock is very large compared with the annual production. If the level of prices is low, then production of the money commodity is accelerated. Also if the cost of production of the money commodity is decreased, its production is accelerated. Such increased production tends to continue until the value of money is equal to the marginal cost of production of the money commodity.

d. Changes in value of money may proceed from a change in amount of goods offered for sale; from a change in the quantity of the money commodity produced; from a change in the relative amount of the money commodity demanded in the arts; or from a change in the rapidity of circulation.

e. Since every change in the value of money reacts upon business, upon the cost of living and upon obligations of debtors and claims of creditors, steadiness of value is most necessary.

f. Since the relative values of other commoditie are constantly changing, it is not possible to ascertain changes in the

value of money by changes in the price of one article. Changes in value of money are best ascertained by *index numbers*. Comparison of the weighted averages of the prices, at different times, of carefully selected list of commodities will indicate whether the general price level is rising or falling, and consequently whether money is more or less valuable. As indications of changes in general well-being, index numbers must be used with caution since they "deal with payments for products and not for services;—with wholesale prices instead of retail ones;—[and] are based on prices in the wholesale markets nearest the point of consumption." (Hadley.)

g. Under free coinage the division of a precious metal between the arts and monetary use is determined by the relation of the marginal utility in one use to that in the other. "Equilibrium is reached when the marginal utility of an ounce of gold employed in the arts is equal to the marginal utility of the things which that ounce will buy if it is converted into money." (Hadley.)

h. If the money supply of a country is large compared with that of other countries, prices in that country will be relatively high. The resulting excess of imports into that country will in time cause an export of money. A deficiency of money will cause a reverse tendency. This is commonly described as the International Distribution of Money.

i. Sir Thomas Gresham (16th century) observed that when such a movement of money occurred, full weight coins were selected for export since they were taken abroad only by weight, while worn or debased coins were kept at home, since they passed for face value. He enunciated the law that "bad money always drives out good money." This is true only when the country has relatively to others an excess of money. Thus qualified the principle explains the shipments of the more valuable metal from a bimetallic country and the exports of metallic money from a country issuing paper money in excess.

j. A deficiency of money is temporarily overcome by a diversion of a relatively greater portion of the monetary metal into monetary uses either from the new supplies or from the amount of the metal in use in the arts or as ornament. A more permanent deficiency is met, as has been shown, by increased production.

k. A temporary relative deficiency of money in one country results in a rise of interest on short term loans in that country. This attracts money from foreign banking centers. Should the deficiency be more permanent or serious, it is overcome by the principle of the International Distribution of Money.

Seligman, *Principles* (3d ed.), §§ 189-197, 200; Seager, *Introduction*, §§ 172, 193-200; Seager, *Economics*, §§ 119, 122, 144-149; Bullock, *Introduction*, §§ 137-142, 145, 147-150, 152-154; Hadley, *Economics*, §§ 212, 216-229; Johnson, *Money and Currency*, pp. 17-33, 103-134, 194-201; Gide, *Principles*, pp. 223-227, 237-241; Fetter, *Principles*, pp. 436-447; Walker, *Political Economy*, pp. 127-142; *Money*, chs. 3, 4; Nicholson, *Principles*, Bk. III., chs. 13, 14, 17; Mill, *Principles*, Bk. III., chs. 8, 9, 19, 20; Nicholson, *Money and Monetary Problems*, pp. 23-71, 85-106, 126-147; Scott, *Money and Banking*, ch. 4.

5. The Production of the Precious Metals and their Relative Value.

a. The forms in which the precious metals are found in the earth and the methods of extracting them have had and still have important effects on their monetary value. Gold is one of the most widely distributed metals. It is found in placers; in beds of existing or former rivers; in quartz and other rocks; in clay and even in sea-water. This wide distribution of gold has important bearing on its steadiness of value.

b. Gold is separated from sand or gravel by washing, either by the process of "panning" or by "sluicing." Hydraulic mining is an extension of sluicing. "Dredging" may also be considered another extension of this method.

Quicksilver is used in the final collection of the gold in connection with these processes. Some gold ores are crushed and treated with quicksilver; others are treated by a chlorination process; but more recently they have been treated most economically by the cyanide process. Some ores are best treated by smelting. The modern application of capital and science to extraction of gold has had important results on its supply and its value.

c. Silver is found free or in chemical combination or in combination with other metals. It is secured by amalgamation, by smelting, or by elaborate technical methods. The application of capital and modern scientific methods have decreased its cost of production.

d. In the ancient world great stores of the precious metals were accumulated for non-economic reasons. These hoards were widely scattered by the Alexandrine and Roman conquests, with beneficial effects on commerce. During the later Empire production, which was now carried on for economic reasons, was checked by war, scarcity of slaves, bad mining, the lease system and the barbarian invasions. The low prices resulting from the scarcity of the precious metals were among the economic causes of the Fall of the Empire. Production continued insignificant through the Middle Ages, although slightly stimulated by the Crusades.

e. After the discovery of America the existing treasures of Mexico and Peru were added to the money of Europe with slight effect; but the discovery of the silver mines of Potosi and the invention of the amalgamation process of extracting silver (both in 1545) caused a great increase in the money supply of the Old World. Gradually these new supplies spread by trade routes causing a great increase in prices, stimulating commerce, affecting political and social conditions and arousing economic thought.

f. Among the Romans an ounce of Gold was worth about ten or eleven of silver. Successive influences changed the relative production and demand of the precious metals, thus affecting the ratio between them until in 1680 an ounce of gold was worth 15 of silver. For two centuries this remained a normal, the ratio almost never going above 1 to 16 or below 1 to 14. The production of silver compared with that of gold from the middle of the 16th century was much greater than this proportion. Silver did not decline in value, however, because it was the money used in domestic trade and because the field for its employment was much enlarged by the growth of Oriental trade. From 1820 to 1850 the value of the ounce of gold ranged between 15.562 oz. and 15.95 oz. of silver.

g. The gold discoveries of 1849 in California and Australia were followed by an enormous increase in the production of gold, both absolutely and relatively to silver. During the preceding half-century there had been produced annually from thirty to fifty times as much silver as gold (by weight); from 1850 to 1870 there was produced only five or six times as much silver as gold. This revolutionary change in relative production caused only a slight change in the ratio of value which ranged during most of the time around 15.38.

h. Between 1870 and 1890 the annual production of gold was less than in the preceding period, while the production of silver increased largely, so that relatively the production of silver was decidedly increased, being roughly from eleven to twenty times as large as that of gold. The ratio of gold to silver changed steadily and rapidly, reaching 1 to 22 in 1889.

i. Since 1890 the production of both metals has been very large, that of gold increasing every year except for the interruption due to the Boer war. Gold production is now about three times as large annually as that of the years following 1849. Being due largely to cheapened methods it bids fair to continue. In spite of this the ratio of value of gold to silver has become 1 to 35 or even 38.

White, *Money and Banking*, pp. 41-59; Johnson, *Money and Currency*, pp. 208-216; Seligman, *Principles* (3rd ed.), § 201; Walker, *Money*, chs. 5-8; *International Bimetallism*, chs. 1, 2; *International Encyclopædia* and other Encyclopædias under *Gold* and *Silver;* Meade, *The Story of Gold.*

7. Government Paper Money.

a. Coin certificates, or representative money, certify that metallic money is on deposit with the government and is payable to the holder of the certificate. United States gold and silver certificates are examples. Such money is convenient, but adds nothing to the volume of money and has no effect on prices.

b. Redeemable paper money is a government promise to pay a certain amount of metallic money on demand, is in such form as to circulate as currency, is usually legal tender and is actually redeemed in metal on presentation. United States "greenbacks" since 1879 have been of this description. Such money is convenient; it is cheaper than gold or silver since it sets a certain amount of metal free for other uses; it is safe provided it is so limited in amount as not to drive all metal from the country and if prompt redemption is maintained. If introduced into the circulation gradually it would have the same effect as an equal amount of metal. Since these conditions depend upon the faith of the issuing government and since it is usually issued in times of great financial need, redeemable paper usually becomes irredeemable.

c. Irredeemable paper is a mere promise to pay, or even a mere assertion of value, forced into circulation by being made legal tender. Were such money strictly limited in amount, or so regulated in amount as to preserve a uniform level of prices, it would be a cheap and effective means of exchange within a country. In actual experience over-issue has almost invariably resulted, either because the urgent financial needs of the government led legislators to increase issues, or because debtors have successfully agitated for cheap money

with which to pay their debts. Our colonial paper monies, the Continental Currency, the United States Civil War issues, the Confederate Currency, the French Revolutionary *assignats* and many other examples show that paper money, nominally limited and redeemable, is over-issued and becomes irredeemable. It causes inflation, depreciation, over-speculation. It is unjust to creditors, to those on fixed incomes, to workingmen; and works general injury.

Hadley, *Economics*, §§ 214, 251, 255; Seligman, *Principles* (3rd ed.), § 207; Bullock, *Introduction*, pp. 257-263; Fetter, *Principles*, pp. 447-452; Walker, *Political Economy*, pp. 152-165; *Money*, Part II.; Scott, *Money and Banking*, ch. 6; Johnson, *Money and Currency*, pp. 318-331; Nicholson, *Principles*, Bk. III., ch. 15; Gide, *Principles*, pp. 258-273; Mill, *Principles*, Bk. III., ch. 13.

Required Reading: Bullock, Selected Readings in Economics, ch. 15; White, Paper Money in France.

CHAPTER X.

CREDIT AND BANKING.

