

## A Syllabus

For an Elementary Course
in
Economics

BY F. R. GLOW


## A SYLLABUS

FOR AN ELEMENTARY COURSE

IN

## ECONOMICS

BY F. R. CLOW<br>State Normal School, Oshkosh, Wis.

## THIRD EDITION <br> PRICE 15 CENTS



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## To the Student:

It is our practice in this school to have at least one good textbook in the hands of the class, and to require all to study it thoroughly. The outline which follows is designed to hold attention to the most fundamental points in elementary economic theory, and to be used to this end both by the students in their study and the teacher in directing discussion in the class-room. The references are to facilitate the use of collateral reading. A limited use of them helps to bring out the thought by dissociating it from any special form of words; but there would rarely be any advantage to a beginner in reading more than three or four references on a topic; the aim of the mumerous references is to distribute the demand which a large class makes on the library.

The problems and exercises are designed for a function similar to that of problems in mathematics, logic, or philosophy, laboratory work in the natural sciences, field work in geology, clinics in medicine, shop work in engineering, and observation.and practice teaching in pedagogy. The zuritten work on the exercises, and all notes on reading, lectures, and class-room discussions, should be on a uniform style of paper, and sufficient margin should be left for binding. On the completon of the study, these papers, together with this syllabus, should be fastene dee equrely. Esogetycery oind covered. To a careful student these papers zuill.bee of more value than many volumes.


## CONTENTS

I. Introduction.
II. Production.
III. Money and Credit; the Medium of Exchange.
IV. Commerce; the Process of Exchange.
V. Value; the Basis of Exchange.
VI. Distribution.

## WORKS REFERRED TO BY SHORT TITLES


W. ... ........F. A. Walker: Political Economy. Briefer Course. Holt \& Co.

## PARALLEL REFERENCES

ADAM SMITH

| Pages in |  |  |  |
| :---: | :---: | :---: | :---: |
| Ashley's Edition | Book | Chapter | Part |
| $5-15$ | I | i |  |
| $24-8$ | I | iv |  |
| 34 | I | V |  |
| $54-83$ | I | vii |  |
| $86-96$ | I | ix |  |
| $100-4$ | I | x | i |
| 119 | I | x | ii |
| 151 | II | i |  |
| $160-2$ | II | iii |  |
| 219 | IV | ii |  |
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Ashley's Edition Pages 1

## 3

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Gonner's Edition Pages

5
9
65-9
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BULLOCK
References are for the first edition.
For the second edition, add eight pages after p. 210.

For the third edition, add
Six pages after p. 142.
Fourteen pages after p. 210.
Forty-four pages after p. 329.

## ECONOMICS

## PART I. INTRODUCTION.

## I. Human Wants.

a. Various classifications of human wants. How are wants classified on the basis of order of development?
$b$. Connection between existence wants and culture wants.
c. Which of these wants can be satisfied by the expenditure of money ? What proportion of the thought and effort of the human race is given to the satisfaction of these money-wants?
B., 79-84; A., 2, 3, 28, 29; Readings, 236-46; Clow, 1-4; Mar., 1-4; E., 72-9; N., 3-7; F., 9-14; Seligman, 3, 4.
2. Wealth.
a. Definition. Does it include water, fish in the sea, a bottle of whisky, a strong arm, labor?
b. Other terms: Services, goods, commodities, utilities, riches.
c. Qualities of material wealth.
(I) Transferability: It must be exchangeable.
(2) Utility: It must be something people want.
(3) It must either be scarce or require labor to secure it.
d. Distinguish wealth from titles to wealth. Are deeds, stocks, bonds and notes part of the wealth of the community?
$e$. Social vs. individual wealth. When property is in one place and its owner in another, in which place should it be counted?
B., 84.7; Clow, 3-5̄; W., 8-13; L., 5, 6, 59-61; E. \& W., 80-5; E., 91-5, 146; M., I, 25-26; L. M., 50 ; A., 1-4; R., 2; N., 48; Mar., 51-4; G., $38-43,54-60$; Nich., I, 5-7, 23-9; F., 15-20; Seager, 48, 49; Seligman, 8-22.
3. May there be too much Wealth?
$a$. Does destruction by wars or fires produce benefit?
b. Are labor-saving inventions beneficial? Importations? Production by convicts, women or others who might be supported without work?
B., 101-7; W., 291-9; L., 166-7; N., 420-4; G., 341-4; E., 96; F., 351-2.
4. Political Economy or Economics.
a. Derivation of terms.
b. Definitions. Is economics a science? What is science?
c. Does economics include a consideration of what ought to be? Does it include industrial history?
B., 79; M., I, 17; L. M., 47; L., 4, 5, 261; A., 1; W., 7, 8; N., 21, 39; Mar., 44-8; G., 1-3; E., 76-83; F., 3-8; Seager, 1-2; Seligman, 6-8; Clark, 1-4, 57-8; Ward, Outlines of Sociology, 162-3.

## PART II. PRODUCTION.

## I. Introduction.

a. What is the problem in this Part?
b. What is production? What common result is there in making chairs and raising wheat?
c. The three agents in production. Can any two of them produce wealth without the third?
B., 115-20; E. \& W., 113-21; W., 21-2; A., 34-9; L., 13-15; N., 57, 70-2; Mar., 57 ; E., 89, 90 ; M., I, 45-9; L. M., 53, 58; G., 93-5; Seager, 107-8; Seligman, 275-84.

## EXERCISES.

1. Prepare a table showing (a) the total wealth of the United States, (b) the wealth of the five states having the greatest amount, and (c) the wealth of the five having the least. Sta. Abs., 80, 81.
2. Prepare a table showing (a) the five states which rank highest in total amount of agricultural and manufactured products, with the amount for each state, (b) the five states, excluding territories and the District of Columbia, which rank lowest. Census, 383-4.
3. Write a paper in good literary form on the amount of wealth in existence as compared with the annual production. (a) State what you intend to show in the paper. (b) Find what proportion the value of farm products bears to the value of all farm property. Sta. Abs., 674. (c) Manufactured products, to manufacturing machinery, tools', and implements. Sta. Abs., 78, 678. (c) Suppose the country should be devastated in some way that would leave its productive power unimpaired. Estimate the length of time required to restore the loss.
N. B. Good literary form means to observe all the directions given in composition and rhetoric. Give no tables, and use few figures. Select the two or three most striking facts which the statistical table tells, and express each one in well-chosen words. Express quantities chiefly by comparison; in no other way do big numbers have any meaning whatever. A graphic representation of a statistical table, however, by means of a chart of some kind, is always acceptable. All written work should state precisely the source of information. In a long paper the references should be placed along the margins.

## 2. Classification of Industries.

a. Extractive: agriculture, mining, lumbering, fishing, grazing.
b. Transforming or manufacturing: wood, iron, textiles, foods, etc.
c. Transportation and communication: railroads, canals, express, telegraph, telephone, post-office.
d. Financial: commerce, banking, promoting.
$c$. Protective: insurance, government, police and justice, detectives.
$f$. Personal services: the professions, domestic servants, etc.
B., 32-76; Seager, 150゙-7; Census, quarto volumes.

## 3. Labor.

## a. Make a logical division of human exertion.

b. Find several definitions of labor.
c. Amount of labor depends on-
(I) The number of laborers.
(2) Their individual efficiency.

Where would you classify musicians, lawyers, policemen, draymen, railway officers and hands, salesmen, base-ball players?

Is the exertion of the slave labor? The horse? The steam engine?
B., 121-30; E. \& W., 129-34; W., 33-42; E., 100-3; L., 27-33; A., 43-4, 57-61; N., 48, 103-8; A. S., 160-2; Mar., 123-37; M., I, 75-9; G., 111-6; H., 121-6; Nich., I, 78-86; F., 173-201; Seager, 120-125; Seligman, 285-90; Clark, 9-15; Readings, 255-86.

## EXERCISES.

1. Write a paper on the increase in the population of the United States. (a) Increase in total population. Census, 32, 33; Sta. Abs., 22, 650. (b) Per cent of increase in a decade. Census, 35,36 . (c) How have the various sections of the country shared in this increase? During which period did each section grow the most rapidly? Census, 32-36; Sta. Abs., 26, 27, 44-6. (d) If the population should continue to increase at the rate of twenty per cent each decade, what would it be in a century? In a thousand years? The answer to this last question can be readily found by the use of logarithms. (e) Estimate the rate of natural increase by excluding the immigration. Sta. Abs., 691, 62.
2. Write a paper on immigration. (a) Fluctuation in the number of immigrants. Sta. Abs., 691. (b) What proportion of our people are foreign-born? Native, but having both parents foreign-born? Native, but having one parent foreign-born? Census, 44-6. (c) What proportions have the various foreign countries contributed to our foreign population? Census, $58-63$; Sta. Abs., 49-59. Observe only the totals for the United States. (d) In what states or cities is each nationality found in the largest proportion? Census, $58-63,103-8$; Sta. Abs., $47-54$. Select one or a few out of the twenty nationalities.
3. Analyze the population of some city. Census, $100-108$.
4. Let each student take one of the following pairs of states for comparison:

| Iowa, Georgia. | Alabama, Minnesota. |
| :--- | :--- |
| Rhode Island, Oregon. | Visconsin, Kentucky. |
| North Dakota, Vermont. | Connecticut, Mississippi. |
| New Jersey, Tennessee. | Massachusetts, South Carolina. |
| New York, Pennsylvania. | Ohio, Louisiana. |

(a) Find the combined production of agricultural and manufactured products for each state, to serve as an index of its wealth producing capacity. If the states do not have the same population, reduce the production to a per capita basis. Census, 383-4. (b) Compare the states in character of population. Notice the proportion of the sexes, races, natives and foreigners, etc. Suggest possible connection between these proportions and production. Census, $42-4$; Sta. Abs., $36-7,47-54$. (c) In which state is the average duration of school the greater? Which has the larger attendance in proportion to the number of children? Connection with production. Census, 70-76, 112-6; Sta. Abs., 63-8.
5. Does the kind of land tenure affect the efficiency of labor? Census, 227.

