

Chapter I.—GENERAL EXPLANATIONS

This volume presents the statistics of the third Biennial Census of Manufactures, which covered industrial operations during the calendar year 1925.

1. Legal provision for biennial census.—Section 32 of the act providing for the Fourteenth Decennial Census authorizes and directs the collection and publication, for the years 1921, 1923, 1925, and 1927, and for every tenth year after each of those years, of statistics of the products of manufacturing industries. (The decennial censuses will cover the years 1929, 1939, etc. Detailed censuses of manufacturing industries were taken decennially prior to 1899 and quinquennially from 1899 to 1919.)

2. Area and period covered.—The canvass covered manufacturing operations in the 48 States and the District of Columbia during the calendar year 1925 or the business year which corresponded most nearly to that calendar year. The returns cover a year's operations except in the cases of establishments which began or discontinued manufacturing within the year. For such establishments reports were obtained, if possible, for the portions of the year during which they were in operation.

3. Scope of the census.—The census statistics are compiled primarily for the purpose of showing (1) the production of each important class or kind of manufactured commodities, and the increase or decrease therein; (2) the absolute and relative magnitude of the various manufacturing industries covered, and their growth or decline; and (3) the industrial importance of individual States and cities and their changes in rank. In addition, statistics are presented which throw light upon certain matters of economic and sociological importance, such as size of establishments, monthly employment of wage earners, and power equipment.

The statistical items in regard to which data were collected at the biennial census for 1925 were as follows: Numbers of proprietors and firm members, salaried officers and employees, and wage earners; amounts paid in salaries, in wages, and for contract work; cost of materials (including also the cost of fuel, electric power, mill supplies, and containers sold with products); value of products; and number and horsepower of prime movers. This information was obtained from all manufacturing establishments coming within the scope of the census. In addition, as explained in Chapter III under the head "Detailed statistics of products, materials, and equipment" (p. 18), data in regard to the quantities and the values of individual classes of products, and in some cases in regard to materials and equipment, were collected from establishments in the more important manufacturing industries.

Because of the necessity for economy, both in time and in expense, certain items of information obtained at the quinquennial censuses have been omitted at the biennial censuses, namely, those relating to capital, sex and age distribution of employees, and expenditures for rent and taxes. Data in regard to amount of coal consumed were collected and tabulated at the census for 1923, but not at the censuses for 1921 and 1925.

4. Revision of schedules.—In connection with the revision of the schedules to be used at this census, conferences were held with representatives of the National Association of Manufacturers; other important manufacturers' associations, civic organizations, and Government bureaus, and with various statistical and

manufacturing experts throughout the country; and correspondence was carried on with manufacturers' associations and individual manufacturers. In this manner much valuable advice in connection with the preparation of the schedules was obtained, and at the same time the widest publicity was given to the census.

In all, 87 special forms of schedules, covering 119 industries, were used at the census for 1925, as against only 78, covering only 87 industries, at the census for 1923. (See "Detailed statistics of products, materials, and equipment," p. 13.)

5. **The canvass.**—The collection of the data was begun in January, 1926, promptly after the close of the year covered by the inquiry, and by the end of June approximately 95 per cent of the schedules had been returned. So far as possible, the canvass was made by mail, with the result that approximately 75 per cent of the reports were collected by this method before the field agents entered on duty.

The field work was expedited and its cost reduced as a result of the cooperation of a large number of manufacturers' organizations, chambers of commerce, boards of trade, and similar organizations, and of trade publications. In all, 488 industrial organizations and 695 local chambers of commerce, boards of trade, etc., assisted in the canvass. Manufacturers' organizations supplied about 400 lists of manufacturers, covering numerous industries. In many industrially important cities the chambers of commerce took complete charge of the canvass.

The usual cooperative arrangements were made with the Bureau of Mines, of this department; with the Forest Service, of the Department of Agriculture; and with the Department of Labor and Industries of Massachusetts.

