Chapter G. Minerals and Power (Series G 1–233)

Mining and Minerals: Series G 1–158

G 1–158. General note. All data for these series were provided by the Bureau of Mines of the United States Department of the Interior, with the exception of data shown for series **G 6–12.** The Bureau of Mines cites for principal reference two annual publications: *Mineral Resources of the United States*, published annually for the period 1882 to 1931; and *Minerals Yearbook*, published annually for the period 1932–33 to 1946. These volumes were prepared and issued by the United States Geological Survey from 1882 to 1923 and by the Bureau of Mines from 1924 to 1945.

In the instance of series **G 65–130**, the descriptive term "production" must be interpreted with caution. In early years, "production" was used loosely; later, it was superseded by a more precise statement of the means of measuring production, such as "shipments," "sales," or "sold or used by producers." Since only a limited number of series can be presented in this volume of historical statistics, that series has been selected, for each mineral, which provides reasonably comparable "production" data as far back in time as possible, and for which value data are also available. Also, the presentation of "production" data for early years and "shipments" or "sales" data for recent years does not mean necessarily that a "production" series is not available for recent periods. Instead, it usually means that the figures labelled "production" in early years are more comparable with the more recent "shipments" or "sales" data than they are with the modern "production" series, as such.

Value of Minerals and Production Indexes (G 1–12)

G 1–5. Value of mineral products of the United States, 1880–1945. SOURCE: For general reference see general note above (series **G 1–158**); see also *Minerals Yearbook*, 1945, "Statistical Summary of Mineral Production," p. 33. Total values represent summarizations of data given in commodity chapters of *Mineral Resources of the United States* and *Minerals Yearbook*. As far as is practicable, the value of minerals produced is expressed in their first marketable form or in the stage of production thought best to represent the mineral industry. Duplication has been eliminated wherever feasible. Because of the absence of major changes, data are considered comparable for all years. The source volumes should be consulted for discussion of minor changes and other detail.

G 6–8. Indexes of mineral production, 1919–1945. Base: 1935–1939 average = 100. SOURCE: Board of Governors of the Federal Reserve System. For 1919–1942, see *Federal Reserve Index of Industrial Production*, October 1943, pp. 43–44 and 98–100; for 1943, see *Federal Reserve Bulletin*, April 1944, p. 385; for 1944–1945, see *Federal Reserve Bulletin*, April 1946, p. 423. For a brief description of the method of constructing this index, see text for series **J 30–48.**

G 9–12. Indexes of physical output in mining, 1899–1939. Base: 1899 = 100. SOURCE: Barger, Harold, and Schurr, Sam H., *The Mining Industries, 1899–1939: A Study of Output, Employment and Productivity*, National Bureau of Economic Research, New York, 1944, p. 14. Indexes were constructed by combining data on physical output "of as many minerals as possible," with values as weights. For the period since 1919, the indexes cover the output of more than 99 percent of all minerals for which value data are available. Data do not include smelting and refining of metals, the coking of coal, the refining of crude oil, the production of cement, the calcining of gypsum, and the cutting of dimension stone.

Fuels (G 13–64)

G 13–18. Bituminous and anthracite coal production and value, 1807–1945. SOURCE: See detailed listings below. See also series **G 154–155** which give total production, bituminous and anthracite combined, and tonnage per man-hour.

G 13–15. Bituminous coal: Production, 1807–1945; value, 1890–1945. SOURCE: See general note, series **G 1–158.** For production data from 1807–20 to 1889, see *Mineral Resources of the United States*, 1923, part II, table 22, p. 549. For production and value data from 1890 to 1945, see *Minerals Yearbook*, 1946, p. 286. Data for 1945 are preliminary and are derived from records of the Bureau of Mines.

Production figures include the small output of anthracite and semianthracite produced outside of Pennsylvania, and the production of lignite; they exclude data from small mines having an output of less than 1,000 tons per year that sell their output by wagon or truck. In 1944, according to incomplete figures, there were 1,821 small mines producing less than 1,000 tons per year, with a total production of 756,307 net tons (see *Minerals Yearbook*, 1945, p. 906). Prior to 1890, for years other than census years, production figures were not compiled on the basis of direct returns from operators. The method of compiling figures during these prior years is described as follows on page 11 of *Mineral Resources*, 1883–1884: "The coal statistics of this volume have been drawn from various sources, including the reports of agents and correspondents of this office, the transportation records of the railroad companies, reports of State Mine Inspectors and of State Geological Surveys, etc." Since 1890 production figures have been compiled on the basis of detailed annual reports furnished by the producers. Data for a small percentage of the output, consisting chiefly of that of small mines, are obtained from the records of the State Mine Departments or from railroad carloadings.

Value data represent dollars received or charged for coal f.o.b. the mines. The value of coal not sold but used by the producer has been estimated at average prices that might have been received if sold commercially. Value figures for 1890 to 1936 inclusive, and 1939, exclude selling expense. Figures for other years include selling expense.

G 16–18. Anthracite coal: Production, 1807–1945; value, 1890–1945. SOURCE: See general note, series **G 1–158.** For production data from 1807–20 to 1889, see *Mineral Resources of the United States*, 1923, part II, table 22, p. 545. For production, and value data from 1890 to 1945, see *Minerals Yearbook*, 1945, pp. 947, 948.

Pennsylvania anthracite includes all nonbituminous coal mined in Pennsylvania, including that from deep mines, strip pits, and culm banks, and river or creek coal recovered from the streams draining the anthracite fields. Coal purchased by legitimate operators from "bootleg" mines has been included since 1941. Also, for purposes of historical comparison, the statistics include the output of the Bernice Basin in Sullivan County, Pa., although coal of this Basin has been officially classified as semianthracite according to the American Society For Testing Materials Tentative Standard. Anthracite statistics are prepared from an annual canvass by mail of all known legitimate anthracite operations that are active producers. More than 95 percent of the tonnage is reported directly, and the remainder is collected by personal visits or from reliable collateral evidence.

G 19–32. Bituminous coal and lignite mining, 1890–1945. SOURCES: Bureau of Mines, *Minerals Yearbook*, 1946, p. 286. Series **G 13a** comprises a segment of series **G 13** (bituminous production),

repeated here for convenience in reference. See also general note for series G 1–158, above.

G 19. Men employed, 1890–1945. SOURCE: See *Minerals Yearbook*, 1946, p. 286. Data represent average number of workers employed. Figures are reasonably comparable for the entire period, although slight variations have occurred in the wording of the questionnaire on employment sent to coal-mine operators.

G 20. Number of mines, 1895–1945. SOURCE: Same as for series G 19. Data include all mines producing 1,000 tons per year and over. For figures for small mines, based on incomplete information, see *Minerals Yearbook*, 1945, p. 906.

G 21–23. Calculated capacity, 1890–1945. SOURCE: Same as for series G 19. Potential annual output is derived by applying the average output per day worked to the number of "potential" work days. A total of 308 days represents the maximum number of work days; 280 "potential" days was suggested by the coal committee of the American Institute of Mining and Metallurgical Engineers; 261 days is the annual equivalent for the 5-day week.

G 24. Average number of days worked, 1890–1945. SOURCE: *Minerals Yearbook*, 1946, p. 287. These figures were obtained by dividing the total man-days by the number of men employed.

G 25–26. Average number of days lost on account of strikes, 1899–1945. SOURCE: Same as for series G 24. These figures were obtained by dividing the total man-days lost by the number of men employed, and by the number of men on strike.

G 27–28. Net tons per man, 1890–1945. SOURCE: Same as for series G 24. Net tons per man per day represents the total man-days divided by the total production. Net tons per man per year represents the total production divided by the number of men employed.

G 29–30. Percent of underground production: Cut by machines, 1891–1945; percent mechanically loaded, 1923–1945. SOURCE: Same as for series G 24. Percentages for production cut by machines for the years 1890 to 1913, inclusive, are of total production; a separation of strip mine and underground production is not available for those years.

G 31–32. Percent of total production mechanically cleaned, 1906–1945, and percent mined by stripping, 1914–1945. SOURCE: Same as for series G 24. For the years 1906 to 1926, inclusive, the percentages of underground production mechanically cleaned are exclusive of coal cleaned at central washeries operated by consumers; after 1926, when data became available on the tonnage cleaned by consumer-operated plants, the percentages include the total tons cleaned at the mines and at consumer-operated washeries.

G 33–42. Pennsylvania anthracite industry, 1890–1945. SOURCE: Bureau of Mines, *Minerals Yearbook*, 1945, pp 947–948. Also see series G 16–18. Series G 16a, shown here, comprises a segment of series G 16, repeated here for convenience in reference.

G 33–34. Foreign trade, 1890–1945. SOURCE: *Minerals Yearbook*, 1945, pp. 947–948. Data on exports and imports obtained from United States Department of Commerce. For figures for individual countries, and for years prior to 1890, see annual volumes of *Foreign Commerce and Navigation, Immigration, and Tonnage.* Canada is the largest anthracite export market.

G 35. Consumption, calculated, 1890–1945. SOURCE: Same as for series G 33–42. Figures on consumption prior to 1913 take no account of producers' stocks, there being no data available for this item.

G 36–37. Employment, 1890–1945. SOURCE: Same as for series G 33–42. Number of men employed includes workers from strip-pit and dredge operations. Men working in "bootleg" or illicit coal mining are not included. For "bootleg" employment estimates, 1941–1945, see *Minerals Yearbook*, 1945, p. 933.

G 38–39. Average tons per man, 1890–1945. SOURCE: Same as for series G 33–42. Output per man per day based on legitimate (as against "bootleg") production only.

G 40. Net tons cut by machines, 1911–1945. SOURCE: Same as for series G 33–42. Data were first collected on this item in 1911.

G 41. Net tons produced by stripping, 1915–1945. SOURCE: Same as for series G 33–42. Data were first collected on this item in 1915.

G 42. Net tons loaded mechanically underground, 1927–1945. SOURCE: Same as for series G 33–42. Data were first collected on this item in 1929; the figures for 1927 and 1928 were reported by the Department of Mines of the Commonwealth of Pennsylvania.

G 43–56. Coke industry, 1880–1945. SOURCE: *Minerals Yearbook*, 1945, pp. 968–969. Also see general note, series G 1–158. Coke production or coal carbonization is a process of modifying a crude raw fuel into special purpose fuels and extracting valuable coal chemical materials before they are destroyed in the burning. Data include only coke made by high-temperature carbonization of coal in byproduct and beehive ovens.

The principal application of coke is in the manufacture of pig iron. Usually about 70 percent of the total output of coke is consumed in blast furnaces and iron foundries, 20 percent for domestic heating, and 10 percent for other industrial purposes such as nonferrous smelting, manufacturing producer-gas and water-gas, chemical processes and other miscellaneous uses. However, these percentages are subject to wide variations depending on the demand for coke from the iron and steel industry.

The term "value" as applied to coke means the value at ovens. Over 61 percent of the byproduct coke now produced is made in ovens operated by corporations which mine the coal they use and operate blast furnaces that consume the bulk of the output of their ovens.

Value of tar in all byproducts (series G 56) for 1906 through 1917 represents value of tar "obtained and sold" and does not always include value of tar used by producer. Beginning with 1918, tar used by producer is specifically included. The value of breeze produced at byproduct plants is included for those years for which it was reported, namely 1916, 1917, and 1919–1945. For other byproducts, only value of those sold is included. Value of breeze produced at beehive plants is not included as it has usually been much less than a million dollars.

G 57–58. Petroleum production, 1859–1945. SOURCE: See general note, series G 1–158; see also annual volumes of *Minerals Yearbook* as follows: For data for 1859–1935, see 1937 volume, p. 1008; for 1936, see 1940 volume, p. 954; for 1937–1940, see 1941 volume, p. 1031; for 1941–1944, see 1945 volume, p. 1052; for 1945, see 1946 volume, p. 880. Petroleum data are obtained from monthly reports from pipe-line companies accounting for crude removed from leases and supplemented by data covering changes in crude stocks on leases and crude oil checked as fuel in production operations. In addition, a check is made of crude oil shipped from leases by tank car or truck. To determine the average value at the well, an annual canvass is made of the principal producers and pipe lines by States of origin.

G 59–64. Natural gas and natural gasoline, 1906–1945. SOURCE: See general note, series G 1–158, and detailed listings below.

G 59–61. Natural gas production, 1906–1945. SOURCE: See general note, series G 1–158; see also annual volumes of *Minerals Yearbook* as follows: For data for 1906–1935, see 1937 volume, p. 1062; for 1936-1940, see 1941 volume, p. 1120; for 1941–1944, see 1945 volume, pp. 1153 and 1160; for 1945, see 1946 volume, p. 812. Figures shown for production represent essentially the amount of gas usefully consumed and have been termed "marketed production." These figures do not measure the total volume of gas withdrawn from natural reservoirs since they take no account of losses and waste.

G 62–64. Natural gasoline production, 1911–1945. SOURCE: See above for series G 1–158; see also annual volumes of *Minerals Yearbook* as follows: For data for 1911–1935, see 1937 volume, p. 1097; for 1936–1938, see 1940 volume, p. 1084; for 1939–1940, see 1941

volume, p. 1156; for 1941–1944, see 1945 volume, p. 1183; for 1945, see 1946 volume, p. 836.

Figures include only natural gasoline and cycle products; they exclude liquified petroleum gases. Figures shown for series G 64 for 1941–1945 were obtained from records of the Bureau of Mines. Average per gallon data for these years shown in the source volumes include liquified petroleum gases and therefore differ from those shown here.

NONMETALS (G 65–92)

G 65–76. Production of nonmetal building materials, 1880–1945. SOURCE: See general note, series G 1–158; see also detailed listings below.

G 65–66. Cement shipments, 1880–1945. SOURCE: See general note, series G 1–158. Figures for 1880–1890 are estimates, believed to be substantially correct. Since 1890, figures result from an annual canvass of the industry. Beginning with 1912, data are based on shipments; prior to 1912, data covered production. Three types of cement are included: Natural cement, portland cement, and puzzolan cement. From 1880 through 1895 only production of natural and portland cements was reported. Figures on puzzolan cement were first collected in 1896. Thereafter data include all three types of cement. Weight per barrel of the three kinds of cement has varied; therefore the total in barrels is not exactly comparable for a number of years. The weight per barrel of portland cement ranged from 400 pounds in 1882 to 376 pounds in 1916; barrels of natural cement ranged from 300 pounds in 1882 to 240 pounds in 1891 and 376 pounds in 1921; barrels of puzzolan cement likewise varied. Since 1921, however, the output of all types of cement has been reported in barrels of 376 pounds.

G 67–68. Gypsum production, 1880–1945. SOURCE: See general note, series G 1–158. For 1880–1930, see annual volumes of *Mineral Resources of the United States* as follows: For data for 1880–1888, see 1895–96 volume, part III, p. 981; for 1889–1914, see 1914 volume, p. 261; for 1915–1919, see 1919 volume, p. 99; for 1920–1927, see 1928 volume, part II, p. 157; for 1928–1930, see 1930 volume, part II, p. 880. For 1931–1945, see the following annual volumes of *Minerals Yearbook*: For 1931–1933, see 1934 volume, p. 852; for 1934–1936, see 1937 volume, p. 1229; for 1937–1939, see 1940 volume, p. 1229; for 1940, see 1941 volume, p. 1293; for 1941–1945, see 1945 volume, p. 1314.

Tonnages of gypsum represent crude gypsum mined and ready for use. Coverage of producers is believed to be virtually complete, except for the first few years.

Value data shown have little bearing on the quantity of crude gypsum mined since values represent finished gypsum products sold including plaster, board, and tile. Furthermore, since 1928, values include gypsum made from foreign gypsum. Production data do not include byproduct gypsum from phosphate and other chemical works; however, the value of such material used in gypsum products is included in the value data for 1928–1945.

G 69–70. Lime sold by producers, 1880–1945. SOURCE: See general note, series G 1–158. Data include both quick and hydrated lime. The lime production and value figures for the period 1880–1890 are obviously much too large and are not considered reliable. Earlier values were obtained mostly from trade quotations applied rather indiscriminately to shipments, and possibly included the cost of cooperage and some freight. Values after 1894 are definitely based on bulk lime at the kiln.

Since lime is a semiperishable commodity, only small quantities are stocked at the kiln, and sales may be taken as equivalent to production of "open-market" lime, that is, lime shipped for uses other than in the producer's own plant. Lime burned for consumption by the producer (captive tonnage) is excluded with the exception of small quantities (generally about 10 percent of total lime sold) which are included to complete the coverage of lime shipped to certain specified uses. This method of reporting production has prevailed since 1921. In certain years prior to that time the quantities of lime produced and used by soda ash manufacturers were included in sales, but this irregularity does not disturb the series noticeably.

G 71–72. Sand and gravel sold or used, 1902–1945. SOURCE: See general note, series G 1–158. Data for 1902 cover only a portion of the industry. In 1904, an attempt was made to include most producers of sand; and in 1905, both sand and gravel were included. In the *Minerals Yearbook*, separate figures are shown for the quantity and value of gravel, and the various kinds of sand. See also Bureau of Mines, *Information Circular No. 7203*, 1942, "Development of the Sand and Gravel Industry."

G 73–74. Slate products sold or used: Quantity, 1912–1945; value, 1880–1945. SOURCE: For 1880–1913, see United States Geological Survey, *Bulletin 586*, p. 200; for 1914–1931, see annual volumes of *Mineral Resources of the United States*; for 1932–1945, see annual volumes of *Minerals Yearbook*. See also general note, series G 1–158. Figures for 1880 and 1889 were based on census data. Figures for 1881 to 1883 are largely estimated; those for 1884 to 1888 are considered fairly reliable. Beginning with 1891, data are compiled from direct reports of the quarry operators to the Geological Survey and, after 1925, to the Bureau of Mines.

G 75–76. Stone sold or used by producers: Quantity, 1916–1945; value, 1880–1945. SOURCE: See general note, series G 1–158. For 1880 to 1915, see *Mineral Resources of the United States*, 1916, part II, p. 995; for 1916–1943, see *Minerals Yearbook*, 1943, pp. 1284, 1299; for 1944 and 1945, see *Minerals Yearbook*, 1945, p. 1273. Data represent quantities used or sold by producers; values are f.o.b. quarries and mills. The data include marble, granite, limestone, dolomite, basalt, sandstone, and "miscellaneous stone" such as light-color volcanic rocks, schists, serpentine, and flint. The statistics combine both "dimension stone" and "crushed and broken stone." The data, however, do not include stone made into abrasives (such as grindstones) or that used in making lime and cement.

G 77–86. Nonmetals: Chemical materials, 1880–1945. SOURCE: See general note, series G 1–158, and detailed listings below.

G 77–78. Barite sold or used by producers, 1880–1945. SOURCE: See general note, series G 1–158. In general, the quantities and values given are for barite at mine, washer, or beneficiating plant. Data prior to 1885 are estimates based on correspondence with grinders. Beginning in 1886, questionnaires were sent to all known producers.

A consistent attempt was made by the earlier barite statisticians to segregate lump material from ground material, since the latter was always made from lump. The terminology "crude" was therefore adopted for lump barite, although it was fairly pure and required no dressing or beneficiation, and this term will be found in the *Mineral Resources* and *Minerals Yearbook* series until 1944. However, special cases began to arise. In California a true crude was mined which required beneficiation, finally emerging as ground barite. In this case the ground equivalent of the crude was included in the other crude production. In 1941 the tremendous deposits at Malvern, Ark., were opened, and another difficult reporting situation arose. Here the crude was but little more than 50 percent barite, and required flotation; it was sold as ground barite. The same solution was applied, i. e., the ground tonnage was included in the "crude" total. By 1944, however, the Arkansas volume was so large that the term "crude" was modified in the statistical tables of the *Minerals Yearbook*. Since that time mine output of commercial grade barite of whatever form has appeared under the appellation "crude (primary) barite." In statistical releases of the Bureau of Mines published in 1946 and 1947, both modifying adjectives have been dropped wherever possible, and production of barite in any form is reported simply as "barite" with due regard to the elimination of duplication. True values of crushed or ground barite so included were not used; instead an estimated value of an identical tonnage of lump barite was substituted. Values on the whole tend to be lower than trade quotations at any given time,

because there is considerable jobbing activity in the industry, and the statistics reflect the value of the first sale only.

G 79–80. Feldspar sold or used by producers, 1880–1945. SOURCE: See general note, series **G 1–158.** Although the production of feldspar was initiated in the 1860's, no official figures of total output are available before 1880. Data for 1880–1886 represent estimates; beginning with 1887, figures were compiled from annual canvasses of the producers by the Geological Survey and later by the Bureau of Mines. Feldspar data prior to 1915 represent the total sales of both crude and ground feldspar as sold by the producer. The value of the feldspar was taken as the value of the first sale. This combination of crude and ground values in the earlier years gives a somewhat distorted view of the relative importance of the values per unit of quantity, but the figures shown nevertheless indicate the general trend of output during that period. From 1915 through 1920, the value for the tonnage of ground feldspar in each State was recalculated at the average value of the crude feldspar sold in that State and a value of the total spar at the average value for crude was obtained. Beginning in 1921, all feldspar produced and marketed in each State has been reported as crude feldspar even though much of it was first marketed as ground feldspar.