## 4. Capital.

a. Definition. What distinguishes capital from other wealth ?
b. Circulating capital and fixed capital; specialized.
c. How does capital arise? What determines its increase?
(I) Surplus over necessaries which can be saved.
(2) The disposition to save.
d. Capital enables the process of production to be lengthened and thereby rendered more efficient. Intermediate products.
How would you classify food, lumber, trees in the forest, a locomotive, domestic animals, goods ready for sale, pig-iron in the foundry, pig-iron used as ballast in a yacht, the learning of the architect, money?
One man with a salary of $\$ 1,000$ spends it all. Another with the same salary saves half of it. How do they affect the business welfare of the country differently?
B., 107-9, 131-41; W., 47-55; A., 47-9; L., 36-44; M., I, 83-6, 101-9, 127-9; L. M., 6ั-6, 79, 93-4; N., 82-4; Mar., 62-ō, 149-58; G., 130-40, 382-6; E., 103-8; E. \& W., 103-11, 134-9; A. S., 151-2, 167; Nich., I, 91-7; Clark, 16-38; Readings, 301-24; Seager, 73-76, 125-136; Seligman, 313-28.

## EXERCISES.

1. Which state in one of the above pairs has the larger amount of capital devoted to manufacturing? Which has the larger product of manufactured goods? Census, 331-3.
2. Which has the larger amount of capital (buildings, machinery, live stock) devoted to farming? Which has the larger amount of farm products? Census, 234-5.
3. The increase of capital compared with the increase in the number of wageearners. Sta. Abs., 514-5; Census, 331-3.
4. In which states has the increase in capital been exceptionally rapid? Slow? Sta. Abs., 514-5; Census, 331-3.
5. In which states has the value of farm capital (implements, machinery, live stock) increased most rapidly? In which has it decreased? Sta. Abs., 540-42; Census, 291-3.

## 5. Nature.

a. In what ways does nature contribute to production?
b. Can the resources of nature be increased?
B., 118-21; L., 14; M., I, 47-9; A., 40-3; E., 99-100; E. \& W., 123-4; G., 96-101; Nich., I, 66-70; Seager, 108-9; Seligman, 300-11.

## EXERCISES.

1. In which states has the amount of public land disposed of annually decreased notably? In which has it increased? Suggest explanation. Sta. Abs., 19.
2. Compare the amount of land selected for homesteads with that selected by railroads. Sta. Abs., 19,20.
3. Compare tables 5 and 6, and write a brief paper in good literary form, giving such results as you can derive by inspection. Sta. Abs., 21-2.
4. Same for table 7. Sta. Abs., 24.
5. In what states has the value of farm land risen most rapidly? In what states has it decreased? Census, 291-3; Sta. Abs., 540-42.
6. Select the five states with the largest per cent of farm land improved? The five with the smallest. The five with the greatest increase. The five with the largest decrease. ${ }^{\circ}$ Census, 288-90; Sta. Abs., 537-9.
7. By comparing the tables on amount of improved farm land with the total areas of the states, Sta. Abs., 17, 18, the proportion of improved land may be found. Select by inspection the five states which have the largest proportion, and compute the per cents for them. Select the five states (excluding territories) which have the smallest proportion. How do these proportions have one meaning for old states and a different one for new regions? Find the three of the original states which have the smallest proportion of improved land. What new states have a larger proportion?
8. Write a paper on irrigation. What states have over 200,000 acres under irrigation? What states have spent over $\$ 2,000,000$ on irrigation systems? Which state has spent the most per acre on its irrigation system? Which state gets the largest crop per acre from its irrigated land? Which gets the smallest? Compare with the value per acre of all crops in the same states. Is irrigation an evidence of meagre natural resources? Census, 296. See also Sta. Abs. (1907), 26, 27.
9. Write a paper on natural resources for water power. Census, 342-349. Are there any states or territories without it? Which state gets the most power from water? What others get over 100,000 horse power? What proportion of the total power in the United States is derived from water? What states use a much larger proportion than this? A much smaller? From these figures try to infer which states are bountifully supplied by nature with water power; which have little of it; which have the natural facilities for it, but find other power more convenient; which use it as much as possible because fuel is lacking. These inferences could be made fairly accurate and definite by taking into consideration population and the amount of manufacture done. Census, 331-333, 342-9.
10. What proportion of the wealth and population of the United States is in the states bordering on the waterways between the Great Lakes and the seaboard? Census, 32 .
11. Make a list of the cities in the United States with a population of over two hundred thousand. Mark those that are on navigable waters. Census, 100-2.
12. Write a paper on our national forests. Observe good literary form. Sta. Abs. (1907), 113-16.
13. On the production of lumber. Sta. Abs. (1907), 117-19.
14. On the fisheries. Sta. Abs. (1907), 120-22.

## 6. The Organization of Production.

a. Division of labor between ( $a$ ) individuals and (b) places. What advantages does it give? What disadvantages?
b. Production on a large scale. Meaning of this phrase.
(I) How connected with division of labor? Does either exist without the other?
(2) How dependent on corporations?
(3) How dependent on honesty, faithfulness, good government?
(4) What advantages and disadvantages does it bring?
c. The manager, undertaker, or entrepreneur.
B., 143-53; W., 43-6; Clow, 11-13; E., 111-6; E. \& W., 141-59; A., 69-75; Mar. 162-95; A. S., ${ }^{2}-15$; N., $98-102$; G., $150-65$; M., I, 156-9, $164-204$; L. M., 100-11; L., $48-52$; Nich., I, 104-37; Seager, 137-154; Seligman, 290-99, 3-9-340; F., 201-4; Readings, 287-300; Clark, 59-73, 358-71.

## EXERCISES.

1. Taking gross value of product as a basis, find how the states divide between them the occupations of agriculture and manufacturing. (a) Find the three states in which the proportion of manufactured products to agricultural products was largest. The three in which it was smallest. (b) Find the states in which this proportion changed the most in favor of manufactures from 1890 to 1900 . The state which changed the most in favor of agriculture. (c) Write a paragraph in good literary form summarizing these results. Census, 383-4.
2. Write a short paragraph on the localization of industries by states. Census, 340. Same by cities. Census, 382.
3. Select the states, from two to five in number, which rank distinctly above the others in the quantity produced of each of the following products. Observe whether other states produce much or little, and what sections of the country produce the least:

Dairy products, Census, 253.
Eggs, Census, 255.
Honey, Census, 256.
Wool, Census, 257; Sta. Abs., 560.
Corn, Census, 258.
Wheat, Census, 258.
Oats and barley, Census, 259.
Rice, Census, 260.
Hay, Census, 261-3; Sta. Abs., 557.
Potatoes, Census, 264 ; Sta. Abs., 558.
Sugar cane, Census, 268; Sta. Abs., 531.
Sugar beets, Census, 270 ; Sta. Abs., 559
Maple sugar, Census, 273.