A. THE NATURE OF CREDIT AND ITS FORMS.

a. "Credit may be defined as the power to secure commodities or services at the present time in return for some equivalent promised at a future time." (Bullock.)

b. Credit is based upon confidence in the honesty of the debtor and in his ability to secure the value promised.

c. Credit is a means of transferring capital; lies at the basis of all modern business; and is an important factor in wealth production, since by means of it capital passes from the less to the more profitable uses.

d. Book accounts, that is, the mere charging of goods on account books, are an important form of credit.

e. A promissory note is a written promise to pay a specified sum on demand or at a given time. By endorsement it may be transferred from person to person and serve as a medium of payment.

f. A check is an order to a bank to pay to a person named a certain sum of money. It presupposes a claim upon the bank, and by endorsement may pass from hand to hand as a medium of payment.

g. A draft, or bill of exchange, is an order drawn by one person upon another requesting the payment of a sum of money. It is commonly based upon a debit owing to the one making the draft. It also may pass from hand to hand by endorsement.

h. Bank notes or government notes are promises of a bank or of a government respectively to pay a stated sum, usually on demand. Being in the form of money they pass from hand to hand without endorsement.

Bullock, *Introduction*, §§ 160-165; Seager, *Economics*, §§ 129, 130; Johnson, *Money and Currency*, pp. 34-37; 46-50; Seligman, *Principles* (3d ed.), §§ 209, 210; Seager, *Introduction*, § 180, 181; Andrews, *Institutes*, § 88; Hadley, *Economics*, §§ 256 259; Scott, *Money and Banking*, pp. 12, 13, 136-147; Mill, *Principles*, Bk. III., ch. 11.

B. BANKS AND BANKING.

1. Banking Functions.

a. A bank is "a manufactory of credit and a machine of exchange." J. F. Johnson says: "The reader must rid his mind of the common notion that a bank deals in money. Just as a hardware store handles hardware, a dry-goods store dry-goods, or a grocery store groceries, so a bank handles credit. Money is not the thing it deals in any more than money is the thing in which a hardware store deals."

b. A person having wealth in process of manufacture or sale may have no acceptable means of payment for an extension or continuance of his business, even though he have much wealth. His credit, based on his wealth, may be taken by a bank in return for its own credit which will have more general acceptability as a means of payment than would his. His wealth, unavailable as a means of payment, becomes the basis of an available means of payment.

c. A bank by loaning or guaranteeing credit thus creates a most important, if not the most important, medium of payment in modern business. Although personal credit may and does serve as a medium of payment, the specialization of the work of examining and attesting it in banks greatly facilitates and extends its use. A good banking system aids enormously in the production of wealth.

d. The more concrete functions of a bank by which it performs its general function of making credit are

(1) *Discount.* In exchange for a promissory note (or other form of credit) involving a promise to pay a specified sum at a specified date, and properly secured, the bank gives the right to receive at once the amount promised in the note less the interest for the time the note will run. A right to receive value in the future is sold for a right to receive less value at present.

(2) *Deposit.* While the proceeds of the note may be drawn in money at once, they are commonly entered in the books of the bank as a deposit to the credit of the borrower. As such they may be drawn in money from time to time or transferred by check. This right to draw at will may also result from the actual deposit of money or credit instruments that are claims on others. The deposit is thus a liability of the bank which serves as a medium of payment.

(3) *Issue.* The bank note, or general promise of a bank to pay money, is essentially the same as a deposit, being a liability of the bank which serves as a medium of payment. It is different in form and often in security. Whether the depositor will use the deposit or bank-note as a medium of payment depends upon his business and convenience.

e. Loans and deposits tend to fluctuate simultaneously, not mainly, as commonly thought, because money deposited is loaned out, but because loans result in deposits.

f. Banks facilitate business in other ways, collecting notes and bills of exchange, serving as financial agents, buying and selling foreign exchange, etc.

Dunbar, *Theory and History of Banking*, ch. 2; Scott, *Money and Banking*, pp. 120-134; Johnson, *Money and Currency*, pp. 44-46; Bullock, *Introduction*, pp. 273-278; Seligman, *Principles*, (3rd ed.), §§ 211, 212; Seager, *Introduction*, § 185; Seager, *Economics*, §§ 133, 134; Gide, *Principles*, pp. 367-378; Fetter, *Principles*, pp. 462-465; White, *Money and Banking*, (3rd ed.), pp. 193-197; Ely, *Outlines*, (1908), pp. 246-250.

2. Kinds of Banks.

a. Banks of deposit and discount are those whose functions are those just described. Issue is not an essential function. In the United States such banks may be chartered by the national or state government, may be private, or may be trust companies having, as such, other financial functions. Only banks chartered by the national government now issue notes in this country.

b. Savings banks exist to receive and invest comparatively small sums. In some states they are philanthropic in nature. Under the best regulated state systems they do not do a general banking business, but invest only in certain approved kinds of securities.

3. Banking Operations and Accounts.

a. The joint stock company is the general form of organization. The stockholders of an incorporated bank elect a board of directors in whose hands rests the entire management of the bank during their term of office. They elect president, vice-presidents, cashier, all other officers, decide upon investments and control general policy. That in some cases they are largely influenced by the president or cashier does not affect the fact of the legal and moral responsibility of the directors.

b. The *capital* is the amount of money subscribed by the shareholders when the bank is organised. In the United States it is usually divided into shares of $100. Different rules prevail under different bank systems as to the proportion of the capital that must be paid in before business is begun. The *surplus* paid in by shareholders or accumulated from profits is practically an addition to capital. The function of capital and surplus is to serve as a guarantee of ultimate solvency. Should losses be met, they fall on surplus and capital.

c. Since the bank must meet all claims promptly, its investments must be such as can be turned into cash quickly. Short term business paper and bills of exchange are the most common investments. Properly secured by endorsement or collateral they are safe; the rate of interest upon them is equal to that on other equally safe investments; and since they are constantly falling due, they enable a bank to expand or contract loans quickly. A bank may also invest in stocks and bonds that have a quick market, especially if it has many steady accounts. Real estate, except a banking house, is a bad banking investment. The greater the amount of investments the greater the income. A bank, then, desires to invest all its funds; but since it must meet in legal tender money on demand all claims of depositors, it must so limit its investments as to have sufficient for this purpose.

d. The *reserve* is the amount of legal tender money kept on hand by a bank in order to meet promptly all demands. Its function is not so much to secure ultimate as immediate payment of obligations. The amount of reserve that should be kept depends upon the nature of a bank's business and the general financial condition of the country. The proportion is sometimes prescribed by law. Reserve is estimated as a percentage against deposits, or, in some cases, against all demand liabilities. It may be increased either by increasing money on hand, or by decreasing liabilities. A contraction of loans is the most frequent actual process of accomplishing such increase.

e. A *bank statement* issued periodically sets forth in more or less detail a bank's condition. On one side are given the liabilities which are of two general classes; those due to the shareholders as such; and those due to all others. The following is a simple example of a statement of a bank that does not issue notes;

LIABILITIES.		ASSETS.	
Capital, . . .	$100,000	Loans, ...	$595,621
Surplus, . . .	20,000	Stocks and bonds,	130,000
Profits, . . .	5,649	Real estate, . .	30,000
Deposits, . . .	754,237	Other assets . .	2,659
		Expenses, . . .	1,506
	$879,886	Reserve, . . .	120,100
			$879,886

Dunbar, *Theory and History of Banking*, ch. 3; Seligman, *Principles*, (3rd ed.), §§ 213, 215; Seager, *Introduction*, §§ 184, 185; Seager, *Economics*, §§ 131, 133, 134; White, *Money and Banking*, (3rd ed.), pp. 205-215.

4. The Check System.

a. When a bank credit takes the form of a deposit it becomes a circulating medium through the check system. If A who draws the check and B who receives it have accounts in the same bank, the amount of the check is charged against A's account and credited to B's. A's original debt to B is paid by a transfer of a claim upon a bank without the use of money.

b. If A and B have accounts in different banks, the check drawn by A upon the Farmers Bank is credited to B in the Merchants Bank when there deposited by him. The check is now a claim of the Merchants Bank upon the Farmers Bank. When paid directly or indirectly by this, it is charged against A's account. A's debt has been paid by book entries involving transfers of claims.

c. The *clearing house* is an institution for facilitating exchange and settlement of checks. One is found in every city of financial importance. To the clearing house each bank sends every business morning all the checks upon other banks in the city received by it the previous day so arranged as to be distributed quickly to banks against which they are drawn. From the other banks each bank receives all the checks drawn

against it and deposited in them the previous day. The checks brought in by a bank represent its total credit or claim; those received by it at the clearing house represent its debit or obligation. The difference represents its debit balance which must be paid in money during the day; or its credit balance which it is entitled to receive. The sum of claims against the clearing house equals the sum of its obligations; and the sum of credit balances must equal the sum of debit balances. The clearing house not only saves much time, expense and danger, but it greatly decreases the amount of actual money necessary to settle balances. In smaller cities clearing house balances are sometimes settled by drafts upon New York.

d. Checks drawn upon banks in smaller cities and deposited in banks in other cities ("country checks") are paid by a more or less round about system of transfer from bank to bank. They are frequently finally settled either by offsetting obligations or by drafts on a financial center.

e. It is clear that by the mechanism of the check system deposits based upon loans, or, in brief, *credit*, are a most important medium of exchange, increasing and decreasing automatically with changes in business, but always dependent upon the existence of sufficient legal tender reserve to insure its prompt liquidation.

f. At certain times of acute financial crisis, when banks, which were in reality sound, were not possessed of sufficient reserve to pay obligations promptly, clearing houses have issued certificates, in return for securities deposited. Such certificates were used by the banks in settling clearing house obligations, setting free much cash reserve for the urgent needs of the community. Even the mere announcement that the clearing house would issue such certificates has been sufficient at times to allay panics.

