CHAPTER V.
DESCRIPTION OF GENERAL TABLES.

Table 1.—Comparative Summary, by Specified Industries: 1880, 1890, and 1900.—This table shows the total number of establishments, capital, wage-earners, materials, and products as reported for each specified industry in the United States at each of the last three censuses. In order to compare similar industries reported at the different censuses, the necessary changes and combinations have been made when possible, in the industries, names, and figures for each census. Therefore the totals for some of the industries at the census of 1900 will not agree with the totals for industries of the same names in the other tables. For example, the total for "shipbuilding" in this table, includes establishments classified as "ship and boat building, wooden," and "shipbuilding, iron and steel," as given in Tables 2, 4, 8, 9, and 11, and also in the tables for each state, given in Part II, and the special report on "shipbuilding" in Part III. "Slaughtering and meat packing, not including retail butchering," includes establishments classified in the other tables as "sausage," "slaughtering and meat packing, wholesale," and "slaughtering, wholesale, not including meat packing."

A comparison similar to that shown in Table 1 for the industries of the country as a whole, is made in the reports for the respective states in Part II, for the leading industries of each state; except that in the tables in Part II, a number of the separate classes which fall in the same general class of industry have been combined. For instance, the manufactures of cotton goods, hosiery and knit goods, woolen goods, and other subdivisions of textiles have been combined so as to show the totals for textile manufacture as reported at the censuses of 1890 and 1900. Therefore, if it is desired to ascertain the increase in the principal industries in each state, reference should be made to the tables in Part II. In considering the figures given in Table 1 and in the tables for the different states in Part II, reference should be made to the remarks concerning comparisons on pages lixi to lxii of this report.

Table 2.—United States, by Specified Industries and Groups of Industries: 1900.—This table presents in greater detail than does Table 1, the statistics showing statistical totals for the United States in each specified industry. The industries are arranged in 15 groups, according to the character of their raw material, or the use of their products, as explained on page cxliii. The total for each group of industries is also shown, so that the totals for all industries of the same general character may be readily seen. The reports received from each establishment were classified according to the product of chief value. In many instances the by-products were entirely different from the principal product, and therefore the establishments shown for any industry can not be considered as engaged exclusively in that industry. Nor can the number of establishments shown for any single industry be accepted as including all the establishments engaged in that industry nor the products as including all goods of that particular kind; for example, an establishment may be engaged in canning fruits and vegetables, and also fish and oysters.

The value of the canned fruits and vegetables, however, may be slightly in excess of the products of fish and oysters, and in this event the report would be assigned to the class of "fruits and vegetables, canning and preserving." The combination of all such similar industries as "fruits and vegetables, canning and preserving," "oysters, canning and preserving," and "fish, canning and preserving," with other industries in which food products are produced, into the general group of "food and kindred products" results in showing a total for a group of industries which includes all principal and all by-products which can in any sense be accepted as identified with that group.

The totals for certain industries given in this table and also in Table 1 will not agree with the totals for the same industries as shown in the special reports in Parts III and IV. For example, the total for "iron and steel" is composed of the separate totals shown for "blast furnaces," "rolling mills," and "iron and steel, forges and bloomeries," in the special report on "iron and steel" in Part IV.

In some instances there are seeming discrepancies when amounts for the different items are compared with some of the industries shown in Parts I and II with the amounts given for apparently the same items in the special tables in Parts III and IV. This is due to the fact that the tables in Parts III and IV present in a detailed form the statistics characteristic of the industries treated. In order to show the totals of the same items for all industries, it was necessary to make combinations of a different character from those...
adopted in the special reports. For instance, in the special report on "lead, copper, and zinc, smelting and refining" (in Part IV, in that part relating to lead smelting and refining) the aggregate cost of the materials used and the aggregate value of the products for the United States as given in the detailed tables exceed the cost of materials and value of products shown in the comparative summary—Table 2—in the same report, and the corresponding totals given in the general tables in Parts I and II. The amount of this excess is $25,508,203, distributed among the following states: California, Colorado, Kansas, Nebraska, New Jersey, and Washington. This difference, as explained in the special report on lead smelting and refining, is caused by the duplication, in the detailed statistics for the industry, of the intermediate product between the ore and the refined metal.