Cotton, Sta. Abs., 552-4.
Tobacco, Census, 274; Sta. Abs., 555-6.
Beans and peanuts, Cénsus, 275.
Broom corn, Census, 276.
Hops, Census, 277.
Apples, Census, 280.
Peaches and pears, Census, 281.
Plums and prunes, Census, 282.
Grapes and wine, Census, 283.
Strawberries, Census, 287 .
Coal, Sta. Abs., 520-1.
Pig iron, Sta. Abs., 529-4.
Liquors, Sta. Abs., 527-30.
4. Write a short paper on the shifting of the area of wheat production. Sta. Abs., 549-51.
5. Of the population of the United States at least ten years of age and engaged in gainful occupations, what per cent is engaged in agriculture? Select the five states in which this per cent is the largest. The five in which it is the smallest. Census, 85-9.
6. Same for manufactures.
7. Same for trade and transportation.
8. From these same statistics write a paper on the occupations of females.
9. Write a lecture, or special report to be given to the class, on the Industrial Revolution, or some phase of it:
a. Early stages in the development of manufacturing: (1) family system, (2) gild system, (3) domestic system.
b. Conditions in England in the eighteenth century favorable to industrial progress.
c. Great inventions: textile machinery, steam engine; use of coal in smelting iron; steam power applied to mining, manufacturing, and transportation.
d. Results: factories, transportation a great industry, production on a large scale ${ }_{\text {, }}$ division of labor; amount and quality of goods; prices, fate of old hand-workers; ultimate effects on society, politics, warfare, and general welfare.
B., 53-76, 157-60; Readings, 104-54; Clow, 14-18; Ely, 26-8, 55; E. \& W., 42-73; Seager, $2-19$; Seligman, 88-98, 342-7; Clark, 256-81, 301-15; Thurston, Economics and industrial history, Part II; Toynbee, Industrial revolution, 51-5, 71, 90-3, 181-4, 189-94, 199; Walpole, History of England, I, 49-66; Lecky, History of England in the 18th century, VII, 276-87; Cheyney, Industrial and social history of England; Earle, Home Life in the colonies; McVey, Modern industrialism; Hobson, Evolution of modern capitalism; Rand, Economic history since 1763 .
10. Write an account of the manufacturing that is done in your own home-food, clothing, implements, loys, fancy-work, etc.: (a) kinds, much or little in comparison with other homes; (b) parts of house or premises devoted to it; tools, machines, materials, processes; (c) work by family, domestics, outsiders; training, compensation; (d) advantages, disadvantages; growing or diminishing.
11. Interview some aged person about industries sixty years ago, and write up the results.
12. Write an account of some existing example of the craft system: (a) kind, location, source of information; (b) forms and value of fixed capital; (c) circulating capital -ownership, processes; (d) labor, by owner, others; training, compensation, hours; (e) advantages and disadvantages, growing or diminishing.
13. Same for an example of the domestic system.
14. Visit a factory, taking notes on what you see. Remember that it is more creditable to do your own observing, estimating, or counting, than to take what some one tells you; but two or three may advantageously co-operate, each concentrating attention on certain things: Write up in good form:
I. Introduction.

1. Name of company. Kind and location of factory.
2. Time, manner, and length of visit.
II. The fixed capital.
3. Buildings, number, size, construction, departments.
4. Machinery for (a) supplying power, (b) handling materials and goods, (c) manufacturing.
III. The circulating capital.
5. Materials used. What supply on hand?
6. Trace course of materials into finished product.
IV. The labor.
7. How many workers? Men, women, children.
8. How many different kinds of work? Largest number of workers doing any one kind.
9. Examples of work that is (a) disagreeable, (b) exhausting or dangerous, (c) easy, (d) that requires great skill.
10. Examples of idleness.
V. Conclusion. Advantages and disadvantages; compare with home or shop work of the old style.
11. To the laborers.
12. To the consumers, in (a) quantity, (b) price, and (c) quality of goods.
13. Trace the introduction of a new invention: railroads, Sta. Abs., 579-80; telephones, 599 ; telegraphs, 598 ; steamboats in place of sails, 603 ; gas engines and electric motors. Census, 330.
14. The concentration of population in cities. Census, $100-102,350,351$. Why is this a result of the industrial revolution?
15. What proportion of the manufactured products of the United States are made under the ownership of individuals? Of firms and limited partnerships? Incorporated companies? For each of these forms of organization, which group of industries ranks highest? Lowest? Census, 326.
16. Compare the increase in the value of farm property with the increase in the capital invested in manufacturing. Census, 217, 300, 301. Account for the difference.
17. Butter and cheese made on farms and in factories. Census, 253. What proportion of the total product of each is made in factories? Of the states producing over $10,000,000$ pounds, which reported the largest proportion of butter from factories? The smallest? The largest proportion of cheese? The smallest? As far as possible account for the great difference in the proportions between the two products and between the different states.
18. Compare the increase in the capital of all manufacturing establishments with the increase in the number of such establishments. Census, 300, 301. Compare with the change, or lack of change, in the size of farms. Census, 217; Sta. Abs., 674. Put in good literary form, using few figures.
19. Is there a connection between the size of a farm and the kind of a crop that can be most profitably raised on it? Census, 224 .
20. Which state has the largest farms? Which the smallest? Sta. Abs., 537-539; Census, 226, 234.
21. Which group of manufacturing industries shows the greatest degree of concentration in large establishments? Census, 324, 321. Which specified industry shows the greatest degree of concentration? Census, $302-321$. Which industry with a product valued at over $\$ 50,000,000$, shows the least degree of concentration? Census, 322; Sta. Abs., 679-82.
22. Which state shows the greatest degree of concentration of manufacturing establishments? Which the least? Census, 331-333; Sta .Abs., 514-0..
23. Analyze Table 159, Census, 327.
24. Analyze Table 166, Census, 336, 337.
25. Analyze production on the largest scale as represented by Table 161, Census, 328,329 . What was the average number of plants controlled by one combination? In which industrial group was this average the largest? What was the average number of wage-earners for each combination? For each plant? In which individual group were these averages the largest? What was the average amount of capital for each combination? For each plant? For each wage-earner? In which industrial group were these averages the largest? What was the average value of the product for each combination? For each plant? For each wage-earner? In which industrial group were these averages the largest?

## 7. Proportional, Increasing, and Diminishing Returns.

a. If the labor and capital devoted to an industry be doubled, will the product be increased proportionately?
b. What conditions would give increasing returns? Diminishing returns?
c. In which classes of industries would increasing returns be most probable? Diminishing returns?
d. How are returns affected by increase of population? By inventions and improvements?
B., $1644-70$; L., $18-23$; L. M., $130-48$; M., I, $50-2,229-52$; A., $56-7$; Mar., 115-28; G., 223-8; W., 23-7; F., 61-72; E. \& W., 125-9; Seager, 113-119, 128-130.

## EXERCISES.

1. To get evidence on the question whether returns in the United States are increasing or decreasing, compare the quantities of the following commodities produced per capita for several years back:

Wool, wheat. Sta. Abs., 675.
Corn, cotton, rice, coal, silver. Sta. Abs., 676.
Petroleum, steel, copper. Sta. Abs., $67 \overline{ }$.
2. Compare the value per capita of farm products; of manufactures. Sta. Abs., 674, 678. In what way may these results be erroneous?
3. Find the consumption per capita:

Sugar. Sta. Abs., 683.
Coffee, tea. Sta., Abs., 684.
Liquors. Sta. Abs., 687.
4. Reproduce on the blackboard the chart in Bogart, Economic history of the United States, 429; or Seligman, 422-3.

## PART III. THE MEDIUM OF EXCHANGE.

## A. MONEY.

## I. Introduction.

a. Functions.
(I) Measure of value.
(2) Medium of exchange.
(3) Standard for deferred payments.
b. Kinds: (1) Standard and (2) token or representative money. Commodities, jewels, precious metals, coin, paper.
c. Qualities needed in the material used as money.
d. Definitions: Money, coin, mint, seigniorage, free coinage, legal tender. Subsidiary and minor coins.
E. \& W, 194-215; B., 210-18, 232-4; W., 97-105; E., 141-4, 151; L., 67-82; A., 118-23, 134-6; M., II, 17-24; L. M., 286-90; A. S., 24-8; N., 147-8; G., 748; F., 98-108, 431-6, 452-7; Clow, 19-22; H., 180-88; Seager, 302-8; Seligman, 449-54; Nich., II, 88-109; White, Money and Banking, 3-34; Readings, 387-400; Laughlin, Principles of Money, 1-33; Kinley, Money, 1-77; Scott, Money and Banking, 1-52; Clark, 538-54.

## 2. The Value of Standard Money.

a. How shown by the prices of goods? Index numbers.
$b$. The three factors. Result of increase or decrease in each?
(i) Volume of business in which money is used.
(2) Quantity, in bulk or weight, of metal used as money. How does change in quantity affect total value of the money?
(3) Rapidity of circulation.
c. Express these factors in an algebraic formula.
d. How is the value of coin affected by the cost of production of the metal of which it is made?
$c$. For which of the three functions is the fitness of money impaired when its value changes?
B., 219-29, 245-9; W., 100-111; E., 150-1; A., 137-8; N., 319-25; M., II, 26-45; L. M., 291-311; Nich., II, 118-24; F., 436-42; H., 193-206; Clow, 20-2, 172-4; Seager, 34555; Seligman, 454-60; Laughlin, Principles, 34-46, 225-365; Scott, 53-68; Kinley, 78-198, 224-59.

## EXERCISES

1. The history of gold and silver since 1800. (a) Ratio of production, in weight. (b) Commercial ratio. (c) Connection between the two. Sta. Abs., 649. See Laughlin, Bimetallism, 161-75; Principles, 60-70; Kinley, 281-4.
2. Effect on prices and wages of the increased production of gold after 1850; after 1895. Sta. Abs,. 569; Bulletins, Bureau of Labor.
3. Find the value in dollars and cents of the following monetary units of foreign countries. The fineness is nine-tenths unless otherwise specified:
a. French franc. The 10 -franc gold coin weighs 49.782 grains.
b. The value of the franc when both France and the United States were on the silver standard (before 1834) may be found by comparing the weights of the silver dollar and of the 5 -franc silver coin of 385.809 grains.
c. German mark. The 10 -mark gold coin weighs 61.459 grams.
d. English pound. The gold sovereign weighs 123.274 grains. It is $.9162 / 3$ fine.
e. Russian ruble. The 10 -ruble gold coin weighs 132.758 grains.
f. Japanese yen. The 10 -yen gold coin weighs 128.6 grains.
g. Chinese tael. The Canton silver tael weighs 580 grains. Use the present commercial ratio.
h. The silver rupee of India weighs 180 grains and is $.9162 / 3$ fine. Up to 1893 it was coined without limit. Select some. year before that date, use the commercial ratio for that year, and compute the value of the rupee in cents.
4. Gresham's Law and the International Flow of Money.
a. If there are full-weight coins, light-weight coins, and token money in circulation together, which will be selected for use in the arts? For export?
b. Imports and exports; favorable and unfavorable balance of trade.
c. When there is a balance to be paid, trace the results on (I) the flow of money between the countries, (2) amount of money in each country, (3) prices in each country, (4) demand in each for the goods of the other, and the imports and exports of each.
B., 237, 271-4; L., 306; G., 194-8; Nich., II, 113-15; N., 414; F., 443-7; Clow, 62-8, 158-62; Seager, 309; Seligman, 467-8; Laughlin, Principles, 366-437; Kinley, 78-98.