Dunbar, *Theory and History of Banking*, ch. 4; Johnson, *Money and Currency*, pp 46-51; Seligman, *Principles* (3d ed.), § 214; Seager, *Introduction*, § 183; Seager, *Economics*, § 132; White, *Money and Banking* (3rd ed.), pp. 216-231; Hadley, *Economics*, pp. 232-238; Scott, *Money and Banking*, pp. 218-226; Cannon, *Clearing Houses*.

5. Bank Currency.

a. The bank note is a promise to pay, and, as has been shown, is essentially like the deposit, since it is credit used as a means of payment. Being in convenient denominations and often resembling government paper money, it circulates freely as money among all, including those unable to judge of its safety and those practically unable to refuse to accept it. Even the best systems of redemption do not insure that constant test of worth which is found in the case of the check. For these reasons, based upon long experience, some protection of note holders as distinguished from other creditors of a bank has been generally deemed advisable. The more important methods are the following:

b. The bank note is frequently made a prior lien upon the assets of the bank. There is reason to believe that circulation secured by prior lien on commercial assets will be entirely safe. This method may be combined with others.

c. It is sometimes protected by the deposit (by the issuing bank) with some government authority of collateral security, such as government bonds. From the sale of such securities in case of the inability of the bank to meet its obligations the noteholders are reimbursed. If the securities accepted are carefully prescribed and if overissue is prevented by requirement that the notes be printed or stamped by the government, absolute safety is secured by this method, but elasticity, or quick response of the amount of notes to the fluctuating needs of business, is absent.

d. The Bank of England notes up to a certain amount are protected by government obligations to the Bank. Above

that they are protected by an equivalent amount of gold, becoming thus coin certificates. Absolutely safe, they in no way add elasticity to the currency.

e. In some banking systems, notably the Canadian, bank notes have been protected by a safety or guaranty fund collected from all the banks by a percentage tax and used to pay the notes of any insolvent bank. The fund in such cases is reimbursed entirely or in part from the assets of the bank according as the notes are or are not a prior lien. In the Canadian system such notes are limited to the amount of a bank's capital, are not legal tender, are promptly redeemed at redemption centers through the country and bear interest from the time of a bank's failure to redeem until they are paid. These provisions in connection with its branch bank features make the Canadian bank-note currency absolutely safe, elastic and very sensitive to the needs of different parts of the Dominion.

f. The German banks are like the Bank of England in that they are allowed a certain amount of uncovered circulation, namely, 385,000,000 m. and that above this amount all notes must be protected by an equivalent amount of cash excepted as stated below. Unlike the Bank of England the German banks may issue uncovered notes by paying a tax at the rate of 5% per annum upon the notes thus issued. Further the cash held must equal one-third of the circulation and the other two-thirds must be protected by short term business paper. This system secures a specie basis, but allows an expansion in time of monetary stringency.

g. Easy redemption will do much to prevent excessive issues and ensure safety. It is absolutely necessary unless notes are protected by specie or bonds, and desirable even then.

Dunbar, *Theory and History of Banking*, ch. 5; chs. 8, 10, 11 contain explanations of the French, English and German bank note currency; Scott, *Money and Banking*, pp. 166-176; ch. 10 describes foreign bank systems; Fetter, *Principles*, pp. 463-468;

Seligman, *Principles*, (3rd ed.), §§ 218, 219; Johnson, *Money and Currency*, pp. 331-339; Hadley, *Economics*, §§ 281-289; Nicholson, *Principles*, Bk. III., ch. 19; White, *Money and Banking*,, (3rd ed.), Bk. III., ch. 16, contains accounts of the foreign bank note systems; Bagehot, *Lombard Street*.

Required Reading: Bullock, Selected Readings in Economics, ch. 16, Laughlin, Regulation of a Bank-Note Currency.

6. General Regulation of Banks.

a. Experience shows that public regulation is essential to soundness. Such public control usually insists upon publicity in the form of frequent statements. It sometimes provides for governmental inspection.

b. Specific regulations are sometimes made as to allowable investments; amounts that may be loaned to one person; the proportion of reserve; the paying up of capital, etc.

Scott, *Money and Banking*, ch. 9.

C. DANGERS OF CREDIT.

a. Unwise extension of credit promotes unwise expenditure and extravagance. It sometimes encourages unwise governmental or corporate expenditures.

b. Unwisely extended in business it promotes speculation and raises prices as does any increase of the medium of exchange. Such rising prices encourage further speculation and unwise investments. These tendencies may continue in ever widening circles until a vast volume of business is being done upon an artificial basis. Sooner or later confidence, which is the basis of credit, is shaken, prices fall rapidly, speculative undertakings and even sound ones fail, panic results and is often followed by a long period of depression before confidence can be restored and credit established.

Hadley, *Economics*, §§ 274-280, 333; Walker, *Political Economy*, pp. 174-186; Seligman, *Principles*, (3rd ed.), § 225; Marshall, *Economics of Industry*, Edition of 1891, pp. 151-153; Jones, *Economic Crisis*.

CHAPTER XI.

AMERICAN MONETARY HISTORY.

1. Colonial and Revolutionary Bills of Credit.

a. Bills of credit, receivable for taxes and frequently legal tender, were issued by the American colonies to provide for war expenses, or ordinary expenses, or to make loans to private individuals. In spite of various provisions designed to secure redemption and to prevent depreciation, they were almost invariably issued in excess, leading to depreciation, speculation, loss to creditors and injury to business.

b. Despite this experience and the warnings of prominent men, the Continental Congress issued large amounts of Continental Currency to meet war expenditures. This money rapidly depreciated and ultimately became worthless in spite of laws fixing prices and forbidding discrimination against it. The results were the usual results of paper issues.

White, *Money and Banking* (3d ed.), Bk. II., chs. 1, 2; Bullock, *Monetary History of the United States*, pp. 29-78; Dewey, *Financial History of the United States*, §§ 9-11, 15-17; Hepburn, *Contest for Sound Money*, pp. 53-60.

2. Establishment of Our National Monetary System.

a. The Federal Constitution provides that Congress shall have power "to coin money, regulate the value thereof, and of foreign coin"; and that "no State shall coin money; emit bills of credit; make anything but gold or silver coin a tender in payment of debts."

b. At the beginning of the national government many kinds of English, Spanish and French gold and silver coins were in circulation. In different parts of the country these

were differently valued in the various monies of account. Hamilton, as Secretary of the Treasury, made a report to Congress in 1791 on the coinage. Although preferring a gold unit he recommended bimetallism in order not to reduce the money in circulation. He advised the adoption of the ratio of 15:1, that being the market ratio at the time. He recommended that the weight of silver (371¼ grs.) in the Spanish dollar, then widely used, be made the unit, and, consequently, that the gold dollar contain 24¾ grs.

c. The act of 1792 establishing our national standard followed Hamilton's recommendations. It provided for free coinage of gold and silver at the ratio of 15:1. The silver unit was a dollar of 371¼ grs. pure silver and the gold unit was an eagle of 247.5 grs. pure gold.

d. The value of silver declined after 1792. Consequently the mint ratio undervalued gold, which disappeared when coined and soon was no longer brought to the mint. Although the situation was much obscured by the circulation of foreign gold, the use of bank notes and the exportation of new United States coins, the standard was in reality a silver monometallic one. Bimetallism failed.

Dewey, *Financial History of the United States*, §§ 27, 29, 30, 44; White, *Money and Banking*, pp. 31-34; Johnson, *Money and Currency*, pp. 341-343; Scott, *Money and Banking*, pp. 329-332; Laughlin, *History of Bimetallism in the United States*, ch. 2; Walker, *International Bimetallism*, pp. 110-116; Hepburn, *Contest for Sound Money*, chs. 1, 2.

3. The Change to Gold Monometallism.

a. A growing demand for a change that would lead to a restoration of gold to our circulation resulted in the law of 1834. The restoration was brought about by changing the ratio to 16:1. This was accomplished by reducing the weight of gold in the dollar to 23.2 grs. In 1837 a law revising the coinage laws raised the weight of gold in the dollar to 22.22

grs., making the ratio 15.98+:1, The weight and ratio of gold and silver have not since been changed in standard coins.

b. This act overvalued gold, the market ratio at the time being 15.73:1. Silver disappeared from circulation, even the subsidiary coins being withdrawn. This tendency was accelerated by the gold discoveries in California.

c. The lack of minor coins caused such inconvenience that in 1853 a law was passed making silver coins of denominations less than one dollar token coins with legal tender quality limited to five dollars. The weight of pure silver in one dollar's worth of these coins, face value, was fixed at 345.6 grs.

d. The result of these laws was, while nominally retaining bimetallism, to establish practically the gold standard with an excellent subsidiary coinage system. No further change in the laws governing the metallic currency was made until 1873.

Dewey, *Financial History of the United States*, § 90; White, *Money and Banking*, pp. 34-36; Johnson, *Money and Currency*, pp. 344-346; Laughlin, *History of Bimetallism*, chs. 4, 5; Hepburn, *Contest for Sound Money*, ch. 3.