G 81–82. Salt, sold or used by producers, 1880–1945. SOURCE: See general note, series **G 1–158.** Data includes evaporated salt, rock salt, and the salt content of brine produced. Since 1893, value data shown include only net value of the product, exclusive of boxes, bags, barrels, or other containers. Prior to 1893 a great many of the producers reporting, included the value of containers in which the salt was shipped. This may partly explain why values shown were greater in some of the earlier years than for many of the later years.

G 83–84. Sulfur production, 1880–1945. SOURCE: See general note, series **G 1–158.** For 1880–1900, see *Mineral Resources of the United States*, 1910, p. 783. Value data were not available for 1904–1945, therefore the production values were calculated from the average value of shipments for each of those years.

G 85–86. Pyrites production, 1880–1945. SOURCE: See general note, series **G 1–158**; for 1880–1931, see also the following annual volumes of *Mineral Resources of the United States*: 1910 volume, part II, p. 795; 1924 volume, p. 4; 1931 volume, p. 144. For 1932–1945, see annual volumes of *Minerals Yearbook*.

G 87–90. Nonmetals, fertilizer materials, 1880–1945. SOURCE: See general note, series **G 1–158.**

G 87–88. Potash sold by producers, 1915–1945. SOURCE: See general note, series **G 1–158.** "Potash" (K_2O) is used here as imposted by convention. This is a hypothetical compound used as a standard basis of computation and comparison of analyses and prices of different potash salts of widely variant composition.

G 89–90. Phosphate rock sold or used by producers, 1880–1945. SOURCE: See general note, series **G 1–158.**

G 91–92. Magnesite production (crude, mined), 1891–1945. SOURCE: See general note, series **G 1–158.** Data pertain to uncalcined magnesite of commercial grade. For 1891–1915, value figures represent the estimated worth of raw magnesite in sacks at San Francisco; for 1915 and prior years, with unimportant exceptions, magnesite was mined only in California. Since World War I, very little raw magnesite has entered the open market and all value data shown are producers' estimates based on cost considerations or a few actual sales.

METALS (G 93–130)

G 93–101. Ferrous metals, production, shipments, and value, 1810–1945. SOURCE: See general note, series **G 1–158** and detailed listings below.

G 93–95. Iron ore, production, shipments, and value, 1860–1945. SOURCE: See general note, series **G 1–158.** Data refer to usable ore and beginning in 1942 include byproduct ore obtained from pyrites. Data for 1860, 1870, and 1880 are originally from census reports for those years; those for 1875 and 1881 are estimates appearing originally in Bell, I. L., *Principles of the Manufacture of Iron and Steel*, 1884, p. 451; and those for 1882 to 1888, inclusive, are estimates made by James M. Swank which appeared originally in volumes of *Mineral Resources* for the years 1882 to 1888.

G 96–98. Pig iron, production, shipments, and value, 1810–1945. SOURCE: See general note, series **G 1–158.** Shipments data do not include ferro-alloys made in blast furnaces. The following reference appears in *Mineral Resources*, 1910, part I, p. 93, with respect to production data for the period 1810–1910: "The statistics for 1854 and all succeeding years were collected by the American Iron and Steel Association; those for 1810, 1840, and 1850 are census figures; those for the other years are largely estimates by early statisticians." Data shown in *Mineral Resources*, 1910, in long tons were converted to short tons for presentation here.

G 99–101. Ferro-alloys, production, shipments, and value, 1910–1945. SOURCE: See general note, series **G 1–158.**

G 102–103. Mercury production, 1850–1945. SOURCE: See general note, series **G 1–158.** Data are on basis of flasks containing 76.5 pounds net avoirdupois prior to June 1904, 75 pounds from June 1904 through 1927, and 76 pounds thereafter. Values are calculated at average price at New York after 1925, but at San Francisco prior thereto. Data prior to 1880 appear in *Mineral Resources*, 1925, part I, p. 44. For this early period, production in California was equivalent to that for the entire country. For early data in greater detail, see also Census Office, *Report on Mineral Industries . . . , Eleventh Census: 1890*, Washington, D. C., 1892, pp. 179–245; and early volumes of *Mineral Resources*, particularly those for 1882, 1883 and 1884, and 1910.

G 104–111. Metals, alloying, 1880–1945. SOURCE: See general note, series **G 1–158.**

G 104–105. Manganese ore, shipments and value, 1880–1945. SOURCE: See general note, series **G 1–158.** Shipments from domestic mines represent standard measure of production.

G 106–107. Chromite shipments, 1880–1945. SOURCE: See general note, series **G 1–158.** Production for 1880–1889 is estimated. Coverage of industry for 1890–1910 is considered to be substantially 95 percent; since 1910 the coverage is virtually 100 percent. Sales by or shipments from mines are used to measure production since the inception of collection of chromite data.

G 108–109. Tungsten, shipments and value, 1900–1945. SOURCE: See general note, series **G 1–158.** Figures for early years are for "production." *Mineral Resources*, 1910, p. 740 (tabular footnote) states, "The production of tungsten ores . . . can be fairly compared only since and beginning with 1906, as before that date no effort had been made to reduce the ores to a common basis of concentration."

G 110–111. Molybdenum shipments, 1914–1945. SOURCE: See general note, series **G 1–158.** Data coverage virtually 100 percent of industry. Data are in terms of pounds of molybdenum contained in molybdenite concentrates. The total absence of production in 1921–1922 reflects a 50 percent drop in alloy steel production in 1921, as well as the general post-war decline in industry.

G 112–117. Nonferrous metals, production, 1801–1945. SOURCE: See general note, series **G 1–158.** See also series **G 102–103** (mercury).

G 112–113. Copper, smelter production, 1845–1945; value, 1880–1945. SOURCE: See general note, series **G 1–158.** Figures for years prior to 1882 were compiled by the U. S. Geological Survey "from the best sources available." Smelter production data cover the fine copper content of blister, anodes, etc., produced at the smelters plus furnace refined copper produced from Lake Superior native copper ores and electrolytic copper produced direct from ore or matte by leaching.

G 114–115. Lead, smelter production, 1801–1945; value, 1880–1945. SOURCE: For production data, see following volumes: For 1801–1926, see U. S. Bureau of Mines, *Summarized Data of Lead Production*, comprising Economic Paper 5, 1929, pp. 12–13. For 1927–1928, see *Mineral Resources of the United States*, 1930, pt. 1, p. 483. For 1929–1945, see annual volumes of *Minerals Yearbook*

as follows: For 1929–1933, see 1936 issue, p. 140; for 1934–1937, see 1938 issue, p. 114; for 1938–1940, see 1941 issue, p. 128; for 1941–1945, see 1945 issue, p. 161. Value data are as provided by Bureau of Mines and are based on average price each year. Data in series **G 114–115** represent production and value of refined lead produced from foreign and domestic ores and domestic base bullion, and do not include refined lead from foreign base bullion. For a more detailed classification of production data, see source volumes.

Statistics on lead output may be prepared on a mine or smelter and refinery basis. The mine-production data compiled on the basis of lead content in ores and concentrates and adjusted to account for average losses in smelting are the most accurate measure of production from year to year. The pig-lead output, as reported by smelters and refiners, presents a more precise figure of actual lead recovery but generally differs from the mine figure due to the overlap or lag between mine shipments and smelter receipts of ore and concentrates. These inequities, however, tend to balance over a period of years.

G 116–117. Zinc, smelter production and value, 1880–1945. SOURCE: See general note, series **G 1–158.** Zinc-production statistics may be prepared on a mine or on a smelter basis. The mine-production data compiled on a basis of zinc content in ores and concentrates and adjusted to account for average losses in smelting are the most accurate measure of output from year to year, especially as to the character and distribution of the production. The slab-zinc production, as reported by smelters, presents a more precise figure of actual zinc recovery but generally differs from the mine figure owing to overlap and lag between mine shipments and smelter receipts of ores and concentrates. These variations, however, tend to balance within the limits of statistical error over a period of years.

G 118–121. Gold and silver, production and value, 1792–1945. SOURCE: Director of the Mint, 1792–1903; Bureau of Mines, 1904–1945. For detailed sources, see text for specific series below. Figures for 1792–1873 are ascribed to R. W. Raymond, former United States Commissioner of Mining Statistics, U. S. Geological Survey, whose eighth and last report was that for 1876. A continuation of the series of the Director of the Mint to 1945 (including figures for the Philippines and Puerto Rico) will be found in the *Annual Reports of the Director of the Mint.*

The relationship between the Bureau of Mines and the Bureau of the Mint series, 1904 to 1945, is explained in various annual issues of *Mineral Resources of the United States*, Bureau of Mines, and in the *Annual Reports of the Director of the Mint.* The following is quoted from the 1941 Mint report.

> "The official estimate of the production of gold and silver in the United States is made by the Bureau of the Mint with the cooperation of the Bureau of Mines, the [Bureau of Mines] making a mine canvass in each State and the [Bureau of the Mint] working backward from mint deposits through refineries, smelters, and other reduction works to the mine production estimate made by the [Bureau of Mines]. The official estimate represents the material received at mint service offices and private refineries. The difference between this estimate [series of Director of the Mint] and the mine production estimate [series of Bureau of Mines] is almost entirely due to the time element involved in the reducing processes, since differences for series of years are shown by comparison to practically offset each other. The two systems thus verify and support each other."

The above quotation refers to the series published by the two agencies in their complete form—that is, including production data for the Philippines, Puerto Rico, and island possessions. The gold and silver data presented in series **G 118–121** are for continental United States and Alaska only.

Since publication of the 1884 *Report of the Director of the Mint Upon the Production of the Precious Metals of the United States,* few major (although some minor) changes have been made in the figures for the period 1848–1880. By 1890 (see *Annual Report of the Director of the Mint,* 1890) the annual figures for 1845–1847, and the group totals for the period 1792–1834 and 1834–1844, had been added. By 1910, figures in ounces were being presented in addition to the dollar value figures shown in reports through 1900.

Use and interpretation of the data for years prior to 1880 should take into account the confusion out of which the present series were derived. Albert Williams, Jr. (Department of the Interior, U. S. Geological Survey, *Mineral Resources of the United States* [1882], p. 180, observed:

> "*Total output to date.*—It may seem strange to say that one of the most perplexing statistical questions is to state the total gold and silver production of the United States from the beginning of mining operations to the present [1882]. The difficulty lies not so much in the dearth of material as in the embarrassing abundance of statistics, actual and estimated, made by different persons at different times; covering overlapping periods and occasionally showing gaps; including and omitting the product of the Southern States; sometimes including the partial output of the west coast of North America beyond the limits of the United States; estimated on the basis of the calendar year or of the fiscal year; revised, changed, and corrected, until the whole subject seems lost in confusion. And yet there is sufficient reliable evidence upon which to reconstruct an estimate believed to have a probable error not exceeding 5 per cent."

Williams' estimate accepts, in general, the Mint series for 1848–1882, the only segment then available; the principal differences lie in his estimates for the period prior to 1847.

For the years 1881–1945, data are for calendar years. For earlier years, the evidence as to type of year is confusing. It seems likely that data are for calendar years through 1873; and for fiscal years, 1874–1880. The *Report of the Director of the Mint Upon the Production of the Precious Metals of the United States During the Calendar Year 1884*, p. 483; *Mineral Resources*, 1882, p. 183; and Tenth Census Reports (1880), vol. XIII, *Statistics and Technology of the Precious Metals*, p. 377, all label the figures to 1880 as fiscal years; late Mint reports specify calendar years for all years. However, close examination of these source volumes and reference to the various annual reports of Rossiter W. Raymond, United States Commissioner of Mining Statistics (last report was that for 1876), makes it appear that figures for 1848–1873 are for calendar years and that the data for 1874–1880 are for fiscal years. The 1884 Mint report on precious metals (p. 382) provides an added item of $25,000,000 in gold for the last half of calendar year 1880. This addition is not allowed for in Mint reports of recent years, nor is any deduction item available for the probable change from calendar to fiscal years beginning in 1874.

Another point of uncertainty is the relationship between quantity and value series for both gold and silver. There seems to be some question as to whether the original series for early years may not have been in dollars and the ounce figures obtained at a later date by use of a conversion factor, rather than the other way around.

A few early sources of gold and silver figures may be mentioned. A published original source for the exact Raymond figures, 1792–1873, which comprise the start of the present series, has not been located. However, for various figures by Raymond, see Raymond's last report (U. S. Treasury Department, *Statistics of Mines and Mining in the States and Territories West of the Rocky Mountains [1876], being the Eighth Annual Report of Rossiter W. Raymond, United States Commissioner of Mining Statistics*), pp. 377 and 454; Eleventh Census Reports (1890), *Report on Mineral Industries in the United States at the Eleventh Census: 1890*, p. 40 ff; and Department of the Interior, U. S. Geological Survey, *Mineral Resources of the United States* [1882], p. 182. An overlap of Raymond's series and that of the Director of the Mint is shown on p. 482 of the Mint precious metals report for 1884.

Those interested will find alternative series for early years and discussion of the estimating problem in *Mineral Resources of the United States* [1882], and in the Eleventh Census Report (1890), *Mineral Statistics*, among other volumes. The figures of "Professor

Whitney," whose work is frequently cited, will be found in Whitney, J. D., *The Metallic Wealth of the United States*, Philadelphia, 1853. The "Mr. Valentine," also frequently cited, is John J. Valentine, vice-president and general manager (in 1890) of the Wells-Fargo Express Company, who published annual data on production in States and Territories west of the Missouri River.

G 118–119. Gold production and value, 1792–1945. SOURCE: For figures for 1792–1903, except annual data for 1835–1844, see U. S. Treasury, *Annual Report of the Director of the Mint*, 1910, p. 99. For annual figures for 1835–1844, see Bureau of Mines, Economic Paper 5, *Summarized Data of Gold Production*, p. 14. For 1904–1945, figures are from records of the Bureau of Mines. See also text for series **G 118–121**, above.

Quantities represent recoverable metal and are given in troy ounces, 1,000 fine. Gold is valued in 1934 and thereafter at $35 per fine ounce; prior thereto at $20.67+ per fine ounce.

Economic Paper 5, of the Bureau of Mines (cited above), provides quantity figures annually, 1835–1927, but the annual figures for 1904–1927 differ from those shown here. In addition, 10-year totals in fine ounces for 1801–1840 are provided as follows: 1801–1810, 135,000; 1811–1820, 135,000; 1821–1830, 150,000; 1831–1840, 318,000.

The Bureau of the Mint series, used here to 1903, is continued to 1945 in the issues of the *Annual Report of the Bureau of the Mint*. For single year data (Mint series), 1845–1909, see 1910 issue; for 1911–1940, see 1941 issue; for later years see subsequent issues.

In any comparisons of data in the gold and silver series, 1904–1945, with those in the annual *Mineral Resources—Minerals Yearbook* volumes, special care should be taken to refer to figures in those volumes which are specifically noted as *excluding* data for the Philippines, Puerto Rico, and island possessions.

G 120–121. Silver production and value. 1834–1945. SOURCE: Same as for series **G 118–119**, except for annual figures for silver, 1834–1844, see Bureau of Mines, Economic Paper 8, *Summarized Data on Silver Production*, p. 18. See also general text for series **G 118–121**, above.

Quantities represent recoverable metal and are given in troy ounces, 1,000 fine. Prices are the New York buying prices except for those years when the United States Treasury was purchasing silver under legislation providing a special price for domestically produced metal. In these years, the price is the treasury purchase price, despite the fact that some silver lacking affidavits regarding its production failed to qualify and entered the market at the commercial price. These latter quantities, however, have been negligible.

Economic Paper 8, of the Bureau of Mines (cited above), provides quantity figures annually, 1834–1927, but the annual figures for 1904–1927 differ from those shown here.

The Bureau of the Mint series, used here to 1903, is continued to 1945 in the issues of the *Annual Report of the Bureau of the Mint*. For single year data (Mint series), 1845–1909, see 1910 issue; for 1911–1940, see 1941 issue; for later years see subsequent issues.

In any comparisons of data in the gold and silver series, 1904–1945, with those in the annual *Mineral Resources—Minerals Yearbook* volumes, special care should be taken to refer to figures in those volumes which are specifically noted as *excluding* data for the Philippines, Puerto Rico, and island possessions.

G 122–124. Platinum, 1880–1945. SOURCE: See general note, series **G 1–158**. Figures for 1880–1900 and 1910–1920 represent crude platinum metals. Those for 1901–1909 represent production of refined platinum metals from domestic ores. Figures for 1921–1945 comprise production of crude platinum metals and platinum metals recovered as a byproduct of gold and copper refining. Figures on recoveries of platinum metals from gold and copper refining are not available prior to 1921. Data include Alaska.

G 125–130. Light-weight metals, production and value, 1885–1945. SOURCE: See general note, series **G 1–158**, and detailed listings below.

G 125–126. Primary aluminum production, 1885–1945. SOURCE: See general note, series **G 1–158**. Value data for 1893–1910 represent estimates. Production data for 1893–1906 cover fiscal year ending August 31.

G 127–128. Bauxite production, 1889–1945. SOURCE: See general note, series **G 1–158**. Production data represent shipments of crude, dried, activated and calcined bauxite from mines except for 1939–1945 which represent shipments of crude ore from mines. Figures on a dried equivalent basis are available from 1920 in source volumes.

G 129–130. Primary magnesium production, 1915–1945. SOURCE: See general note, series **G 1–158**; see also *Minerals Yearbook*, 1939 and subsequent annual volumes. Production figures represent sales. Data shown for 1922–1924 are estimates.

EMPLOYMENT AND INJURIES (G 131–158)

G 131–143. Employment and injuries: Mines (except coal) and quarries, and related industries, 1911–1945. SOURCE: See general note, series **G 1–158**, and detailed listings below.

G 131–136. Employment and injuries, all mines except coal mines, 1911–1945. SOURCE: See general note, series **G 1–158**; for 1911–1942, see *Bulletin 461*, "Metal- and Nonmetal-Mine Accidents in the United States—1942," 1945, p. 51; for 1943–1945, see annual volumes of *Minerals Yearbook* for 1945 and 1946, except for series **G 134** and **G 136**, data for which were obtained from records of the Bureau of Mines.

G 137–143. Employment and injuries, quarries and related industries, 1911–1945. SOURCE: See general note, series **G 1–158**; for 1911–1942, see *Bulletin 458*, "Quarry Accidents in the U. S., 1942," 1944, p. 83; for 1943–1945, see annual volumes of *Minerals Yearbook* for 1945 and 1946. Man-hours of employment (series **G 139**) for the period 1911–1923 were computed on the assumption that weighted average length of workday was 9.36 hours as shown by reports from representative companies for 1924. Figures for injured per million man-hours (series **G 143**) for years previous to 1916 are believed to be not representative owing to probable incompleteness of reports of slight or minor injuries.

G 144–158. Fatalities, production and employment: Bituminous and anthracite mines, 1870–1945. SOURCE: See general note, series **G 1–158**, and detailed listing below.

G 144–153. Number killed in coal mines (bituminous and anthracite, combined), 1870–1945. SOURCE: See general note, series **G 1–158**; for 1870–1942, see *Bulletin 462*, "Coal Mine Accidents in the United States: 1942," pp. 102–104; for 1943–1945, see annual volumes of *Minerals Yearbook* for 1945 and 1946, except for series **G 147**, **G 149**, **G 150**, **G 152**, and **G 153**, data for which were obtained from records of the Bureau of Mines. Prior to 1910, certain States did not maintain records of accidents. Rates shown are based exclusively on tonnage and men employed in States for which accident records were available.

G 154–158. Production and employment in coal mines, 1911–1945. SOURCE: Same as for series **G 144–153**.

These data are based on monthly reports by coal mine operators to the U. S. Bureau of Mines. Total production figures (series **G 154**) for 1935–1944 represent annual totals of data received monthly, and they differ from combined totals for bituminous and anthracite production collected annually and presented as series **G 13** and **G 16**, respectively.

Power: Series G 159–233

ENERGY PRODUCTION AND USE (G 159–199)

G 159–170. Annual supply of energy from mineral fuels and water power, 1819–1945. SOURCES: For decennial data 1819–1889, see U. S. Department of Commerce, Bureau of Mines, *Mineral Resources of the United States*, 1930, part II—Nonmetals, table 7,

p. 623; for annual averages of 5-year periods 1871–1900, see *Statistical Abstract*, 1946, table 526, p. 473; for 1899–1945, see U. S. Department of the Interior, Bureau of Mines, annual volumes of *Minerals Yearbook* as follows: For 1899–1935, see 1937 volume, table 8, p. 807; for 1936–1943, see 1945 volume, p. 846; for 1944–1945, revised data obtained from records of Bureau of Mines.

In converting water power to its fuel equivalent, two alternative assumptions have been made. The first (series G **161**) assumes a *constant* fuel equivalent, which represents the average efficiency of all central stations generating steam-electric power in 1913, the base period used. The usefulness of the *constant* factor lies in showing the rate at which water power is being developed. It permits direct comparison between the relative increase in kilowatt-hours of water power and the corresponding increase or decrease in tons of coal, barrels of oil, or cubic feet of gas produced. On the other hand the *constant* factor makes no allowance for the fact that coal and other fuels produced today are used more efficiently than formerly.

To show the influence of improving fuel efficiency, a second computation (series G **162**) of the energy equivalent of water power has therefore been made. This assumes a *prevailing* fuel equivalent, diminishing year by year, which represents the average performance of all fuel-burning central electric stations for the year in question. (The *prevailing* factor is thus much above the *constant* factor in 1899 and much below it in 1945.) The *prevailing* fuel equivalent indicates more nearly the quantity of fuel that would have been needed in any one year to generate the same power in a steam-electric station. It should be noted, however, that the ultimate uses to which the water power generated is put often displace fuel burned much less efficiently than in central stations and that in any instance no other important branch of fuel consumption has made advances in fuel efficiency approaching that of the central stations.