## EXERCISES.

1. Write a paper on the importation and exportation of gold. Sta. Abs., 151. Neglect the distinction between domestic and foreign exports. Use few figures and observe good literary form.
2. Compare with the balance of trade. Sta. Abs., 170.

## 4. Token Money.

a. Kinds.
(I) Over-valued coin and paper.
(2) Convertible and inconvertible.
b. How issued by (I) governments and (2) banks?
c. Value of token money and results of issuing it depend on amount.
(I) Small amount issued suddenly; gradually.
(2) Issue equalling amount of standard coin in circulation.
(3) Beyond this amount: different results for convertible and inconvertible money; for over-valued coin and paper.
d. How does a country carry on foreign trade when its money is inconvertible and depreciated?
B., 234-44, 249-55; A., 139-40; N., 413-18, 506-10; L., 160-70; F., 447-9; Mill, II, 88-91, 195-201; G., 212-27; W., 121-42; E., 144-7; H., 188-92; L. M., 344-9; Nich., II, 115-7, 125-30; Readings, 400-5; Seager, 316-9; Seligman, 451-4; Laughlin, Principles, 508-31; Kinley, 329-89; Scott, 99-116.

## EXERCISES.

1. Experience with inconvertible paper. F., 447-52; L. M., 344-60.
a. The assignats of the French Revolution. Readings, 496-30.
b. The United States. B., 249-55, 281; Report of monetary commission; Bolles, Dewey, Knox, Hepburn, White, Bogart, Coman.
2. Experience with bimetallism. E., 152-5; Seligman, 461-6; Horton.
a. France and the Latin Union. Laughlin, Bimetallism, 146-60.
b. Germany. Laughlin, Bimetallism, 135-45.
c. China and Japan.
d. United States. B., 280-1; F., 459-62; L. M., 316-24; Laughlin, Bimetallism, 10-121; Principles, 451-507; Seager, 309-16; Seligman, 461-6; Scott, 83-93, 314-49; Report of monetary commission, Bolles, Dewey, Hepburn, Poor, Russell, Taussig, White, Bogart, Coman.
3. Write a paper in good literary form on the amounts of gold and silver coined in the United States since 1800. Sta. Abs., 651. Note the amounts now in circulation and in the treasury. Sta. Abs., 111-13.
4. How heavy would the silver dollar have to be in order to contain a dollar's worth of silver?
5. Compile a table of the kinds and amounts of money now in circulation in the United States. Sta. Abs., 111-13.
6. Write an account of each kind of paper money now in circulation, obtaining your information as far as possible from laws, statistics, and samples of the money itself. This outline is suggested:
a. When first issued? Why?
b. Nature; manner of issue, security, redemption, legal tender quality.
c. Fluctuations in the amount outstanding, with explanations.
d. Later legislation and its effects.

## PROBLEMS.

1. When a general change has taken place in the cost of production of commodities, as measured in labor, should the debtor repay a purchasing power equal to what he borrowed, or the product of an equal amount of labor? F., 453-6; Laughlin, Principles, 60-70; Kinley, 281-4.
2. What arrangements would constitute bimetallism? Observe (a) coinage, (b) legal tender, (c) mint ratio, (d) commercial ratio, (e) money in actual use, (f) in one or more countries. B., 289-99; W., 345-56; Seager, 355-60; F., 457-9.
3. How would bimetallism work when the discovery of new mines decreased the cost of production of one of the metals while exhaustion of old mines increased the cost of production of the other? When the time comes to change the mint ratio, which of the two standards should suffer the change? F., 459-61; M., II, 46-9; Scott, 293-312; Giffen, The Case against Bimetallism; Taussig, Laughlin, Kinley.
4. It is asserted by some that decrease in the demand for silver since 1870 has been the cause of the fall in its value. If this were true, how would the relation between value and cost of production be affected? The amount of production? Compare the amount of coinage by the United States before 1870 with the amount since; the annual production of silver, by weight, before the fall in value with the production since. Sta. Abs., 649, 651; Laughlin, Bimetallism, 161-75.
5. A multiple or tabular standard. F., 456; L., 76-7; Kinley, 275-81; Smart, Studies in Economics, 141-58.
6. Discuss the function performed by the silver dollars stored in the Treasury. What gives the silver certificates their value? What disposition should be made of the silver?
7. Should the greenbacks be retired?
8. Should our silver currency be made by law convertible into gold?
9. Is a general rise of prices desirable? H., 228-31.

## B. CREDIT.

## 1. Forms of Credit. How does each do the work of money?

a. Book credit.
b. Promissory notes issued by (a) persons, (b) banks, and (c) governments. What are bonds?
c. Bank deposits, checks, and drafts.
d. Commercial drafts or bills of exchange.
B., 256-64; M., II, 54-5, 59-63, 173-80; L. M., 328-34, 410-7; L., 145-51; E., 158-9; N., 183-6; G., 276, 292-4; F., 465; Seager, 323-5; Seligman, 469-72.
2. Banking.
a. What is a bank? Its functions: (a) receive deposits, (b) make loans, (c) conduct exchange, (d) issue notes.
b. The check and clearing house system.
c. Bank accounts and statements.
d. Relation between deposits, loans, and reserve. What is the effect of withdrawing a deposit in cash ?
B., 265-9; W., 313-9; L., 151-3, 328-38; N., 158-67, 179-86; G., 280-9; Dunbar, Theory and history of banking, 1-81; E., 162-3; A., 151-7; Nich., II, 164-7; H., 235-7; F., 463-5; Clow, 142-5; Seager, 323-31; Seligman, 472-5; Fiske, The modern bank.

## EXERCISES.

1. Describe the organization and working of a bank, deriving your information from observation and interviews.
2. The origin of the national banks in the United States. Dunbar, 132-53; B., 282-3; L., 339-43; F., 468-71; Histories of the Civil War.
3. Write a paper on the distribution of national banks by states and cities, using few or no figures. Sta. Abs., 129-30.
4. Analyze the changes in the number of national banks and in their capital stock. Sta. Abs., 126.
5. Study a bank statement. One may be found occasionally in a newspaper or obtained from any bank. Write an explanation of each item in it. Paste the printed statement on your manuscript.
6. Study a check which has been used. Trace its course from the person who drew it until it returns to him again. Eaton, How to do business, 18.
7. Witness the operations of a clearing house and write up what you see.
8. Analyze the transactions of the New York clearing house, and compare with those of other cities. Sta. Abs., 134.
9. Find and explain the requirements of the law about the reserves of national banks. Inspect one or more bank statements and see how near the reserve is to the legal limit. If possible, ask a banker in what other banks he has part of his reserve deposited.
10. Illustrate the connection between loans and deposits by the experience of national banks for the past twenty years. Sta. Abs., 127-8.
11. Analyze the loans of banks with reference to the kinds of security for them. Observe the peculiarities of certain cities and states, and account for them as far as possible. Sta. Abs., 129.
12. What difference can you find between the resources of national banks and those of savings banks? Sta. Abs., 119, 131.
13. Describe the banking system of some other country. Duṇbar, 154-99; Seligman, 843-6; Fiske, 279-324.

## 3. The Advantages of Credit.

a. Convenience.
b. Saves use of the precious metals as money. Exchange; domestic and foreign.
c. Secures fuller use of the agents of production.
B., 270-1; G., $277-80$; L .M., 325-27; M., II, 50.4, 197-9; E., 160-2; Clow, 145-57; Seager, 327-34, 361-7; Kinley, 199-223; Seligman, 471-2; Lectures on commerce, 218-30.

## PROBLEMS.

1. Is credit capital? Does it create capital?
2. What are the advantages of credit?
3. The feudal serf was practically unable to sell or mortgage his land. Was this to his advantage? Consider also entailed estates; allotments of land on Indian reservations.
4. Much wealth is now represented by securities which can be pledged as collateral for a loan with very little ceremony. What does this mean for the use of credit and the stability of wealthy families?