4. The Paper Currency of the Civil War Period.

a. The enormous and sudden increase of government expenditures due to the war necessitated the use of every possible source of revenue. The expenditures for the four fiscal years 1858–1861 were $272,826,000; for the four fiscal years 1862–1865 they were $3,348,400,000. At first borrowing by bonds was resorted to, and then gradually increased customs and internal revenue taxes to the limit of endurance. The increased taxes became effective only slowly.

b. To meet pressing needs of the early years of the war Congress authorized the issue of legal tender government notes receivable by and payable to the government except for duties on imports and interest on the public debt. Of the

$450,000,000 authorized, $431,000,000 were outstanding June 30, 1864. This action was bitterly opposed by many at the time and there is much reason to believe that more vigorous and far-sighted use of the taxing power at the beginning of the war, supplemented by the issue of bonds, would have furnished sufficient funds without resorting to paper money.

c. Measured in gold these notes showed immediate depreciation. They declined steadily to 62 in February, 1863; then rose gradually to 79 in August, 1863; then fell steadily and rapidly until they reached 39 in July, 1864; from that time until the end of the war they rose gradually, standing at 74 in May, 1865. Somewhat more slowly, prices of commodities revealed this depreciation, while wages rose very tardily. This meant a heavy burden upon the people already suffering from heavy taxes. The rise in general prices cannot be ascribed entirely to inflation, being due to various causes, including the heavy taxes on domestic and foreign productions.

d. The financial difficulties caused by the war and the drain upon bank and government reserves caused the suspension of specie payments, Dec. 30, 1861. With the issue of the "greenbacks" the depreciation of paper increased so that by the summer of 1862 even the silver subsidiary coins of lower standard were driven from the circulation in accordance with Gresham's law. From this time until several years after the war, only paper was used in ordinary transactions.

e. The deficiency of small change caused great inconvenience. Fractional currency and copper coins were issued by cities and individuals. Postage stamps were largely used in small trade. In July, 1862, Congress authorized the issue of postage currency in small denominations. In March, 1863, Congress authorized the issue of paper fractional currency receivable in payments to the government and exchangeable for legal tenders. These remained the small currency of the country until some years after the war.

f. Although not in circulation gold was needed by the government to pay interest on the debt; by importers to pay duties; and for trade with other countries. This gold was bought with paper and constantly fluctuated in its price according to actual or expected changes in business, financial, political or military conditions. An exchange for dealing in gold was opened in New York and gold became a favorite subject of speculation. Because of the alleged evils of this speculation, Congress passed a bill in 1864 forbidding dealing in gold for future delivery. Since this law prevented legitimate purchase of gold, it caused a sharp rise in the paper price of gold. The law was repealed fifteen days after its passage.

g. The question of the constitutionality of the legal tenders was early raised and the early decisions of the Supreme Court were unfavorable, although the cases brought involved limited questions such as the use of the notes to settle contracts entered into before the legal tender act was passed. In one of these cases, however (1869), the Court by four to three implied that the legal tender clause was both improper and unnecessary. In 1871 the membership of the Court having changed, it was decided that the legal tender notes were constitutional as a war measure. In 1884 a decision was rendered that they were legitimate even when issued in time of peace. This decision, which itself reveals the influence of the Civil War in enlarging federal authority, was bitterly attacked by some historians and constitutional lawyers. All in all, popular opinion agreed with the Court and there is no further question of the power of the Federal Government to issue legal tender notes.

h. During the same period the Confederate States were experiencing to the utmost the evils of paper currency. Immense quantities were issued by the Confederate government, by the individual states, by individuals and corporations

under authority received from the States. They all became practically worthless soon.

Dewey, *Financial History of the United States*, §§ 116-125, 131, 155, 156; White, *Money and Banking*, Bk. II., ch. 3; Johnson, *Money and Currency*, pp. 272-290; Hepburn, *Contest for Sound Money*, chs. 8, 11.

5. Monetary Reconstruction.

a. Various views as to the best policy toward United States notes prevailed after the war, from the extreme attitude in favor of immediate resumption of specie payments to that which favored an increased use of government notes. At first (1866) Congress adopted a policy of gradual contraction, but the panic of 1873 revived the demand for more paper money. Congress in 1874 passed a bill for the permanent increase of the paper currency from $382,000,000, at which it then stood, to $400,000,000. This bill authorizing an increase of paper in time of peace was vetoed by President Grant, who thus checked the inflationist movement, although the Greenback party was active and in some sections powerful from 1876 to 1880.

b. In January, 1875, the Resumption Act was passed providing for reduction of the greenbacks to $300,000,000; for the substitution of silver coin for the fractional currency; and for the resumption of specie payments on January 1st, 1879. A fortnight before the date set the premium on gold disappeared and on January 1st, 1879, specie payments were resumed with no difficulty. In May, 1878, Congress prohibited the further permanent retirement of greenbacks, and the amount then outstanding ($346,681,000) still remains. These notes are redeemable in gold, but are reissued when so redeemed.

Dewey, *Financial History of the United States*, §§ 143-147, 154-161; White, *Money and Banking*, (3rd ed.), pp. 150-166; Hepburn, *Contest for Sound Money*, chs. 9, 10; Noyes, *Thirty Years* (also his *Forty Years*) *of American Finance*.

6. Silver Legislation. 1873-1893.

a. In 1873 the United States was legally a bimetallic country, but silver was so undervalued that it was not coined, so that gold was the standard. In fact, paper money, somewhat depreciated, was the money of circulation and prices were reckoned in it. In 1873 a law for the revision of the coinage was enacted. Incidentally it dropped from the list of coins the long disused silver dollar. The law was later described as "the crime of 1873."

b. The decline in the price of silver beginning at this time made this change one of great significance. The advocates of enlarged circulation, defeated in their attempts to secure paper inflation, now vigorously demanded the restoration of silver to free coinage. A bill for the free coinage of silver was passed by the House in November, 1877. It was amended by the Senate so as to limit the amount coined and secure the profit to the government. In this form it became law over the presidental veto in 1878.

c. The provisions of this *law of 1878* (sometime called the Bland, or the Bland-Allison, act) were that the government should buy each month not less than two nor more than four million dollars worth of silver bullion at the market price and coin it into dollars containing 371.25 grs. of pure silver; that these dollars should be legal tender; and that certificates of deposit in denominations of not less than ten dollars might be issued upon the deposit of such coin with the government, such certificates being receivable for public dues, but not legal tender.

d. The predicted quick transition of the United States to a cheap silver standard did not take place because the amount of silver issued was so limited; and the rapid development of the country in population, wealth and commerce, required more money. A comparatively small amount of silver dollars

circulated, but the silver certificates were kept out, especially after the passage of an act in 1886 providing that they might be issued in small denominations.

e. The agitation for free coinage continued. Since a presidential veto would prevent the passage of a free coinage law, the Sherman law was passed in 1890 as the price paid by the Republican party for the votes of a few silver Senators necessary to the passage of the McKinley high tariff bill. In view of the sharp political issue joined slightly later, it is significant that this bill was passed by a Republican Congress and President.

f. This *Sherman Law of 1890* provided that the government should issue legal tender notes to be used in buying 4,500,000 ozs. of silver monthly at the market price. With a temporary exception only so much silver was to be coined as was needed for the redemption of these Sherman notes. Further, they might be redeemed in gold or silver at the discretion of the Treasury, it being declared the policy of the United States to keep the two on an equality. The purchase provisions of the law of 1878 were repealed, but silver certificates were still to be issued.

g. The larger amount of Treasury notes issued under this act and added to the existing legal tenders made a greater demand on the gold reserve. Unfavorable trade conditions, large expenditures and decreased revenues endangered the maintenance of the gold standard. There resulted an acute panic in 1893. In consequence the purchase provisions of the act of 1890 were repealed (1893).

Dewey, *Financial History of the United States*, §§ 170-173, 186-189; Seligman, *Principles*, (3rd ed.), § 204; Taussig, *Silver Situation in the United States*, Part I.; White, *Money and Banking*, Bk. II., ch. 6; Johnson, *Money and Currency*, pp. 346-356; Laughlin, *History of Bimetallism in the United States*, chs. 7, 13; Hepburn, *Contest for Sound Money*, chs. 12, 13, 17; Noyes, *Thirty* (or *Forty*) *Years of American Finance*, chs. 4-8.

7. The Great Silver Controversy.

I. GENERAL CONSIDERATIONS.

a. The panic of 1893–4 was a serious one. Government revenues decreased, failures were numerous, production of all kinds decreased, distress and unemployment prevailed. Prices, as shown by index numbers, declined steadily, being lower in 1896 than at any other time during the Civil War. The condition of the agricultural population, especially in the West, was unfortunate. Prices of all sorts of agricultural products were very low. The principal and interest of the mortgages with which the farms had been bought became an increasing burden.

b. The prevailing discontent based on economic conditions revealed itself politically. In the South and West the Populists gained preat strength as did a radical wing within the Democratic party. Within the Republican party a minority favored free coinage of silver, while many others were willing to make concessions to the silver men as a matter of policy. Only in the East was there a positive advocacy of gold monometallism.

c. In the campaign of 1896 the Democrats, under the leadership of W. J. Bryan, advocated free coinage of silver. From a non-committal attitude, the Republican nominee, William McKinley, gradually took one of strong advocacy of what was called "sound money." After one of the fiercest campaigns in the country's history the opponents of free coinage won.

d. Although the arguments advanced in the campaign of 1896 had reference, in part, to a particular situation they involved such a comprehensive consideration of general monetary principles in an actual situation that a resume of the discussion seems worth while.

