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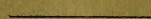
OCCUPATIONS IN THEIR RELATION
TO THE TARIFF



BY

EDWARD ATKINSON

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OCCUPATIONS IN THEIR RELATION TO THE TARIFF.

PERSONS OCCUPIED FOR GAIN IN THE UNITED STATES,
ACCORDING TO THE CENSUS OF 1900, CLASSIFIED AP-
PROXIMATELY ACCORDING TO THEIR RELATION TO DUTIES
UPON FOREIGN IMPORTS.

THE Census of 1900, when compared with the Census of 1880, discloses some important variations in the pursuits of the people. It shows a very large gain both in the aggregate and also in the relative numbers "occupied for gain" in the field, the forest, the furnace, and the factory alike. Some changes in the methods of enumeration are stated, which account in small part for these variations; but, after making allowance for these variations, the figures disclose a large reduction in the number of persons occupied in agriculture, coupled with a great increase in product. This reduction may surely be attributed to the more complete application of machinery to the cultivation of the soil and to much greater intelligence applied to farming, higher wages or earnings being the consequence or result of the increasing production and lessening cost.

The figures disclose a large proportionate increase in the number of persons, especially of women, occupied in trade and transportation. This change is due to the greater volume of products to be distributed. The figures of the number of shops for distribution also disclose an increasing number of small shops under individual management. The figures also disclose a moderate increase in the number of persons occupied in manufactures, in the mechanic arts, and in mining, coupled with a greater proportionate increase in the products, again showing a larger product per hand, higher wages and lessening cost. There are also a larger number of small workshops under individual management, in ratio to population, than ever before.

The proportion occupied in professional, personal, and do-

mestic service remains the same, within a very small fraction. The figures also disclose an increasing proportion of persons occupied in agriculture, manufactures, and mining, who depend upon exports for the disposal of the excess of their products after fully meeting domestic consumption, which excess, under existing conditions, can only be disposed of for export.

Whether by means of protection or in spite of it (now a purely academic question), have we not reached a point in our industrial condition when it may have become a more important problem how to keep the door open for our exports to foreign countries than how to close the door to foreign imports? The competition of low-priced or "pauper labor" no longer excites alarm, in view of the fact that foreign states are making an effort to meet the competition of the "cheap labor" of the United States.

It is now an accepted truth, axiom, or principle in economic science that, in all arts to which modern science, invention, and mechanism can be applied, the highest rates of wages or earnings are recovered or derived from the sale of products made at the lowest cost of labor computed by the unit of product, either by the bushel, the pound, the ton, or the yard.

In the subsequent analysis of the occupations of the working force of 1900, numbering a fraction over twenty-nine million (29,000,000) persons, the writer has found it impossible to set apart one million (1,000,000) persons whose present work would be seriously affected in an adverse way, even if free trade were suddenly adopted,—a change which no one proposes and which very few would advocate. In his own judgment there are not two-thirds that number of persons whose work would be adversely affected, but he has added another third lest he should be charged with a personal bias due to his own point of view.

A true method of revenue reform might be, first, to remove all duties on crude and partly-manufactured materials, with a corresponding reduction in rates on finished products in which they are component materials. Then, bearing in mind that under normal conditions of peace the revenue from liquors and tobacco, domestic and foreign, covers the cost of civil government, including army and navy on a peace basis, other

duties may be removed gradually year by year with the falling in of pensions.

With this introduction the subsequent tables are submitted for criticism and correction, if any errors can be found. The judgment of economic students will doubtless vary in some measure in setting apart the relative number of persons who now depend in part upon protective duties; but the writer doubts if any one whose sole purpose is to elicit the truth and the facts, of which these figures are symbols, can make any considerable change in the relative proportions submitted in the subsequent tables. When the facts become established, the dread of business depression predicted, if any complete revision of the duties upon imports is undertaken, may be wholly removed.

Can it be assumed that an abatement of the duties on fish, potatoes, coal, cord-wood, hay, scrap iron, and steel, or upon the iron ores of Canada and Cuba, can cause business depression among the consumers, who would thus be supplied with a greater abundance of crude materials and food than ever before? Can it be assumed that the removal of the taxes upon Canadian lumber or upon the beef cattle of Canada and Mexico will cause business depression among the farmers of the West, who would thus be supplied with a greater abundance at a lessened cost of building and fencing material and of stock cattle to be fattened and finished on their grain crops? Can it be assumed that, even if the total abatement of duties on sugar could be carried with due regard to present revenue, it would cause business depression? If free sugar were assured, the dairy farmers and fruit-growers would be enabled to make an immense increase in their product of condensed milk and of jellies, jams, and preserves. Can it be assumed that the free admission of wool would cause business depression, even if the duties on woollen and worsted fabrics were correspondingly lessened to a revenue basis?