## 4. Changes in the Volume of Credit.

a. Credit a part of the circulating medium.
(I) To what extent has credit displaced money?
(2) Volume of credit changes-how much and how quickly?
(3) Effect of these changes on prices and international trade.
b. The credit cycle.
(I) Effect of a belief that prices will rise or fall on demand for goods, readiness to sell, and prices.
(2) Speculation : expansion of credit, actual rise of prices.
(3) Panic: fear, withdrawal of bank deposits, demand for loans, contraction of credit, fall of prices.
(4) Depression: lack of confidence, stagnation, little use of credit; low prices, gradual recovery. Apparent overproduction.
c. Separation of producers and consumers.
B., $274-8$; W., $1056-60$; N., $168-72$; L. M., $325-43$; M., II, $64-70,77-9$; H., $295-9$; G., 334-41; Nich., II, 131-7, 206-14; Clow, 132-41; F., 333-55; Seligman, 476-8, 487-90.

## EXERCISES.

1. Put on the blackboard the chart in Laughlin, Industrial America, 213.
2. How much did the deposits of banks contract after the panic of 1893 ? Sta. Abs., 128. After the panic of 1907? If deposits be counted as circulating medium the same as coin and paper money, what proportion did this contraction make in the total circulating medium?
3. How much did the clearings of New York banks contract after each of the following panics?-1857, 1873, 1884, 1890, 1893, 1903, Sta. Abs., 133.
4. Judge from the course of bank deposits and clearings how long a depression lasts. Sta. Abs., 128, 133. How long does the period of speculation last?
5. Make a study of seasonal fluctuations in the reserves of banks. Sta. Abs., 120-3. To what extent are these fluctuations confined to the financial centers?
6. It is sometimes said that bankers cause panics intentionally. How are the earnings and dividends of banks affected by panic years? Sta. Abs., 126.
7. White an account of the panic of 1907.
8. State the provisions of the Aldrich-Vreeland Act.

## PROBLEMS.

1. How can elasticity of the currency be best secured? Laughlin, Industrial America, 192-218.
2. Should national banks be allowed to issue notes on other security than government bonds? Readings, 431-52.
3. Should national banks be allowed to establish branches?
4. In what ways can panics be avoided or diminished in intensity? Seligman, 489-90.
5. What are the warnings of an approaching panic? Study prices of commodities, imports and exports, bank reserves, rates of interest. Sta. Abs. for 1907, 624-6.

## PART IV. COMMERCE: THE PROCESS OF EXCHANGE.

## I. Introduction.

a. Define: commerce, trade, wealth, production, labor. What is the problem before us in studying these phenomena?
b. The elements of commerce: (I) variety of wants; (2) division of occupations. Make an original illustration showing how both parties to a trade may gain.
c. The organization of commerce. (I) Define: merchant (notice derivation), wholesale, retail, jobber, broker, commission merchant. (2) Who takes the initiative, the buyer or seller?

Clow, 1-22, 106-16, 193-4; E. \& W., 230-45; L., 83-101; E., 118-37; L. M., 377; Webster, Gen. history of commerce, 3-6.

## EXERCISES.

1. Prepare a special report on the medieval fairs and markets. Cheyney, 75-9; Readings, 325-31.
2. Describe a fair of the present time.
3. Describe some market of the present time.
4. What proportion of the persons in the United States having gainful occupations are in trade and transportation compared with earlier years? In what special occupations has the proportion increased the most? Sta. Abs., 41; Census, 24-7.
5. Write a paper in good literary form on the sources of our supply of wool. Sta. Abs., 470-5, 560-61.
6. Same for sugar. Sta. Abs., 476-9, 431-4, 5 50 9.
7. Write a paper in literary form on the regions of production and consumption of each of the following products:

Wheat. Sta. Abs., 549-51, 423-5, 427-30, 465.
Cotton. Sta. Abs., 552-4, 514-18, 466-7.

## PROBLEMS.

1. Is a railroad brakeman a producer of wealth? A merchant? A bookkeeper? A promoter who organizes a new company but leaves its management to others?
2. Of the various classes of industries (See Part II, 2), why should commerce be selected for special treatment?
3. What is the problem before us in studying Part IV?
N. B. It will be well to return to the discussion of problems 2 and 3 at the conclusion of Part IV.

## 2. Classes of Merchandise.

a. Find several classifications; make one of your own.
b. What factors determine the place of production of each class. Consider (I) nature-climate, materials in the ground, (2) labor, (3) capital.

Clow, 24-36, 96; Readings, 481-6; Chisholm, Handbook of commercial geography, 14-51; Adams, Com. Geog., 1-48; Trotter, Geog. of commerce, 1-34; Rocheleau, Geog, of commerce and industry, 1-23.

## EXERCISES.

1. Write a paper on the imports of one of the following groups of articles. What are the important items in the group? Notice if some are increasing and others decreasing. Make a chart to show the fluctuations: Chemicals, manufactures of cotton, fibres and textile grasses, fish, fruits and nuts, glass, hides and skins, iron and steel, silk and its manufactures, spirits and other liquors, sugar and molasses, wood and its manufactures, wool and its manufactures. Sta. Abs., 299-329.
2. Compare the proportion of some class of goods in the exports of the United States for a recent year with the proportion for some earlier year, say a quarter or half a century ago. Account for the change. Sta. Abs., 664-5; Clow, 51-61.
3. Same for imports. Sta. Abs., 662-3; Clow, 37-49.
4. Compare the United Kingdom, Belgium, Brazil, and Canada in the proportion some class of goods makes in their exports. Statesman's Year-Book.
5. Same for imports. Statesman's Year-Book.
6. See exercises under Part II, 6.

## PROBLEMS.

1. What change may we expect fifty years will bring in the foreign trade of this country?
2. With what countries may we expect that our trade will increase? Decrease?

## 3. International Trade.

a. Balance of trade-favorable or unfavorable. Causes of a recurring balance.
b. International flow of money.
c. International values.
d. The effect of restrictions on international trade.
B., 329-43; Clow, 62-8, 158-74; Seager, 368-83; Seligman, 491-501; F., 480-9; Readings, 453-72.

## EXERCISES.

1. Write a paragraph, in good literary form, on the balance of trade of the United States for the last fifty years. Sta. Abs., 170.
2. What foreign countries have a favorable balance of trade? Unfavorable? Sta. Abt., 692-3.
3. With what foreign countries is the balance of trade in our favor? Sta. Abs., 692-3.
4. See Clow, 65-7. Prepare a table and charts like these for some country, with brief explanations.
5. Study some country with reference to its balance of trade. Clow, 69-89; Sta. Abs., 692-93. If the balance is a recurring one, account for it as far as possible.
6. Study the recent tariff history of the United States. Clow, 44-6; Taussig, Tariff history; Laughlin, Industrial America, 33-66; Bogart, 369, 394-7; Coman, 298-305; Stanwood, Tariff controversies.
7. Of some other country. Seligman, 501-4; Consular reports; Bastable, The commerce of nations.
8. Describe the duties imposed on commodities in the United Kingdom. Clow, 69, 70; Statistical Abstarct of the United Kingdom.
9. Describe some system of navigation laws or shipping subsidies. Clow, 189-91; Reports of the U. S. Commissioner of Navigation; Johnson, Ocean and inland water transportation, 288-300.

## PROBLEMS.

1. If labor in Kansas is equally productive with that of Germany in the manufacture of cloth, but twice as productive in the raising of wheat, the situation may be represented thus:-

A day's labor produces-

If the two countries trade, how does each come out at each of the following rates?-
(1) $x$ cloth of Germany for $y$ wheat of Kansas.
(2) $x$ cloth of Germany for $2 y$ wheat of Kansas.
(3) $x$ cloth of Germany for $1 \frac{1}{2}, y$ wheat of Kansas.

Find the per cent of gain or loss for each country. Compute it at first without allowing anything for the cost of making the exchange. Then compute it again, allowing $1 / 4 y$ wheat for cost of transportation.
2. State the arguments in favor of a protective tariff, and discusss the validity of each. Clow, 185-9; Readings, 472-512; Clark, 517-37; F., 491-503; A. S., 219-32; M., II $532-9$; L. M., 450-6, 6C5-28; L., 289-302; W., 388-402; E., 280-อ̈; H., 422-40; Seligman, 505-16; Bastiat, Sophisms of protection; Bayles, Sophisms of free trade; Atkinson, Taxation and work; Patten, Economic basis of protection; Mongredien, Free trade in England; Bastable, The commerce of nations; Taussig, State papers and speeches on the tariff; Smart, Return to protection.
3. To what extent do these arguments apply to the United States at the present time?

## 4. Facilities for Transportation and Communication.

a. Waterways, harbors, rivers, and canals.
b. Highways.
c. Railroads and electric railways.
d. Post office.
$e$. Telegraph and telephone.
$f$. Pipe lines, conduits, etc.
What is is the effect on the manner of installing and operating these facilities when (I) a large fixed capital is necessary, (2) operation must be continuous, (3) increase of traffic does not involve proportionate increase in operating expenses?
Seager, 460-1, 467-9; Clark, 396-450; Seligman, 517-21; F., 517-30; H., 153-8.
General references: Hadley, Railroad transportation; Acworth, Elements of railway economics; Noyes, Am. railroad rates; Bullock, (3rd ed.), 343-72; Dixon, State railroad control; Haines, Restrictive railway legislation: B. H. Meyer, Gov. regulation of railway rates; Johnson, Am. railway transportation, Ocean and inland water transportation; Lectures on commerce, 29-128.