Dewey, *Financial History of the United States*, §§ 189-194; Noyes, *Thirty* (or *Forty*) *Years of American Finance*, chs. 9, 10; Hepburn, *Contest for Sound Money*, pp. 373-391; Johnson, *Money and Currency*, pp. 356-360.

II. THE ARGUMENT FOR AND AGAINST FREE COINAGE IN 1896.

a. The question of stability in the standard of value.

(1) The bimetallists argued that their policy would secure greater stability in the standard of value. They claimed that under monometallism the standard of value is subject to all the results of change in demand or supply of the chosen metal, while under bimetallism, since the two metals would not be likely to change in the same direction simultaneously, the monetary demand would be transferred to the cheaper, thus preventing as great fluctuation as would otherwise take place. Further, the very size of the money base would prevent fluctuations in supply having the same effect as under monometallism.

(2) The monometallist, on the other hand, contended that the fluctuations in the standard of value, although not so great under bimetallism, would be more frequent, since they would be caused by changes in the supply of either metal. They further contended that, while the argument of the bimetallist might be sound when the legal ratio was close to the market ratio, it had no potency in the particular situation under consideration since not bimetallism but silver monometallism would be the result of the policy proposed.

b. The question of a "par of exchange."

(1) The bimetallist urged bimetallism as furnishing a "par of exchange" between gold and silver using countries. He alleged that gold using countries had recently

suffered because of the absence of such a par of exchange, the gold value of their exports constantly decreasing because of the fall in the value of the silver with which they were paid for. Further, such a par of exchange would encourage the flow of capital from country to country.

(2) The gold monometallists denied that trade is "so much hampered by fluctuations in relative money values as is often asserted." Further free coinage of silver by the United States alone would mean that this country would be silver monometallic and thus lack a par of exchange with all the important industrial and commercial nations.

c. The argument as based on the prices of commodities.

(1) The silver advocate dwelt particularly upon the social and industrial evils due to falling prices. Index numbers proved the fact of falling prices. Falling prices are disastrous to farmers, to merchants, to laborers, to debtors—all of whom are the active, energetic classes. Falling prices throughout history have been accompanied by depression and disaster. The fall in prices since 1873 was ascribed to the demonetization of silver and the consequent increased demand for gold to do so much more of the world's monetary work. Although there had been an increase in the production of silver, it was not so important as certain previous changes in the relative production of gold and silver had been. In these earlier cases the new metal had under bimetallism been absorbed without great effect on the ratio, and so it would have been after 1873, if silver had not been demonetized.

(2) The gold advocate ascribed falling prices to changes in methods of production and transportation. Further, prices ought to fall since the real cost of production

measured in labor has fallen. The price of labor measured in gold has not fallen, and this is the fairest test of the stability of value of money. The increase in prices which would follow remonetization of silver would work great injustice to the thrifty creditor class, including all who have small savings. It would decrease the real value of all fixed incomes. It would decrease the real incomes of laborers, since prices would rise more rapidly than would wages.

(3) The silver advocate denied that changes in methods of production and transportation explained the fall in prices, since equally revolutionary changes in methods of production between 1849 and 1873 were accompanied by rising prices. He insisted that the value of labor ought to increase, since the results of progress should accrue to the producing classes and not to those having incomes from accumulated wealth. This desirable consummation would result from bimetallism.

d. The possibility of maintaining a bimetallic standard at 16 to 1.

(1) The extreme gold monometallist contended that bimetallism was always a failure, and pointed to the experience of the United States, of France and of the Latin Union. He contended that a great flood of silver would drive all gold out of circulation and result in metallic inflation and depreciation.

(2) The silver advocate contended that bimetallism was not impossible even for the United States alone, since the amount of free silver was so slight that it could be absorbed into the circulation of the United States without displacing all the gold. Even if it did, this would not be so serious a result as the continuance of the existing low prices.

(3) The international bimetallist agreed with the advocate of free coinage of silver as to the evils of gold monometallism. He contended that the experience of the United States was of no significance as to the possibility of bimetallism by international agreement. Further, he claimed that for seventy years bimetallism in France was not only successful, but rendered the world a great service by preventing the serious effects on the ratio of value which would otherwise have resulted from revolutionary changes in the relative production of the precious metals. Arguing vigorously for the possibility and necessity of international bimetallism, he agreed with the gold monometallist that free coinage of silver by the United States alone would result in silver monometallism at a depreciated standard with disastrous consequences.

(4) The contention of the international bimetallist is that, if a number of leading nations agree to coin both metals freely at a common ratio, any change in the ratio of value will cause such an increased demand for the cheaper and decreased demand for the dearer that the market ratio cannot long vary from the legal ratio.

Johnson, *Money and Currency*, chs. 11, 12; Hadley, *Economics*, pp. 208-231; Bullock, *Introduction*, §§ 191-199; Taussig, *Silver Situation in the United States*, Part II.; Walker, *International Bimetallism; Political Economy*, pp. 463-475; Scott, *Money and Banking*, chs. 14, 15; Nicholson, *Principles*, Bk. III., ch. 18; *Money and Monetary Problems*, pp. 246-311.

8. Establishment of the Gold Standard.

In 1900 Congress passed a law which provided that gold is the standard of value and making it the duty of the Secretary of the Treasury to maintain all other monies at a parity with it; that all United States notes shall be redeemed in gold and that a reserve fund of $150,000,000 shall be maintained for this purpose; that the Treasury notes of 1890 shall be retired

and that silver certificates shall be mainly in small denominations.

Dewey, *Financial History of the United States*, § 198; Seligman, *Principles*, (3rd ed.), §§ 205, 206; Johnson, *Money and Currency*, pp. 360-363; Hepburn, *Contest for Sound Money*, ch. 18.

CHAPTER XII.

AMERICAN BANKING HISTORY.

1. The First and Second United States Banks.

The first Bank of the United States was chartered by the federal government in 1791; and the second Bank of the United States was chartered for twenty years in 1816. Neither of these banks is of any significance from the standpoint of monetary principles, but they had great importance in connection with the political history of the time. They rendered good service in connection with the general finances of the government and the country.

Dewey, *Financial History of the United States*, §§ 43, 58, 67, 68, 70, 71, 86-88; on pp. 97, 118, 143, 197 in Dewey will be found extensive references on this subject; White, *Money and Banking*, Bk. III., chs. 6, 7; Hepburn, *Contest for Sound Money*, pp. 62-73, 81-112.

2. State Banking Before the Civil War.

a. Until the establishment of the National Banking System during the Civil War, a large part of the actual monetary circulation of the country consisted of notes issued by banks chartered by the States. The laws under which these banks were formed varied greatly. In some states there were almost no restrictions upon the formation and management of banks.

b. This lack of uniformity and wise regulation, behind which was an unintelligent and apathetic public opinion, resulted in all sorts of banking abuses. Capital was frequently not paid up. Note issues were often excessive in proportion to capital, were not protected by sufficient reserve or, in some cases, by any at all. Note redemption was practically impossible in the case of most notes. Counterfeiting and altering

were very general. The notes of good banks were quickly returned for redemption, leaving a great mass of more or less depreciated circulation. While banks and business men were able to some extent to protect themselves by bank note "Detectors" and "Reporters," the ordinary individual constantly suffered loss.

c. These evils led, especially in the older states, to various attempts to rectify them. The *Suffolk Bank* of Boston brought New England bank notes up to par by becoming a kind of clearing house for the redemption of notes. This system worked successfully from 1818 to 1865.

d. Another attempt at improvement was the New York State *safety fund system* which was introduced in 1829. Although the experience was not satisfactory, it showed that this method of protecting note holders would succeed if issues were registered to prevent over-issue; if notes were made a first lien on assets; if the safety fund was used only for the redemption of circulating notes; if, as soon as a bank failed, its notes might be presented for redemption.

e. Still another method was the *special pledge system* tried with success in New York and unsuccessfully in other states. Experience taught that this system would be successful only if the best public bonds were accepted as securities excluding mortgages and other kinds of securities; and if the notes were registered to prevent over-issue.

Seligman, *Principles*, (3rd ed.), § 220; White, *Money and Banking*, Bk. III., chs. 9-12; Dewey, *Financial History of the United States*, §§ 66, 69; Hepburn, *Contest for Sound Money*, pp. 89-93, 131-139.

3. The United States National Bank System.

a. During the Civil War the national government took charge of the bank circulation of the country by chartering banks which could issue notes secured by United States bonds. The main motive was to find a market for these bonds. In

1866 state bank notes were forced from circulation by a ten per cent. tax.

b. The Comptroller of the Currency has general charge of the United States banks, having authority to charter, to examine, to require statements of condition and in other ways to exercise general supervision. The *minimum capital*, which must be paid promptly in cash, varies according to the size of the place. The powers of these banks are limited to a strict banking business. They are subject to various restrictions designed to secure safety.

c. The *reserve* must consist of lawful money. In certain cities designated as reserve cities a bank's reserve must equal 25% of its deposits. All other banks must keep a reserve of 15%, of which three-fifths may be deposited in banks in reserve cities. A reserve city bank may keep one-half of its reserve on deposit in banks in certain designated central reserve cities. A 5% fund deposited at Washington for redemption of notes may be counted as part of the reserve. When the reserve is below the legal limit, loans may not be extended until it is made good.

d. A bank may issue *notes* equal to the par value of bonds deposited by it with the Comptroller of the Currency, but they may not exceed in amount the market value of the bonds nor the capital stock paid in. Five per cent. of its circulation must be kept by each bank on deposit with the Comptroller for redemption of its notes. The notes are legal tender in all financial relations between the United States and an individual except in payment of interest on the debt of the United States and in payment of import duties. They are legal tender between national banks, but not otherwise. No notes of less than five dollars may be issued and only one-third of a bank's circulation may be in that denomination. The banks pay a small tax on circulation. Under onerous

conditions "emergency circulation" may be issued without bond security.

e. The defects of the national bank system are mainly connected with its circulation. Although absolutely safe, the bank currency is not elastic. Many propositions for a change of the note system have been made.