The ideal factor for converting water power into fuel equivalent would be the average efficiency of all forms of fuel consumption in each year. No basis for determining such an all-embracing average exists at present, but enough is known to make certain that it would show much less reduction from 1899 to 1945 than do the central stations. A just comparison of the changing contributions of water power and of fuel to the national energy supply would lie somewhere between the results shown by the *constant* equivalent and the *prevailing* central-station equivalent.

The figures for oil and natural gas represent the entire production of crude petroleum and of gas. Most of this production does not come into direct competition with coal. An elaborate analysis and the accumulation of data not now available would be required to determine even approximately how much of any one fuel actually has been displaced either by other fuels or by water power. The present series do not permit determination of such displacement; their purpose is rather to measure the long-time trends in the total demand for energy.

G 171–233. General note. Production and use of electric energy, 1902–1945. SOURCE: See detailed listings below. Some data on the production and use of electric energy are available since the beginning of commercial production in 1882. Data for the years 1882 to 1920, however, are difficult to evaluate because of changing bases of measurements and variations in coverage of the various censuses or other surveys made during the period. The Census Bureau published the results of surveys of the electric light and power industries made at five-year intervals during the period 1902–1937, and the Censuses of Manufactures and of Mineral Industries contain important data on industrial use and production of electric energy. The United States Geological Survey, the *Electrical World* and the National Electric Light Association also published considerable data applicable to the industry during this early period.

The chief gaps in the data for these years are in the production of electric energy by industrial establishments for their own use and in the measurement of the sales by electric railroads and railways for public distribution. Early data on capacity and on requirements must be converted from horsepower to kw. (kilowatts) to be comparable; and capacity data in kv.-a (kilovolt-amperes) were often tabulated as kw. without regard to the power factor. Data on generation were also often reported without regard to the kw.-h. (kilowatt-hours) used in production and, in many instances, where the prime mover was used both for direct drive and for electric generation, the kw.-h. equivalent of power used directly was reported as generation. These variations in units of measurement and in classification often resulted in differences in reported totals of as much as 20 to 25 percent. In presenting historical data on electric energy since 1902, efforts have been made to resolve such differences and place the data on a comparable basis.

Since 1920 comprehensive statistics on capacity and generation of electric utilities for public use have been compiled and published by the Geological Survey, 1920 to 1936, and by the Federal Power Commission, 1936 to 1945. Data on capacity and generation by nonutility establishments from 1939 to 1945 have been compiled and published by the Federal Power Commission. The Commission also published financial, operating, sales, and rate statistics for the electric utility industry. Data on customers, revenues, sales, and related matters for the period 1926 to 1945 are published by the Edison Electric Institute. The technical and trade journals from time to time publish data on the electric utility and related industries.

G 171–174. Electric energy production by electric utilities and industrial establishments, by type of prime mover, 1902–1945. SOURCE: Sum of data in series G **175–182** (electric utilities and industrial establishments). See also text for series G **171–233**, above.

G 175–178. Electric energy production by electric utilities, by type of prime mover, 1902–1945. SOURCE: For 1902–1917, see Bureau of the Census reports, *Census of Electric Light and Power Stations*; for 1920–1945, see Federal Power Commission, *Production of Electric Energy and Capacity of Generating Plants*, 1945. See also text for series G **171–233**, above.

G 179–182. Electric energy production by industrial establishments, by type of prime mover, 1902–1945. SOURCES: Federal Power Commission. Data for 1902–1938 based on Bureau of the Census, *Census of Manufactures*, *Census of Mineral Industries*, *Census of Electric Light and Power Stations*, and related data; data for 1939–1945, Federal Power Commission, *Industrial Electric Power Requirements, 1939–1945*. See also text for series G **171–233**, above.

G 183. Total utility and industrial electric energy production, 1902–1945. SOURCE: Sum of series G **184** and G **190**.

G 184–189. Electric utilities electric energy production by class of ownership, 1902–1945. SOURCE: See above for series G **175–178**.

G 190. Electrical energy production by industrial establishments, 1902–1945. SOURCE: See above for series G **179**. This series is identical to series G **179** and is repeated here for convenience in reference.

G 191–193. Industrial use of electric energy, 1902–1945. SOURCE: Federal Power Commission. Data for 1902–1938 based on Bureau of the Census, *Census of Manufactures*, *Census of Mineral Industries*, and related data; data for 1939–1945, Federal Power Commission, *Industrial Electric Power Requirements, 1939–1945*. See also text for series G **171–233**, above.

G 194–199. Consumption of fuels by electric utilities for production of electric energy, 1920–1945. SOURCE: Federal Power Commission, *Consumption of Fuel for the Production of Electric Energy, 1945*.

GENERATING PLANTS AND CAPACITY (G 200–224)

G 200–203. Number of electric utility generating plants, 1902–1945. SOURCE: Federal Power Commission records.

G 204. Production per kilowatt of installed generating capacity, 1902–1945. SOURCE: Federal Power Commission records.

G 205–208. Installed generating capacity of electric utilities and industrial establishments, by type of prime mover, 1902–1945. SOURCE: Sum of data for series **G 209–216** (electric utilities and industrial establishments).

G 209–212. Installed generating capacity of electric utilities, by type of prime mover, 1902–1945. SOURCE: Same as series **G 175–178**, above. These data include capacity of small standby plants which operate infrequently and have insignificant production, and capacity of publicly owned "Non-Central Stations" which operate primarily for such functions as public street lighting or water pumping.

G 213–216. Installed generating capacity of industrial establishments, by type of prime mover, 1902–1945. SOURCE: Same as series **G 179–182**, above.

G 217. Total utility and industrial installed generating capacity, 1902–1945. SOURCE: Sum of series **G 218** and **G 224.**

G 218–223. Electric utilities installed generating capacity by class of ownership, 1902–1945. SOURCE: Same as series **G 175–178**, above.

G 224. Installed generating capacity by industrial establishments, 1902–1945. SOURCE: See above for series **G 213.** This series is identical to series **G 213** and is repeated here for convenience in reference.

SALES TO ULTIMATE CONSUMERS (G 225–233)

G 225–233. Electric utilities, sales to ultimate consumers, 1902–1945. SOURCES: For 1902–1925, see Federal Power Commission records, based on data in Bureau of the Census, *Census of Electric Light and Power Stations*, National Electric Light Association Proceedings, *Electric World*, and related sources; for 1926–1945, see Edison Electric Institute, *Statistical Bulletin.*

Series G 1–5.—MINERALS—VALUE OF MINERAL PRODUCTS: 1880 TO 1945

[In thousands of dollars]

YEAR	All mineral products	Metallic	NONMETALLIC			YEAR	All mineral products	Metallic	NONMETALLIC		
			Total	Fuels [1]	Other				Total	Fuels [1]	Other
	1	2	3	4	5		1	2	3	4	5
1945	8,140,000	1,974,000	6,166,000	5,212,000	954,000	1912	2,237,794	862,191	1,375,603	945,541	430,062
1944	8,419,000	2,340,000	6,079,000	5,178,000	901,000	1911	1,924,081	681,023	1,243,058	835,763	407,295
1943	8,071,800	2,488,000	5,583,800	4,608,300	975,500						
1942	7,576,300	2,363,900	5,212,400	4,103,400	1,109,000	1910	1,987,844	750,027	1,237,817	828,213	409,604
1941	6,878,000	2,132,000	4,746,000	3,708,100	1,037,900	1909	1,887,107	755,092	1,132,015	746,204	385,811
						1908	1,591,773	550,890	1,040,883	716,034	324,849
1940	5,613,900	1,678,600	3,935,300	3,116,500	818,800	1907	2,069,570	904,151	1,165,419	789,128	376,291
1939	4,914,200	1,291,700	3,622,500	2,834,300	788,200	1906	1,900,880	886,280	1,014,600	652,398	362,202
1938	4,363,200	892,600	3,470,600	2,820,300	650,300						
1937	5,413,400	1,468,200	3,945,200	3,200,500	744,700	1905	1,623,765	702,785	920,980	602,258	318,722
1936	4,556,800	1,081,600	3,475,200	2,759,200	716,000	1904	1,359,181	501,314	857,867	584,043	273,824
						1903	1,495,381	589,253	906,128	634,226	271,902
1935	3,650,000	733,130	2,916,870	2,330,000	586,870	1902	1,327,951	605,017	722,934	469,079	253,855
1934	3,325,400	548,934	2,776,466	2,233,300	543,166	1901	1,155,078	493,814	661,264	442,409	218,855
1933	2,555,100	417,065	2,138,035	1,683,400	454,635						
1932	2,461,700	285,875	2,175,825	1,743,400	432,425	1900	1,108,936	514,232	594,704	406,376	188,328
1931	3,166,600	569,790	2,596,810	1,892,400	704,410	1899	1,010,096	484,021	526,075	340,773	185,302
						1898	727,042	308,747	418,295	267,513	150,782
1930	4,764,800	985,790	3,779,010	2,764,500	1,014,510	1897	651,612	270,434	381,178	253,598	127,580
1929	5,887,600	1,480,390	4,407,210	3,190,527	1,216,683	1896	641,041	252,575	388,466	268,161	120,305
1928	5,385,200	1,288,290	4,096,910	2,884,962	1,211,948						
1927	5,530,000	1,220,633	4,309,367	3,060,047	1,249,320	1895	642,691	248,533	394,158	268,438	125,720
1926	6,213,600	1,405,345	4,808,255	3,541,916	1,266,339	1894	550,245	187,335	362,910	235,618	127,292
						1893	545,493	223,654	321,839	251,735	70,104
1925	5,677,630	1,382,155	4,295,475	3,058,680	1,236,795	1892	622,232	284,215	338,017	248,344	89,673
1924	5,305,800	1,233,370	4,072,430	2,898,630	1,173,800	1891	600,849	280,985	319,864	237,160	82,704
1923	5,986,500	1,511,930	4,474,570	3,317,100	1,157,470						
1922	4,647,290	988,100	3,659,190	2,737,880	921,310	1890	615,429	303,937	311,492	230,962	80,530
1921	4,138,500	654,700	3,483,800	2,703,470	780,330	1889	542,326	250,823	291,503	208,297	83,206
						1888	553,799	242,460	311,339	231,459	79,880
1920	6,981,340	1,763,675	5,217,665	4,192,910	1,024,755	1887	535,633	241,183	294,450	217,251	77,199
1919	4,623,770	1,361,099	3,262,671	2,510,894	751,777	1886	456,185	204,795	251,390	184,608	66,782
1918	5,540,708	2,156,588	3,384,120	2,736,151	647,969						
1917	4,992,496	2,088,914	2,903,582	2,237,837	665,745	1885	419,551	174,718	244,833	183,075	61,758
1916	3,508,439	1,622,129	1,886,310	1,332,584	553,726	1884	407,040	182,784	224,256	165,825	58,431
						1883	448,061	201,131	246,930	185,760	61,170
1915	2,394,644	993,353	1,401,291	972,617	428,674	1882	453,106	219,070	234,036	170,479	63,557
1914	2,111,172	687,101	1,424,071	992,837	431,234	1881	403,120	192,663	210,457	149,798	60,659
1913	2,433,545	879,058	1,554,487	1,087,843	466,644	1880	367,463	190,881	176,582	120,241	56,341

[1] Coal, natural gas, natural gasoline and allied products, and petroleum.

Series G 6–8.—MINERALS—INDEXES OF MINERAL PRODUCTION (FEDERAL RESERVE): 1919 TO 1945

[1935–1939 average=100]

YEAR	Total	Metals	Fuels	YEAR	Total	Metals	Fuels	YEAR	Total	Metals	Fuels	YEAR	Total	Metals	Fuels
	6	7	8		6	7	8		6	7	8		6	7	8
1945	137	101	143	1937	112	127	109	1930	93	102	91	1923	98	118	94
1944	140	113	145	1936	99	102	99	1929	107	134	103	1922	71	--------	--------
1943	132	126	132					1928	99	120	95	1921	66	--------	--------
1942	129	148	125	1935	86	73	89	1927	100	116	97				
1941	125	149	122	1934	80	58	83	1926	100	126	95	1920	83	--------	--------
				1933	76	51	80					1919	71	--------	--------
1940	117	134	114	1932	67	36	72	1925	92	121	87				
1939	106	113	105	1931	80	68	82	1924	89	108	86				
1938	97	86	99												

Series G 9–12.—MINING—INDEXES OF PHYSICAL OUTPUT (NBER): 1899 TO 1939

[1899=100]

YEAR	Total mining	Metals	NONMETALLIC		YEAR	Total mining	Metals	NONMETALLIC		YEAR	Total mining	Metals	NONMETALLIC	
			Fuel	Other				Fuel	Other				Fuel	Other
	9	10	11	12		9	10	11	12		9	10	11	12
1939	366	224	430	382	1925	321	226	352	422	1911	192	166	204	261
1938	331	176	403	340	1924	310	207	346	386					
1937	387	251	449	396	1923	329	214	374	383	1910	195	175	203	264
1936	344	195	410	362	1922	239	155	269	300	1909	184	170	187	255
					1921	222	99	268	247	1908	162	139	172	223
1935	293	144	365	265						1907	173	145	188	231
1934	271	111	346	251	1920	271	195	305	288	1906	160	149	162	222
1933	249	88	327	223	1919	234	184	259	235					
1932	230	76	301	221	1918	270	249	286	245	1905	154	141	157	184
1931	286	136	346	344	1917	268	259	276	281	1904	138	125	142	149
					1916	254	264	248	279	1903	134	120	141	128
1930	343	197	393	459						1902	119	120	118	116
1929	389	252	434	507	1915	220	212	226	253	1901	114	111	116	105
1928	357	230	397	482	1914	202	172	218	258					
1927	357	223	401	475	1913	217	192	230	281	1900	108	109	106	108
1926	348	235	386	447	1912	206	184	215	278	1899	100	100	100	100

Series G 13–18.—FUELS—BITUMINOUS AND ANTHRACITE COAL, PRODUCTION: 1807 TO 1945

[Production in net tons of 2,000 pounds]

YEAR	BITUMINOUS			PENNSYLVANIA ANTHRACITE		
	Production	Value		Production	Value	
		Total	Average per ton		Total	Average per ton
	13	14	15	16	17	18
	Tons	*Dollars*	*Dollars*	*Tons*	*Dollars*	*Dollars*
1945	577,617,327	1,768,204,320	3.06	[1] 54,933,909	323,944,435	5.90
1944	619,576,240	1,810,900,542	2.92	[1] 63,701,363	354,582,884	5.57
1943	590,177,069	1,584,644,477	2.69	[1] 60,643,620	306,816,018	5.06
1942	582,692,937	1,373,990,608	2.36	[1] 60,327,729	271,673,380	4.50
1941	514,149,245	1,125,362,836	2.19	[1] 56,368,267	240,275,126	4.26
1940	460,771,500	879,327,227	1.91	51,484,640	205,489,814	3.99
1939	394,855,325	728,348,366	1.84	51,487,377	187,175,324	3.64
1938	348,544,764	678,653,000	1.95	46,099,027	180,600,167	3.92
1937	445,531,449	864,042,000	1.94	51,856,433	197,598,849	3.81
1936	439,087,903	770,955,000	1.76	54,579,535	227,003,538	4.16
1935	372,373,122	658,063,000	1.77	52,158,783	210,130,565	4.03
1934	359,368,022	628,383,000	1.75	57,168,291	244,152,245	4.27
1933	333,630,533	445,788,000	1.34	49,541,344	206,718,405	4.17
1932	309,709,872	406,677,000	1.31	49,855,221	222,375,129	4.46
1931	382,089,396	588,895,000	1.54	59,645,652	296,354,586	4.97
1930	467,526,299	795,483,000	1.70	69,384,837	354,574,191	5.11
1929	534,988,598	952,781,000	1.78	73,828,195	385,642,751	5.22
1928	500,744,970	933,774,000	1.86	75,348,069	393,637,690	5.22
1927	517,763,352	1,029,657,000	1.99	80,095,564	420,941,726	5.26
1926	573,366,985	1,183,412,000	2.06	84,437,452	474,164,252	5.62
1925	520,052,741	1,060,402,000	2.04	61,817,149	327,664,512	5.30
1924	483,686,538	1,062,626,000	2.20	87,926,862	477,230,852	5.43
1923	564,564,662	1,514,621,000	2.68	93,339,009	506,786,768	5.43
1922	422,268,099	1,274,820,000	3.02	54,683,022	273,700,125	5.01
1921	415,921,950	1,199,983,600	2.89	90,473,451	452,304,903	5.00
1920	568,666,683	2,129,933,000	3.75	89,598,249	434,252,198	4.85
1919	465,860,058	1,160,616,013	2.49	88,092,201	364,926,950	4.14
1918	579,385,820	1,491,809,940	2.58	98,826,084	336,480,347	3.40
1917	551,790,563	1,249,272,837	2.26	99,611,811	283,650,723	2.85
1916	502,519,682	665,116,077	1.32	87,578,493	202,009,561	2.31
1915	442,624,426	502,037,688	1.13	88,995,061	184,653,498	2.07
1914	422,703,970	493,309,244	1.17	90,821,507	188,181,399	2.07
1913	478,435,297	565,234,952	1.18	91,524,922	195,181,127	2.13

YEAR	BITUMINOUS			PENNSYLVANIA ANTHRACITE		
	Production	Value		Production	Value	
		Total	Average per ton		Total	Average per ton
	13	14	15	16	17	18
	Tons	*Dollars*	*Dollars*	*Tons*	*Dollars*	*Dollars*
1912	450,104,982	517,983,445	1.15	84,361,598	177,622,626	2.11
1911	405,907,059	451,375,819	1.11	90,464,067	175,189,392	1.94
1910	417,111,142	469,281,719	1.12	84,485,236	160,275,302	1.90
1909	379,744,257	405,486,777	1.07	81,070,359	149,181,587	1.84
1908	332,573,944	374,135,268	1.12	83,268,754	158,178,849	1.90
1907	394,759,112	451,214,842	1.14	85,604,312	163,584,056	1.91
1906	342,874,867	381,162,115	1.11	71,282,411	131,917,694	1.85
1905	315,062,785	334,658,294	1.06	77,659,850	141,879,000	1.83
1904	278,659,689	305,397,001	1.10	73,156,709	138,974,020	1.90
1903	282,749,348	351,687,933	1.24	74,607,068	152,036,448	2.04
1902	260,216,844	290,858,483	1.12	41,373,595	76,173,586	1.84
1901	225,828,149	236,422,049	1.05	67,471,667	112,504,020	1.67
1900	212,316,112	220,930,313	1.04	57,367,915	85,757,851	1.49
1899	193,323,187	167,952,104	0.87	60,418,005	88,142,130	1.46
1898	166,593,623	132,608,713	0.80	53,382,645	75,414,537	1.41
1897	147,617,519	119,595,224	0.81	52,611,681	79,301,954	1.51
1896	137,640,276	114,891,515	0.83	54,346,081	81,748,651	1.50
1895	135,118,193	115,779,771	0.86	57,999,337	82,019,272	1.41
1894	118,820,405	107,653,501	0.91	51,921,121	78,488,063	1.51
1893	128,385,231	122,751,618	0.96	53,967,543	85,687,078	1.59
1892	126,856,567	125,124,381	0.99	52,472,504	82,442,000	1.57
1891	117,901,238	117,188,400	0.99	50,665,431	73,944,735	1.46
1890	111,302,322	110,420,801	0.99	46,468,641	66,383,772	1.43
1889	95,682,543	----------	--------	45,456,970	----------	--------
1888	102,040,093	----------	--------	46,619,564	----------	--------
1887	88,562,314	----------	--------	42,088,197	----------	--------
1886	74,644,981	----------	--------	39,035,446	----------	--------
1885	72,824,321	----------	--------	38,335,974	----------	--------
1884	82,998,704	----------	--------	37,156,847	----------	--------
1883	77,250,680	----------	--------	38,456,845	----------	--------
1882	68,429,933	----------	--------	35,121,256	----------	--------
1881	53,961,012	----------	--------	31,920,018	----------	--------

YEAR	PRODUCTION (NET TONS)		YEAR	PRODUCTION (NET TONS)		YEAR	PRODUCTION (NET TONS)	
	Bituminous	Anthracite		Bituminous	Anthracite		Bituminous	Anthracite
	13	16		13	16		13	16
1880	42,831,758	28,649,812	1860	6,494,200	8,115,842	1840	1,102,931	967,108
1879	37,898,006	30,207,793	1859	6,013,404	9,619,771	1839	552,038	1,008,322
1878	36,245,918	21,689,682	1858	5,548,376	8,426,102	1838	445,452	910,075
1877	34,841,444	25,660,316	1857	5,153,622	8,186,567	1837	182,500	1,071,151
1876	30,486,755	22,793,245	1856	5,012,146	8,534,779	1836	142,000	842,832
1875	29,862,554	22,485,766	1855	4,784,919	8,141,754	1835	134,000	690,854
1874	27,787,130	24,818,790	1854	4,582,227	7,394,875	1834	136,500	464,015
1873	31,449,643	26,152,837	1853	4,169,862	6,400,426	1833	133,750	600,907
1872	27,220,233	24,233,166	1852	3,664,707	6,151,957	1832	146,500	447,550
1871	27,543,023	19,342,057	1851	3,253,460	5,481,065	1831	120,100	217,842
1870	17,371,305	15,664,275	1850	2,880,017	4,138,164	1830	104,800	215,272
1869	15,821,226	17,083,134	1849	2,453,497	3,995,334	1829	102,000	138,086
1868	15,858,555	17,003,405	1848	1,968,032	3,805,942	1828	100,408	95,500
1867	14,722,313	16,002,109	1847	1,735,062	3,551,005	1827	94,000	78,151
1866	13,352,400	15,651,183	1846	1,977,707	2,887,815	1826	88,720	59,194
1865	11,900,427	11,891,746	1845	1,829,872	2,480,032	1825	75,000	42,988
1864	11,066,474	12,538,649	1844	1,672,045	2,009,207	1824	67,040	13,685
1863	9,533,742	11,785,320	1843	1,504,121	1,556,753	1823	60,000	8,563
1862	7,790,725	9,695,110	1842	1,244,494	1,365,563	1822	54,000	4,583
1861	6,688,358	9,799,654	1841	1,108,700	1,182,441	1821	----------	1,322
						1807–20	3,000	12,000

[1] Includes some "bootleg" coal purchased by legitimate operators and prepared at their breakers. For statistics of "bootleg" operations in Pennsylvania anthracite industry, see *Minerals Yearbook*, 1945, p. 932. During the 5-year period, 1941–1945, it is estimated that a total of 14,502,424 net tons of "bootleg" anthracite was produced, of which 6,552,121 net tons was purchased for preparation by recognized operators.