## EXERCISES.

1. Write up in literary form the recent history of the merchant marine of the United States. Sta. Abs., 603-26.
a. The number and tonnage of sailing vessels and of steam. 603.
b. The distribution of ownership. 603.
c. Employment in foreign trade, coastwise trade, fisheriès. 604.
d. Vessels built, by kinds and localities. 605, 606.
e. Tonnage entering from foreign countries, 607; Clearing, 608.
f. Distribution of entrances and clearances, by foreign countries, 609-12; by seaports of the United States, 613-15; by nationality of the vessels, 616-617.
g. Value of goods carried by American and foreign vessels respectively: imports, 618 ; exports, 619 ; total foreign trade, 620.
h. Tonnage movement in domestic lake trade, 612, 613.
i. Disasters to vessels. 624-26.
2. Write papers in good literary form on the railroads of the United States: (a) mileage, (b) rolling stock, (c) traffic, (d) rates, (e) finances. Sta. Abs., 579-90.
3. Early development of railroads. Government aid. B., 56-65; Seligman, 520-24; F., 534-6; Hadley, 1-63; B. H. Meyer, 53-88; Johnson, Railway transportation, 13-33, 307-321.
4. Give some example of competition between railroads. Noyes, 124-36; Hadley, 82; Johnson, Railway transportation, 213-27.
5. Explain the importance of classification in rate-making. Seligman, 532-5; Johnson, Railway transportation, 283-92.
6. Compare American railway rates with European. Johnson, Railway transportation, 293-304.
7. What are pools, discriminations, private cars, rebates? Find examples. Seligman, $535-40$; Noyes, $89-123,137$; F., $530-33$; Seager, 461-7; Johnson, Railway transportation, 228-43; Bullock (3rd ed.), 346-8, 357-61; McClures 26:318-31, 398-411.
8. Give some examples of consolidation of railroads. Noyes, 154-60; Bullock (3d ed.), 348-51.
9. The growth of great railroad systems. Seligman, 525; Johnson, Railway transportation, 52-68; Bogart, 305-26; Coman, 322; Bullock (3d ed.), 343-53; Laughlin, Industrial America, 140-83.
10. Give an example of the effect of (a) water transportation on railway rates, (b) the building of a new parallel railway. Hadley, 93-5; Johnson, Water transportation, 374-9; Bogart, 329-34.
11. Describe some example of government regulation of railroads. Seligman, 541-44; Acworth, 130-59; Noyes, 200-21; Bullock (3d ed.), 363-70; F., 541-4; Seager, 469-73; B. H. Meyer, 189-239; Johnson, Railway transportation, 322-34.
12. Describe some example of government ownership. Seligmanf, 562-70; H. R. Meyer's books; Hadley, 186-236; Johnson, Railway transportation, 335-48.
13. Describe the relation of some street railway to the government and the public. Seligman, $572-3$; Seager, $448-50$, $453-4$; Shaw, Municipal government in Great Britain, 127-33.
14. Same for some telegraph or telephone system. Seligman, 519; Seager, 450-2; Cheyney, 273-5; Bogart, 334-6.

## PROBLEMS.

1. What is the fundamental difference between the railroads and the highways or a waterway? Noyes, 1-9; Acworth, 1-9.
2. How is the competition between railroads different from that between draymen? Noyes, 128-33; Hadley, 73-74.
3. Why is the tendency toward consolidation of railroads so irresistible? Is it ever of benefit to the public? Noyes, 128-60; F., 539-40; Hadley, 63-82; Bullock (3d ed.), 351-3; Lectures on commerce, 111-28.
4. What should be the basis for making railway rates? (a) Cost of service, (b) distance, (c) what the traffic will bear, (d) uniform for all distances and classes of goods. Bullock (3d ed.), 353-61; Seligman, 528-35; Acworth, 51-130; Noyes, 24-88; Hadley, 100-24; Johnson, Railway transportation, 271-92; Clark, 402-50; Harris, 142-204.
5. Government ownership vs. government regulation. Johnson,. Railway transportation, 420-27; Bullock (3d ed.), 361-72; Seligman, 541-4, 562-78; Noyes, 222-60; H., 398-400; F., 544-54; Hadley, 236-60; Seager, 450.-9, 473-5; B. H. Meyer, 29-47; H. R. Meyer's books.
6. Parcels post vs. the express companies. Seligman, 567-8; Johnson, Railway transportation, 158-69.

## PART V. VALUE: THE BASIS OF EXCHANGE.

## 1. Definitions.

a. Utility, total and marginal; subjective value.
b. Value in exchange. May it be more or less than subjective value?
c. Price.
d. Demand. Imagine a line of purchasers of indefinite length ranged in the order of the price they will pay.
e. Supply. Imagine a line of sellers.
в., $88-96,183-8 ;$ W., $67-70,74$; A., 102-9; M., I, 537-8; L. M., $249-52$; R., 1,2 ; E., 121-5; E. \& W., 87-99, 165-8; L., 63, 108; G., 82-4; Mar., 8, 9; Readings, 245-9; Seager, 81-91; F., 21-9; Seligman, 172-88, 222-3.

## EXERCISES.

1. Connection between the amount of corn produced and the price of corn. Sta. Abs., 543. Same for wheat, 544. Oats, 545.
2. Connection between the price of coffee and tea and the amounts consumed. Sta .Abs., 481, 482.
3. The effect of excise and customs duties on the consumption of commodities: wool, Sta. Abs., 470; sugar, 683; liquors, 687; tea, 482. The import duty of about two cents a pound on sugar was removed April 1, 1891. The duty was restored in August, 1894, and raised somewhat in July, 1897. The duties on wool were raised in October, 1890, removed entirely on the imported grades in 1894, and restored in 1897. The taxes on liquors, both customs and internal, were doubled in July, 1898, and a customs duty was put on tea.

## 2. Competition.

a. What is the force that drives the business world ?
b. Construct a definition which represents competition as a negative quality. What things may make competition imperfect?
c. Assumed in developing general principles. It is to economic theory what the vacuum is to the law of falling bodies.
d. A market. What is a perfect market?
W., 74-5; N., 248-52; L., 104-5; M., I, 541-3; L. M., 175-7; Mar., 204-9, 217; H., 72-4; Seager, $98-104$; Seligman, 223, 139-53; Ely, Evolution of industrial society, 123-51.

## EXERCISES.

1. Local variations in the prices of commodities which are not easily transported: hay, Sta. Abs., 557; potatoes, 558. Compare with these: flaxseed, 559; wool, 560-61.
2. The transference of an industry to a locality possessing greater natural advantages is illustrated by the rise of cotton manufacturing in the South. Sta. Abs., 680.
3. A measure of the mobility of labor is found in the fluctuations in the number of immigrants into the United States, and in the number of passengers, other than cabin,
going abroad. Sta. Abs., 60-2. Find what per cent the immigration was of the total population. In what year was it the largest? The smallest? Account for the fluctuations. Same of emigration.
4. Market Price-temporary equilibrium of demand and supply.
a. Effect of a change in exchange value or price.
(1) Effect of a rise in price on supply; on demand.
(2) Effect of a fall in price on supply; on demand.
b. Effect on price of changes in supply and demand.
(I) Effect of an increase in supply; in demand.
(2) Effect of a decrease in supply; in demand.
c. Demand and supply tend to equal each other. The equation is maintained by fluctuations in price.

Clow, 117-22; B., $189-93$; A., 106; Mar., 210-23; N., 215-23; M., I, 549-51; L. M., 256; H., 75-85; Seligman, 225-38.

## EXERCISES.

1. For two weeks follow the price of some product or the stock of some corporation in the market reports given in the newspapers. Prepare a chart (Clow, 132) showing the variations. Read any explanations that are given, and as far as possible show how the fluctuations resulted from changes in demand or supply.
2. Make a chart showing the variations in the average price of some commodity for a series of years. Sta. Abt., 565-76.

## 4. Normal Price-stable equilibrium.

a. Conditions of supply.
(I) Strictly limited in quantity.
(2) Capable of indefinite increase in production without much change of price.
(3) Subject to law of diminishing returns.
b. Causes of variation from normal price.
(I) Unforeseen variation in either demand or production, when a readjustment of production cannot be quickly made.
(2) Imperfect competition.
B., 194-207; L., 111, 117-129; W., 78-88; M., I, 547, 556-9; L. M., 259, 261-3, 285; A., 107-8; A. S., 53-8; R., 75-9; Mar., 228-35; E., 133-7; E. \& W., 169-73; N., 114-23; H., 86-91; Clark, 92-126; Seager, 104,160-2; Seligman, 239-74.

## EXERCISES.

1. Try to discover normal price in a table of the prices of some commodity for a series of years. Sta. Abs., ${ }^{2} 65-76$.
2. Do you see indications of changes in normal price?