Dewey, *Financial History of the United States*, §§ 138, 139, 163-165, 174, 200, 209; Seligman, *Principles*, (3rd ed.), § 221; White, *Money and Banking*, Bk. III., chs. 14, 19; Dunbar, *Theory and History of Banking*, ch. 10; Seager, *Introduction*, §§ 189, 190; Seager, *Economics*, §§ 137-139; Bullock, *Introduction*, § 185; Hepburn, *Contest for Sound Money*, pp. 320-360.

CHAPTER XIII.

INTERNATIONAL EXCHANGE.

a. Most international payments are settled by the use of credit instruments, essentially in the same manner in which domestic payments are made. Such bills when drawn upon important financial centers, and pre-eminently when drawn upon London, may by endorsement pass from country to country forming an international currency.

b. Bills of exchange are *commercial* or *documentary* if drawn against exports of merchandise ; *financial* or *bankers'* if drawn by bankers. They are "sight" if payable on presentation ; and "time," if payable a certain length of time after date. The time bill will be lower in price than the sight bill by the interest for the ensuing period.

c. The "par of exchange" between two countries is the expression of the value of the standard unit coin of one country in terms of the standard unit coin of the other. Since the English sovereign contains 4.866+ as much gold as a gold dollar, the par of exchange between England and the United States is one pound sterling = $4.866+. Exchange between two countries is said to be at par when the amount of specie given for a bill of exchange in one country is exactly equal to what will be received for it in the other.

d. Since trade conditions are constantly changing, exchange is rarely at par. If a country's obligations are greater than its claims, the demand for bills of exchange (at par) will be greater than the supply and they will sell at that premium which will cause an equilibrium. If its obligations are less

than its claims, then correspondingly bills of exchange will be at a discount.

e. The limits of these fluctuations are found in the cost of importing or exporting specie. The premium on bills of exchange cannot ordinarily go above the cost of exporting specie nor below the cost of importing it. These limits are called the "gold points." In time of great monetary stringency such normal limits may be passed.

f. A country's balance of credit or debit (upon which the price of foreign exchange depends) cannot be ascertained by examining solely exports and imports of commodities. There must also be taken into account securities bought and sold, expenses of travellers, ocean freights, interest on obligations of one country held in others, commissions and any other items affecting balance of liability.

g. Business is done largely upon credit; credit depends largely upon specie reserve; specie reserve is affected by gold imports or exports; such movements of specie depend upon the price of foreign exchange. The rate of foreign exchange, then, has great significance to merchants, manufacturers, bankers and speculators.

Seligman, *Principles*, (3rd ed.), § 228; Seager, *Introduction*, §§ 205-209; Seager, *Economics*, §§ 140-144; Bullock, *Introduction*, pp. 268-272; 339-344; Fetter, *Principles*, pp. 485-488; Johnson, *Money and Currency*, pp. 85-102; Andrews, *Institutes*, §§ 95, 96; Nicholson, *Principles*, Bk. III.. ch. 26; Hadley, *Economics*, pp 238-241; Scott, *Money and Banking*, ch. 12; Mill, *Principles*, Bk. III., ch. 20.

CHAPTER XIV.

ECONOMIC NATURE AND FUNCTION OF SPECULATION.

a. Speculation is the buying or selling of commodities in the expectation that subsequent selling or buying of the same will yield a profit other than that which would be considered a reward for wholesale or retail handling. In one form or another it is a prominent fact in present economic life. To it are attributed many evils such as that it is purely gambling; that it causes artificial prices and corners; that it injures producers and investors; and that the gains of speculators are mere extortion.

b. Gambling is economically disadvantageous. This is not because the utility of the gain in case of success is less than that of the possible loss, as President Hadley says, for this is not true if the odds are favorable; but because gambling discourages industry and social productiveness.

c. Insurance, on the other hand, encourages industry and promotes social welfare.

d. Nearly all modern business involves speculation, since, while goods are in process of production or sale, changes in price may result in great gain or loss. The manufacturer, the wholesale or retail merchant, the builder, the farmer, are speculators whether they will or not.

e. To some extent these risks may be avoided by contracts for future delivery. At the inception of the work the builder or the manufacturer may contract for future delivery

of labor or material. The manufacturer may contract to sell his goods and to buy his materials so as to avoid many uncertainties. Such arrangements, however, do not do away with speculation, but transfer it to a class who specialize as speculators.

f. Such a class to succeed must be skilled forecasters of future demand and supply. If they estimate that a certain commodity will in the future be lower in price than now, all things considered, they sell for future delivery, confident that they will buy for even less. If they believe the price will be higher they buy for future delivery, confident that the future price will yield a profit. In each case their action tends to secure a greater uniformity of price over a period than would otherwise be found. There results a survival of a class of skillful speculators who estimate the course of prices with great accuracy.

g. The motive of such speculators is to make a personal gain, and the method is practically a wager. But there results a great social advantage. By the action of speculators supply tends to be equalized in time and space so that prices tend to be steadier. This results in securing the greatest possible social utility from such supply.

h. There seems to be no easy method of distinguishing between good and bad speculation. Both use the same commodities and the same methods. Both use largely borrowed money. False reports, corners, manipulation and anything which tends to fix prices artificially rather than to ascertain what they naturally tend to be, interferes with the equalization of supply over a given time, and consequently to result in an economic loss to the community. Further, the ease with which the business of speculation may be taken up entices many who overestimate their capacity in this direction. That this results in economic loss is true, but speculation is, in this

respect, different from other businesses only in degree. Further, such mistaken speculators are rapidly eliminated from business.

i. It seems clear that reason and experience are against attempts to regulate speculation by prohibiting the sale of commodities for future delivery.

Hadley, *Economics*, chap. 4; Seligman, *Principles*, pp. 359-366, 369; Seager, *Introduction*, pp. 174-177; Seager, *Economics*, § 66; Fetter, *Principles*, chap. 36; Emery, *Speculation on the Stock and Produce Exchanges of the United States.*

Required Reading: Bullock, Selected Readings in Economics, pp. 340-353, 367-386: Selections from Emery's Speculation.

CHAPTER XV.

PROTECTION AND FREE TRADE.

1. Definition and Discrimination.

a. Protection means "the policy of encouraging and developing home industries by means either of bounties paid to home producers or of duties imposed upon goods imported from abroad."

b. Free trade means trade carried on in such way that no protection is afforded the home producer. Duties on commodities not produced in the country are consistent with free trade. So are duties upon foreign commodities which are also produced in the country, if they are accompanied by equivalent excises.

c. A tariff levied mainly for revenue may give incidental protection. A protective tariff may produce great revenue.

d. An increase of the rate of the protective duty may lower revenue by greatly decreasing importations.

e. The taxation of foreign goods which cannot be produced at home encourages home industries theoretically, since to some extent it results in substitution in consumption of similar home-produced articles.

Bullock, *Introduction*, §§ 238, 239.

2. History of Governmental Relations to Foreign Trade.

a. Under Mercantilism (15th, 16th and 17th centuries) governments restricted and aided trade by many methods and in nearly all lines. Import and export duties, bounties, navigation laws, prohibition were all used to develop a nation's

trade and manufactures. This was largely, however, under the influence of the balance of trade theory.

b. The general movement for freedom in the eighteenth century included a demand for greater freedom of international trade. Adam Smith vigorously attacked the Mercantilist system, set forth the advantages of free trade and became the recognized spokesman of this policy. His influence was far-reaching, not only upon economists, but also upon statesmen.

c. Although William Pitt, the younger, revealed the influence of Adam Smith, the first actual progress in England toward free trade was accomplished by Huskisson between 1823 and 1828. In 1837 the famous anti-corn law agitation began, and, under the leadership of Richard Cobden and John Bright, continued until the repeal of the Corn laws in 1846. The free trade policy was gradually extended until in 1869 the present absolutely non-protective system was introduced. In the last few years a movement for protection has gained ground. Mr. Balfour, assenting to the superiority of free trade in general, doubted its wisdom for England in the midst of a protectionist world, and favored protection as a retaliatory measure and as a basis of reciprocity. Mr. Chamberlain, further, favored protection with reciprocal discriminating tariff agreements with the colonies in order to strengthen the Empire. But in the election of 1906 England declared emphatically for continuation of free trade, although the drift of by-elections has seemed to indicate growth of protectionist sentiment since then.

d. The tariff policy of the United States.

(1) The first national revenue system included a tariff law which, mainly designed to secure revenue, was moderately protective. Such was our national policy for some years.

(2) From 1807 to 1815 the Embargo, the Non-intercourse

Act and war cut off foreign commerce, turned the demand for certain products toward the home producer and acted as extreme protection. When these conditions passed away the protected home producer, suddenly exposed to the full force of foreign competition, secured in 1816 the first distinctly protective tariff.

(3) Laws passed in 1832 and 1833 provided for reduction and then a gradual decrease of duties. Although increased duties were imposed in 1842, the act of 1846 again provided for low rates. So satisfactory were the results of low tariff that in 1857 a further reduction was made.