In this compilation I have made use of the condensed table of occupations given in the introduction to Census Volume II. on Population, in which volume more elaborate statements may be found.

In the graphical table I have indicated in the shaded portions

| | | | | |
|---|----------|--|---|------------------|
| G | 1. | AGRICULTURE. | | |
| | | 10,381,765. | | |
| | <i>a</i> | Subject to foreign competition | 200,000 | |
| | | Free from foreign competition | 10,181,765 | |
| <p>.....</p> <p>Average proportion of the products of agriculture exported in recent years.</p> | | | | |
| 2. PROFESSIONAL SERVICES, 1,258,739. Free of foreign competition. | | | | |
| | 3. | DOMESTIC AND PERSONAL SERVICE. | | |
| | | 5,580,657. | | |
| | | Free from foreign competition. | | |
| | 4. | TRADES AND TRANSPORTATION. | | |
| | | 4,766,964. | | |
| | | Free from foreign competition. | | |
| II | | 5. MANUFACTURES, MECHANIC ARTS, AND MINING. | Subject to urgent foreign competition, II. | 400,000 |
| | | | Subject in part to urgent foreign competition, III. | 400,000 |
| III | | | Free of foreign competition | 6,285,992 |
| | | | Total | <u>7,085,992</u> |

the numbers subject to foreign competition even in part; in the white sections, the proportions wholly or substantially free. In the section of Agriculture, I have indicated above the dotted line the proportion devoted to home consumption, and below the dotted line the proportion exported on the average of recent years.

In one respect the figures of the imports and exports of this country do not mean the same thing as those of European countries. We export our surplus products: their imports consist of food, fibres, and fabrics necessary to their subsistence and to the conduct of their manufactures. Except when due to a short crop, as in the last year, a falling off in our exports of an increasing product, merely stands for an increased home consumption. An increased home consumption and an increasing import, especially of the materials used in domestic manufactures, which is so conspicuous at the present date, indicates progress, and not retrogression of our domestic industry and consumption.

The so-called balance of trade expressed in terms of money is fallacious and misleading. When we export our surplus which we cannot consume, and receive in exchange the articles of necessity, comfort, and luxury which we want, the larger the excess of imports over exports, the greater proof of our own profit.

In order to enable any one to decide what course to take in this matter, the following analysis of the occupations of the persons who were occupied for gain in the census year are now presented. This census is the most complete ever taken. The same enumerators who counted the population also made the classification by occupations. It is stated that in each census many persons have classed themselves as laborers and are listed under the head of "Personal Service" who are occupied in farm labor during some part of each year. The same qualification was made by Superintendent Walker in 1880. This variation does not therefore affect the general conclusion.

Attention is first called to the general classification under the Census of 1900:—

| | |
|--|-----------------------------|
| Population | 76,303,387 |
| "Occupied for gain,"— <i>i.e.</i> , working for wages or profit in money : | |
| Males | 23,754,205 |
| Females | <u>5,319,912</u> 29,074,117 |

1 in each 2.61 of the whole number. In 1880 the proportion occupied for gain was 1 in each 2.93.

Occupations as classified in the census under general or collective titles :

| | |
|---|-----------------------------|
| Agricultural pursuits | 10,381,765 |
| Professional service | 1,258,739 |
| Domestic and personal service | 5,580,657 |
| Trade and transportation | 4,766,964 |
| Manufacturing and mechanical pursuits | 7,085,992 |
| Total | <u>29,074,117</u> |
| Males | 23,754,205 |
| Females | <u>5,319,912</u> 29,074,117 |

Each of these general classes must be subject to a second analysis, in order to separate those who are not exposed to competition from the import of products from other countries from those who are.

For this purpose three lists are submitted :—

I. Persons occupied for gain who would be free from the competition of an import from a foreign country (omitting Canada) if there were no duty on imports of any kind.

II. Persons occupied for gain of whom a very small number may be subject to foreign competition, but the price of whose product depends in large measure upon the demand for export; also including persons occupied for gain who are now subject to, but who would be practically free from, foreign competition if the materials of foreign origin which enter into their processes were free of duty.