## 5. Peculiar Cases of Value.

a. Joint products and by-products.
(I) Value of the group of articles subject to joint production.
(2) Value of each article in the group.
b. Monopolies.
(1) Kinds of monopolies.
(a) Legal-patents and copyrights.
(b) Natural-that which cannot be duplicated.
(c) Industrial-growing out of business conditions.
(2) Value of monopolized products.
(a) When there are no expenses.
(b) How affected by fixed charges?
(c) How affected by proportional expenses?
c. Prices under excessive competition.
(i) Competition will be excessive when-
(a) Low prices will not stop production: Fixed capital, immovable, specialized-local use. Suspension deteriorates plant, connection.
(b) Increase in production is not accompanied by a proportional increase in expense.
(c) Monopoly can give better or cheaper service.
(d) High profits can be expected after competitors are crushed.
(2) How low will prices go?
(a) Secret rates to secure additional business.
(b) What if these rates are extended to all the business?
(c) When will it be profitable to go out of business?
(3) Industrial monopoly must result.

Joint products: B., 207-8; M., II, 120-3; L. M., 372-4; Mar., 240; A., 114-5; E. \& W., 174-5; Seligman, 251-3.

Monopolies: B., 301-12; E., 58-67, 207; E. \& W., 177-86; N., 273-5; L., 133, note; Mar., 247-9; M., I, 552; Nich., II, 59-66; Clark, 373-95; F., 302-44; Seager, 187203; Ely, Monopolies and trusts; Seligman, 152-3, 255-9.

## EXERCISES.

1. Give illustrations of joint products and by-products that have come under your ${ }^{\circ}$ own observation. Twelfth census, Vol. 10: 725-748.
2. Make up a table which will illustrate the influence of variable expenses on monopoly prices. B, 304.
3. Prepare a special report on the formation of some industrial combination.
a. United States Steel. Bridges, History of Carnegie Steel Co.
b. Amalgamated Copper.
c. International Harvester.
d. American Tobacco.
e. International Mercantile Marine.
f. Diamond Match.

Ripley, Trusts, etc.; Meade, Trust finance; Jenks, Trust problem; find articles in periodicals by Poole's Index.
4. Give examples of the methods used by a trust to crush out a small competitor. Clark, Control of trusts; Nolan, Combinations, etc.; Cosmopolitan, 38: 666; Ely, Problems of to-day; Laughlin, Industrial America, 100-40.
5. Prepare a special report on the formation of the Standard Oil Co., and show how the word trust came to be applied to any large industrial combination. Coman, 327; Bogart, 405-7; Tarbell, History of the Standard Oil Co.; Lloyd, Wealth against commonwealth; Von Halle, Trusts.

## PROBLEMS.

1. What should be done with monopolies?
a. Laissez faire.
b. Government regulation.
(1) Monopoly profit taken by taxation.
(2) Regulation of charges.
(3) Secure honesty and publicity of management.
c. Government ownership.
.B., 312-27; H., 164-79, 391-403; E., 271-306; E. \& W., 186-92; Seager, 498-509, 454-6; Seligman, $059-78$; F., 514-24, 545-54; Laughlin, Industrial America, 100-40; Shaw, Mun. Govt. in Cont. Europe, 45-54, 346-55, 458-60; Bemis, Municipal monopolies; Foote, Municipal public service industries; Report of Chicago Trust Conference; also the references above.
2. It has been said that a monopoly does not eliminate competition, but only places it on a new basis. True?

## PART VI. DISTRIBUTION.

## I. Introduction.

a. By what name is the total produce of a country designated?
b. Shared between the three agents in production, as rent, interest, wages, and profits.
c. What is the problem of distribution?
B., 367-70; W., 161-7; A., 158-64; N., 128-9; Mar., 257-70; E. \& W., 246-50; Seligman, 351-3; Seager, 155-68; Clark, 74-91; Clark, Distribution of Wealth, 1-9.

## EXERCISES.

NOTE. For all of the questions under this topic, and for some under the topics which follow, the data do not exist from which exact or even approximate answers can be derived. But it is profitable to gather the data which do exist, and to find the limits within which the truth must lie.

1. What sum may be taken to represent a year's produce of the United States? (a) Start from the average of earnings and the number of persons having occupations. Census, 85,300 ; Sta. Abs., 43, 514. (b) From the annual production of wealth and services. Census, $24,25,219,301$; Sta. Abs., 40, 41, 674, 677, 678. In connection with professional and personal services use average earnings again. In what respects are these data incomplete?
2. How much does the estimate amount to per capita? How much for each worker? Census, 85.
3. Apportion the estimated production among the various classes of expenditure according to Engel's Law. Bullock, 99.
4. Make an attempt to distribute the total income of the railroads into the four kinds of social income-rent, interest, etc. Sta. Abs., 587. Notice the number of employees. Sta. Abt., 41.

## 2. Rent.

a. What fixes the price of produce subject to the law of diminishing returns? The margin of cultivation.
$b$. The differential productiveness of lands above the margin.
c. Relation of rent to the price of produce and the price of land.
d. Special varieties of rent.
(I) Non-competitive rent.
(2) Rent of mines.
(3) Situation rent in cities.
$e$. The unearned increment.
B., $31-402$; W., $168-89$; A., 165-8; N., 241-6; M., I, $220-1,525,577-86$; L. M., 233-40, 277-83; L., 244-56; E., 168-78; E. \& W., 252-65; R., 51-5, 59, 71-4; H., 287-93; Nich., I, 402-16; Seager, 209-20; Seligman, 371-90; F., 53-98; Clark, 159-94; Dist. of Wealth, 354-72; Readings, 568-88.

## EXERCISES.

1. If possible find by inquiry an example of land which is leased without improvements for a long term of years, the lessee putting on such capital or making such improvements as he desires. Find the amount of the rent and the value of the land. The rent is what per cent of the value? McClures, 24: 563-78.
2. It may be possible to get a similar result from a piece of land which has recently been improved. Note the value of the land before the improvment was made, and then the cost of the improvement. Find the annual income of the property, and deduct from it all expenses, taxes, insurance, repairs, depreciation, management, etc. Allow the land its proportion of the net income, and see what proportion this makes on the value of the land.
3. From assessors' valuations find the proportion between the value of land and the value of the improvements on it. Distinguish (a) residential property, (b) farms, (c) stores, office buildings, factories, and other business property.
4. What is the total value of the land in the United States, not counting buildings? Sta. Abs., 542, note; Census, 217, note. See the large Census volume on "IVealth, Debt, and Taxation," pages 3-21.
5. What proportion of the land included in farms is improved so as to yield a rent? Census, 288; Sta. Abs., 537. What proportion of all land is included in farms or in cities? Sta. Abs., 17. What proportion of the land in cities is improved? Get answers from actual observation. What proportion of the land of a state is improved so as to yield a rent? How nearly is the land rent of a state or city in proportion to its land valuation?
6. Make an analysis of the tenure of homes. Census, 28-31, 90-94.
7. Make an analysis of the tenure of farms. Census, 218, 227, 294, 295.

## PROBLEMS.

1. A mine yields 100,000 tons of coal a year, and will be good for ten years. The cost of mining and getting the coal to market is ten cents per ton less than at the poorest mine it pays to work for the same market. What should the annual rental be?
2. Is it practicable and desirable to take rent out of the sources of individual income and devote it to the uses of the state? B., 450-6; W., 333-7; M., I, 291-3, $295-8$; L. M., 172-4; Nich., I, 2. $26-71$; G., 441-64, 529-32; E. \& W., 340-2; F., 374; Seligman, 388-91, Essays in taxation, 64-94; Seager, 517-27; Cox, Land nationalization.

## 3. Interest.

a. Rate of interest is the point of equilibrium between the supply of and the demand for loanable capital.
(I) What does this capital consist of? What would it consist of if there were no money?
(2) Conditions affecting supply.
(3) Conditions affecting demand.

Suppose four permanent improvements costing $\$ 1,000$ each could be made on a farm so as to increase the annual product by $\$ 100, \$ 80, \$ 60$, and $\$ 40$ respectively. Which ones could the owner afford to make if interest is at 9 per cent? 7 per cent? 6 per cent? 5 per cent?
b. Risk and rate of interest.
c. How does the quantity of money in circulation affect the rate of interest?
d. Relation of the rate of interest to the present value of fixed incomes. Bond value tables.
What is the present worth of a perpetual annuity of $\$ 100$ when the market rate of interest is 5 per cent? When interest is 10 per cent?
B., 379-91; Clow, 126-30, 213-17; W., 190-200; N., 302-11; E., 209-17; E. \& W., 290-99; A., 171-5; A. S., 86-96, 172-9; L., 183-90; L. M., 440-9; M., II., 204-14; Mar., 292-6; Nich., II., 215-34; H., 270-84; Seager, 244-58; Seligman, 392-410; F., $98-$ 159; Clark, 127-30, 146-58, 213-7, 339-57; Dist. of Wealth, 116-38.

## EXERCISES.

1. Compare rates of interest on public debt in the principal countries of the world. Sta. Abs., 694.
2. Trace the fluctuations in the earnings of banks. Sta. Abs., 126.
3. From data in the newspapers or financial publications, compute the rate of interest yielded to an investor by various securities bought at the present market price.
4. From one of the books issued by dealers in securities prepare a chart showing the highest and lowest prices of some bond each year for a series of years.
5. Same for the rate of interest on time loans. On call loans.
6. Study the variations in the rate of interest on mortgage loans between different times and places.
7. Write a brief •history of the interest-bearing debt of the United States. Sta. Abs., 89.
8. Make an analysis of the local indebtedness of the United States. Sta. Abs., 86-88.
9. Give a special report on historical changes in the rate of interest. Readings, 563-8.