(4) For revenue reasons high duties were imposed during the Civil War. Incidentally, these duties involved heavy protection. Industries that thus came to be dependent on protection were unwilling to dispense with it, when after the War the urgent need of revenues therefrom had passed away. The political weakness of the South (where low tariff views had prevailed) and the growing political strength of the industrial regions favored a continuation of the high war tariff.

(5) At times agitation for revision of the tariff was active, but the changes made were insignificant. President Cleveland's famous tariff message in 1887 made the tariff again a live political issue, but a Republican Senate prevented change. On the contrary, a Republican victory in the elections contested over this question, led to the passage of the very highly protective McKinley act in 1890.

(6) The popular discontent with this act soon placed the Democrats in full control, and in 1894 the Wilson-Gorman act was passed and became law without the President's signature. This measure (a compromise and badly devised) was highly protective and did not fairly

represent the policy of tariff-reduction. Unsatisfactory to nearly all, it was short lived.

(7) In 1897 the Dingley act introduced the most highly protective system the country had known. There was even among protectionists some reaction against extreme protection. Mr. Blaine and President McKinley declared for reciprocity. Because of local industrial conditions or because of antipathy to the protected trusts, the revisionist tendency, especially in the middle West, became quite marked. Revision played some part in the campaign of 1908. Because of the popular feeling shown in this campaign and because of promises made to revise the tariff downward, an act was passed in 1909. Except for placing hides on the free list, this law gave no indication of a relaxation in the high protective system. Certain nominal reductions left the duties still prohibitive; the average rate of duty was slightly higher than ever; and the rates upon important necessaries like woollen goods, cottons, hosiery, etc., were left as under the Dingley act or actually raised.

e. The general expectation in the middle of the nineteenth century that the contemporary tendency toward free trade would continue, was mistaken. France, Germany, Italy, and, in fact, practically all countries maintain high protection.

Seligman, *Principles*, (3rd ed.) § 229; Dewey, *Financial History of the United States*, §§ 35, 36, 73, 78-84, 102, 107, 113, 114, 119, 127, 128, 167, 180, 181, 187, 192, 196: Gide, *Principles*, pp. 310-318; Palgrave, *Dictionary of Political Economy*, vol. II., p. 148, article *Free Trade*, *Modern History of; The Americana* article on *Free Trade*.

Required Reading: Bullock, Selected Readings in Economics, pp. 155-164. Census Report on the Advantages of the United States for Manufacturing Industries.

3. Some General Controversial Considerations.

a. There is much fallacious argument on both sides based on alleged results. *Post ergo propter.* Countries have prospered under each system. The United States was very flourishing under low tariff from 1846 to 1861, and under high tariff from 1897 to 1907. Panics occurred under low tariff in 1847 and 1857, and under high tariff in 1873, 1884–6, and 1907.

b. Many forces affect a country's prosperity—natural resources, human efficiency, education, wars, forms of social organization. It is, then, difficult to trace the exact influence of free trade or protection. The results of each are undoubtedly often much exaggerated.

c. The free trader in asserting, as he sometimes does, that the government cannot tax one for the benefit of another, misrepresents the protectionist attitude, for protection claims that it benefits all. The free trader, frequently, also demands a more extreme application of *laissez faire* than is in harmony with modern thought and practice as to the relation of government to industry.

d. On the other hand, the actual establishment of a new industry by protection does not necessarily justify it. Almost any industry might be established in almost any country by protection; but it might be at too great cost.

e. We cannot settle this controversy by regarding the consumer alone as does the free trader often; nor by regarding the effect on a few producers as does the protectionist.

For references see end of the chapter.

4. The Argument for Protection.

a. The "balance of trade" argument emphasizes the desirability of securing a large share of the precious metals by discouraging imports and encouraging exports of commo-

dities. A favorable balance of trade will result in an import of money, and thus a nation will get wealthy. Intelligent protectionists no longer use this argument.

b. For a long period the "home market" argument was influential in the United States. It was "thought to reconcile the interests of the agricultural South and West with those of the manufacturing North. It rests upon the proposition that the prosperity of the American farmer depends upon a regular and constant market for his products, and that such a market is to be obtained only by building up manufacturing centers within the country." (Seager.)

c. The "infant industry" argument asserts that a country well fitted in natural resources and in the character of its people to carry on a certain industry, may not be able to establish it without protection because of the competition of other nations in which the industry has long been carried on. A temporary burden upon the consumer is justified because of the later results. Competition within the country will eventually reduce prices.

Friedrich List, a German Economist (19th century), asserted that the industrial development of a country includes five stages; hunting and fishing, pastoral life, agriculture, manufacture for home supply, manufacture for export. In the case of some nations this evolution is checked in the transit from the agricultural stage by competition of nations that have progressed further. Hence, said List, temporary protection is necessary to enable a country to pass from the agricultural to the manufacturing stage.

d. The "wages argument" for protection has taken two phases in the United States. Early in our history, protection was said to be necessary to overcome the disadvantage of the American manufacturer due to the high wages he must pay. Later it was asserted that wages had become high because of

protection. Now the two are advanced together; wages are high because of protection and we must continue protection in order to overcome the industrial disadvantage of high cost due to high wages.

e. The advantages of "diversified industries" have recently been emphasized. A well-rounded economic development with different kinds of occupations is necessary to social progress. Without protection a country may be one-sided in its development with an undue tendency toward agriculture or manufacturing, resulting possibly in early exhaustion of some kinds of natural resources. Diversified industries, says the protectionist, securing "a more efficient utilization of labor and capital and a help to enterprise, will result in higher wages as well as greater profits, a better standard of life for the workman and a more prosperous condition for the manufacturer."

f. It is sometimes said that by protection a country may make foreigners pay its taxes. The imposition of the protective duty will compel the foreign manufacturer to reduce his price in order to retain his market in the taxing country. With slight or even no increase in price to the domestic consumer, the government gets its revenues at the expense of the foreigner.

g. In order to be independent of other nations in time of war a country should establish by protection those industries producing necessities of existence and war materials.

For references see end of the chapter.

Required Reading: Bullock, Selected Readings in Economics, pp. 472-489; List's Arguments for Protection.

5. The Argument for Free Trade.

a. Against the "balance of trade" argument it is said that wealth does not consist of money only; that an excessive

stock of money, if it could be secured in this way, would so affect prices as to stimulate imports and discourage exports; that imports must in the long run pay for exports; and that international movements of money depend not upon relation of exports of commodities to imports of commodities, but of total credits to total liabilities.

b. Against the "home market" argument it is claimed that the home market is no steadier than the foreign; that the development of transportation has decreased the cost of moving goods; and that the need of the United States at present is foreign markets.

c. The "infant industry" argument is held to have little weight now, since we are able to compete with the world in nearly every line of manufacture and have passed from an agricultural economy. Further, it is said, that "infant industries" never are willing to dispense with that aid which was designed to be temporary; that while admittedly protection should be granted only to those industries which are quite sure to succeed ultimately, this aid is applied generally and without discrimination; and that the protection of agricultural industries is not consistent with this theory. Moreover, as evidence that industries can and do develope without protection, emphasis is placed on the development of manufactures in the newer parts of the United States, in spite of the competition of the older manufacturing regions within the country.

d. The free trader asserts that wages are fixed by productivity and little dependent upon the tariff. He calls attention to the fact that wages in the United States, because of the high level of productivity, have always been high in unprotected as well as in protected industries and that protected laborers are few as compared with the unprotected. High wages do not necessarily mean high cost, but frequently low cost. Comparative costs rather than comparative wages determine ability

of manufacturers to compete with those of other nations. While the withdrawal of protection might destroy certain industries, the level of general wages would not fall after readjustment had taken place. Wages are low in Russia and Germany, although these countries are strongly protectionist. Further the free trader asserts that protection, by interfering with the most natural and efficient production, actually tends to make wages lower than they would otherwise be.

e. The free trader, while not denying that diversification of industries is desirable, contends that it may be secured at too great cost; that much diversification is inevitable in every country; that in the United States we cannot fail to have great diversification because of the variety of climate and resources; and that infinite wisdom and foresight are necessary to secure a proper diversification artificially. Natural development is safer.

f. To make the foreigner pay our taxes is unethical; and is possible only in a few cases. Moreover the foreigner can, if this argument be sound, make us pay his taxes.

g. The military argument may have some weight for other countries, but little for the United States, because we produce nearly all necessaries.

h. More positively, the free trader asserts that freedom of international trade, like freedom of internal trade, increases production of wealth by bringing about the "most efficient utilization of economic forces." "The freer the conditions of exchange the more highly will the division of labor be developed. Difference in the productive capacities of different countries fit some to produce some things, others, others. If free trade is permitted . . . . the consequence will be a larger joint produce and a larger share of wealth for each country." (Seager.)

i. Protection, if effective, increases prices, burdens the consumer and is class legislation.

j. By increasing the cost of raw material protection injures many manufacturing industries. This argument has been advanced vigorously in some parts of the United States recently. Our export trade is injured by taxing raw materials.

k. Protection leads to the exhaustion of raw materials.

l. Protection involves business uncertainty.

m. Protection leads to political corruption, undue influence from protected interests on political parties and legislation, and log-rolling. Campaign funds are supplied by protected parties.

n. While theoretically there is much to be said for protection (especially in connection with nascent industries) if designed by a judicious, disinterested and exceedingly wise authority, actual conditions and practical experience condemn it.

For references see end of the chapter.

Required Readings: Bullock, Selected Readings in Economics, pp. 489-512; Bastiat's Criticism of Protection.