III. Persons occupied for gain who would be subject to severe foreign competition if all duties on imports were suddenly removed.

(Canada is omitted because we now sell to Canada nearly double the value of products of agriculture, mines, and factories that we import from her.)

It is not held that these divisions have been or can be exactly made, but the variations are so small as to make the margin of error a negligible quantity.

In dealing with agriculture, I have put into Class III. of

persons subject to foreign competition such number of persons as would correspond to the relative valuation of products of the farm which may be imported, as compared with the valuation of the crops of which products of like kind cannot be imported in any quantity. Many of these crops depend on the export of our surplus in establishing the price of the whole.

In the census of Agriculture the total value of all farm products at the farms is computed at \$4,739,118,752, divided among 5,739,657 farms, at an average of \$826 per farm. Reasons are given why this is a slight underestimate, and that the value of all farm products exceeds \$5,000,000,000. The number of farm products which may be exposed to the competition of an import of like kind is very small. The special crops are:—

| | | |
|--------------------|------------|---------------|
| Rice | valuation, | \$7,891,613 |
| Flaxseed | “ | 19,624,901 |
| Tobacco | “ | 56,993,003 |
| Hops | “ | 7,271,230 |
| Sugar | “ | 24,584,459 |
| Wool | “ | 45,723,739 |
| Mohair | “ | 267,864 |
| | | <hr/> |
| | | \$162,356,809 |

To these may be added hides and skins, a few fruits and nuts, and some other small items. A small quantity of cotton is imported from Egypt; but it is for special use, and supplements rather than competes with American cotton.

Adding these items, we reach about \$200,000,000 worth, subject to foreign competition, or only 4 per cent. of the whole valuation, while \$4,800,000 worth rests upon the export of the surplus to fix the price of the whole.

But, even in respect to this \$200,000,000 worth, not one-half would be seriously affected by an abatement of duties.

Tobacco must be taken out, because it will always be a prime source of revenue both by excise and customs taxes.

Domestic wool has always been in quickest demand, and has brought the highest relative price, when duties have been lessened or wholly abated after a short period of adjustment to new conditions, the reason being that the manufacturers

must have free wool in order to compete with foreign manufacturers on even terms.

No hand-cultivated rice can compete with the rice of Louisiana and Texas, where the rice grounds harden in the harvest season so as to permit the use of harvesting machinery.

No hops can compete with the hops of the North-west.

Dealing with persons occupied in agriculture, in the proportion of one-half the valuation which may be subjected to foreign competition, we get 200,000 persons only out of 10,000,000 subject to competition, leaving 9,800,000 free of foreign competition and in large measure dependent upon exports.

With this explanation I now submit the tabulation under the three heads previously named.

CLASS I.

Persons occupied for gain who are free from the competition of an import from a foreign country.

(We sell to Canada twice the quantity of the products of agriculture and of manufactures that we import. In ratio to numbers the Canadians are now our best foreign customers, and there is little opposition to the treaty of reciprocity.)

FREE OF FOREIGN COMPETITION.

IN AGRICULTURE OR LISTED UNDER THAT TITLE.

| | | |
|---|-----------|------------------|
| Farmers, planters, and overseers | 5,674,875 | |
| Agricultural laborers | 4,410,877 | |
| Gardeners, florists, and nurserymen | 61,788 | |
| Dairy men and women | 10,875 | |
| Other agricultural pursuits | 5,530 | 10,163,945 |
| Lumbermen and raftsmen | | 72,020 |
| Stock raisers, herders, and drovers | | 84,988 |
| Turpentine farmers and laborers | | 24,737 |
| Wood-choppers | | 36,075 |
| | | <hr/> 10,381,765 |
| Less the number subject to competition removed to Class III. | | 200,000 |
| | | <hr/> 10,181,765 |

ALSO FREE OF FOREIGN COMPETITION.

| | |
|--|-------------------|
| All persons in professional service | 1,258,739 |
| All persons in domestic and personal service | 5,580,657 |
| All persons in trade and transportation | 4,766,964 |
| | <u>21,788,125</u> |

FREE FROM FOREIGN COMPETITION IN MANUFACTURES AND THE
MECHANIC ARTS.