## PROBLEMS.

1. What should be the present worth of the coal mine in Problem 1 above?
2. Should the rate of interest be fimited by law? W., 307-13; Seligman, 409-10.
3. Should notes and mortgages be exempt from taxation? Ely, Taxation in Am. . states and cities, 335-9; Wells, Theory and practice of taxation, 472-84.
4. How shall I invest my savings? Lectures on commerce, 254-77; Hamilton, Savings and savings institutions.

## 4. Wages.

a. Real wages vs. money wages.
b. A purely competitive rate of wages would be the point of equilibrium between the demand for and the supply of labor.
(I) Conditions affecting demand.
(a) Natural resources.
(b) Amount of capital.
(c) Temporary state of credit and condition of business.
(2) Conditions affecting supply. For each kind of work there is a practical minimum rate of wages; below, the supply of laborers will not be maintained; above, it will tend to increase indefinitely.
(a) For men, women, children, amateurs.
(b) For different kinds of work. Necessaries of life vs. maintenance stitable for the work.
(c) Standard of living.
c. Laborers of all kinds who have superior productive power receive a rent of ability.
d. Wages in different occupations.
(I) Differences due to relative attractiveness of occupations.
(2) What factors limit competition. for occupations?
(3) Why does some attractive work receive very high pay and some disagreeable work very low pay?
B., 402-16; L., 193-201; A., 178-86; E., 180-5; E. \& W., 267-87; W., 216-31; N., 252-6; H., 301-35; Mar., 264-89; R., 80-4; A. S., 34, 66-8, 70-2, 100-4; G., 492-506; Nich., I., $326-64$; L. M., 175-92, 205-15; M., I., 471-94; Taussig, Wages and Capital; Seager, 222-43; Seligman, 411-28; F., 184-215; Clark, 127-45, 282-300, 315-38; Dist. of Wealth, $77-115$; Readings, $543-63$; Smart, Studies in economics, 1-60.

## EXERCISES.

1. What proportion of the value of all the manufactured products in the United States is paid to wage-earners? What proportion is paid in salaries? Census, 300, 301. Distinction made by the Census between wages and salaries. Find a few industries which vary widely in the proportion going to wages. Census, 302-21.
2. Divide the sums paid for salaries and wages by the numbers of persons earning salaries and wages respectively. Census, 300 . What is the source of error in considering these quotients the averages of salaries and wages?
3. How much do wages differ in different (a) localities, (b) occupations, (c) periods of time? Large volume of the Census on "Employees and wages"; Bulletins of the Department or Bureau or Labor; Readings, $533-43$. (d) Sta. Abs. (1907), 210, 211, shows the fluctuations in real wages as well as in money wages.
4. Compare men, women, and children as to (a) the number employed, (b) the amount and proportion of wages, and (c) the increase in wages from 1890 to 1900 . Census, 300. (d) By using the large volume, "Employees and wages," these comparisons may be extended to different states or cities, and to different occupations. See also Sta. Abs. (1907), 173-87.
5. From Table 4 in the large Census volume on "Occupations," pp. 16-19, study the age at which various occupations are begun, the age at which the number who follow each is at the maximum, and the age at which the greatest number retire from it.
6. Prepare a special report on the history of labor organizations (a) in England; (b) in the United States. B., 432-41; E., 187-97; Cheyney, 277-94; Webb, Howell.
7. Give an account of some labor organization derived from (a) interviews with its officers, (b) its by-laws and other official literature, (c) other sources. Readings, 613-40.
8. Give an account of (a) a strike, (b) the settlement of some labor dispute by arbitration, (c) some working agreement between employer and employees. (d) Write up strikes and lockouts from the statistics. Sta. Abs (1907), 188-208.
9. Give a special report on the policies of labor organizations. Readings, 589-612; Seager, 385-441; Seligman, 434-42; Laughlin, Industrial America, 67-99; Commons, Trade unions; Hollander \& Barnet, Trade unionism.
10. Prepare a special report on what has been done by legislation or other government action to bring about the arbitration of industrial disputes. Bulletins of the Bureau of Labor; Seager, 412-33.
11. Prepare a special report on the hours of labor. Readings, $640-67$.
12. Write up in good literary form what you see of interest in one of these tables: Nos. 155, 156, 157 (Census, 322-5); 164 (331-3); 167 (338-9); 171, 172 (350); 173 (351); 174 (352-60); 175 (361-81).

## PROBLEMS.

1. Could a surgeon maintain his skill and keep up with the progress of his profession on an income from $\$ 2$ to $\$ 5$ a day?
2. What determines the income of the canvasser? The travelling salesman?
3. Account for the low wages of shop girls, the small income of country editors, the difference between the wages of men teachers and the wages of women teachers, the large sums paid to great musicians, the large incomes of some doctors and lawyers, the small remuneration received by the writers of great poems and scientific works.
4. In what ways is labor different from a commodity? B., 424-31; E., 287-92.
5. The relations of employer and laborer.
a. Recognition of labor organization. Union shop vs. open shop.
b. How can the public be protected against the inconvenience, loss, and danger resulting from strikes? W., $324-30$; L., $344-9$; Ely, Evolution of industrial society, $331-97$.
c. Arbitration: voluntary or compulsory; by a standing board or one chosen for the occasion. B., 446-9; Lloyd, Newest England.
d. Conciliation, collective bargaining, trade agreements. How can an agreement be enforced against an unwilling party?

Ashley, Adjustment of wages; Peters, Labor and capital; Seligman, 445-7; Civic Federation, Industrial conciliation; Howell, Labour legislation; Ely, Labor movement; Lynch, Redress by arbitration; Price, Industrial peace; Gilman, Methods of industrial peace; Wright, Industrial arbitration and conciliation; Schulze-Gaevernitz, Social peace.
6. Women and child labor. Adams \& Sumner, Labor problems; 19-67; Smart, Studies in economics, 105-37.

## 5. Profits.

a. Various definitions and meanings.
b. Deductions necessary in order to determine profit.
(I) Explain wages of superintendence, depreciation, insurance.
(2) Pure profit vs. monopoly gains and conjunctural gains.
c. The relation of profit to the marginal manager and the price of produce.
B., 416-23; Clow, 122-5; L., 222-35; E. \& W., 302-10; F., 282-91; W., 201-15; Clark, 128-33; Dist. of Wealth, 201-5, 290-1, 405, 410-12; Seager, 169-87; Seligman, 353-70; Readings, 543-63; Nich., I., 388-401; Mill, I., 495-508.

## EXERCISES.

1. From the value of the products of all manufactures, deduct cost of materials, miscellaneous expenses, wages, salaries, and interest on the capital. The remainder is what per cent of the capital? Census, 300. Note 2 tells why this remainder for 1890 is different from that of 1900.
2. Select industries which show how widely this remainder varies. Census, 302-21. Try to account for the variations.
3. Compute in the same way the profits of the great combinations. Census, 328,329 . Compare with other industries. Census, 302-21.

## 6. Summary of Distribution.

a. Logical division of the factors of production.
(I) The universal or non-privileged: (a) capital or (b) labor in positions subject to perfect competition by new capital and labor.
(2) The differential or privileged: (a) capital or (b) labor when enjoying partial or complete monopoly, and (c) natural resources.
$b$. The share of product going to the differential factors.
(I) ' Obeys the laws of rent.
(2) What is the "no-rent" labor and capital?
(3) Effect of inventions, social progress, etc. When do they contract and when do they extend the margin?
c. The share of the product going to the universal factors.
(I) Determined by the productiveness of the marginal increment.
(2) The law of substitution.
(3) Effects of progress.

Mar., 258-63, 330-70; M., II., 259-340; L. M., 465-517; Seager, 275-282, 299-301;. Clark, 195-242; Dist. of Wealth, 173-205, 273-98.

## PROBLEMS.

Each of the following plans has been urged as a remedy for our industrial ills, especially those connected with the distribution of wealth:

1. Co-operation: by producers; by consumers. Adams \& Sumner, Labor problems, 379-432; F., 295-301; Seager, 513-7; B., 443-5; W., 319-24; Potter, Co-operative movement in Great Britain; L., 350-58; E., 200-3; Seligman, 513-17; Cheyney, 295-307; M., II, 371-7.
2. Profit sharing: F., 292-5; Clark, 451-516; A. \& S., 333-78, 555-8; Seager, 511-13; B., 442-3; M., II, 353-7; Gilman, Profit sharing, Dividend to labor; Seligman, 510-12; Cheyney, 307-10.
3. Socialism: E. \& W., 312-25; B., 456-68; A., 23-4, 62-3; N., 512-25; E., 308-14; M., I, 261-77; II, 378-81; L. M., 157-71; Nich., I, 424-34; G., 410-29, 439-41; Fabian Essays; Ely, Rae, Brooks; Seager, 528-35; Seligman, 559-62; Readings, 668-795; Hunter, Socialists at work.


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