6. **Publication of the statistics.**—Preliminary summary reports, subject to correction, were issued as press announcements, each relating to a particular industry or group of industries. In all, 254 such press summaries, covering nearly all the industries embraced in the census classification (see "Classification of industries," p. 17), were given out during a period of approximately 12 months beginning May 11, 1926, and ending May 16, 1927. On April 15, 1927, a preliminary summary report giving combined and separate figures for all manufacturing industries was issued. Thus the most important of the statistics were made public with a minimum of delay.

The next publication of statistics was made through the medium of printed reports, in pamphlet form, 59 in number. Of these reports, 55 presented complete and detailed statistics for particular industries or small groups of related industries, and 4 contained statistics of a general character relating to all industries. The contents of all these reports, together with some additional matter, have been assembled in this volume.

7. **Statistics for earlier census years.**—In this report the presentation of comparative statistics for earlier census years, except those for all industries combined (Chapter II), has been restricted, as a general rule, to the years 1923, 1921, 1919, and 1914. This restriction has been made partly for the sake of economy in space and partly because the statistics for years prior to 1914 are not, in all cases, wholly comparable with those for the more recent years.

In comparing the statistics for 1923 and 1925 with those for preceding census years, it should be remembered that 1919 and 1921 were not normal years, the former having been characterized by unusual industrial activity and the latter by industrial depression, and that the statistics for salaries, wages, value of products, and other monetary items are not comparable as between 1914 and subsequent years because of the reduction in the purchasing power of the dollar. (See "Production as measured by physical volume," p. 13.)

8. **Adjustments in figures for earlier years.**—It is sometimes necessary, for various reasons but chiefly because of changes in census classifications, to make adjustments in the figures for earlier census years. When such adjustments are of considerable magnitude, they are explained in footnotes; but when they are insignificant and do not materially affect the comparability of the statistics, no specific reference to them is made in the present report.

9. **The factory system.**—The censuses for 1904 and subsequent years have been taken in conformity with the provision of law (act approved March 6, 1902, and subsequent census laws) directing that the canvass "shall * * * be confined to manufacturing establishments conducted under what is known as the factory system, exclusive of the so-called neighborhood, household, and hand industries."

The term "manufacturing," as used by the Census Bureau, denotes the conversion of raw or partly manufactured materials into finished or partly finished products, usually through the use of machinery operated on a factory basis. Operations which do not alter the character of the substances handled, such as mixing or blending coffees and teas, packing fresh foodstuffs, fruits, etc., without processing, and the activities of milk-receiving stations, are not treated, for census purposes, as manufacturing. A few industries which do not conform strictly to the definition given are, however, covered by the census. For example, publishing, although not a manufacturing industry in itself, is so intimately related to printing that statistics compiled for the latter industry and not covering publishing operations would be incomplete and unsatisfactory.

In compliance with the provision of law cited above, the following classes of establishments are excluded from the canvass:

(a) Establishments which were idle during the entire year or reported products valued at less than \$5,000. (See "Limitation of statistics to establishments reporting products valued at \$5,000 or more," below.)

(b) Establishments engaged principally in the performance of work for individual customers, such as custom tailor shops, dressmaking and millinery shops, and repair shops. (This does not apply to large establishments manufacturing to fill special orders.)

(c) Establishments engaged in the building industries, other than those manufacturing building materials for the general trade.

(d) Establishments engaged in the so-called neighborhood industries and hand trades, in which little or no power machinery is used, such as automobile repairing, blacksmithing, harness making, tinsmithing, etc.

(e) Cotton ginneries.

(f) Small grain mills and sawmills engaged exclusively in custom grinding or custom sawing.

(g) Wholesale and retail stores which incidentally manufacture on a small scale, particularly where it was impossible to obtain separate data for the manufacturing operations.

(h) Educational, eleemosynary, and penal institutions engaged in manufacturing.

Most of the establishments of classes *c* and *d* also fall in class *b*, their work being done mainly to individual order.