Series G 19–32.—FUELS—BITUMINOUS COAL AND LIGNITE MINING: 1890 TO 1945

[Net tons are of 2,000 pounds. For production data prior to 1890, see page 142. See also series G 14–15]

YEAR	Production (net tons)	Men employed	Number of mines	Calculated capacity (millions of net tons): At 308 days	At 280 days	At 261 days	Average number of days worked	Average number of days lost on account of strikes: Per man employed	Per man on strike	Net tons per man: Per day	Per year	Percent of underground production: Cut by machines	Mechanically loaded	Percent of total production: Mechanically cleaned	Mined by stripping
	13a	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1945	577,617,327	383,100	7,033	682	620	578	261	(1)	(1)	5.78	1,508	90.8	56.1	25.6	19.0
1944	619,576,240	393,347	6,928	686	624	582	278	(1)	(1)	5.67	1,575	90.5	52.9	25.6	16.3
1943	590,177,069	416,007	6,620	689	626	583	264	(1)	(1)	5.38	1,419	90.3	48.9	24.7	13.5
1942	582,692,937	461,991	6,972	730	663	618	246	1	7	5.12	1,261	89.7	45.2	24.4	11.5
1941	514,149,245	456,981	6,822	733	666	621	216	20	27	5.20	1,125	89.0	40.7	22.9	10.7
1940	460,771,500	439,075	6,324	703	639	595	202	1	8	5.19	1,049	88.4	35.4	22.2	9.4
1939	394,855,325	421,788	5,820	683	621	579	178	25	36	5.25	936	87.9	31.0	20.1	9.6
1938	348,544,764	441,333	5,777	663	602	562	162	1	13	4.89	790	87.5	26.7	18.2	8.7
1937	445,531,449	491,864	6,548	710	646	601	193	(1)	(1)	4.69	906	(1)	20.2	14.6	7.1
1936	439,087,903	477,204	6,875	680	618	576	199	2	21	4.62	920	84.8	16.3	13.9	6.4
1935	372,373,122	462,403	6,315	640	582	543	179	(1)	(1)	4.50	805	84.2	13.5	12.2	6.4
1934	359,368,022	458,011	6,258	622	565	527	178	3	15	4.40	785	84.1	12.2	11.1	5.8
1933	333,630,533	418,703	5,555	615	559	521	167	9	30	4.78	797	84.7	12.0	10.4	5.5
1932	309,709,872	406,380	5,427	653	594	554	146	19	120	5.22	762	84.1	12.3	9.8	6.3
1931	382,089,396	450,213	5,642	736	669	623	160	3	35	5.30	849	83.2	13.1	9.5	5.0
1930	467,526,299	493,202	5,891	770	700	653	187	2	43	5.06	948	81.0	10.5	8.3	4.3
1929	534,988,593	502,993	6,057	752	679	638	219	(2)	11	4.85	1,064	78.4	7.4	6.9	3.8
1928	500,744,970	522,150	6,450	760	691	644	203	8	83	4.73	959	76.9	4.5	5.7	4.0
1927	517,763,352	593,918	7,011	835	759	708	191	45	153	4.55	872	74.9	3.3	5.3	3.6
1926	573,366,985	593,647	7,177	821	747	696	215	1	24	4.50	966	73.8	1.8	(1)	3.0
1925	520,052,741	588,493	7,144	822	748	696	195	2	30	4.52	884	72.9	1.2	(1)	3.2
1924	483,686,538	619,604	7,586	871	792	738	171	7	73	4.56	781	71.5	0.7	(1)	2.8
1923	564,564,662	704,793	9,331	970	885	823	179	2	20	4.47	801	68.3	0.3	3.8	2.1
1922	422,268,099	687,958	9,299	916	832	776	142	78	117	4.28	609	64.8	--------	(1)	2.4
1921	415,921,950	663,754	8,038	860	781	729	149	3	23	4.20	627	66.4	--------	3.4	1.2
1920	568,666,683	639,547	8,921	796	725	675	220	6	22	4.00	881	60.7	--------	3.3	1.5
1919	465,860,058	621,998	8,994	736	669	624	195	25	37	3.84	749	60.0	--------	3.6	1.2
1918	579,385,820	615,305	8,319	717	650	607	249	1	7	3.78	942	56.7	--------	3.8	1.4
1917	551,790,563	603,143	6,939	699	636	593	243	4	17	3.77	915	56.1	--------	4.6	1.0
1916	502,519,682	561,102	5,726	673	613	570	230	4	26	3.90	896	56.9	--------	4.6	0.8
1915	442,624,426	557,456	5,502	672	610	569	203	4	61	3.91	794	55.3	--------	4.7	0.6
1914	422,703,970	583,506	5,592	668	608	566	195	19	80	3.71	724	51.8	--------	4.8	0.3
1913	478,435,297	571,882	5,776	635	577	538	232	4	36	3.61	837	50.7	--------	4.6	--------
1912	450,104,982	548,632	5,747	622	566	527	223	10	35	3.68	820	46.8	--------	3.9	--------
1911	405,907,059	549,775	5,887	593	538	502	211	2	27	3.50	738	43.9	--------	(1)	--------
1910	417,111,142	555,533	5,818	592	538	502	217	35	89	3.46	751	41.7	--------	3.8	--------
1909	379,744,257	543,152	5,775	560	510	474	209	1	29	3.34	699	37.5	--------	3.8	--------
1908	332,573,944	516,264	4,730	531	482	450	193	11	38	3.34	644	37.0	--------	3.6	--------
1907	394,759,112	513,258	4,550	520	473	440	234	1	14	3.29	769	35.1	--------	2.9	--------
1906	342,874,867	478,425	4,430	496	451	420	213	28	63	3.36	717	34.7	--------	2.7	--------
1905	315,062,785	460,629	5,060	460	417	390	211	2	23	3.24	684	32.8	--------	--------	--------
1904	278,659,689	437,832	4,650	425	386	360	202	8	44	3.15	637	28.2	--------	--------	--------
1903	282,749,348	415,777	(1)	387	350	328	225	3	28	3.02	680	27.6	--------	--------	--------
1902	260,216,844	370,056	(1)	348	316	295	230	7	44	3.06	703	26.8	--------	--------	--------
1901	225,828,149	340,235	(1)	309	281	262	225	2	35	2.94	664	25.6	--------	--------	--------
1900	212,316,112	304,375	(1)	279	255	237	234	5	43	2.98	697	24.9	--------	--------	--------
1899	193,323,187	271,027	3,245	254	230	216	234	8	46	3.05	713	22.7	--------	--------	--------
1898	166,593,623	255,717	2,862	243	221	206	211	--------	--------	3.09	651	19.5	--------	--------	--------
1897	147,617,519	247,817	2,454	232	213	197	196	--------	--------	3.04	596	15.3	--------	--------	--------
1896	137,640,276	244,171	2,599	221	202	187	192	--------	--------	2.94	564	11.9	--------	--------	--------
1895	135,118,193	239,962	2,555	215	196	182	194	--------	--------	2.90	563	(1)	--------	--------	--------
1894	118,820,405	244,603	(1)	214	196	181	171	--------	--------	2.84	486	(1)	--------	--------	--------
1893	128,385,231	230,365	(1)	194	174	164	204	--------	--------	2.73	557	(1)	--------	--------	--------
1892	126,856,567	212,893	(1)	178	162	151	219	--------	--------	2.72	596	(1)	--------	--------	--------
1891	117,901,238	205,803	(1)	163	148	138	223	--------	--------	2.57	573	5.3	--------	--------	--------
1890	111,302,322	192,204	(1)	152	137	129	226	--------	--------	2.56	579	(1)	--------	--------	--------

[1] Data not available.

[2] One-half day or less.

Series G 33–42.—FUELS—PENNSYLVANIA ANTHRACITE INDUSTRY: 1890 TO 1945

[Net tons are of 2,000 pounds. For production data prior to 1890, see page 142. See also series G 17–18]

YEAR	Production (net tons)	FOREIGN TRADE (NET TONS)		Consumption calculated (net tons)	EMPLOYMENT		OUTPUT (AVERAGE TONS)		OPERATIONS (NET TONS)		
		Exports	Imports		Average number of employees	Average number of days worked	Per man per day	Per man per year	Cut by machines	Produced by stripping	Loaded mechanically underground
	16a	33	34	35	36	37	38	39	40	41	42
1945	[1] 54,933,909	3,691,247	149	51,600,000	72,842	269	2.79	751	1,210,171	10,056,325	13,927,955
1944	[1] 63,701,363	4,185,933	11,847	59,400,000	77,591	292	2.79	815	1,336,082	10,953,030	14,975,146
1943	[1] 60,643,620	4,138,680	166,020	57,100,000	79,153	270	2.78	751	1,624,883	8,989,387	14,745,793
1942	[1] 60,327,729	4,438,588	140,115	56,500,000	82,121	239	2.95	705	2,285,640	9,070,933	14,741,459
1941	[1] 56,368,267	3,380,189	74,669	52,700,000	88,054	203	3.04	617	1,855,422	7,316,574	13,441,987
1940	51,484,640	2,667,632	135,436	49,000,000	91,313	186	3.02	562	1,816,483	6,352,700	12,326,000
1939	51,487,377	2,590,000	298,153	49,700,000	93,138	183	3.02	553	1,881,884	5,486,479	11,773,833
1938	46,099,027	1,908,911	362,895	45,200,000	96,417	171	2.79	478	1,588,407	5,095,341	10,151,669
1937	51,856,433	1,914,173	395,737	50,400,000	99,085	189	2.77	523	1,984,512	5,696,018	10,683,837
1936	54,579,535	1,678,024	614,639	53,200,000	102,081	192	2.79	535	2,162,744	6,203,267	10,827,946
1935	52,158,783	1,608,549	571,439	51,100,000	103,269	189	2.68	505	1,848,095	5,187,072	9,279,057
1934	57,168,291	1,297,610	478,118	55,500,000	109,050	207	2.53	524	1,981,088	5,798,138	9,284,486
1933	49,541,344	1,034,562	456,252	49,600,000	104,633	182	2.60	473	1,648,249	4,932,069	6,557,267
1932	49,855,221	1,303,355	607,097	50,500,000	121,243	162	2.54	411	1,674,223	3,980,973	5,433,340
1931	59,645,652	1,778,308	637,951	58,408,000	139,431	181	2.37	428	1,587,265	3,813,237	4,384,780
1930	69,384,837	2,551,659	674,812	67,628,000	150,804	208	2.21	460	1,410,123	2,536,288	4,467,750
1929	73,828,195	3,406,369	487,172	71,457,000	151,501	225	2.16	487	1,159,910	1,911,766	3,470,158
1928	75,348,069	3,336,272	384,707	73,650,000	160,681	217	2.17	469	1,289,809	2,422,924	[2] 2,351,074
1927	80,095,564	3,325,507	119,030	74,672,000	165,259	225	2.15	485	1,171,888	2,153,156	[2] 2,223,281
1926	84,437,452	4,029,683	813,956	77,221,000	165,386	244	2.09	511	931,650	2,401,356	----------
1925	61,817,149	3,179,006	382,894	64,061,000	160,312	182	2.12	386	941,189	1,578,478	----------
1924	87,926,862	4,017,785	117,951	80,717,000	160,009	274	2.00	550	1,423,884	1,865,677	----------
1923	93,339,009	5,090,138	300,360	86,914,000	157,743	268	2.21	592	1,208,542	2,263,098	----------
1922	54,683,022	2,649,457	233,528	56,799,000	156,849	151	2.31	349	502,793	949,745	----------
1921	90,473,451	4,677,368	8,894	81,950,000	159,499	271	2.09	567	979,145	2,027,790	----------
1920	89,598,249	5,403,749	31,748	85,786,000	145,074	271	2.28	618	938,073	2,054,441	----------
1919	88,092,201	4,976,598	82,818	81,518,000	154,571	266	2.14	570	1,575,205	2,006,879	----------
1918	98,826,084	4,967,808	37,272	92,775,000	147,121	293	2.29	672	1,857,514	2,360,183	----------
1917	99,611,811	6,007,306	13,000	94,068,000	154,174	285	2.27	646	1,955,223	2,301,588	----------
1916	87,578,493	4,665,530	6,000	87,118,000	159,869	253	2.16	548	1,839,506	1,987,800	----------
1915	88,995,061	3,965,255	814	88,144,000	176,552	230	2.19	504	1,307,756	1,121,603	----------
1914	90,821,507	4,289,873	17,696	84,041,000	179,679	245	2.06	505	916,596	----------	----------
1913	91,524,922	4,652,912	1,004	85,474,000	175,745	257	2.02	520	555,776	----------	----------
1912	84,361,598	4,131,444	1,870	80,232,000	174,030	231	2.10	485	246,216	----------	----------
1911	90,464,067	3,980,479	2,759	86,486,000	172,585	246	2.13	524	69,907	----------	----------
1910	84,485,236	3,384,222	9,180	81,110,000	169,497	229	2.17	498	----------	----------	----------
1909	81,070,359	3,183,840	3,574	77,890,000	[2] 171,195	205	([3])	([3])	----------	----------	----------
1908	83,268,754	3,082,641	18,462	80,205,000	174,174	200	2.39	478	----------	----------	----------
1907	85,604,312	3,021,841	11,085	82,594,000	167,234	220	2.33	512	----------	----------	----------
1906	71,282,411	2,483,005	36,236	68,836,000	162,355	195	2.25	439	----------	----------	----------
1905	77,659,850	2,497,581	38,350	75,201,000	165,406	215	2.18	470	----------	----------	----------
1904	73,156,709	2,495,799	81,232	70,742,000	155,861	200	2.35	469	----------	----------	----------
1903	74,607,068	2,249,920	196,837	72,554,000	150,483	206	2.41	496	----------	----------	----------
1902	41,373,595	1,016,934	190,636	40,547,000	148,141	116	2.40	279	----------	----------	----------
1901	67,471,667	2,232,504	320	65,239,000	145,309	196	2.37	464	----------	----------	----------
1900	57,367,915	1,853,163	132	55,515,000	144,206	166	2.40	398	----------	----------	----------
1899	60,418,005	1,912,732	68	58,505,000	139,608	173	2.50	433	----------	----------	----------
1898	53,382,645	1,513,062	3,527	51,873,000	145,504	152	2.41	367	----------	----------	----------
1897	52,611,681	1,454,620	27,478	51,185,000	149,884	150	2.34	351	----------	----------	----------
1896	54,346,081	1,512,000	113,892	52,948,000	148,991	174	2.10	365	----------	----------	----------
1895	57,999,337	1,647,195	158,297	56,510,000	142,917	196	2.07	406	----------	----------	----------
1894	51,921,121	1,613,500	100,876	50,408,000	131,603	190	2.08	395	----------	----------	----------
1893	53,967,543	1,493,281	60,220	52,534,000	132,944	197	2.06	406	----------	----------	----------
1892	52,472,504	953,836	72,865	51,592,000	129,050	198	2.06	407	----------	----------	----------
1891	50,665,431	964,601	42,120	49,743,000	126,350	203	1.98	401	----------	----------	----------
1890	46,468,641	889,655	16,962	45,596,000	126,000	200	1.85	369	----------	----------	----------

[1] Includes some "bootleg" coal purchased by legitimate operators and prepared at their breakers.

[2] As reported by the Commonwealth of Pennsylvania, Department of Mines.

[3] Data not available.

Series G 43–56.—FUELS—COKE INDUSTRY: 1880 TO 1945

[Net tons are of 2,000 pounds]

YEAR	PRODUCTION (MILLION NET TONS)				NUMBER OF OVENS			Coal charged (million net tons)	Yield of coke from coal (percent)	Average dollar value of coke per ton at plant	TOTAL VALUE OF PLANT (MILLIONS OF DOLLARS)			
		Byproduct			Byproduct							Coke		
	Total coke	Quantity	Percent of total coke	Beehive coke	In existence	Under construction at end of year	Beehive, in existence				Total coke and byproducts	Beehive	Byproduct	All byproducts
	43	44	45	46	47	48	49	50	51	52	53	54	55	56
1945	67.3	62.1	92.3	5.2	14,510	335	12,179	95.7	70.4	7.56	699	38	470	191
1944	74.0	67.0	90.6	7.0	14,580	180	16,318	105.3	70.3	7.13	736	49	479	208
1943	71.7	63.8	88.9	7.9	14,253	528	17,666	102.5	70.0	6.64	686	52	424	210
1942	70.6	62.3	88.3	8.3	13,303	1,327	16,295	100.8	70.0	6.03	629	47	378	204
1941	65.2	58.5	89.7	6.7	13,016	181	18,669	93.1	70.0	5.41	536	37	316	183
1940	57.1	54.0	94.6	3.1	12,734	492	15,150	81.4	70.1	4.80	442	14	260	168
1939	44.3	42.9	96.7	1.4	12,732	---	10,934	63.5	69.8	4.80	355	6	207	142
1938	32.5	31.7	97.4	0.8	12,724	146	10,816	46.6	69.7	5.14	283	4	163	116
1937	52.4	49.2	94.0	3.2	12,718	259	12,194	74.5	70.3	4.98	412	14	247	151
1936	46.3	44.6	96.3	1.7	12,849	305	13,012	65.9	70.2	5.02	369	7	226	136
1935	35.1	34.2	97.4	0.9	12,860	122	13,674	50.5	69.6	5.03	290	4	173	113
1934	31.8	30.8	96.8	1.0	12,963	---	14,206	46.0	69.2	5.01	263	4	155	104
1933	27.6	26.7	96.7	0.9	13,053	---	16,857	40.1	68.7	4.46	218	3	120	95
1932	21.8	21.1	97.0	0.7	13,053	---	19,440	31.9	68.3	4.79	193	2	103	88
1931	33.5	32.4	96.6	1.1	13,108	---	21,588	48.6	68.9	4.83	287	4	158	125
1930	48.0	45.2	94.2	2.8	12,831	276	23,907	69.8	68.7	4.36	378	10	200	168
1929	59.9	53.4	89.2	6.5	12,649	408	30,082	86.8	69.0	4.66	471	23	256	192
1928	52.8	48.3	91.5	4.5	12,544	145	41,288	77.2	68.4	4.79	430	16	237	177
1927	51.1	43.9	85.9	7.2	12,475	289	49,795	74.4	68.6	5.13	422	30	232	160
1926	56.9	44.4	78.0	12.5	11,716	978	52,558	82.9	68.6	5.41	465	57	251	157
1925	51.3	39.9	77.9	11.4	11,290	429	57,587	74.5	68.8	5.12	406	52	211	143
1924	44.3	34.0	76.8	10.3	11,413	247	60,432	65.0	68.1	5.51	364	48	196	120
1923	57.0	37.6	66.0	19.4	11,156	629	62,349	84.4	67.5	6.56	504	116	257	131
1922	37.1	28.5	76.9	8.6	11,212	403	63,958	54.3	68.3	6.42	333	50	188	95
1921	25.3	19.8	78.1	5.5	11,142	85	66,014	37.2	68.0	5.84	216	30	118	68
1920	51.3	30.8	60.0	20.5	10,881	396	75,298	76.2	67.4	9.27	581	163	313	105
1919	44.2	25.1	56.9	19.1	10,379	877	82,560	65.6	67.4	5.85	326	98	160	68
1918	56.5	26.0	46.0	30.5	9,279	1,815	84,635	85.0	66.4	6.77	459	189	193	77
1917	55.6	22.4	40.4	33.2	7,869	2,260	88,027	83.8	66.4	5.36	366	159	139	68
1916	54.5	19.1	35.0	35.4	7,283	2,084	91,581	81.6	66.8	3.13	233	96	75	62
1915	41.6	14.1	33.8	27.5	6,268	1,191	93,110	61.8	67.2	2.54	136	57	49	30
1914	34.6	11.2	32.5	23.4	5,809	644	93,946	51.6	66.9	2.56	106	50	38	18
1913	46.3	12.7	27.5	33.6	5,688	504	96,962	69.2	66.9	2.78	146	80	49	17
1912	44.0	11.1	25.3	32.9	5,211	793	97,019	65.6	67.1	2.54	126	69	43	14
1911	35.6	7.9	22.1	27.7	4,624	698	99,255	53.3	66.7	2.37	94	57	27	10
1910	41.7	7.1	17.1	34.6	4,078	1,200	100,362	63.1	66.1	2.39	108	75	25	8
1909	39.3	6.2	15.9	33.1	3,989	949	99,993	59.4	66.2	2.29	98	70	20	8
1908	26.0	4.2	16.1	21.8	3,799	240	97,419	39.4	66.0	2.40	69	48	14	7
1907	40.8	5.6	13.8	35.2	3,684	330	95,996	61.9	65.8	2.74	120	90	22	8
1906	36.4	4.6	12.5	31.8	3,547	112	90,354	55.7	65.3	2.52	(1)	92		(1)
1905	32.2	3.4	10.7	28.8	3,103	417	84,405	49.5	65.1	2.25	(1)	72		(1)
1904	23.7	2.6	11.0	21.1	2,910	832	80,689	36.5	64.8	1.95	(1)	46		(1)
1903	25.3	1.9	7.4	23.4	1,956	1,335	77,378	39.4	64.1	2.63	(1)	66		(1)
1902	25.4	1.4	5.5	24.0	1,663	1,346	67,406	39.6	64.1	2.49	(1)	63		(1)
1901	21.8	1.2	5.4	20.6	1,165	1,533	62,786	34.2	63.7	2.04	(1)	44		(1)
1900	20.5	1.1	5.2	19.4	1,085	1,096	57,399	32.1	63.9	2.31	(1)	47		(1)
1899	19.7	0.9	4.6	18.8	1,020	65	48,583	30.2	65.1	1.76	(1)	35		(1)
1898	16.0	0.3	1.8	15.7	520	500	47,863	25.2	63.6	1.59	(1)	26		(1)
1897	13.3	0.3	2.0	13.0	280	240	47,388	20.9	63.6	1.66	(1)	22		(1)
1896	11.8	0.1	0.7	11.7	160	120	46,784	18.7	63.1	1.84	(1)	22		(1)
1895	13.3	0.02	0.1	13.3	72	60	45,493	20.8	64.0	1.44	(1)	19		(1)
1894	9.2	0.02	0.2	9.2	12	60	44,760	14.4	64.0	1.34	(1)	12		(1)
1893	9.5	0.01	0.1	9.5	12	---	44,189	14.9	63.5	1.74	(1)	17		(1)
1892	12.0	---	---	12.0	---	---	42,002	18.8	63.8	1.96	24	24	---	---
1891	10.4	---	---	10.4	---	---	40,057	16.3	63.3	1.97	20	20	---	---
1890	11.5	---	---	11.5	---	---	37,158	18.0	63.9	2.02	23	23	---	---
1889	10.3	---	---	10.3	---	---	34,165	16.0	64.3	1.62	17	17	---	---
1888	8.5	---	---	8.5	---	---	30,059	12.9	66.0	1.46	12	12	---	---
1887	7.6	---	---	7.6	---	---	26,001	11.9	64.2	2.01	15	15	---	---
1886	6.8	---	---	6.8	---	---	22,597	10.7	64.0	1.63	11	11	---	---
1885	5.1	---	---	5.1	---	---	20,116	8.1	63.3	1.49	8	8	---	---
1884	4.9	---	---	4.9	---	---	19,557	8.0	61.3	1.49	7	7	---	---
1883	5.5	---	---	5.5	---	---	18,304	8.5	64.2	1.49	8	8	---	---
1882	4.8	---	---	4.8	---	---	16,356	7.6	63.3	1.77	8	8	---	---
1881	4.1	---	---	4.1	---	---	14,119	6.5	62.8	1.88	8	8	---	---
1880	3.3	---	---	3.3	---	---	12,372	5.2	63.7	1.99	7	7	---	---