| | |
|---|------------------|
| Persons occupied in building trades | 1,212,526 |
| Oil wells and employees | 24,626 |
| Brick and tile makers (with a few exceptions) | 49,933 |
| Miners and quarrymen (with a few exceptions) | 563,866 |
| Bakers | 79,188 |
| Butchers | 113,956 |
| Confectioners (with a few exceptions) | 31,194 |
| Millers | 40,548 |
| Blacksmiths | 226,477 |
| Iron and steel workers (with a few exceptions) | 290,611 |
| Steam boiler makers | 33,046 |
| Stove, furnace, and grate manufacturers | 12,473 |
| Wheelwrights | 13,505 |
| Boot and shoe makers (with a few exceptions) | 208,912 |
| Leather curriers and tanners (with a few exceptions) | 42,671 |
| Bottlers and soda water manufacturers | 10,519 |
| Cabinet makers (with a few exceptions) | 35,619 |
| Coopers | 37,200 |
| Saw and planing mill operatives | 161,624 |
| Other wood workers | 111,273 |
| Paper box makers | 21,098 |
| Charcoal, coke and lime burners | 14,448 |
| Model and pattern makers | 15,073 |
| Rubber factory operatives (with a few exceptions) | 21,866 |
| Upholsterers | 30,821 |
| Small miscellaneous industries (with a few exceptions) | 471,300 |
| Printers, lithographers, and pressmen (with a few exceptions) | 155,147 |
| Fishermen and oystermen | 68,177 |
| Less the small number in deep sea fisheries transferred to No. III., numbering not over | 8,000 |
| Engineers and firemen | 223,495 |
| Less the proportion probably occupied in arts in Classes II. and III. in part or fully sub- ject to foreign competition | 23,495 |
| | <u>200,000</u> |
| | <u>4,289,697</u> |

CLASS II.

Persons occupied for gain who would be practically free from foreign competition if materials of foreign origin used in their processes were free of duty.

| | | | |
|--|---------|---------|------------------|
| Chemicals (other than oil wells and oils) | | 14,814 | |
| Glass workers (subject to a few exceptions) | | 49,998 | |
| Marble and stone cutters (subject to a few exceptions) | | 54,460 | |
| Potters (mostly making tiles, drain pipes, etc.) (subject to a few exceptions) | | 16,140 | |
| Butter and cheese (subject to a few exceptions) | | 19,241 | |
| Food preparations | " | 28,782 | |
| Machinists | " | 283,145 | |
| Tool and cutlery makers | " | 28,122 | |
| Wire workers | " | 18,487 | |
| Harness and saddle | " | 40,101 | |
| Trunk and leather case | " | 7,051 | |
| Brewers and maltsters | " | 20,962 | |
| Distillers and rectifiers | " | 3,144 | |
| Brass workers | " | 26,760 | |
| Clock and watch makers | " | 24,120 | |
| Gold and silver workers | " | 26,112 | |
| Tinplate and tinware | " | 70,505 | |
| Other metal workers | " | 56,602 | |
| Bookbinders | " | 30,278 | |
| Engravers | " | 11,151 | |
| Paper and pulp mills | " | 36,328 | |
| Textile industries | 567,065 | | |
| Less those occupied in the finer and fancy fabrics, say, removed to Class III. | 67,065 | 500,000 | |
| Tailors, seamstresses, milliners, shirt-makers, and makers of other clothing | 907,466 | | |
| Less those who are on the finest articles of fancy and fashion | 7,466 | 900,000 | |
| Engineers and firemen | | 23,495 | |
| Glove makers | | 12,271 | |
| Less removed to Class III. | | 2,271 | 10,000 |
| Broom and brush makers | | 10,220 | |
| Photographers (with a few exceptions) | | 26,941 | |
| Tobacco and cigars (with a few exceptions) | | 131,452 | |
| Manufacturers and officials | 243,082 | | |
| Less transferred to Class III. | 3,082 | 240,000 | |
| | | | <u>2,708,411</u> |

| | |
|---|-----------|
| Deducting for the few exceptions in fine and fancy cut and plate glass; Italian marble; fine and hand-decorated china; Stilton, Roquefort, and other fancy cheeses; Scotch marmalade and the like; worsted combers and other machinery in which there is much hand work; fancy cutlery; English saddles and harnesses of high cost; hand-made trunks, boots, and shoes; foreign beer and ale of special brands; fine wines and liquors; hand work in brass, copper, gold, and silver; a few watches; finely bound and printed books, engravings, and photographs; fancy paper; hand-made brushes, and a few other articles not specifically transferred to Class III., estimated in number at | 312,116 |
| There remain in Class II. free of competition | 2,396,295 |

CLASS III.