10. **Limitation of statistics to establishments reporting products valued at \$5,000 or more.**—At the biennial censuses, in order to reduce the cost of the work and to facilitate the compilation of the statistics, no data (except in regard to wage earners and products, for 1921, and in regard to products only, for 1923 and 1925) were collected from establishments whose output was valued at less than \$5,000. At the quinquennial censuses, however, data on all subjects covered by the census were collected from all establishments with products valued at \$500 or more. This change in the minimum value-of-products limit, which resulted in a 21.6 per cent reduction in the number of establishments in regard to which general and detailed statistics were compiled at the census for 1921, did not otherwise materially impair the comparability of the biennial and quinquennial figures, since more than 99 per cent of the total wage earners and of the total value of products were reported by the establishments having

products valued at \$5,000 or more. (The data—covering products only—collected from establishments reporting products valued at less than \$5,000 were not tabulated at the censuses for 1923 and 1925.)

11. The establishment.—As a rule, the term "establishment" signifies a single plant or factory. In some cases, however, it refers to two or more plants operated under a common ownership and located in the same city, or in the same State but in different municipalities or unincorporated places having fewer than 10,000 inhabitants. On the other hand, separate reports are occasionally obtained for different industries carried on in the same plant, in which event a single plant is counted as two or more establishments.

12. Classification by industries.—Each establishment as a whole (a single plant being counted as two or more establishments in certain cases, as explained in the preceding paragraph) is assigned, on the basis of its products of chief value, to some one industry. The products reported for a given industry thus, on the one hand, include minor products different from those covered by the industry designation, and, on the other hand, do not include the entire output of products normally belonging to the industry, because some of this class of commodities may be made in establishments in which they are not the products of chief value. In the case of every industry the value of the minor or secondary products not normally belonging to it, and that of commodities normally belonging to it but made as secondary products by establishments engaged primarily in other lines of manufacture, offset one another to a greater or less extent; and in most cases the total value of products as reported does not differ greatly from the value of the total output, in all industries, of the classes of products covered by the industry designation. (See "Assignment of establishments to industries," p. 17.)

13. Persons engaged.—Under this head three classes are distinguished: (1) Proprietors and members of firms; (2) salaried officers (presidents, vice presidents, secretaries, treasurers, managers, superintendents, etc.), clerks, and all other salaried employees; (3) wage earners, including pieceworkers. (See Chap. IV, p. 1193.)

14. Power equipment.—Data in regard to number and horsepower of prime movers have been collected at the decennial and quinquennial censuses of manufactures since and including that for 1869, and at the biennial censuses for 1923 and 1925, but no such data were called for on the schedule for 1921. At the census for 1925, for the first time, data in regard to the number and the capacity of electric generators were also collected and tabulated. The total "primary power," as shown in the census reports, includes the power of electric motors driven by purchased current, but does not include that of electric motors driven by current generated in the same establishment. Thus the total includes, without duplication, the rated horsepower of all engines, motors, etc., which serve as primary power machines in the establishments reporting; and the detailed power tables for individual industries in Chapter III, the table giving detailed power statistics by geographic divisions and States (p. 1236), and that giving detailed power statistics by industry groups and industries (p. 1238) show also the number and the horsepower of electric motors driven by current generated in the same establishments.

The horsepower figures for 1919 and 1914 as given in the power tables differ slightly from those published in the reports for those years, for the reason that the statistics as originally published included data for purchased power other than electric, whereas the statistics for 1923 and 1925 do not include such data. The amount of purchased power other than electric is insignificant. It constituted only about 1 per cent of the total purchased power and about one-third of 1 per cent of the total primary power in 1919, and the corresponding proportions for 1925 are probably still smaller.

It has been found that some manufacturers misinterpreted the inquiry in regard to electric generators and included in their reports data for motor generators. Where it was evident that this was the case the figures were corrected by correspondence, but it is probable that the inclusion of figures for motor generators was not discovered in all cases, and that consequently the statistics for electric generators include data for an indeterminate but comparatively small number of motor generators.