[1] No accurate data on value of the byproducts available.

Series G 57–58.—FUELS—PETROLEUM, PRODUCTION: 1859 TO 1945

[Quantities in thousands of barrels (42 gallons). Value in thousands of dollars]

YEAR	Quantity 57	Value 58	YEAR	Quantity 57	Value 58	YEAR	Quantity 57	Value 58	YEAR	Quantity 57	Value 58
1945	1,713,655	2,094,250	1927	901,129	1,172,830	1910	209,557	127,900	1892	50,515	25,907
1944	1,677,904	2,032,960	1926	770,874	1,447,760	1909	183,171	128,329	1891	54,293	30,527
1943	1,505,613	1,809,020				1908	178,527	129,079			
1942	1,386,645	1,643,470	1925	763,743	1,284,960	1907	166,095	120,107	1890	45,824	35,365
1941	1,402,228	1,602,000	1924	713,940	1,022,683	1906	126,494	92,445	1889	35,164	26,963
			1923	732,407	978,430				1888	27,612	17,948
1940	1,353,214	1,385,440	1922	557,531	895,111	1905	134,717	84,157	1887	28,283	18,877
1939	1,264,962	1,294,470	1921	472,183	814,745	1904	117,081	101,175	1886	28,065	19,996
1938	1,214,355	1,373,060				1903	100,461	94,694			
1937	1,279,160	1,513,340	1920	442,929	1,360,745	1902	88,767	71,179	1885	21,859	19,198
1936	1,099,687	1,097,820	1919	378,367	760,266	1901	69,389	66,417	1884	24,218	20,596
			1918	355,928	703,944				1883	23,450	25,790
1935	996,596	961,440	1917	335,316	522,635	1900	63,621	75,989	1882	30,350	23,631
1934	908,065	904,825	1916	300,767	330,900	1899	57,071	64,604	1881	27,661	25,448
1933	905,656	608,000				1898	55,364	44,193			
1932	785,159	680,460	1915	281,104	179,463	1897	60,476	40,874	1880	26,286	24,601
1931	851,081	550,630	1914	265,763	214,125	1896	60,960	58,519	1879	19,914	17,211
			1913	248,446	237,121				1878	15,397	18,045
1930	898,011	1,070,200	1912	222,935	164,213	1895	52,892	57,632	1877	13,350	31,789
1929	1,007,323	1,280,417	1911	220,449	134,045	1894	49,344	35,522	1876	9,133	22,983
1928	901,474	1,054,880				1893	48,431	28,950	1859–1875	74,072	215,781

Series G 59–64.—FUELS—NATURAL GAS AND NATURAL GASOLINE, PRODUCTION: 1906 TO 1945

YEAR	NATURAL GAS (PRODUCED AND DELIVERED TO CONSUMER)			NATURAL GASOLINE (PRODUCED)			YEAR	NATURAL GAS (PRODUCED AND DELIVERED TO CONSUMER)			NATURAL GASOLINE (PRODUCED)		
	Total	Value at points of consumption		Total [1]	Value at plant			Total	Value at points of consumption		Total	Value at plant	
		Total	Average per M cubic feet		Total	Average per gallon			Total	Average per M cubic feet		Total	Average per gallon
	59	60	61	62	63	64		59	60	61	62	63	64
	Million cu. ft.	*1,000 dollars*	*Cents*	*1,000 gallons*	*1,000 dollars*	*Cents*		*Million cu. ft.*	*1,000 dollars*	*Cents*	*1,000 gallons*	*1,000 dollars*	*Cents*
1945	3,918,686	837,852	21.4	3,290,949	145,570	4.4	1925	1,188,571	265,271	22.3	1,127,470	120,383	10.7
1944	3,711,039	797,255	21.5	3,031,308	[2] 148,200	4.9	1924	1,141,521	253,856	22.2	933,861	82,233	8.8
1943	3,414,689	760,950	22.3	2,773,218	122,500	4.4	1923	1,006,976	240,001	23.8	816,226	77,268	9.5
1942	3,053,475	692,737	22.7	2,725,968	102,565	3.8	1922	762,546	221,535	29.1	505,832	72,711	14.4
1941	2,812,658	621,333	22.1	2,688,714	105,815	3.9	1921	662,052	174,617	26.4	449,934	61,815	13.7
1940	2,660,222	577,939	21.7	2,339,400	68,261	2.9	1920	798,210	196,194	24.6	384,744	71,788	18.7
1939	2,476,756	534,240	21.6	2,169,300	90,050	4.2	1919	745,916	160,888	21.6	351,535	64,197	18.3
1938	2,295,562	500,698	21.8	2,156,574	87,266	4.0	1918	721,001	153,554	21.3	282,536	50,364	17.8
1937	2,407,620	528,354	21.9	2,065,434	97,125	4.7	1917	795,110	142,089	17.9	217,884	40,189	18.4
1936	2,167,802	476,813	22.0	1,796,340	84,572	4.7	1916	753,170	120,227	16.0	103,493	14,331	13.8
1935	1,916,595	429,374	22.4	1,651,986	70,940	4.3	1915	628,579	101,312	16.1	65,365	5,151	7.9
1934	1,770,721	395,378	22.3	1,535,360	60,523	3.9	1914	591,867	94,116	15.9	42,653	3,106	7.3
1933	1,555,474	368,540	23.7	1,420,000	54,368	3.8	1913	581,898	87,847	15.1	24,061	2,458	10.2
1932	1,555,990	384,632	24.7	1,523,800	49,244	3.2	1912	562,203	84,564	15.0	12,081	1,157	9.6
1931	1,686,436	392,816	23.3	1,831,918	63,732	3.5	1911	512,993	74,622	14.5	7,426	532	7.2
1930	1,943,421	416,090	21.4	2,210,494	128,160	5.8	1910	509,155	70,756	13.9	----------	----------	--------
1929	1,917,693	413,276	21.6	2,233,688	158,410	7.1	1909	480,706	63,207	13.1	----------	----------	--------
1928	1,568,139	363,726	23.2	1,814,034	138,944	7.7	1908	402,141	54,640	13.6	----------	----------	--------
1927	1,445,428	317,930	22.0	1,641,144	118,688	7.2	1907	406,622	54,222	13.3	----------	----------	--------
1926	1,313,019	300,168	22.9	1,363,090	136,412	10.0	1906	388,843	46,874	12.1	----------	----------	--------

[1] Includes cycle products as follows—1939, 39,354,000 gallons; 1940, 165,690,000 gallons; 1941, 480,354,000 gallons; 1942, 654,864,000 gallons; 1943, 657,846,000 gallons; 1944, 843,024,000 gallons. Cycle plants were first used in 1939.

[2] Estimated.

Series G 65–76.—NONMETALS—BUILDING MATERIALS, PRODUCTION: 1880 TO 1945

[Short tons are of 2,000 pounds]

YEAR	HYDRAULIC CEMENT		GYPSUM [2]		LIME		SAND AND GRAVEL		SLATE		STONE	
	Shipments[1]	Value	Crude gypsum mined	Value, finished products sold	Sold by producers	Value	Sold or used[3]	Value	Products sold or used	Value	Sold or used by producers (approximate)	Value
	65	66	67	68	69	70	71	72	73	74	75	76
	1,000 barrels	1,000 dollars	1,000 short tons	1,000 dollars	1,000 short tons	1,000 dollars	1,000 short tons	1,000 dollars	1,000 short tons	1,000 dollars	1,000 short tons	1,000 dollars
1945	107,833	175,431	3,812	60,149	5,921	45,918	195,524	128,837	552	5,659	153,405	179,308
1944	95,592	151,997	3,761	55,700	6,474	48,698	194,783	125,164	478	5,004	155,580	175,642
1943	129,479	202,460	3,878	59,097	6,597	49,064	234,064	152,793	469	4,870	171,343	184,320
1942	187,809	286,905	4,698	63,171	6,104	44,367	304,346	188,500	591	6,360	195,884	205,002
1941	170,365	250,589	4,789	69,758	6,079	42,941	288,715	147,207	619	7,516	183,108	195,337
1940	132,864	193,465	3,699	53,493	4,887	33,956	238,308	110,688	473	5,738	153,733	160,044
1939	125,057	184,255	3,227	45,928	4,254	30,049	226,008	106,066	531	6,682	147,447	158,462
1938	108,192	156,703	2,684	36,256	3,347	24,138	181,320	85,923	493	5,655	124,839	139,255
1937	115,678	171,414	3,058	38,801	4,124	30,091	189,660	97,473	445	5,605	133,143	146,213
1936	114,611	172,778	2,713	[4] 34,325	3,749	26,934	178,330	90,308	455	5,485	131,416	141,526
1935	76,244	114,810	1,904	[4] 24,625	2,987	21,749	123,924	61,977	330	3,650	83,159	87,824
1934	76,579	117,882	1,536	[4] 18,000	2,397	17,164	116,612	61,247	233	2,708	92,064	98,980
1933	64,761	86,229	1,335	[4] 16,225	2,269	14,254	107,755	53,073	260	2,696	70,222	80,946
1932	81,368	82,718	1,416	[4] 18,400	1,960	12,302	120,038	57,522	284	3,104	70,644	89,064
1931	128,377	142,580	2,559	[4] 29,875	2,708	18,675	153,479	86,280	368	5,498	97,933	135,086
1930	160,846	231,249	3,471	[4] 37,850	3,388	25,616	197,052	115,177	464	7,912	126,996	178,949
1929	172,027	255,105	5,016	[4] 41,000	4,270	33,479	222,572	132,836	670	11,245	141,110	202,693
1928	178,052	278,883	5,102	[4] 42,575	4,458	36,450	209,119	119,208	646	11,472	133,870	196,821
1927	174,023	281,736	5,347	42,174	4,415	38,638	197,454	115,530	692	11,381	136,345	198,647
1926	164,219	280,786	5,635	46,721	4,560	41,566	183,101	111,339	718	12,353	124,496	188,309
1925	159,047	281,076	5,678	47,577	4,581	42,609	172,001	107,542	725	12,575	115,851	174,217
1924	147,466	266,053	5,043	42,725	4,072	39,596	156,230	97,013	728	11,776	103,184	161,870
1923	137,184	259,632	4,753	34,888	4,076	39,994	139,932	90,904	707	12,077	103,319	159,470
1922	118,591	208,464	3,780	29,361	3,640	33,255	94,867	64,618	608	9,177	80,212	122,067
1921	96,047	181,675	2,891	23,700	2,532	24,895	79,845	56,484	412	7,322	63,539	106,962
1920	97,079	195,590	3,129	24,533	3,570	37,544	82,041	65,662	469	8,726	78,527	133,542
1919	86,141	147,318	2,420	15,728	3,330	29,449	70,576	45,952	410	6,031	65,539	96,709
1918	71,348	113,718	2,057	11,471	3,206	26,809	61,824	37,927	[5] 286	4,841	68,563	82,700
1917	91,343	123,210	2,696	11,116	3,786	23,808	76,419	35,297	[5] 395	5,750	83,575	82,216
1916	95,394	104,689	2,758	7,959	4,073	18,509	89,092	29,810	[5] 422	5,339	91,831	79,070
1915	87,685	75,155	2,448	6,597	3,623	14,424	76,603	23,122	[5] 386	4,959	----------	74,595
1914	87,258	80,533	2,476	6,896	3,381	13,269	79,282	23,847	[5] 427	5,707	----------	77,544
1913	89,541	89,551	2,600	6,775	3,595	14,648	79,556	24,218	[5] 465	6,175	----------	83,733
1912	85,926	69,554	2,501	6,564	3,529	13,970	68,355	23,113	[5] 482	6,043	----------	78,193
1911	79,548	66,705	2,324	6,462	3,393	13,689	66,847	21,159	----------	5,728	----------	77,109
1910	77,785	68,752	2,379	6,523	3,506	14,088	69,410	21,038	----------	6,237	----------	76,521
1909	66,690	53,611	2,253	5,907	3,485	13,846	59,566	18,337	----------	5,441	----------	71,345
1908	52,911	44,478	1,722	4,076	2,767	11,091	37,216	13,270	----------	6,317	----------	65,712
1907	52,230	55,904	1,752	4,942	3,093	12,657	41,852	14,492	----------	6,019	----------	71,106
1906	51,000	55,302	1,541	3,838	3,198	12,481	32,932	12,698	----------	5,668	----------	66,379
1905	40,102	35,932	1,043	3,029	2,984	10,942	23,205	11,224	----------	5,496	----------	63,799
1904	31,675	26,032	941	2,784	2,708	9,951	10,680	5,748	----------	5,617	----------	58,766
1903	29,899	31,931	1,042	3,793	(6)	9,256	2,111	1,831	----------	6,257	----------	57,433
1902	25,754	25,366	816	2,089	(6)	9,336	1,848	1,424	----------	5,696	----------	54,799
1901	20,069	15,787	634	1,507	(6)	8,204	----------	----------	----------	4,788	----------	47,284
1900	17,231	13,284	594	1,627	(6)	6,797	----------	----------	----------	4,240	----------	36,971
1899	15,855	13,157	486	1,287	(6)	6,983	----------	----------	----------	3,963	----------	35,245
1898	12,344	10,058	292	755	(6)	6,887	----------	----------	----------	3,724	----------	28,635
1897	11,038	8,227	289	756	(6)	6,390	----------	----------	----------	3,525	----------	26,894
1896	9,526	6,485	224	573	(6)	6,328	----------	----------	----------	2,746	----------	23,965
1895	8,731	5,482	266	797	(6)	6,589	----------	----------	----------	2,699	----------	26,656
1894	8,362	5,019	239	762	(6)	8,288	----------	----------	----------	2,790	----------	27,306
1893	8,002	4,410	254	697	(6)	(7)	----------	----------	----------	2,523	----------	[8] 33,737
1892	8,759	5,144	256	695	(6)	(7)	----------	----------	----------	4,117	----------	[8] 48,225
1891	8,223	4,639	208	628	(6)	(7)	----------	----------	----------	3,826	----------	[8] 45,769
1890	7,777	4,527	183	575	(6)	(7)	----------	----------	----------	(7)	----------	[9] 49,761
1889	6,832	5,203	268	764	(6)	8,217	----------	----------	----------	3,483	----------	42,926
1888	6,503	5,021	110	550	4,909	24,544	----------	----------	----------	2,053	----------	26,719
1887	6,943	5,674	95	425	4,675	23,375	----------	----------	----------	1,720	----------	26,516
1886	4,500	3,990	95	429	4,250	21,250	----------	----------	----------	1,610	----------	20,220
1885	4,150	3,492	90	405	4,000	20,000	----------	----------	----------	1,648	----------	19,030
1884	4,000	3,720	90	390	3,700	18,500	----------	----------	----------	1,852	----------	18,849
1883	4,190	4,294	90	420	3,200	19,200	----------	----------	----------	[5] 1,898	----------	20,009
1882	3,250	3,673	100	450	3,100	21,700	----------	----------	----------	[5] 1,754	----------	21,556
1881	2,500	2,529	85	350	3,000	20,000	----------	----------	----------	[5] 1,544	----------	22,556
1880	2,073	1,853	90	400	2,800	19,000	----------	----------	----------	[5] 1,530	----------	20,626

[1] 1880–1911 data are for production.

[2] 1880–1927, value of products made from domestic crude gypsum; 1928–45, value of products made from domestic, imported, and byproduct crude gypsum.

[3] By commercial and government-and-contractor producers.

[4] Revised figures partly estimated, to make them comparable with 1937 and succeeding years.

[5] Estimated.

[6] Not available.

[7] Included under "Stone." Separate figures not available.

[8] Includes lime.

[9] Includes lime and slate.