There are several establishments in the industry that perform both branches of the work—smelting and refining. As the plan of the inquiry required, such establishments made a report of materials and products which included a certain amount of duplication—that is, they were required to report as the product of the smelter, the value of the base bullion smelted; this in turn was reported as the cost of the materials used in the refining branch of the establishment; and finally, the value of the refined metal was reported as the value of the product of the refinery. There was consequently a duplication in reports received from those establishments under both materials and products, of an amount equal to the value of the base bullion smelted, and this amount of duplication was included in the figures of the special report, but eliminated from the statistics presented in Parts I and II. As practically the entire product of the smelters, with the exception of those smelting nonferrous ore, ultimately reaches the refinery as its raw material, the extent of duplication in the aggregate cost of materials and value of products for both branches of the industry is much greater than is indicated by these figures; but the duplication in such cases is analogous to that which takes place when the product of one industry is used as the material of another; this subject is more fully discussed on page cxxxix, in the section on "gross and net value of products." It was, however, only when materials and products were twice included in the report for the same establishment that they were considered as duplicated in the statistics presented.

Again, in the special report on "lumber and timber products" (in Part III) the total for "live capital" in "mills" is given as $904,342,773. In the general tables (in Part I), the live capital for the same establishments, under the industry "lumber and timber products," is given as $233,156,819, the total in the general tables exceeding that in the special report by $80,844,041. This is due to the fact that in the special report the amounts of capital invested in "logging," in "timber camps," and in "mill plants," are shown separately. Two of the classes of investment assigned to "logging," namely, "forest products not delivered at mill" and "all other capital invested in logging," and two classes of investment belonging to "timber camps," namely, "live capital" and "all other items of investment in plant," amounting to $80,844,041, were considered as live capital in presenting the total capital in the form adopted for the general tables. Similar discrepancies appear in the cost of materials and the total miscellaneous expenses shown for this industry in the two sets of tables. The cost of materials in the general tables exceeds that in the special report by $71,628,447. In the special report this amount is shown as paid for the keep of animals, wages, and salaries for employees engaged in logging, cost of transportation of logs, and amount paid for contract logging; these expenses forming a part of the cost of materials. In the special report, the total amount paid for miscellaneous expenses appears as $30,539,096, while in the general tables it is given as $17,731,519. The difference, $12,807,577, represents the amount paid for "contract logging," which, being essentially "logging wages," is made in the general tables a factor in the total cost of materials.

The value of products shown in this and all the general tables includes the amount received for custom or contract work and repairing. The three exceptions to this rule are the "flouring and grit mill products," "copper smelting and refining," and "lead smelting and refining." In the case of flour and grit mills, the schedules required the amount received for custom or exchange grinding to be reported separately, and this amount is shown as a separate item in the special report in Part III, but the "total value of products" shown is the value of all flour and meal and by-products that passed through the mills during the census year, including the products represented by the amounts received for custom grinding. The amount received for custom grinding is shown in the special report in Part III to have been $16,481,155. In the smelting and refining industries, the amounts received for smelting on contract are shown separately in the special report in Part IV, but the "total value of products" shown was the value of all products, whether they were owned by the establishments reporting or by other persons. In the special report for "lumber and timber products" in Part III, the quantity and estimated value of the custom-sawn lumber are shown separately, the estimated value being $48,086,970. This value is not included in the "total value of products" shown in Table 2. The total value of products ($506,822,384), given in Table 2 consists of the value of the products owned by the establishments, and also of $10,682,770 received for custom sawing, $603,346 received for custom grinding, and $539,458 received for custom ginning, in cases where gristmills and cotton gins were operated in connection with sawmills.
The total value of products ($394,088,127), shown in Table 2 for "leather, tanned, curried, and finished" consists of the reported value of products owned by the establishments reporting, and also of $4,321,666 received for tanning and currying on contract. The special report in Part III shows the estimated value of the hides tanned and curried on contract to have been $19,249,391.

In many industries, such as "boots and shoes, custom work and repairing," and "clothing, women's dressmaking," the value of products consists entirely of the amounts received for custom work and repairing.

In so far as the figures for 1900 are concerned, the statistics presented in Table 1 are reproduced in Table 2. The tables in Part II, which show the statistics for each state by specified industries, are similar to Table 2, with the exception that Table 2 refers to the totals for the United States, while those in Part II relate to the industries for the respective states.