In making use of the horsepower statistics it should be borne in mind that they represent the total *rated horsepower capacity* of engines, motors, and other prime movers, and that the amount of power in actual daily use was considerably smaller.

15. Capital (amount actually invested).—No data as to capital have been collected at the biennial censuses and consequently no capital statistics are shown for years subsequent to 1919. Capital statistics for 1919 and 1914 are given in the table on page 15. In some cases the capitalization of a manufacturing enterprise can not be segregated from that of commercial and other enterprises carried on by the same establishments. In many cases where manufacturing plants are rented it is impossible for the manufacturers to report the valuation of the property and equipment used in their operations. For these and other reasons it is impracticable to obtain from many manufacturers either accurate data or trustworthy estimates of the amount of capital invested, and therefore the census statistics formerly reported under this head and appearing in the table on page 15 must be regarded as rough approximations only.

16. Salaries and wages.—These items represent, respectively, the total compensation of salaried officers and employees and the total compensation of wage earners (including those employed on a piece-price basis). The income derived by proprietors and firm members from the manufacturing industries in which they are engaged is not, of course, in the form of either salaries or wages and therefore is not included in the figures for these items. (See Chapter IV, p. 1193.)

17. Contract work.—The term "contract work"—which does not necessarily imply the existence of a formal contract—is applied to work done outside the establishment reporting, on materials furnished by it. It may be done either by another manufacturing establishment or by persons working at home. Payments made for such work appear under the head "Paid for contract work"; payments received are included in "Value of products." Contract work is most common in the clothing industries, and in a few others, such as the manufacture of gloves, some contract work is done; but in the great majority of the manufacturing industries the payments for such work are very small in comparison with the total value of products, and it is probable that in some cases they are not accurately reported. For all industries combined the amount paid for contract work in 1925 was equal to only 1 per cent of the total value of products.

18. Cost of materials.—The statistics under this head relate to the materials used during the year, which may be more or less than those purchased during the year. The term "materials" covers fuel, purchased power and heat, mill supplies, and containers sold with products, as well as materials which actually enter into the products.

19. Value of products.—The amounts reported under this head represent the selling value, at the factory, of all products manufactured during the year, whether sold or not. In the case of establishments performing work under contract (see "Contract work," above) the amounts received for such work are reported in lieu of value of products.

Some manufacturers sell their products at prices which include freight and other delivery charges, but these transportation charges are deducted wherever possible.

The repair shops of steam and electric railroads manufacture few if any products for sale, their work being done or their products manufactured solely or principally for the use and benefit of the railroads operating them. For these plants, therefore, the value reported usually represents the operating cost or the cost of production, as no market value can properly be assigned to the work or the products and as it is not customary for such establishments to make any allowance for profit.

Somewhat akin to the case of the railroad repair shops is that of establishments which make partly finished products, or containers and auxiliary articles, for the use of other manufacturing establishments under the same ownership. For example, a wood-pulp plant may make pulp for use in a paper factory under the same ownership. In such cases the "transfer value" assigned by the manufacturer is accepted as the value of the pulp. This transfer value is usually based on market prices or on the cost of manufacture, but sometimes it is purely arbitrary.

20. Value added by manufacture.—Manufacturing is a transformation of materials. The economic importance of the processes of manufacture must be judged, not by the quantity or the value of the products leaving the factories, but by the addition to the utility or to the money value of the materials. The value created by the manufacturing processes is in most cases substantially the difference between the cost of the materials (including fuel, mill supplies, etc., as explained under "Cost of materials") and the value of the products. In comparing manufacturing industries with one another this relation between the value of finished products and the cost of materials should be kept constantly in mind. The products of one industry may be valued at the same amount as those of another, but the one may have added several times as much value to the materials as the other, and may therefore have been of correspondingly greater economic importance.