Series G 77–92.—NONMETALS—CHEMICAL AND FERTILIZER MATERIALS, AND MAGNESITE, PRODUCTION: 1880 TO 1945

[Short tons are of 2,000 pounds; long tons are of 2,240 pounds]

YEAR	CHEMICAL MATERIALS										FERTILIZER MATERIALS				MAGNESITE	
	Barite		Feldspar		Salt		Sulfur		Pyrites		Potash (K_2O)		Phosphate rock			
	Sold or used by producers	Value	Sold or used by producers	Value	Sold or used by producers	Value	Quantity	Value	Quantity	Value	Sold by producers	Value	Sold or used by producers	Value	Crude, mined	Value
	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92
	1,000 short tons	*1,000 dollars*	*1,000 long tons*	*1,000 dollars*	*1,000 short tons*	*1,000 dollars*	*Long tons*	*1,000 dollars*	*Long tons*	*1,000 dollars*	*1,000 short tons*	*1,000 dollars*	*1,000 long tons*	*1,000 dollars*	*1,000 short tons*	*1,000 dollars*
1945	696	5,349	373	2,022	15,394	46,069	3,753,188	60,051	722,596	2,700	870	30,314	5,807	23,951	336	2,325
1944	519	3,558	327	1,814	15,717	45,989	3,218,158	51,491	788,530	2,598	818	29,487	5,377	20,856	561	4,407
1943	420	2,797	308	1,646	15,214	43,878	2,538,786	40,621	802,384	2,884	732	26,183	5,126	18,962	755	6,072
1942	429	2,673	316	1,547	13,693	38,144	3,460,686	55,371	720,363	2,464	681	23,963	4,644	16,597	497	3,874
1941	503	3,134	339	1,519	12,721	33,620	3,139,253	50,228	645,257	2,009	531	17,368	4,690	15,596	375	2,656
1940	409	2,597	291	1,272	10,360	26,475	2,732,088	43,713	626,640	1,920	393	12,562	4,003	12,335	333	2,488
1939	384	2,344	253	1,113	9,278	24,510	2,090,979	33,247	519,497	1,560	366	12,028	3,757	12,294	199	1,465
1938	310	2,005	196	895	8,026	23,243	2,393,408	40,209	555,629	1,686	286	9,748	3,739	12,952	97	725
1937	356	2,241	269	1,383	9,242	24,132	2,741,970	49,355	584,166	1,778	267	9,020	3,956	12,975	203	1,483
1936	283	1,675	245	1,303	8,829	23,306	2,016,338	36,294	547,236	1,666	223	6,969	3,352	11,406	207	1,412
1935	225	1,251	190	1,005	7,927	21,838	1,632,590	29,223	514,192	1,583	225	4,993	3,042	10,952	177	1,192
1934	210	1,109	154	853	7,612	22,851	1,421,473	25,444	432,524	1,216	114	2,813	2,835	10,040	101	731
1933	168	853	151	779	7,605	22,318	1,406,063	25,309	284,311	770	139	5,297	2,490	7,872	108	840
1932	130	746	105	540	6,408	19,939	890,440	16,028	189,703	499	56	2,103	1,707	5,738	38	283
1931	175	995	147	861	7,358	21,541	2,128,930	38,321	330,848	975	64	3,087	2,535	9,288	74	499
1930	235	1,538	172	1,067	8,054	25,009	2,558,981	46,062	347,512	1,029	57	2,986	3,926	13,997	129	1,033
1929	277	1,851	198	1,277	8,544	27,335	2,362,389	42,523	333,465	1,250	58	2,988	3,761	13,153	188	1,500
1928	270	1,755	211	1,419	8,075	26,773	1,981,873	35,674	312,815	1,081	60	3,029	3,501	12,443	127	1,099
1927	254	1,671	202	1,425	7,569	24,818	2,111,618	39,065	[1] 302,826	[1] 1,129	50	2,448	3,171	11,253	121	1,091
1926	238	1,773	210	1,607	7,372	25,055	1,890,027	34,020	[1] 226,933	[1] 840	25	1,083	3,210	10,894	134	1,201
1925	228	1,703	186	1,316	7,398	26,162	1,409,262	21,984	[1] 193,642	[1] 740	26	1,204	3,482	11,546	121	1,433
1924	196	1,541	205	1,509	6,803	25,747	1,220,561	19,895	[1] 167,914	[1] 677	22	843	2,868	10,252	120	1,041
1923	214	1,664	145	1,058	7,131	27,796	2,036,097	32,781	[1] 190,635	[1] 694	19	785	3,007	11,576	147	1,104
1922	155	1,124	117	845	6,793	27,465	1,830,942	30,027	[1] 172,851	[1] 686	11	464	2,418	10,483	56	572
1921	66	532	92	618	4,981	24,558	1,879,150	33,449	157,118	711	4	448	2,064	12,270	48	510
1920	228	2,142	136	851	6,840	29,894	1,255,249	24,854	310,777	1,597	41	7,463	4,104	25,080	304	2,748
1919	209	1,728	63	348	6,883	27,075	1,190,575	17,978	420,647	2,558	46	11,271	2,272	11,591	156	1,248
1918	155	1,045	88	430	7,239	26,940	1,353,525	29,778	464,494	2,645	39	15,840	2,491	8,214	232	1,813
1917	207	1,171	127	475	6,978	19,940	1,134,412	24,276	482,662	2,593	33	13,981	2,584	7,771	317	2,900
1916	222	1,011	118	405	6,363	13,646	649,683	10,395	439,132	2,038	10	4,243	1,982	5,897	155	1,394
1915	109	381	94	337	5,352	11,748	520,582	8,798	394,124	1,675	1	342	1,836	5,413	30	274
1914	53	156	121	630	4,873	10,197	417,690	7,602	336,662	1,283	--------	--------	2,734	9,608	11	124
1913	45	156	108	777	4,816	10,123	491,080	10,165	341,338	1,286	--------	--------	3,111	11,796	10	77
1912	37	153	77	521	4,665	9,403	787,735	13,628	350,928	1,334	--------	--------	2,973	11,676	11	84
1911	38	123	83	579	4,366	8,346	205,066	3,691	301,458	1,165	--------	--------	3,053	11,901	9	75
1910	43	122	72	502	4,243	7,900	247,060	4,447	241,612	978	--------	--------	2,655	10,917	12	75
1909	62	210	68	425	4,215	8,344	273,983	5,069	247,070	1,028	--------	--------	2,338	10,796	9	38
1908	39	120	63	429	4,035	7,554	364,444	6,560	222,598	857	--------	--------	2,386	11,399	7	20
1907	90	292	82	559	4,159	7,608	188,878	3,305	247,387	795	--------	--------	2,265	10,654	8	23
1906	50	160	65	402	3,944	6,658	295,123	5,106	261,422	931	--------	--------	2,081	8,579	8	23
1905	48	149	32	226	3,635	6,096	220,000	4,480	253,000	938	--------	--------	1,947	6,763	4	15
1904	66	175	40	266	3,084	6,021	85,000	1,776	207,081	815	--------	--------	1,874	6,581	3	9
1903	50	152	37	257	2,656	5,287	[2] 7,382	[2] 293	[3] 225,745	[3] 817	--------	--------	1,582	5,319	4	11
1902	62	203	40	250	3,339	5,669	[2] 7,443	[2] 89	[3] 200,431	[3] 858	--------	--------	1,490	4,693	3	8
1901	49	158	31	220	2,879	6,617	[4] 6,866	[4] 223	234,825	1,034	--------	--------	1,484	5,316	4	10
1900	68	188	22	181	2,922	6,945	3,147	88	204,615	750	--------	--------	1,491	5,359	2	19
1899	42	140	22	212	2,759	6,867	4,313	108	174,734	543	--------	--------	1,516	5,084	1	18
1898	31	108	12	32	2,466	6,213	1,071	33	193,364	594	--------	--------	1,309	3,453	1	19
1897	26	58	11	43	2,236	4,920	2,031	46	143,201	392	--------	--------	1,039	2,673	1	14
1896	17	47	9	35	1,939	4,041	4,696	87	115,483	320	--------	--------	931	2,803	2	11
1895	22	68	8	30	1,914	4,423	1,607	42	99,549	323	--------	--------	1,039	3,606	2	17
1894	23	87	17	99	1,816	4,739	446	20	105,940	363	--------	--------	997	3,480	1	10
1893	29	89	11	84	1,666	4,155	1,071	42	75,777	257	--------	--------	941	4,136	1	7
1892	32	130	11	89	1,638	5,655	2,400	81	109,788	305	--------	--------	682	3,296	1	10
1891	31	118	10	50	1,398	4,716	1,071	40	106,536	339	--------	--------	588	3,651	([5])	4
1890	22	87	8	45	1,243	4,752	([6])	--------	99,854	274	--------	--------	510	3,214	--------	--------
1889	21	106	7	39	1,121	4,195	402	8	93,705	202	--------	--------	546	2,920	--------	--------
1888	22	110	9	50	1,128	4,374	([6])	--------	54,331	168	--------	--------	452	2,040	--------	--------
1887	17	75	10	56	1,121	4,094	2,679	100	52,000	210	--------	--------	481	1,837	--------	--------
1886	11	50	15	74	1,079	4,737	2,232	75	55,000	220	--------	--------	431	1,849	--------	--------
1885	17	75	14	68	985	4,825	638	18	49,000	221	--------	--------	673	4,145	--------	--------
1884	28	100	11	55	912	4,198	446	12	35,000	175	--------	--------	432	2,375	--------	--------
1883	30	108	14	71	867	4,251	893	27	25,000	138	--------	--------	378	2,270	--------	--------
1882	22	80	14	70	898	4,320	536	21	12,000	72	--------	--------	332	1,992	--------	--------
1881	22	80	14	70	868	4,200	536	21	10,000	60	--------	--------	267	1,980	--------	--------
1880	22	80	12	60	835	4,830	536	21	2,000	5	--------	--------	211	1,124	--------	--------

[1] Corrected for flotation concentrates reported in *Mineral Resources of the United States*, 1931, p. 145.

[2] Tonnage calculated from combined total of domestic sulphur and sulphur content of pyrite produced; value, by subtracting value of pyrite (calculated from average value reported) from combined total value.

[3] Calculated from combined total of domestic sulphur and sulphur content of pyrite produced; value from average value reported.

[4] Quantity derived from figures in metric tons shown in *Mineral Resources*, 1903, p. 1081; value is as reported in same source.

[5] Less than 500 tons.

[6] None mined.

Series G 93–101.—METALS, FERROUS—IRON ORE, PIG IRON, AND FERRO-ALLOYS: 1810 TO 1945

[Long tons or gross tons are of 2,240 pounds; short or net tons are of 2,000 pounds]

YEAR	IRON ORE (USABLE ORE) Production	Shipments Quantity	Shipments Value	PIG IRON Production	Shipments Quantity	Shipments Value	FERRO-ALLOYS Production [1]	Shipments [1] Quantity	Shipments [1] Value
	93	94	95	96	97	98	99	100	101
	Long tons	*Long tons*	*1,000 dollars*	*Net tons*	*Net tons*	*1,000 dollars*	*Tons*	*Tons*	*1,000 dollars*
1945	88,376,393	[2] 88,136,715	243,761	53,224,213	53,265,353	1,172,435	1,732,423	1,661,657	210,510
1944	94,117,705	[2] 95,135,675	256,886	61,003,759	60,995,977	1,278,981	1,893,855	1,860,956	246,014
1943	101,247,835	[2] 99,462,850	269,017	60,765,195	60,787,159	1,273,634	2,082,979	1,995,171	271,488
1942	105,526,195	[2] 105,988,514	279,179	59,077,593	59,100,601	1,227,390	1,898,260	1,869,211	259,084
1941	92,409,579	93,053,994	249,706	55,085,446	55,223,641	1,111,811	1,636,073	1,719,785	204,857
1940	73,695,899	75,198,084	189,087	46,203,967	46,958,929	840,442	1,224,360	1,292,660	128,128
1939	51,731,730	54,827,100	158,538	34,805,024	35,942,463	626,825	735,171	841,162	76,157
1938	28,447,282	26,430,920	74,322	20,812,200	20,386,636	356,875	584,724	464,112	42,460
1937	72,098,548	72,347,785	207,828	40,482,506	39,451,269	731,139	1,008,170	970,651	86,140
1936	48,788,745	51,465,648	131,741	33,884,505	34,494,833	541,694	818,488	853,531	69,135
1935	30,540,252	33,426,486	83,035	23,326,460	23,719,755	358,145	545,316	592,176	48,892
1934	24,587,616	25,792,606	66,484	17,568,815	17,501,335	261,400	452,607	428,798	34,635
1933	17,553,188	24,624,285	63,776	14,590,062	16,075,581	213,348	348,894	421,423	28,654
1932	9,846,916	5,331,201	12,898	9,575,607	9,540,608	120,033	230,311	218,646	14,004
1931	31,131,502	28,516,032	74,124	20,637,516	19,950,088	285,147	466,969	398,295	30,765
1930	58,408,664	55,201,221	145,619	35,562,429	33,544,398	512,165	732,518	650,240	51,900
1929	73,027,720	75,602,734	197,149	47,727,661	46,535,060	731,858	869,563	829,324	75,506
1928	62,197,088	63,432,826	155,789	42,734,400	42,900,142	661,351	757,131	794,695	66,578
1927	61,741,100	61,232,473	151,126	40,953,522	39,050,641	646,226	709,649	646,749	55,164
1926	67,623,000	69,292,832	174,016	44,097,456	42,762,779	749,633	674,389	689,258	61,368
1925	61,907,997	63,924,763	160,797	41,104,634	41,232,466	739,316	575,455	616,222	53,048
1924	54,267,419	52,083,375	151,307	35,174,485	34,791,824	665,079	517,800	497,244	43,250
1923	69,351,442	69,811,472	240,739	45,204,484	42,964,744	946,799	----------	579,817	49,877
1922	47,128,527	50,612,620	157,809	30,486,292	30,991,226	608,145	----------	423,280	28,259
1921	29,490,978	26,652,528	89,745	18,690,701	17,963,253	389,438	----------	248,627	21,698
1920	67,604,465	69,281,341	285,006	41,357,105	39,995,454	1,140,904	----------	612,808	77,519
1919	60,965,418	56,372,784	197,313	34,737,208	33,857,859	775,915	----------	419,638	53,731
1918	69,658,278	72,021,202	244,368	43,741,201	42,618,092	1,180,760	----------	750,868	115,434
1917	75,288,851	75,573,207	238,260	43,255,762	43,245,951	1,053,786	----------	634,021	83,732
1916	75,167,672	77,870,553	181,902	44,166,972	43,821,482	663,478	----------	589,738	50,282
1915	55,526,490	55,493,100	101,289	33,506,159	34,030,624	401,410	----------	388,644	17,450
1914	41,439,761	39,714,280	71,905	26,132,113	24,934,854	298,777	255,524	----------	9,350
1913	61,980,437	----------	--------	34,682,090	34,035,607	458,342	296,207	----------	13,015
1912	55,150,147	----------	--------	33,294,169	33,802,685	420,563	328,685	----------	12,224
1911	43,876,552	----------	--------	26,487,493	26,048,162	327,335	253,375	----------	8,378
1910	57,014,906	----------	--------	30,579,995	29,875,016	412,162	288,863	----------	7,424

YEAR	IRON PRODUCTION Iron ore	Pig iron
	93	96
	Long tons	*Net tons*
1909	51,294,271	28,890,928
1908	35,983,336	17,848,340
1907	51,720,619	28,875,124
1906	47,749,728	28,344,054
1905	42,526,133	25,751,466
1904	27,644,330	18,476,677
1903	35,019,308	20,170,362
1902	35,554,135	19,959,864
1901	28,887,479	17,783,756
1900	27,553,161	15,443,951
1899	24,683,178	15,255,187
1898	19,433,716	13,186,806
1897	17,518,046	10,811,002
1896	16,005,449	9,657,902
1895	15,957,614	10,579,865
1894	11,879,679	7,456,275
1893	11,587,629	7,979,442
1892	16,296,666	10,255,840
1891	14,591,178	9,273,454
1890	16,036,043	10,307,027
1889	14,518,041	8,516,079
1888	[3] 12,062,530	7,268,507
1887	[3] 11,300,000	7,187,206
1886	[3] 10,000,000	6,365,328
1885	[3] 7,600,000	4,529,869
1884	[4] 8,200,000	4,589,612
1883	[4] 8,400,000	5,146,971
1882	[4] 9,000,000	5,178,122
1881	[4] 7,119,643	4,641,564
1880	7,120,362	4,295,414
1879	----------	3,070,875
1878	----------	2,577,361
1877	----------	2,314,585
1876	----------	2,093,236
1875	[4] [5] 4,017,857	2,266,581
1874	----------	2,689,413

YEAR	Pig iron production 96	YEAR	Pig iron production 96	YEAR	Pig iron production 96	YEAR	Pig iron production 96	YEAR	Pig iron production 96	YEAR	Pig iron production 96
	Net tons		*Net tons*		*Net tons*		*Net tons*		*Net tons*		*Net tons*
1873	2,868,279	1867	1,461,626	1861	731,544	1855	784,178	1847	896,000	1830	184,300
1872	2,854,559	1866	1,350,343			1854	736,217	1846	856,800	1829	159,040
1871	1,911,608			1860	919,770	1852	560,000	1842	240,800	1828	145,600
		1865	931,582	1859	840,627						
1870	1,865,000	1864	1,135,996	1858	705,094	1850	631,406	1840	321,331	1820	22,400
1869	1,916,641	1863	947,604	1857	798,157	1849	728,000	1832	224,000		
1868	1,603,000	1862	787,662	1856	883,137	1848	896,000	1831	213,920	1810	60,377

[1] In net tons beginning with 1940; in gross tons for prior years. [2] Includes byproduct ore. [3] Represents consumption of domestic ores. Estimated; see text.
[4] Estimated; see text. [5] Figures (in long tons) for 1870 and 1860 are 3,831,891 and 2,873,460, respectively.

Series G 102–103.—METALS, NONFERROUS—MERCURY, PRODUCTION: 1850 TO 1945

[Flasks are of 76.5 pounds net, avoirdupois, prior to June 1904; 75 pounds net through 1927; thereafter, 76 pounds net]

YEAR	Quantity 102	Value 103	YEAR	Quantity 102	Value 103	YEAR	Quantity 102	Value 103	YEAR	Quantity 102	Value 103	YEAR	Quantity 102	Value 103
	Flasks	*Dollars*		*Flasks*	*Dollars*		*Flasks*	*Dollars*		*Flasks*	*Dollars*		*Flasks*	*Dollars*
1945	30,763	4,149,621	1925	9,174	762,616	1905	30,534	1,105,941	1885	32,073	986,245	1865	53,000	2,433,700
1944	37,688	4,460,752	1924	10,085	692,739	1904	35,315	1,536,203	1884	31,913	973,347	1864	47,489	2,179,745
1943	51,929	10,137,060	1923	7,937	521,302	1903	35,634	1,613,864	1883	46,725	1,343,344	1863	40,531	1,705,544
1942	50,846	9,983,612	1922	6,375	368,348	1902	34,291	1,481,371	1882	52,732	1,488,624	1862	42,000	1,526,700
1941	44,921	8,311,283	1921	6,339	300,595	1901	29,727	1,440,570	1881	60,851	1,815,185	1861	35,000	1,471,750
1940	37,777	6,681,618	1920	13,392	1,066,807	1900	28,317	1,272,566	1880	59,926	1,857,706	1860	10,000	535,500
1939	18,633	1,936,714	1919	21,415	1,933,560	1899	30,454	1,452,656	1879	73,684	2,199,467	1859	13,000	820,690
1938	17,991	1,357,781	1918	32,883	3,863,752	1898	31,092	1,188,647	1878	63,880	2,101,652	1858	31,000	1,482,730
1937	16,508	1,488,691	1917	36,159	3,808,266	1897	26,691	995,040	1877	79,395	2,961,434	1857	28,204	1,374,381
1936	16,569	1,324,194	1916	29,932	3,768,139	1896	30,765	1,075,544	1876	72,716	3,199,504	1856	30,000	1,549,500
1935	17,518	1,261,121	1915	21,033	1,804,631	1895	36,067	1,335,922	1875	50,250	4,228,538	1855	33,000	1,767,150
1934	15,445	1,140,845	1914	16,548	811,680	1894	30,416	933,771	1874	27,756	2,919,376	1854	30,004	1,663,722
1933	9,669	572,666	1913	20,213	813,171	1893	30,164	1,108,527	1873	27,642	2,220,482	1853	22,284	1,235,648
1932	12,622	731,129	1912	25,064	1,053,941	1892	27,993	1,139,595	1872	31,621	2,084,773	1852	20,000	1,166,600
1931	24,947	2,179,145	1911	21,256	977,989	1891	22,904	1,036,406	1871	31,686	1,999,327	1851	27,779	1,859,248
1930	21,553	2,478,789	1910	20,601	958,153	1890	22,926	1,203,615	1870	30,077	1,725,818	1850	7,723	768,052
1929	23,682	2,892,638	1909	21,075	957,859	1889	26,484	1,191,780	1869	33,811	1,551,925			
1928	17,870	2,207,003	1908	19,752	872,446	1888	33,250	1,370,625	1868	47,728	2,190,715			
1927	11,276	1,314,782	1907	21,554	853,538	1887	33,825	1,433,334	1867	47,000	2,157,300			
1926	7,642	702,323	1906	26,083	1,030,279	1886	29,981	1,064,325	1866	46,550	2,473,202			

Series G 104-111.—METALS, ALLOYING—MANGANESE ORE, CHROMITE, TUNGSTEN, AND MOLYBDENUM, PRODUCTION: 1880 TO 1945

[Long tons are of 2,240 pounds; short tons and net tons are of 2,000 pounds. Shipments of tungsten represent ore and concentrates, 60 percent WO_3. Molybdenum quantity figures refer to pounds Mo in concentrates]