Table 3.—Manufactures, by States and Territories.—The totals for all industries in the United States and in each state and territory for 1900 are shown in this table. The items are the same as those given in Table 2, and the statistics are a duplication, in so far as the figures for 1900 are concerned, of the totals in Table 1, in Part II. Table 1, in Part II, is a comparative table giving the totals for each state and territory, as reported at each census, from 1850 to 1900, inclusive, and is a recapitulation of the comparative summary tables shown in the reports on the several states and territories. The grand totals for Tables 1, 2, and 3 for the census of 1900 are the same as far as they apply to the same items, each being a total for all industries in the United States. The items in Tables 3 and 3 cover all the questions in the schedule pertaining to manufactures, with the exception of certain special inquiries relating to materials and products, which are shown for selected industries in the special reports in Parts III and IV, and special questions concerning the character of ownership—whether by individuals, firms or limited partnerships, incorporated companies or cooperative and miscellaneous organizations—which are shown in Tables 7, 8, and 9. Tables 2, 3, and 4 show the total number of establishments reporting the use of motive power and the total quantity of power measured in tons of horsepower. Detailed statistics, which show the quantity of steam, water, and electric power, respectively, are given in Tables 10, 11, and 12.

Table 4.—Specified Industries by States and Territories: 1900.—The items given in this table for the industries by states and territories are the same as those shown in Table 2 for the industries, and Table 3, for the several states and territories, with the exception that it does not show the average number of wage-earners employed during each month of the year. The total for each industry corresponds with the total for the same industry in Table 2, which is a recapitulation of the totals of this table arranged by groups of industries. The table shows the territorial distribution of the establishments engaged in each of the different classes of industry at the census of 1900. As some industries were represented by only one or two establishments, they have been included in a group of "all other industries" at the end of the table, in order to avoid disclosing the operations of individual establishments.

Table 5.—Groups of Industries, by States and Territories: 1900.—In this table the statistics of the 15 industry groups, shown in Table 2, are presented in a condensed form for each state and territory. Group 1, "food and kindred products," for example, appears in each of the 51 states and territories. The table shows the number of establishments, capital invested, salaried officials, clerks, etc., wage-earners, miscellaneous expenses, materials, and products, for the United States and for each state and territory in which each group is reported.

Table 6.—States and Territories, by Groups of Industries: 1900.—This table shows the totals for each state and territory, by the industry groups. These totals should be considered in connection with the statistics in Part II, showing the statistics for each state by specified industries, the totals for each state being the same in the two tables. The arrangement of the industries, however, in Table 6 brings together all of those engaged in the use of similar materials, etc. It is a general grouping of the industries for each state, and is designed to show at a glance the predominating industries for each.

Table 7.—Establishments and Products, Arranged by Character of Organization, United States, by States: 1900.—This table shows the number of establishments in the United States and in each state and territory arranged according to the character of ownership, under the classes "individual," "firm or limited partnership," "incorporated company," "cooperative and miscellaneous," and also the value of the products for all establishments under each of the 4 different classes of ownership.

Table 8.—Establishments and Products, Arranged by Character of Organization, United States, by Specified Industries and Groups of Industries: 1900.—This table gives the totals of the different character of establishments for the United States in each specified industry, the industries being arranged in 15 groups as in Table 2. It shows the number of establishments and the value of products according to ownership of the establishments as in Table 7. In a number of instances, the presentation of the value of the products in Tables 7 and 8 would result in disclosing the operations of individual establishments, and in such instances the statistics for that item have been omitted. The amounts, however, are included in the totals for the United States and for each group of industries.

Table 9.—Establishments Arranged by Character of Organization, Specified Industries, by States and Territories: 1900.—The classification of the establishments in this table is the same as that in Tables 7 and 8, but the
arrangement of the table differs in that, in Table 9, the number of establishments for each state and territory is shown for the industries alphabetically arranged.

Tables 7, 8, 9 are all designed to present the character of organization of the establishments; Table 7 showing the totals for the United States for all industries by states and territories; Table 8 showing the totals for each specified industry and group of industries; and Table 9 showing the totals for each industry by states and territories. Tables 7 and 8 show the value of products as well as the number of establishments. The three tables should be considered in connection with each other. They indicate, first, the predominant kind of the ownership of the establishments in each state and territory; second, the character of the ownership of the establishments in each industry in the United States considered as a whole; and third, the character of the ownership of the establishments in each industry in each state and territory.

The value of the products of the establishments controlled by individuals represented 18.5 per cent of the total value for the group; by firms and limited partnerships, 17.3 per cent; by incorporated companies, 62.1 per cent; and by cooperative and miscellaneous organizations, 1.1 per cent. While the number of establishments controlled by incorporated companies was only 8.2 per cent, the value of their products represented 62.1 per cent, or more than half of the total value of products for the group. Table 9 is designed to show the character of the ownership of the establishments in each industry in each state.