For this reason statistics of "value added by manufacture," representing the difference between cost of materials and value of products, are presented. These statistics are especially valuable because they are almost entirely free from the duplication that appears in the total value of products. (See "Duplication in cost of materials and value of products," below.) They include a small amount of duplication due to the fact, already mentioned (see "Contract work"), that certain establishments perform contract work on materials owned by other establishments either in the same or in affiliated industries. Such establishments report the amount received for contract work in lieu of value of products, and where they are classified in the same industry as the establishments which produce the finished commodities, this results in duplication in the total value of products and therefore in the total value added by manufacture. The amount of this duplication is insignificant except in a few industries, particularly the manufacture of clothing.

21. Duplication in cost of materials and value of products.—In making use of the statistics for cost of materials and value of products it must be remembered that they include a large amount of duplication due to the use of the products of certain establishments as materials by others. This duplication occurs not only between different industries but between different establishments in the same industry. For example, in the slaughtering and meat-packing industry certain packing establishments purchase fresh meat from slaughter-houses for use as their material. The total value of products reported for the industry, therefore, includes the factory value of all finished products, and in addition includes the value of products which pass through further manufacturing processes in other establishments. The same is true on a much broader

scale as between different industries. To illustrate: Copper ingots made in the copper smelting and refining industry are sold to copper-rolling mills, which roll them into rods. The rods are sold to copper-wire mills, which draw them into wire. Wire made by these mills is sold to establishments in the "Electrical machinery, apparatus, and supplies" industry, which use it in the manufacture of ignition apparatus for internal-combustion engines. These establishments sell the ignition apparatus to manufacturers of automobile engines. The engines in turn are sold to automobile manufacturers, who install them in complete automobiles. The value of the automobiles as reported by the automobile manufacturers includes, of course, the value of the engines; similarly, the value of the engines includes the value of the ignition apparatus; and so on. Thus in the aggregate of the values of products reported by the copper smelters and refiners, the rod mills, the wire mills, the manufacturers of ignition apparatus, the engine manufacturers, and the automobile manufacturers, the value of the copper ingots is included six times, of the rods five times, of the wire four times, of the ignition apparatus three times, and of the engines twice; and corresponding duplications occur in the aggregate cost of materials. As a result of this large but indeterminable amount of duplication, the aggregate value of the products of all manufacturing establishments is much in excess of the aggregate value of manufactured products in the form in which they reach the ultimate consumer.

A small amount of duplication also results from the inclusion of receipts from contract work in the value of products. The amount of this duplication is, however, insignificant except in a few industries, particularly the manufacture of clothing. (See "Contract work," p. 7, and "Value added by manufacture," p. 8.)

22. Effect of changes in prices.—Between 1914 and 1919 the prices of most manufactured products increased greatly; during the following two-year period the prices of many commodities declined somewhat; and both increases and decreases, the former predominating, took place between 1921 and 1925. These changes should be taken into account in comparing the figures for cost of materials, value of products, and value added by manufacture for different census years. (See "Production as measured by physical volume," p. 13.)

23. Quantity of products and number of wage earners as standards of measurement.—The best standard by which to measure growth or decline in manufacturing industry is found in the quantities (or numbers) of individual classes of products, where these are given for different census years in such form as to be truly comparable. Another fairly reliable standard of measurement is afforded by the average number of wage earners; but it must be remembered that, on the one hand, in some industries mechanical processes are displacing hand labor to such an extent as to make possible a marked increase in production with no increase in the number of wage earners, while, on the other hand, the average length of the working day has been considerably reduced since 1914 (the earliest year for which figures are given in this report).

24. Cost of manufacture and profits.—The census data do not show the entire cost of manufacture and consequently can not be used for the calculation of profits. At both the quinquennial and the biennial censuses no account has been taken of depreciation or of interest, insurance, advertising, and other sundry expenses, and at the biennial censuses no data have been collected for rent and taxes. The sum of the reported expenses—salary and wage payments, cost of materials, and amount paid for contract work (and for decennial and quinquennial census years; rent and taxes)—must not, therefore, be taken as representing the total cost of production, and thus can not be used in comparison with the value of products to determine profit or loss.