YEAR	MANGANESE ORE [1]		CHROMITE		TUNGSTEN		MOLYBDENUM	
	Shipments	Value	Shipments	Value	Shipments	Value	Shipments [2]	Value
	104	105	106	107	108	109	110	111
	Net tons	*Dollars*	*Long tons*	*Dollars*	*Short tons*	*Dollars*	*Lbs. Mo.*	*Dollars*
1945	182,337	7,320,309	12,476	532,382	5,715	7,957,731	32,524,000	23,107,000
1944	247,616	9,014,876	40,740	1,668,299	10,283	14,407,143	39,423,000	27,999,000
1943	205,173	7,278,758	142,964	4,820,461	11,945	17,973,685	53,955,000	38,500,000
1942	190,748	6,493,674	100,782	2,994,081	9,333	13,508,266	66,437,000	47,275,000
1941	87,795	2,696,124	12,731	274,062	6,567	9,223,726	38,377,000	25,996,000
1940	44,038	1,169,024	2,662	28,784	5,319	6,576,318	25,329,000	17,189,000
1939	32,824	794,746	3,614	46,892	4,287	4,402,182	32,415,000	22,157,000
1938	28,360	681,679	812	10,730	3,044	3,161,498	25,727,000	17,977,000
1937	45,071	1,062,399	2,321	14,888	3,500	4,094,000	30,122,000	20,571,000
1936	35,974	696,400	269	2,978	2,612	2,323,818	17,959,000	11,933,000
1935	29,599	557,340	515	6,163	2,395	1,921,017	10,892,000	7,261,000
1934	29,697	571,748	369	4,653	2,049	1,791,316	9,377,000	6,502,000
1933	21,444	466,285	843	11,585	895	514,234	5,761,000	4,316,000
1932	19,910	377,222	155	2,160	396	218,394	2,373,000	1,186,000
1931	43,951	699,121	268	3,509	1,404	928,000	3,157,000	1,577,000
1930	75,080	1,437,465	80	1,905	702	509,000	3,759,269	2,068,000
1929	67,625	1,612,357	269	3,976	830	654,000	3,904,648	2,259,000
1928	52,483	1,214,853	660	14,807	1,208	753,900	3,329,214	1,924,600
1927	50,110	1,151,918	201	5,063	1,164	724,000	2,286,075	1,858,786
1926	51,810	1,228,663	141	2,079	1,382	920,400	1,431,830	1,192,714
1925	110,124	1,857,769	108	2,105	1,191	755,500	1,154,050	961,324
1924	63,297	1,307,477	288	1,140	565	287,000	297,174	222,880
1923	35,280	874,973	227	3,819	241	144,600	22,667	11,350
1922	15,013	455,160	355	7,288	-------	-------	-------	-------
1921	15,155	495,097	282	2,900	-------	-------	-------	-------
1920	105,750	2,396,235	2,502	44,857	216	101,800	34,900	17,207
1919	61,552	1,791,118	5,079	129,302	327	353,900	297,926	341,814
1918	342,573	8,240,386	82,430	3,955,567	5,061	7,049,300	861,637	1,253,700
1917	144,873	4,109,722	43,725	1,049,400	6,144	6,783,000	350,200	495,350
1916	35,250	656,278	47,035	726,243	5,923	12,074,000	206,740	205,000
1915	10,705	108,049	3,281	36,744	2,332	4,100,000	181,769	114,866
1914	2,951	27,377	591	8,715	990	435,000	1,297	1,297
1913	4,534	40,480	255	2,854	1,537	672,118	-------	-------
1912	1,863	15,723	201	2,753	1,330	502,158	-------	-------

YEAR	MANGANESE ORE [1]		CHROMITE		TUNGSTEN	
	Shipments	Value	Shipments	Value	Shipments	Value
	104	105	106	107	108	109
	Net tons	*Dollars*	*Long tons*	*Dollars*	*Short tons*	*Dollars*
1911	2,752	24,586	120	1,629	1,139	407,985
1910	2,529	22,892	205	2,729	1,821	832,992
1909	1,729	19,675	598	8,300	1,619	614,370
1908	6,881	62,779	359	7,230	671	229,955
1907	6,276	63,369	290	5,640	1,640	890,048
1906	7,751	88,132	107	1,800	928	348,867
1905	4,612	-------	22	375	[3] 803	268,676
1904	3,523	-------	123	1,845	[3] 740	184,000
1903	3,164	-------	150	2,250	[3] 292	43,639
1902	8,375	-------	315	4,567	[3] 184	34,040
1901	13,434	-------	368	5,790	[3] 179	27,720
1900	13,184	-------	140	1,400	[3] 46	11,040
1899	11,127	-------	-------	-------	-------	-------
1898	17,872	-------	-------	-------	-------	-------
1897	12,441	-------	-------	-------	-------	-------
1896	11,299	-------	786	6,667	-------	-------
1895	10,693	-------	1,740	16,795	-------	-------
1894	7,065	-------	3,680	53,231	-------	-------
1893	8,644	-------	1,450	21,750	-------	-------
1892	15,246	-------	1,500	25,000	-------	-------
1891	25,146	-------	1,372	20,580	-------	-------
1890	21,602	-------	3,599	53,985	-------	-------
1889	27,101	-------	2,000	30,000	-------	-------
1888	32,702	-------	1,500	20,000	-------	-------
1887	38,667	-------	3,000	40,000	-------	-------
1886	33,816	-------	2,000	30,000	-------	-------
1885	26,049	-------	2,700	40,000	-------	-------
1884	11,402	-------	2,000	35,000	-------	-------
1883	6,894	-------	3,000	60,000	-------	-------
1882	5,076	-------	2,500	50,000	-------	-------
1881	5,482	-------	2,000	30,000	-------	-------
1880	6,452	-------	2,288	27,808	-------	-------

[1] Containing 35 percent or more Mn. [2] Includes exports. [3] Not strictly comparable with figures for later years, see text.

Series G 112-117.—METALS, NONFERROUS—COPPER, LEAD, ZINC, PRODUCTION: 1801 TO 1945

[Short tons are of 2,000 pounds]

YEAR	COPPER		LEAD		ZINC [2]	
	Smelter production	Value	Smelter production [1]	Value	Smelter production	Value
	112	113	114	115	116	117
	Short tons	*Dollars*	*Short tons*	*Dollars*	*Short tons*	*Dollars*
1945	782,726	[3] 184,723,000	443,467	[3] 56,763,776	764,561	[3] 131,504,492
1944	1,003,379	[3] 236,797,000	464,668	[3] 59,477,504	869,302	[3] 149,519,944
1943	1,092,939	[3] 257,934,000	469,480	[3] 60,093,440	942,309	[3] 162,077,148
1942	1,087,991	[3] 256,766,000	548,852	[3] 69,155,352	891,872	[3] 155,185,728
1941	966,072	227,993,000	544,683	62,093,862	822,020	123,303,000
1940	909,084	205,453,000	516,628	51,662,800	675,275	85,084,650
1939	712,675	148,236,000	445,619	44,561,900	507,236	52,752,544
1938	562,328	110,216,000	364,826	29,186,080	446,341	42,848,736
1937	834,661	201,988,000	466,535	55,984,200	556,904	72,397,520
1936	611,410	112,499,000	399,099	37,515,306	492,132	49,213,200
1935	381,294	63,295,000	324,164	25,933,120	420,634	37,015,792
1934	244,227	39,076,000	310,082	23,566,232	363,590	31,268,740
1933	225,000	28,800,000	257,390	19,561,640	307,182	25,803,288
1932	272,005	34,273,000	270,664	16,239,840	207,148	12,428,880
1931	521,356	94,887,000	412,514	35,063,690	291,996	22,191,696
1930	697,195	181,271,000	608,088	60,808,800	498,045	47,812,320
1929	1,001,432	352,504,000	702,173	88,473,798	625,447	82,559,004
1928	912,950	262,930,000	652,834	82,257,084	602,581	73,514,882
1927	842,020	220,609,000	700,689	88,286,814	592,516	75,842,048
1926	869,811	243,547,000	728,895	116,623,200	618,422	92,763,300
1925	837,435	237,832,000	701,945	122,138,430	572,946	87,087,792
1924	817,125	214,087,000	612,792	98,046,720	517,339	67,254,070
1923	717,500	210,945,000	568,129	84,083,092	510,434	69,419,024
1922	475,143	128,289,000	482,644	55,021,416	354,277	40,387,578
1921	252,793	65,221,000	405,342	36,480,780	200,500	20,050,000
1920	604,531	222,467,000	485,263	77,642,080	463,377	75,067,074
1919	643,210	239,274,000	432,089	45,801,434	465,743	67,998,478
1918	954,267	471,408,000	555,239	78,843,938	517,927	94,262,714

YEAR	COPPER		LEAD		ZINC [2]	
	Smelter production	Value	Smelter production [1]	Value	Smelter production	Value
	112	113	114	115	116	117
	Short tons	*Dollars*	*Short tons*	*Dollars*	*Short tons*	*Dollars*
1917	943,060	514,911,000	564,322	97,063,384	669,573	136,592,892
1916	963,925	474,288,000	558,313	77,047,194	668,343	176,442,552
1915	694,005	242,902,000	516,607	48,561,058	489,519	121,400,712
1914	575,069	152,968,000	520,433	40,593,774	353,049	36,010,998
1913	612,242	189,795,035	425,101	37,408,888	346,676	38,827,712
1912	621,634	205,139,338	404,089	36,368,010	338,806	46,755,228
1911	548,616	137,154,092	402,759	36,248,310	286,526	32,663,964
1910	540,080	137,180,257	393,467	34,625,096	269,184	29,071,872
1909	546,476	142,083,711	374,593	32,214,998	255,760	27,622,080
1908	471,285	124,419,335	323,175	27,146,700	210,424	19,779,856
1907	434,498	173,799,300	376,422	39,900,732	249,860	29,483,480
1906	458,903	177,136,497	365,003	41,610,342	224,770	27,421,940
1905	444,392	138,650,346	334,954	31,485,676	203,849	24,054,182
1904	406,269	104,004,770	323,678	27,836,308	186,702	19,043,604
1903	349,022	95,632,099	340,589	28,609,476	159,219	16,240,338
1902	329,754	80,460,055	282,180	23,138,760	156,927	15,064,992
1901	301,036	100,546,111	280,370	24,111,820	140,822	11,547,404
1900	303,059	100,615,450	280,138	24,652,144	123,886	10,901,968
1899	284,333	97,242,043	218,296	19,646,640	129,051	14,969,916
1898	263,256	65,287,610	230,528	17,520,128	115,399	10,616,708
1897	247,039	59,289,393	231,787	16,688,664	99,980	8,198,360
1896	230,031	49,686,634	207,370	12,442,200	81,499	6,356,922
1895	190,307	40,725,634	181,126	11,592,064	89,686	6,457,392
1894	177,094	33,647,896	174,911	11,544,126	75,328	5,272,960
1893	164,677	35,570,275	189,320	14,009,680	78,832	6,306,560
1892	172,499	40,019,847	195,349	16,018,618	87,260	8,027,920
1891	142,061	36,367,586	195,663	16,827,018	80,873	8,087,300

[1] Excludes refined lead produced from scrap and foreign base bullion. [2] Primary slab zinc; excludes redistilled secondary zinc produced from domestic and foreign ores.
[3] Excludes bonus payments of Office of Metals Reserve.

Series G 112–117.—METALS, NONFERROUS—COPPER, LEAD, ZINC, PRODUCTION: 1801 TO 1945—Con.

[Short tons are of 2,000 pounds]

YEAR	COPPER		LEAD		ZINC [2]	
	Smelter production	Value	Smelter production[1]	Value	Smelter production	Value
	112	113	114	115	116	117
	Short tons	*Dollars*	*Short tons*	*Dollars*	*Short tons*	*Dollars*
1890	129,882	40,523,042	157,844	14,205,960	63,683	7,005,130
1889	113,388	30,614,755	178,357	13,911,846	58,860	5,886,000
1888	113,181	38,028,726	176,015	15,489,320	55,903	5,478,494
1887	90,739	25,043,872	156,630	14,096,700	50,340	4,631,280
1886	78,882	17,511,698	132,189	12,161,388	42,641	3,752,408
1885	82,938	17,914,552	126,192	10,095,360	40,688	3,499,168
1884	72,473	18,843,065	136,297	10,085,978	38,544	3,391,872
1883	57,763	19,061,799	140,297	12,065,542	36,872	3,318,480
1882	45,323	17,313,430	129,780	12,718,440	33,765	3,579,090
1881	35,840	13,045,760	114,495	10,991,520	30,258	3,146,832
1880	30,240	12,942,720	95,725	9,572,500	25,100	2,761,000

YEAR	Copper, smelter production	Lead, smelter production[1]	YEAR	Copper, smelter production	Lead, smelter production[1]	YEAR	Lead, smelter production[1]	YEAR	Lead, smelter production[1]	YEAR	Lead, smelter production[1]	YEAR	Lead, smelter production[1]
	112	114		112	114		114		114		114		114
	Short tons	*Short tons*		*Short tons*	*Short tons*		*Short tons*		*Short tons*		*Short tons*		*Short tons*
1879	25,760	90,840	1868	12,992	16,400	1857	5,376	15,800	1850	728	22,000	1843	25,000
1878	24,080	89,130	1867	11,200	15,200	1856	4,480	16,000	1849	784	23,500	1842	24,000
1877	23,520	80,380	1866	9,968	16,100	1855	3,360	15,800	1848	560	25,000	1841	20,500
1876	21,280	62,940	1865	9,520	14,700	1854	2,520	16,500	1847	336	28,000	1840	17,000
1875	20,160	58,590	1864	8,960	15,300	1853	2,240	16,800	1846	168	28,000	1839	17,500
1874	19,600	51,230	1863	9,520	14,800	1852	1,232	15,700	1845	112	30,000	1838	15,000
1873	17,360	41,940	1862	10,580	14,200	1851	1,008	18,500	1844		26,000	1837	13,500
1872	14,000	25,720	1861	8,400	14,100								
1871	14,560	19,970	1860	8,064	15,600								
1870	14,112	17,830	1859	7,056	16,400								
1869	14,000	17,500	1858	6,160	15,300								

YEAR	Lead, smelter production[1]	YEAR	Lead, smelter production[1]	YEAR	Lead, smelter production[1]	YEAR	Lead, smelter production[1]
	114		114		114		114
	Short tons		*Short tons*		*Short tons*		*Short tons*
1836	15,000	1830	8,000	1823	2,068		
1835	13,000	1829	8,571	1822	1,900		
1834	12,000	1828	7,452	1821	1,900		
1833	11,000	1827	4,490	1816–1820	7,500		
1832	10,000	1826	2,379	1811–1815	7,500		
1831	7,500	1825	2,232	1806–1810	5,000		
		1824	1,987	1801–1805	5,000		

[1] Excludes refined lead produced from scrap and foreign base bullion.

[2] Primary slab zinc; excludes redistilled secondary zinc produced from domestic and foreign ores.

Series G 118–124.—METALS, PRECIOUS—GOLD, SILVER, PLATINUM, PRODUCTION: 1792 TO 1945

[Figures for gold and silver represent mine production; include Alaska, exclude Puerto Rico and Philippine Islands]

YEAR	GOLD		SILVER		PLATINUM		
	Quantity	Value	Quantity	Value	Total	Domestic placer and lode	Gold and copper refining
	118	119	120	121	122	123	124
	Fine oz.	*Dollars*	*Fine oz.*	*Dollars*	*Troy oz.*	*Troy oz.*	*Troy oz.*
1945	954,572	33,410,020	29,024,197	20,639,429	31,046	26,551	4,495
1944	998,394	34,943,790	34,473,540	24,514,517	40,549	33,625	6,924
1943	1,363,815	47,733,525	41,460,826	29,483,254	37,552	27,162	10,390
1942	3,457,110	120,998,850	54,090,765	38,464,544	33,044	23,239	9,805
1941	4,750,865	166,280,275	67,258,997	47,828,620	32,730	26,236	6,494
1940	4,869,949	170,448,215	70,549,362	50,168,435	41,574	33,800	7,774
1939	4,673,042	163,556,470	64,373,281	43,695,802	41,160	32,526	8,634
1938	4,267,469	149,361,415	61,705,837	39,890,643	48,269	41,022	7,247
1937	4,117,078	144,097,742	71,408,625	55,234,573	21,505	10,927	10,578
1936	3,782,667	132,393,349	61,152,534	47,362,638	18,879	9,895	8,984
1935	3,236,951	113,106,219	48,518,639	34,867,631	11,552	9,069	2,483
1934	2,778,789	97,118,626	32,782,304	21,192,600	6,055	3,720	2,335
1933	2,291,697	58,575,774	23,128,781	8,095,073	3,023	1,266	1,757
1932	2,269,353	46,911,683	22,762,292	5,590,874	3,918	1,074	2,844
1931	2,224,729	45,985,148	29,856,628	8,658,423	9,011	885	8,126
1930	2,138,723	44,211,342	47,724,903	18,374,087	9,118	527	8,591
1929	2,058,993	42,563,177	60,860,011	32,438,386	11,242	800	10,442
1928	2,148,064	44,404,425	57,872,443	33,855,379	9,797	529	9,268
1927	2,107,032	43,556,207	59,625,682	33,807,762	8,162	261	7,901
1926	2,232,526	46,150,408	62,487,219	38,992,024	11,311	3,616	7,695
1925	2,307,374	47,697,654	66,710,080	46,296,795	11,338	3,185	8,153
1924	2,444,331	50,528,816	64,070,744	42,927,398	7,502	1,110	6,392
1923	2,404,912	49,713,955	70,355,674	57,691,650	3,696	622	3,074
1922	2,293,251	47,405,709	61,207,989	61,207,989	3,490	1,008	2,482
1921	2,345,010	48,475,654	46,171,299	46,171,299	4,964	1,470	3,494
1920	2,382,987	49,260,720	56,536,904	61,625,223	---------	692	---------
1919	2,753,282	56,915,390	51,899,460	58,127,395	---------	742	---------
1918	3,212,672	66,411,836	68,058,952	68,058,952	---------	647	---------
1917	3,900,209	80,624,484	70,661,512	58,225,086	---------	605	---------
1916	4,417,007	91,307,630	78,857,533	51,888,257	---------	750	---------
1915	4,754,474	98,283,714	72,353,730	36,683,340	---------	742	---------
1914	4,418,062	91,329,443	69,623,249	38,501,656	---------	570	---------
1913	4,311,103	89,118,410	71,187,228	42,997,086	---------	384	---------
1912	4,465,511	92,310,296	66,034,385	40,611,146	---------	721	---------
1911	4,685,620	96,860,350	61,107,840	32,387,155	---------	628	---------

YEAR	GOLD		SILVER		Platinum domestic placer and lode
	Quantity	Value	Quantity	Value	
	118	119	120	121	123
	Fine oz.	*Dollars*	*Fine oz.*	*Dollars*	*Troy oz.*
1910	4,584,903	94,778,348	57,596,709	31,102,223	390
1909	4,798,313	99,189,947	57,312,677	29,802,592	638
1908	4,435,163	91,682,953	50,875,787	26,964,166	750
1907	4,227,499	87,390,163	52,500,021	34,650,013	357
1906	4,703,000	97,219,645	57,362,455	38,432,846	1,439
1905	4,264,734	88,159,881	56,272,496	33,988,587	318
1904	3,910,729	80,835,648	55,999,864	32,035,378	200
1903	3,560,000	73,591,700	54,300,000	29,322,000	110
1902	3,870,000	80,000,000	55,500,000	29,415,000	94
1901	3,805,500	78,666,700	55,214,000	33,128,400	1,408
1900	3,829,897	79,171,000	57,647,000	35,741,100	400
1899	3,437,210	71,053,400	54,764,500	32,858,700	300
1898	3,118,398	64,463,000	54,438,000	32,118,400	225
1897	2,774,935	57,363,000	53,860,000	32,316,000	150
1896	2,568,132	53,088,000	58,834,800	39,654,600	163
1895	2,254,760	46,610,000	55,727,000	36,445,500	150
1894	1,910,813	39,500,000	49,500,000	31,422,100	100
1893	1,739,323	35,955,000	60,000,000	46,800,000	75
1892	1,597,098	33,015,000	63,500,000	55,662,500	80
1891	1,604,840	33,175,000	58,330,000	57,630,000	100
1890	1,588,877	32,845,000	54,516,300	57,242,100	600
1889	1,594,775	32,967,000	50,094,500	46,838,400	500
1888	1,604,478	33,167,500	45,792,700	43,045,100	500
1887	1,603,049	33,136,000	41,721,600	40,887,200	448
1886	1,686,788	34,869,000	39,694,000	39,482,400	50
1885	1,538,373	31,801,000	39,909,400	42,503,500	250
1884	1,489,950	30,800,000	37,743,800	41,921,300	150
1883	1,451,250	30,000,000	35,732,800	39,618,400	200
1882	1,572,187	32,500,000	36,196,900	41,105,900	200
1881	1,678,612	34,700,000	33,257,800	37,657,500	100
1880	1,741,500	36,000,000	30,318,700	34,717,000	100
1879	1,881,787	38,900,000	31,565,500	35,477,100	---------
1878	2,477,109	51,206,400	35,022,300	40,401,000	---------
1877	2,268,662	46,897,400	30,777,800	36,991,500	---------
1876	1,931,575	39,929,200	29,996,200	34,919,800	---------

Series G 118–124.—METALS, PRECIOUS—GOLD, SILVER, AND PLATINUM, PRODUCTION: 1792 TO 1945—Con.