Subject to foreign competition.

| | |
|--|---------|
| In agriculture | 200,000 |
| In deep-sea fisheries | 8,000 |
| Textile operatives | 67,065 |
| Clothing | 7,466 |
| Glove makers | 2,271 |
| Manufacturers and officials | 3,082 |
| | <hr/> |
| | 287,884 |
| Add from tabulation of Classes I. and II. as per previous list of exportations | 312,116 |
| | <hr/> |
| Probable number subject to foreign competition | 600,000 |

That number comprises all who, in the judgment of the compiler, could be subject to foreign competition of an adverse or urgent kind if no duty, even for revenue, were maintained. A moderate duty for revenue purposes would incidentally protect them.

RECAPITULATION.

| | |
|---|------------------|
| Class I. Persons who cannot be subjected to foreign competition, but who pay their proportion of duties on imports and of the enhancement of prices brought into effect by protection | 26,077,822 |
| Class II. Persons not subject to foreign competition, whose industry in many branches would be promoted by the abatement of duties on materials of foreign origin used by them | 2,396,295 |
| Class III. Persons occupied in arts which would require a readjustment if all duties were suddenly removed, which no one proposes | 600,000 |
| Total | <hr/> 29,074,117 |

In dealing with Classes I. and II., I have used my own experience and judgment in putting into Class III. such proportion of persons occupied (especially in the textile arts) as may make the finer and fancy or hand-made fabrics which depend mainly on fashion and fancy for their sale.

I have also assumed the abatement of duties on wool, hides, drugs, dyestuffs, and chemicals, from which about \$15,000,000 of revenue are now derived. So long as these taxes exist, the manufactures of textile fabrics, boots, shoes, and leather goods, paper, and many other articles, are restricted and their exports are much lessened.

Under Class II., subject only in small part to foreign competition, are also listed glass, pottery, chemicals, tools, brewers, clocks, watches, gold and silver ware, tailors, milliners, photographers, and machinery. I have made allowance by exceptions in these arts to the best of my judgment.

In all these arts there is, and probably always will be, an import of the fine and fancy fabrics or of articles chosen for style or fashion, all of which are suitable subjects for revenue duties. These imports rather set a standard for domestic manufacturers to emulate than subject them to competition in the great bulk of their products, which are for the use of the millions rather than the millionaires. Tobacco will always be subject to revenue duties. Under existing conditions there is no justification for duties on machinery, pig-iron, copper, coal, ores, or other metals, which are the materials and tools of our domestic industry. We are exporting the highest types of metallurgy and machinery, while the tax on special machinery of other kinds which we import, and upon coal, ores, hay, potatoes, fish, beeves, and other necessities, are burdens upon industry of the most obnoxious kind.

If any one takes exception to this division, and now justifies the continuance of a tariff for "protection with incidental revenue," let him carry over as many as he honestly can from Classes I. and II. into Class III., giving reasons for such changes. I think it will prove impossible for any sincere student of the subject to designate one million persons, out of the twenty-nine million now occupied for gain, whose industry would be seriously or adversely affected, even if all duties on

foreign products of like kind were at once removed,—an act which no one proposes. If all duties on materials were removed, the number would be lessened far below a million.

On the other hand, there are proportionately in agriculture from 1,500,000 to 2,000,000 out of 10,000,000 who rest upon exports for the disposal of their surplus products. There are about as many persons occupied even in manufacturing and in the mechanic arts only, whose products are exported, as there are in all the same arts which are now or can be protected by duties on imports. Out of 29,000,000 persons occupied for gain, not over 3,000,000 to 4,000,000 are or can be directly affected by tariff legislation, either by the obstruction of exports or imports in consequence of duties on imports. 25,000,000 are engaged in arts necessary to the existence of society and which can neither be promoted nor retarded by duties on imports, except so far as the cost of their living is increased by an ill-adjusted or injudicious system of taxation.

I suggest to students a computation of occupations in the lines of this study by the use of the census data of occupations and by the use of the admirable monographs on all branches of manufacturing. The figures do not correspond exactly, because the numbers given in the schedules of manufacturing are of persons who were occupied in each art at the date of the census, while those given in the tables of occupations were of persons numbered according to their own declaration of their customary occupation. The margin of variation proves the close correspondence of the two sets of figures taken by two classes of census experts.

Separate studies of the arts of each State and each city would also disclose the relative importance of each art or industry in each section of the country, while the study of the manufactures of each city would disclose the assumed benefit of duties on imports and the advantages of the remission of duties upon materials of foreign origin which are used in domestic industry.