25. Relation of wages to cost of materials and value of products.—In making comparisons between the wages paid in manufacturing industries and the cost

of materials and value of products of these industries, it should be borne in mind that the materials and products items contain large but indeterminable amounts of duplication (see "Duplication in cost of materials and value of products," p. 8), whereas the wage figures are free from duplication. Moreover, the cost of materials, excluding the duplication therein, is made up in considerable part of wages paid to wage earners in nonmanufacturing industries, such as agriculture, mining, fisheries, and transportation. For example: The iron ore used as a material in blast furnaces comes from iron mines and is transported to the furnaces by rail or water. The cost of the ore at the mines consists in part of the miners' wages, and the cost of the ore delivered at the furnace includes also the wages paid to the employees of the navigation or railroad company which transported it. The pig iron produced by the blast furnaces is used as a material by steel mills. Thus the cost of this material is made up in part of the miners' wages, in part of the wages paid to the transportation employees, in part of the wages of the blast-furnace employees, and in part of other items. The wages paid the blast-furnace employees are included in the total wages shown by the manufactures reports, but the miners' wages and the wages of the transportation employees are not included. Moreover, the cost of the pig iron used as a material by the steel mills includes the cost of the iron ore, fuel, and supplies used by the blast furnaces. If the steel mill and the blast furnace were treated as a single establishment, this duplication would be eliminated and the cost of materials would be that of the iron ore, etc., used by the blast furnace, and the corresponding duplication in value of products would also disappear. If the mine, the transportation company, the blast furnace, and the steel mill were operated under a single ownership and treated as a single establishment, the cost of materials would be reduced to the value of the ore in the ground and the cost of fuel and supplies; the value of products would be a net amount representing the output of the steel mill alone instead of being made up of the value of the steel-mill products plus the value of the blast-furnace products; and the wage item would cover all wages instead of being limited to the wages paid in the blast furnace and the steel mill.

Thus, if the aggregate amount of wages paid both in manufacturing industries and in those industries which supply the raw materials used by manufacturers were compared with the net cost of materials or the net value of manufactured products in the form in which they reach the ultimate consumer, the ratio of the first amount to the second or the third would be much larger than that of the wages paid in manufacturing industries alone to the gross cost of materials or the gross value of manufactured products.

26. State and city statistics.—The Bureau of the Census is prohibited by law from publishing any statistics which might disclose operations of individual establishments. For this reason it is necessary in the compilation of the State statistics for a particular industry to include in "All other States" certain States which are more important than some of those for which separate figures are given. For example: The "All other States" shown in Table 6, on p. 386, for the worsted-goods industry includes several which reported values of products larger than that for Wisconsin, \$680,310. Similarly, the "All other industries" items in General Tables III and IV (beginning on pp. 1302 and 1381, respectively) cover certain industries which are more important than some of those for which separate figures are given.

In general, separate statistics are given for each State or for each industry, as the case may be, which is represented by three or more establishments. In some cases, however, a single establishment produces a very large proportion of the combined output of three or more establishments in a given industry in a particular State or city, and in such cases separate figures can not be given for

the State in the industry table nor for the industry in the State or city table without a substantial disclosure of the production of the leading establishment.

At the biennial censuses the presentation of city statistics by industries has been restricted to those cities whose population on July 1 of the census year was estimated at 100,000 or more. Combined summary statistics for all industries for cities having 10,000 to 100,000 inhabitants are given for each State in Table V (pp. 1453 to 1469). Statistics by industries for a number of cities having from 50,000 to 100,000 inhabitants have been supplied to local chambers of commerce, boards of trade, and similar organizations which cooperated in making the canvass, but these statistics have not been published directly by the Bureau of the Census. All city statistics refer only to establishments actually located within the boundaries of the respective cities.