6. Conclusion.

a. With much strength and much weakness in the argument on each side it is not strange that both popular and expert opinion should be divided. Each must form his own conclusions.

b. However, the one who accepts the conclusions of the free trader must remember that, in the United States, our whole industrial and commercial system is adjusted to protection. Progress toward free trade, if it be desirable, must be gradual, discriminating and mindful of actual conditions.

c. On the other hand the protectionist should remember that there is little argumentative support for continuous and

universal protection. Hence no particular tariff is permanent and sacred. Changing conditions require frequent revision.

Seligman, *Principles*, (3rd ed.) §§ 230-232; Seager, *Economics*, ch. 17; Seager, *Introduction*, §§ 210-216; and his article on Protection in *International Encyclopedia*; Bullock, *Introduction*, pp. 355-373; Hadley, *Economics*, §§ 466-488; Fetter, *Principles*, ch. 51; Gide, *Principles*, pp. 318-346; Andrews, *Institutes*, §§ 56-60; Mill, *Principles*, Bk. V., ch. x., § 1; Ely, *Outlines*, (1908), ch. 18; Smart, *The Return to Protection*, chs. 1-12.

CHAPTER XVI.

COMBINATION; MONOPOLIES.

1. Definition.

"Monopoly means....such control over the supply of an economic good as enables the monopolist to regulate its price." (Seager.) Monopoly should be discriminated from scarcity, from differential advantage, from large business enterprise. Since modern industrial and social conditions tend to increase the extent of monopolistic control and to decrease the regulative and protective action of competition, this question becomes one of increasing significance.

Seager, *Introduction*, §§ 109, 246; Seager, *Economics*, §§ 74, 183; Fetter, *Principles*, p. 304; Ely, *Outlines*, (1908), pp. 187-192; Bullock, *Introduction*, § 200; Palgrave, *Dictionary of Political Economy*, articles on Monopolies; Le Rossignol, *Monopolies Past and Present*, ch. 1; Ely, *Monopolies and Trusts*, ch. 1.

2. Classes of Monopolies.

a. *Personal monopolies* due to unusual personal talent or knowledge.

b. *Legal monopolies* created by law which may be

1) *Private* if granted to private persons.

2) *Public* if reserved as a governmental privilege.

c. *Natural monopolies* where certain conditions seem quite inevitably to produce monoply. Such may be

1) *Monopolies of location* due to the limited supply of some natural agent or opportunity, as in the case of mineral springs, the anthracite coal supply of the United States, street railways in certain streets, railroads in mountain passes.

2) *Monopolies of organization* in industries of increasing

returns, as gas, water, electric lighting companies; railroads. In these fixed capital and supplementary costs are influential.

3) *Capitalistic monopolies or "trusts"* due to the advantage of controlling a larger capital than that of other producers in the same industry.

d. One business may represent several classes of monoply.

Bullock, *Introduction*, §§ 202-205; Seager, *Introduction*, § 110; Seager, *Economics*, § 75; Fetter, *Principles*, pp. 305-308; Ely, *Outlines*, (1908) pp. 192-197; Seligman, *Principles*, pp. 152, 153; Ely, *Monopolies and Trusts*, ch. 2.

3. Personal and Legal Monopolies.

a. Personal monopolies are relatively insignificant; mainly in lines of service that are not absolutely necessary; are subject to the competition of somewhat lower grades of ability; and consequently need no special regulation or consideration.

b. Private monopolies of the older sort are no longer granted. Patents and copyrights are granted in order, first, to secure compensation to inventors and writers for their intellectual labor; and, secondly, to encourage the investment of capital in making the invention or book available to the public. While in individual cases social injury rather than benefit results, and while not only are particular patent and copyright laws open to serious criticism but even the fundamental ideas of such systems are somewhat criticised, still they are generally accepted as the most practicable methods of rewarding these classes of producers.

c. Public legal monopolies are of great importance, but for sociological or fiscal rather than purely economic reasons.

Seager, *Introduction*, §§ 248-250; *Economics*, §§ 184-186; Ely, *Outlines*, (1908), pp. 194, 463-465; Hadley, *Economics*, §§ 148, 149; Palgrave, *Dictionary of Political Economy*, article on Patents; Le Rossignol, *Monopolies*, ch. 5.

4. General Considerations regarding Natural Monopolies.

a. The tendency toward the formation of combinations, possessed of more or less monopolistic powers, is natural and inevitable.

b. Monopoly value tends to be fixed at that point which gives greatest net returns (Chapter 6, § 7). Hence there will tend to result frequently, prices high as compared to normal values; bad quality quite beyond the consumer's power to redress; a resulting interference with normal and just distribution; the accumulation of great fortunes which are out of proportion to the services rendered society; social injury because of the discouragement to the consumption of certain monopolized articles of great utility.

c. The power of a monopoly to control prices is, however, subject to certain restrictions without conscious social effort. The consumer may refrain from consuming the article in some cases with no great injury to himself and even with a positive economic gain; or he may substitute some other article for the monopolized one. Further if a monopoly pushes its advantage too far, competition may arise.

d. These possibilities of injury and of natural remedy vary in different lines of consumption. In the case of necessaries, especially if a naturally limited supply is controlled, the consumer is at the mercy of the monopoly; while in the case of luxuries no serious results are likely. But even if a monopoly does not use its power to the utmost, these evils may be present in greater or less degree. To take a dime unfairly where a dollar might have been extorted involves a relatively small injury, but social injustice and danger are present.

e. Moreover the nominal returns to the owners of a monopoly are not a sure indication of the profits really made by prices above normal value. High salaries, large profits

made by subsidiary companies, overcapitalization may conceal the fact of undue gains.

f. For these reasons many lines of public policy have been suggested to prevent the actual or possible evils. These may be grouped under the heads of Reestablishment of Competition; Public Ownership; Public Regulation.

Seligman, *Principles*, §§ 149, 157; Seager, *Introduction*, §§ 111, 114 115; *Economics*, §§ 76, 78; Palgrave, *Dictionary of Political Economy*, article on Monopolies; Jenks, *The Trust Problem*, chs. 2, 10; Ely, *Monopolies and Trusts*, pp. 217-240.

5. Reestablishment of Competition.

The numerous recent attempts to reestablish competition by prohibiting combination or concerted action have been almost without exception failures. Even if the nominal object of the law is attained, combination is continued in some other method. "Where combination is possible, competition is impossible." In many cases monopoly is desirable as a matter of public interest. Competing waterworks, gas companies, telephone companies, railroads, mean public inconvenience, a waste of capital, and in the long run higher cost to the consumer. As Professor Ely says, "We must have monopolies in these cases and the only question we are concerned with is, 'What kind of monoplies shall we have?' "

Jenks, *The Trust Problem*, pp. 217-221; 212, 213.

6. Public Ownership.

The immediate answer of many to the question in the last section is Public Monopolies. Better service; lower prices or larger public revenues; prevention of great private fortunes; destruction of the corrupt political control gained by corporations; end of discriminations that mean the success or failure of private business; relief of the producer or shipper of raw materials from disastrous oppression, are some of the alleged benefits that would flow from public ownership. In actual

experience varying results show themselves, so that while these benefits may be realized and in some cases actually have been, there is sufficient conflicting evidence to make public ownership at least questionable. Service under Public Ownership is declared inferior; lower prices, if given, may be at the expense of the tax payer and not because of efficient management; these public undertakings become political spoils and corruption develops. The importance of the service; the size of the force of workers employed; the nature of the technical problems to be dealt with; the amount of capital involved; the civic development and general character of the community concerned; the administrative capacity of the government are factors influencing the decision. The water supply tends fortunately toward public ownership; but, in the opinion of most impartial students of the question, public ownership of the railways would be disastrous in the United States even though it is successful in other countries; and public ownership of the great capitalistic monopolies is advocated only by the socialist. Between these extremes are gas and electric lighting, telephones, the telegraph, express and municipal transit, in all of which the wisdom or unwisdom of private ownership is fairly debatable.

Seager, *Introduction*, §§ 253-257, 264; *Economics*, §§ 189-192, 202, 203; Seligman, *Principles*, §§ 222-224; Bullock, *Introduction*, § 212; Fetter, *Principles*, ch. 53; Ely, *Outlines*, (1908), pp. 507-512; 480, 481; Hadley, *Economics*, §§ 436-449; Le Rossignol, *Monopolies*, pp. 131-142, 180-183, 251.

7. Public Regulation.

Since the evils of uncontrolled monopoly are certain, since competition cannot be forcibly restored, and since public ownership has not been approved in the United States and in some other countries, private ownership has been subjected to public regulation. This solution of the monopoly question which is the actual American method and now in process of rapid development, takes innumerable forms of

which only a few can be mentioned. The quality of the service or commodity may be prescribed; the price fixed; discrimination between different consumers forbidden; the length of the franchise limited; the capitalization regulated; taxes imposed upon earnings to secure some of the monopoly profits for the community. Some form or other of public service commission is the instrument by which the community exercises this regulation. Essential to success is the power to investigate and to enforce publicity.

Fetter, *Principles*, chs. 55, 56; Seager, *Introduction*, § 257, chs. 24, 25; *Economics*, § 193, chs. 21, 22; Seligman, § 214; Ely, *Outlines* (1908), pp. 481-483.

8. Conclusion.

The growing extent of monopolies, the resulting seriousness of the problem, the differences in the conditions affecting the different sorts of monopolies, the complexity of the political, legal, sociological, fiscal, technical and economic factors involved, make this subject too difficult to be more than outlined in a general course. Only after careful special study of this subject can one rightly form a judgment.