Table 10.—Comparison of Products, Motive Power, and Classification by Number of Employees, by States and Territories: 1900.—This table shows, first, a comparison of the value of products for the census year and the year next preceding, and the number of establishments reporting this comparison. In preparing the figures for the comparison of products, only the establishments which reported the value of their products for both years were considered. Of the 512,254 establishments for all industries, 856,424, or 69.6 per cent, reported this comparison.

The comparison is not shown for "lumber and timber products" and "gas, illuminating and heating." The value of the products reported for the former industry represents the value of the merchant products and the amount received for custom work. In reporting the value of the products for the preceding business year, a number of establishments apparently included the actual value of the lumber represented by the custom work. As this vitiated the comparison, the industry was omitted from the tabulation. "Gas, illuminating and heating," was omitted because the schedule did not require the establishments to report the value of products for the year preceding the census year.

The table shows, in the second place, the number of establishments reporting the use of power, and the total horsepower used, classified according to the kind of power; and, in the third place, it shows the total number of establishments, classified according to the number of employees in each. In making this classification of the establishments, the industries are first arranged in two groups, viz., hand trades and manufactures proper, and the classification as to number of employees is made for each group.

Table 11.—Comparison of Products, Motive Power, and Classification by Number of Employees, United States, by Specified Industries and Groups of Industries: 1900.—The items shown in this table are similar to those shown in Table 10. In this table, however, the industries are arranged in 15 groups, and the totals are given for each group and each specified industry.

Table 12.—Comparison of Products, Motive Power, and Classification by Number of Employees, for Industries Showing 50,000 Horsepower and over, by States and Territories: 1900.—The items are again the same as those presented in Tables 10 and 11. The table shows statistically the territorial distribution of those 35 selected industries in which severally the motive power amounted to 50,000 horsepower or more. The object of the table is to show the states in which the largest quantity of power is reported in the industries considered. For instance, of the total horsepower shown for agricultural implements, 34,918, or 45.2 per cent, was reported by the 85 establishments in the state of Illinois.
VALUE OF PRODUCTS OF SELECTED INDUSTRIES: 1900

IRON AND STEEL PRODUCTS

COKE

CLAY PRODUCTS (BRICK, TILE, POTTERY, ETC.)

GLASS (INCLUDING GLASS CUTTING, STAINING, AND ORNAMENTING)

LEATHER (TANNED, CURRIED, AND FINISHED)

BOOTS AND SHOES (FACTORY PRODUCT)
VALUE OF PRODUCTS OF SELECTED INDUSTRIES: 1900

CHEMICALS AND ALLIED PRODUCTS

PETROLEUM REFINING

PAPER AND WOOD PULP

PRINTING AND PUBLISHING (BOOK AND JOB, MUSIC AND NEWSPAPERS)
VALUE OF PRODUCTS OF MANUFACTURES PER SQUARE MILE: 1900

- **Flour and Grist Mill**
- **Cheese, Butter and Condensed Milk**
- **Slaughtering and Meat Packing**
- **Liquors (Distilled), Malt and Vinous**
- **Clay Products (Brick and Tile, Pottery, etc.)**
- **Glass**

Legend:
- Less than $10 to a square mile
- $10 to 100 to a square mile
- $100 to 1000 to a square mile
- $1000 and over
VALUE OF PRODUCTS OF MANUFACTURES PER SQUARE MILE: 1900

TEXTILES

COTTON GOODS

WOOL

SILK AND SILK GOODS

HOSEERY AND KNIT GOODS

MEN'S AND WOMEN'S CLOTHING, FACTORY PRODUCT

Legend:

- Less than $10 to a square mile
- $10 to 100 to a square mile
- $100 to 1000 to a square mile
- $1000 and over
VALUE OF PRODUCTS OF MANUFACTURES PER SQUARE MILE: 1900

PETROLEUM REFINING

CHIMICALS AND ALLIED PRODUCTS

PAPER AND WOOD PULP

PRINTING AND PUBLISHING

LEATHER (TANNED, CURRIED AND FINISHED)

BOOTS AND SHOES (FACTORY PRODUCT)

Less than $10 to a square mile

$10 to 100 to a square mile

$100 to 1000 to a square mile

$1000 and over