27. Omission of statistics for "Coffee and spice, roasting and grinding" industry.—The United States totals for 1923 and prior years, and the geographic-division and State figures for 1923 and 1921, as presented in this report, differ from those heretofore published because of the exclusion here and the inclusion in the previous reports of data for the "Coffee and spice, roasting and grinding" industry, for which no statistics were tabulated at the census for 1925. The figures for coffee roasting and spice grinding have been subtracted from those for 1923 and 1921 for geographic divisions and States in Table I, but not from the division and State figures for 1919 and 1914. The coffee and spice data have also been subtracted from the 1923 figures in Tables III, IV, and V, for those States and those cities for which figures for this industry were separately shown. In the cases, however, of those States and cities for which statistics for the coffee-roasting and spice-grinding industry were not shown separately but were included with those for "All other industries," the 1923 and 1921 figures in Table I and the 1923 figures in Tables III, IV, and V have been left without change.

28. Power laundries and dyeing and cleaning establishments.—Power laundries and dyeing and cleaning establishments are not classified as manufacturing plants, but their consumption of fuel and labor makes them important factors in the industrial system. Prior to 1925, statistics for power laundries were collected at the censuses for 1909, 1914, and 1919, but those for dyeing and cleaning establishments were collected only once, at the census for 1919. The reports on the power-laundry and dyeing and cleaning industries are presented in Chapter VII, but no statistics in regard to these industries are included with those for manufacturing industries proper.

29. Special inquiries.—In order to meet the demand for data in regard to production, sales, stocks, consumption, etc., of certain commodities or classes of commodities, the bureau makes special inquiries on the following subjects:

BIENNIAL
Ties and poles—purchases.
Vegetable materials, used by tanners—consumption.

ANNUAL
Canned vegetables—pack of peas, beans, corn, spinach, and tomatoes.
Clay products and nonclay refractories—production and stocks, by classes of products and by States; and Sand-lime brick—production and stocks.
Farm equipment—production and manufacturers' sales, by classes of products.
Forest products:
Cork products—sales by manufacturers.
Lumber, lath, and shingles—production, by States and (lumber only) by species.
Lumber—cut of large mills, by States.
Wood pulp—production, by States and by processes, and consumption of pulp wood, by States and by species.

ANNUAL—continued
Insecticides—production, stocks, and sales by manufacturers, by container sizes.
Leather—production, by classes.
Lighting equipment—production, in values, by classes of products.
Sand-lime brick, see Clay products, etc.

SEMIANNUAL
Boots and shoes, other than rubber—production, by States and principal classes.
Canned vegetables—stocks of peas, corn, and tomatoes.
Paints and varnishes—production and sales by manufacturers, by classes of products.
Sulphuric acid and acid phosphates—production, consumption, manufacturers' sales, and stocks of acid phosphates; and production, purchases, consumption, sales, and stocks of sulphuric acid in fertilizer plants.

QUARTERLY

Electric locomotives, mining and industrial—shipments, by classes.
 Electrical goods—new orders booked by manufacturers.
 Fats and oils, animal and vegetable—production, factory consumption, stocks, exports, and imports, by classes; consumption, stocks, and imports of raw materials, by classes.
 Gelatin, edible—production and stocks.
 Glues of animal origin—production and stocks.
 Tobacco (leaf)—stocks held by manufacturers and dealers, by types.
 Wheat and wheat flour—stocks held by flour mills.
 Wool—stocks held by manufacturers and dealers, by conditions, classes, grades, and markets.

MONTHLY

Boots and shoes, other than rubber—production, by classes.
 Box board—production, activity, new orders, unfilled orders, shipments, and stocks.
 Clay products:
 Porcelain plumbing fixtures—new orders, shipments, unfilled orders, and stocks, by grades and classes of products.
 Terra cotta, architectural—new orders, by districts.
 Tile, floor and wall—production, shipments, and stocks, by classes of products.
 Vitreous-china plumbing fixtures—new orders, shipments, unfilled orders, and stocks, by grades and by classes of products.
 Iron and steel:
 Boilers, steel—new orders, by classes of installation.
 Enameled sanitary ware—new orders, shipments, and unfilled orders, by classes of products.
 Fabricated steel plate—new orders, by classes of products.
 Fabricated structural steel—new orders and shipments.
 Malleable castings—production, shipments, and new orders.
 Steel barrels—production, shipments, stocks, and unfilled orders.
 Steel castings—production and new orders, by classes.
 Steel furniture—new orders, shipments, and unfilled orders, by classes.
 Leather:
 Bag, case, and strap, and upholstery leather—production and tanners' stocks, by classes of leather.
 Glove and garment leather—production and tanners' stocks, by classes.
 Gloves and mittens, leather—cut, by classes of products.
 Hides, skins, and leather—production (leather only) and stocks held by manufacturers and dealers, by classes.
 Raw stocks of hides and skins held by tanners.
 Sheep and lamb skins and cabretta skins—production and tanners' stocks, both raw and finished, by classes of leather.
 Sole, belting, and harness leather—production and tanners' stocks and (for harness leather) unfilled orders and shipments.

MONTHLY—continued

Leather—Continued.
 Upper leather (cattle, calf, and kip)—production and tanners' stocks, by classes of leather.
 Upper leather (goat and kid, cabretta, sheep and lamb, etc.)—production and tanners' stocks, by classes of leather.
 Machinery:
 Automobiles—production (factory sales) of passenger cars and trucks, for the United States and Canada.
 Locomotives, railroad—shipments and unfilled orders of manufacturers, by classes.
 Pumps and water systems, domestic—shipments, by classes.
 Stokers, mechanical—manufacturers' sales, by classes of installation.
 Trucks and tractors, electric, industrial—shipments, by classes.
 Water softeners, domestic—new orders, shipments, and stocks.
 Miscellaneous metal products:
 Babbitt metal—consumption.
 Fire-extinguishing equipment—shipments, by classes of products.
 Plumbing fixtures—wholesale prices, by classes and by price index.
 Sheet-metal ware, enameled—shipments, by classes.
 Sheet-metal ware, galvanized—production and shipments.
 Textiles:
 Cotton—consumption, stocks at mills and in public storage, and imports and exports.
 Cotton spinning—number and activity of spindles.
 Cottonseed—receipts, amounts crushed, and stocks.
 Cottonseed products—manufactured, shipped, and held at mills.
 Clothing, men's and boys'—cut, by classes of products.
 Clothing, work—cut, by kinds of material; shipments, and unfilled orders.
 Hosiery—production, by classes, shipments, stocks, new orders, and unfilled orders.
 Knit underwear—production, shipments, stocks, new orders, and unfilled orders.
 Pyroxylin-coated textiles—shipments and unfilled orders and pyroxylin spread.
 Wool—consumption by textile mills, by conditions, classes, and grades.
 Wool manufactures—activity of machinery.
 Wheat flour—production of flour and offal and grindings of wheat.
 Wood chemicals, crude and refined—production, shipments, and stocks of acetate of lime and methanol; refiners' consumption and stocks of crude methanol; and consumption and stocks of wood; for the United States and for Canada.
 Composite indexes—production, stocks, and unfilled orders, by industries.

SEMIMONTHLY

Cotton—ginnings, to specified dates (12 reports during the ginning season).

WEEKLY

Weekly business conditions (press summary).

30. Survey of Current Business.—This monthly publication provides, for the information of manufacturers and business men generally, a compilation of important current statistics on business and industry gathered from governmental, commercial, and private sources and covering about 1,700 basic commercial and industrial movements. It now reaches nearly 7,000 subscribers monthly, in addition to hundreds of newspapers, trade associations, and representatives of the United States Consular Service abroad. A brief semimonthly summary of the survey is also issued.