[Figures for gold and silver represent mine production; include Alaska, exclude Puerto Rico and Philippine Islands]

YEAR	GOLD		SILVER		YEAR	GOLD		SILVER		YEAR	Gold, quantity	Silver, quantity
	Quantity	Value	Quantity	Value		Quantity	Value	Quantity	Value			
	118	119	120	121		118	119	120	121		118	120
	Fine oz.	*Dollars*	*Fine oz.*	*Dollars*		*Fine oz.*	*Dollars*	*Fine oz.*	*Dollars*		*Fine oz.*	*Fine oz.*
1875	1,619,009	33,467,900	24,530,300	30,485,900	1859	2,418,750	50,000,000	77,300	105,100	1843	58,000	18,567
1874	1,620,122	33,490,900	28,868,200	36,917,500	1858	2,418,750	50,000,000	38,700	52,000	1842	43,000	18,567
1873	1,741,500	36,000,000	27,650,400	35,881,600	1857	2,660,625	55,000,000	38,700	52,400	1841	30,000	18,567
1872	1,741,500	36,000,000	22,236,300	29,396,400	1856	2,660,625	55,000,000	38,700	52,000			
1871	2,104,312	43,500,000	17,789,100	23,588,300						1840	24,000	18,567
					1855	2,660,625	55,000,000	38,700	52,000	1839	23,000	18,567
1870	2,418,750	50,000,000	12,375,000	16,434,000	1854	2,902,500	60,000,000	38,700	52,200	1838	24,000	18,567
1869	2,394,562	49,500,000	9,281,200	12,297,600	1853	3,144,375	65,000,000	38,700	52,200	1837	16,000	18,567
1868	2,322,000	48,000,000	9,281,200	12,306,900	1852	2,902,500	60,000,000	38,700	51,300	1836	26,000	18,567
1867	2,502,196	51,725,000	10,441,400	13,866,200	1851	2,660,625	55,000,000	38,700	51,700			
1866	2,588,062	53,500,000	7,734,400	10,356,400						1835	39,000	18,567
					1850	2,418,750	50,000,000	38,700	50,900	1834		7,730
1865	2,574,759	53,225,000	8,701,200	11,642,200	1849	1,935,000	40,000,000	38,700	50,700			
1864	2,230,087	46,100,000	8,507,800	11,443,000	1848	483,750	10,000,000	38,700	50,500	1834–1844 [1]	362,812	193,400
1863	1,935,000	40,000,000	6,574,200	8,842,300	1847	43,005	889,000	38,700	50,600	1792–1834 [1]	677,250	
1862	1,896,300	39,200,000	3,480,500	4,684,800	1846	55,341	1,140,000	38,700	50,300			
1861	2,080,125	43,000,000	1,546,900	2,062,000								
					1845	48,762	1,008,000	38,700	50,200			
1860	2,225,250	46,000,000	116,000	156,800	1844	54,812	(1)	18,567	(1)			

[1] Value for 1834–1844: Gold, $7,500,000, silver, $253,400; for 1792–1834: Gold, $14,000,000.

Series G 125–130.—METALS, LIGHT-WEIGHT—ALUMINUM, BAUXITE, AND MAGNESIUM, PRODUCTION: 1885 TO 1945

[Long tons are of 2,240 pounds]

YEAR	PRIMARY ALUMINUM		BAUXITE		PRIMARY MAGNESIUM		YEAR	PRIMARY ALUMINUM		BAUXITE	
	Quantity	Value	Shipments	Value	Sales	Value		Quantity	Value	Shipments	Value
	125	126	127	128	129	130		125	126	127	128
	1,000 pounds	*1,000 dollars*	*Long tons*	*Dollars*	*1,000 pounds*	*1,000 dollars*		*1,000 pounds*	*1,000 dollars*	*Long tons*	*Dollars*
1945	990,120	140,864	[1] 1,332,656	5,987,347	86,992	(2)	1913	47,279	9,456	210,241	997,698
1944	1,552,892	222,416	[1] 3,282,587	14,216,614	293,170	(2)	1912	41,806	8,361	159,865	768,932
1943	1,840,358	265,380	[1] 6,693,080	32,744,109	340,534	(2)	1911	38,396	6,911	155,618	750,649
1942	1,042,212	151,371	[1] 2,625,413	12,934,025	94,841	(2)					
1941	618,134	100,395	[1] 902,759	5,358,976	31,056	(2)	1910	35,402	[3] 6,641	148,932	716,258
							1909	29,081	[3] 5,589	129,101	679,447
1940	412,560	75,292	[1] 434,988	2,578,968	12,824	(2)	1908	10,679	[3] 2,331	52,167	263,968
1939	327,090	64,600	[1] 375,301	2,166,236	10,650	(2)	1907	16,325	[3] 4,673	97,776	480,330
1938	286,882	556,659	311,354	1,812,545	4,820	(2)	1906	[4] 14,125	[3] 5,050	75,332	368,311
1937	292,681	55,609	420,232	2,444,686	4,540	(2)	1906[5]	5,469	[3] 1,955	----------	----------
1936	224,929	41,612	372,005	2,198,523	3,903	(2)					
							1905	[4] 10,810	[3] 3,784	48,129	240,292
1935	119,295	22,070	233,912	1,556,595	4,241	(2)	1904	[4] 8,100	[3] 2,835	47,661	235,704
1934	74,177	14,094	157,838	1,129,053	4,250	(2)	1903	[4] 6,636	[3] 2,190	48,087	171,306
1933	85,125	16,174	154,176	923,259	1,435	377	1902	[4] 5,763	[3] 1,902	27,322	120,366
1932	104,888	20,453	96,349	548,168	792	229	1901	[4] 5,738	[3] 1,894	18,905	79,914
1931	177,545	37,284	195,895	1,140,629	580	200					
							1900	[4] 5,062	[3] 1,656	23,184	89,676
1930	229,037	50,961	330,612	1,928,297	560	269	1899	[4] 3,262	[3] 1,206	35,280	125,598
1929	227,973	51,864	365,777	2,265,638	908	512	1898	[4] 2,993	[3] 1,048	25,149	75,437
1928	210,544	47,899	375,426	2,273,898	531	290	1897	[4] 2,371	[3] 1,019	20,590	57,652
1927	163,607	39,266	320,940	1,988,780	366	442	1896	[4] 1,002	[3] 501	18,364	47,388
1926	147,386	37,583	392,250	2,415,200	323	390					
							1895	[4] 501	[3] 326	17,069	44,000
1925	140,116	36,430	316,540	1,988,250	245	274	1894	[4] 494	[3] 350	11,066	35,818
1924	150,564	37,607	347,570	2,137,990	128	150	1893	[4] 216	[3] 153	9,179	29,507
1923	128,658	28,305	522,690	3,156,610	125	155	1892	260	173	10,518	34,183
1922	73,633	13,622	309,600	2,012,330	60	89	1891	150	100	3,593	11,675
1921	54,532	10,906	139,550	889,800	48	86					
							1890	61	61	1,844	6,012
1920	138,042	41,375	521,308	3,247,345	124	233	1889	47	97	728	2,366
1919	128,477	38,558	376,566	2,201,747	127	247	1888	19	65	----------	----------
1918	124,725	41,159	605,721	3,447,992	284	615	1887	18	59	----------	----------
1917	129,861	45,882	568,690	3,119,058	116	234	1886	3	27	----------	----------
1916	115,107	33,900	425,100	2,296,400	75	311					
							1885	(6)	3	----------	----------
1915	90,504	16,280	297,041	1,514,834	88	440					
1914	57,973	10,080	219,318	1,069,194	----------	----------					

[1] Shipments of crude ore from mines. Not comparable with previous figures.
[2] Bureau of Mines not at liberty to publish.
[3] Estimated.
[4] Fiscal year ending Aug. 31.
[5] September-December.
[6] Less than 500 lbs.

Series G 131–143.—EMPLOYMENT AND INJURIES—MINES (EXCEPT COAL), AND QUARRIES AND RELATED INDUSTRIES: 1911 TO 1945

YEAR	ALL MINES, EXCEPT COAL MINES						QUARRIES AND RELATED INDUSTRIES						
	Men employed		Killed		Injured		Men employed			Killed		Injured	
	Actual number	Average days active	Total number	Per thousand 300-day workers	Total number	Per thousand 300-day workers	Total number	Average days of employment per man	Man-hours of employment	Total number	Per million man-hours	Total number	Per million man-hours
	131	132	133	134	135	136	137	138	139	140	141	142	143
1945	71,831	289	112	1.62	8,090	117.00	58,180	264	127,168,321	53	0.42	4,121	32.41
1944	81,741	288	147	1.87	10,192	129.89	58,476	268	129,301,925	73	0.56	4,437	34.32
1943	100,752	291	220	2.25	13,025	133.45	69,877	274	155,280,258	80	0.52	5,199	33.48
1942	112,446	280	237	2.26	13,957	133.08	84,270	271	180,835,533	112	0.62	6,349	35.11
1941	125,290	255	230	2.16	15,772	148.17	86,123	260	173,165,422	76	0.44	6,870	39.67
1940	120,120	242	223	2.30	14,766	152.51	79,509	240	147,243,591	72	0.49	5,188	35.23
1939	111,909	233	173	1.99	13,710	157.99	79,449	236	143,846,583	48	0.33	5,204	36.18
1938	103,027	228	156	1.99	12,722	162.37	77,497	223	133,766,111	82	0.61	5,027	37.58
1937	118,429	252	219	2.20	18,055	181.42	84,094	241	158,298,530	77	0.49	6,348	40.10
1936	100,932	250	199	2.37	14,650	174.34	80,022	236	147,064,448	91	0.62	5,717	38.87
1935	92,314	220	164	2.42	10,206	150.44	73,005	200	110,033,341	51	0.46	4,152	37.73
1934	66,645	221	116	2.36	7,892	160.81	64,331	204	95,258,880	60	0.63	3,924	41.19
1933	57,016	204	95	2.45	5,925	152.68	61,927	183	87,888,263	59	0.67	3,637	41.38
1932	53,288	208	107	2.89	5,014	135.57	56,866	195	93,709,860	32	0.34	3,574	38.14
1931	80,940	231	158	2.53	8,709	139.56	69,200	224	133,750,124	61	0.46	5,427	40.58
1930	103,233	270	271	2.92	15,594	167.86	80,633	255	186,502,184	105	0.56	7,417	39.77
1929	118,735	292	350	3.03	23,092	200.11	85,561	268	211,765,529	126	0.59	9,810	46.32
1928	113,866	288	273	2.50	22,483	205.61	89,667	272	224,953,034	119	0.53	10,568	46.98
1927	119,699	284	352	3.10	25,133	221.54	91,517	271	229,805,889	135	0.59	13,459	58.57
1926	127,823	291	430	3.47	30,350	245.01	91,146	271	230,464,089	154	0.67	13,201	57.28
1925	126,713	293	371	2.99	35,132	283.53	91,872	273	233,222,241	149	0.64	14,165	60.74
1924	123,128	290	418	3.51	33,118	278.04	94,242	269	236,982,774	138	0.58	14,777	62.35
1923	123,279	297	367	3.01	33,563	275.41	92,455	276	239,109,000	143	0.60	14,990	62.69
1922	105,697	276	344	3.54	26,080	268.48	79,081	261	193,362,000	132	0.68	11,839	61.23
1921	93,929	238	230	3.09	18,604	249.69	77,185	233	168,363,000	120	0.71	10,465	62.16
1920	136,583	296	425	3.16	32,562	242.02	86,488	267	216,465,000	178	0.82	11,217	51.82
1919	145,262	279	468	3.47	31,506	233.60	75,505	253	179,135,000	123	0.69	9,199	51.35
1918	182,606	297	646	3.57	42,915	237.09	68,332	260	166,472,000	125	0.75	8,719	52.38
1917	200,579	287	852	4.44	46,286	240.97	82,290	261	200,841,000	131	0.65	13,242	65.93
1916	204,685	282	697	3.62	48,237	250.64	90,797	253	214,692,000	173	0.81	13,427	62.54
1915	152,118	280	553	3.89	35,295	248.56	100,740	246	231,512,000	148	0.64	9,671	41.77
1914	158,115	271	559	3.92	30,216	211.87	87,936	233	191,470,000	180	0.94	7,836	40.93
1913	191,276	288	683	3.72	32,971	179.59	106,278	246	244,691,000	183	0.75	7,739	31.63
1912	169,199	287	661	4.09	30,724	190.11	113,105	249	263,494,000	213	0.81	6,552	24.87
1911	165,979	282	695	4.45	26,577	170.27	110,954	228	237,043,000	188	0.79	5,390	22.74

Series G 144–158.—FATALITIES, PRODUCTION AND EMPLOYMENT—BITUMINOUS AND ANTHRACITE MINES: 1870 TO 1945

[Includes underground and surface accidents]

YEAR	NUMBER KILLED										PRODUCTION AND EMPLOYMENT (BITUMINOUS AND ANTHRACITE)				
	Total, bituminous and anthracite				In bituminous mines			In anthracite mines			Production		Employment		
	Total number killed	Per million tons mined	Per million man-hours	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Quantity (thousands of tons)	Tons per man-hour	Number of employees	Active days	Man-hours
	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158
1945[1]	1,079	1.71	1.19	2.83	1.62	2.58	2.96	2.62	1.93	2.17	[2] 632,291	0.699	437,000	262	905,000,000
1944	1,298	1.90	1.30	3.05	1.81	2.99	3.22	2.74	2.24	2.29	684,950	0.687	453,937	281	997,319,796
1943	1,451	2.22	1.56	3.39	2.06	3.01	3.44	3.80	2.85	3.17	652,977	0.703	486,516	264	928,802,326
1942	1,471	2.30	1.62	3.42	2.14	2.77	3.41	3.88	2.75	3.45	640,021	0.703	530,861	243	910,388,986
1941	1,266	2.22	1.54	3.26	2.08	2.34	3.28	3.58	2.18	3.16	569,884	0.694	546,692	213	821,156,793
1940	1,388	2.71	1.85	3.92	2.61	2.73	4.07	3.57	1.99	3.16	512,808	0.685	533,267	199	748,420,870
1939	1,078	2.41	1.59	3.35	2.19	1.95	3.29	4.11	2.24	3.61	447,977	0.661	539,375	179	678,195,593
1938	1,105	2.79	1.78	3.76	2.52	1.98	3.68	4.88	2.34	4.08	395,697	0.637	541,528	163	621,168,448
1937	1,413	2.83	1.74	3.69	2.68	2.44	3.74	4.15	2.17	3.44	498,793	0.615	589,856	195	811,422,146
1936	1,342	2.73	1.62	3.50	2.52	2.28	3.46	4.46	2.39	3.73	491,139	0.594	584,582	197	826,386,460
1935	1,242	2.92	1.70	3.67	2.60	2.09	3.53	5.24	2.66	4.26	424,632	0.580	565,202	180	732,607,581
1934	1,226	2.94	1.59	3.54	2.67	2.09	3.52	4.69	2.47	3.61	416,536	0.541	566,426	184	769,430,678
1933	1,064	2.78	1.48	3.58	2.50	1.99	3.58	4.66	2.21	3.58	383,172	0.533	523,182	171	719,148,559
1932	1,207	3.36	1.90	4.60	3.09	2.36	4.85	4.99	2.05	3.83	359,565	0.565	527,623	149	636,391,330
1931	1,463	3.31	1.82	4.42	2.83	2.40	4.42	6.42	2.75	4.43	441,751	0.549	589,705	168	804,394,130
1930	2,063	3.84	2.06	5.00	3.46	3.28	5.26	6.40	2.94	4.22	536,911	0.535	644,006	192	1,002,691,781
1929	2,187	3.59	1.87	4.54	3.19	3.39	4.63	6.53	3.18	4.24	608,817	0.521	654,494	221	1,168,551,000
1928	2,176	3.78	1.92	4.64	3.45	3.31	4.90	5.93	2.78	3.85	576,093	0.507	682,831	206	1,135,543,000
1927	2,231	3.73	1.83	4.43	3.36	2.93	4.60	6.11	2.96	3.94	597,859	0.490	759,177	199	1,219,079,000
1926	2,518	3.83	1.86	4.50	3.60	3.48	4.86	5.36	2.74	3.37	657,804	0.486	759,033	221	1,352,840,000

[1] Preliminary. [2] Includes some "bootleg coal purchased by legitimate operators and prepared at their breakers."

Series G 144–158.—FATALITIES, PRODUCTION AND EMPLOYMENT—BITUMINOUS AND ANTHRACITE MINES: 1870 TO 1945.—Con.

[Includes underground and surface accidents]

YEAR	NUMBER KILLED										PRODUCTION AND EMPLOYMENT (BITUMINOUS AND ANTHRACITE)				
	Total, bituminous and anthracite				In bituminous mines			In anthracite mines			Production		Employment		
	Total number killed	Per million tons mined	Per million man-hours	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Quantity (thousands of tons)	Tons per man-hour	Number of employees	Active days	Man-hours
	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158
1925	2,234	3.84	1.93	4.65	3.53	3.12	4.79	6.47	2.50	4.12	581,870	0.501	748,805	192	1,160,334,000
1924	2,402	4.20	1.99	4.80	3.94	3.08	5.39	5.64	3.10	3.39	571,613	0.473	779,613	192	1,207,475,000
1923	2,462	3.74	1.82	4.39	3.46	2.77	4.65	5.45	3.23	3.62	657,904	0.485	862,536	195	1,356,089,000
1922	1,984	4.16	2.03	4.90	3.99	2.45	5.16	5.49	1.91	3.81	476,951	0.487	844,807	144	979,995,000
1921	1,995	3.94	1.74	4.20	3.48	2.18	4.88	6.05	3.43	3.80	506,395	0.442	823,253	173	1,145,738,000
1920	2,272	3.45	1.57	3.78	3.13	2.78	3.79	5.48	3.38	3.74	658,265	0.454	784,621	230	1,451,162,000
1919	2,323	4.19	1.77	4.28	3.62	2.71	4.16	7.21	4.11	4.64	553,952	0.423	776,569	209	1,309,155,000
1918	2,580	3.80	1.61	3.94	3.50	3.30	3.97	5.58	3.75	3.83	678,212	0.424	762,426	258	1,599,854,000
1917	2,696	4.14	1.71	4.25	3.83	3.50	4.33	5.84	3.77	3.98	651,402	0.413	757,317	251	1,575,863,000
1916	2,226	3.77	1.53	3.93	3.33	2.98	3.88	6.34	3.47	4.11	590,098	0.406	720,971	235	1,452,788,000
1915	2,269	4.27	1.69	4.44	3.80	3.02	4.47	6.58	3.32	4.33	531,619	0.397	734,008	209	1,339,279,000
1914	2,454	4.78	1.78	4.66	4.40	3.19	4.90	6.55	3.31	4.05	513,525	0.373	763,185	207	1,378,437,000
1913	2,785	4.89	1.80	4.70	4.53	3.79	4.90	6.75	3.52	4.10	570,048	0.368	747,644	238	1,549,294,000
1912	2,419	4.53	1.70	4.46	4.04	3.31	4.46	7.12	3.45	4.48	534,467	0.376	722,662	225	1,422,694,000
1911	2,656	5.35	2.04	4.97	4.82	3.53	5.02	7.73	4.02	4.90	496,371	0.381	728,348	220	1,302,108,000
1910	--------	5.62	--------	5.30	5.32	4.00	5.53	7.11	3.55	4.65	--------	--------	--------	--------	--------
1909	--------	5.73	--------	5.35	5.46	4.15	5.58	6.99	3.40	4.79	--------	--------	--------	--------	--------
1908	--------	5.97	--------	5.54	5.42	3.50	5.44	8.14	3.89	5.84	--------	--------	--------	--------	--------
1907	--------	6.78	--------	6.25	6.46	4.99	6.40	8.27	4.23	5.77	--------	--------	--------	--------	--------
1906	--------	5.27	--------	4.87	4.72	3.38	4.76	7.81	3.43	5.28	--------	--------	--------	--------	--------

YEAR	NUMBER KILLED							
	Total killed		In bituminous mines			In anthracite mines		
	Per million tons mined	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers
	145	147	148	149	150	151	152	153
1905	5.78	5.14	5.14	3.53	5.02	8.29	3.89	5.43
1904	5.88	5.17	5.26	3.35	4.98	8.13	3.82	5.73
1903	5.47	4.72	5.07	3.47	4.63	6.94	3.44	5.01
1902	5.81	5.15	5.58	3.93	5.13	7.25	2.03	5.25
1901	5.40	4.54	4.74	3.16	4.21	7.60	3.53	5.40
1900	5.72	4.87	5.32	3.74	4.79	7.16	2.85	5.15
1899	5.08	4.40	4.25	3.05	3.91	7.63	3.30	5.72
1898	4.97	4.28	4.06	2.64	3.75	7.70	2.82	5.57
1897	5.08	4.27	3.99	2.38	3.64	8.04	2.82	5.64
1896	5.85	4.62	4.45	2.51	3.92	9.22	3.36	5.79
1895	6.00	4.68	5.46	3.09	4.78	7.26	2.95	4.51
1894	5.91	4.50	4.65	2.26	3.96	8.57	3.38	5.34
1893	5.39	4.03	4.07	2.26	3.32	8.43	3.42	5.21
1892	5.98	4.42	5.06	3.05	4.17	7.97	3.24	4.91
1891	6.06	4.30	4.94	2.86	3.85	8.45	3.39	5.01
1890	5.01	3.50	3.56	2.15	2.85	8.13	3.00	4.50
1889	5.22	--------	3.44	1.77	--------	8.45	3.11	4.81
1888	5.61	--------	4.38	2.23	--------	7.81	2.98	4.10

YEAR	NUMBER KILLED					
	Total, per million tons mined	In bituminous mines		In anthracite mines		
		Per million tons mined	Per thousand employed	Per million tons mined	Per thousand employed	Per thousand 300-day workers
	145	148	149	151	152	153
1887	4.86	3.08	1.55	7.46	2.95	4.25
1886	5.23	3.89	1.85	7.12	2.70	4.13
1885	5.91	3.48	1.68	9.36	3.58	5.26
1884	6.17	4.11	2.26	8.94	3.28	5.12
1883	6.58	4.99	3.09	8.40	3.53	4.56
1882	5.72	3.63	1.95	8.29	3.54	4.87
1881	6.04	2.75	1.67	8.55	3.59	4.87
1880	5.16	2.95	1.43	7.05	2.75	
1879	6.82	3.39	2.02	8.67	3.81	--------
1878	6.38	3.17	1.86	8.62	2.92	--------
1877	7.28	5.90	2.17	7.56	2.90	--------
1876	9.20	4.29	1.00	9.96	3.22	--------
1875	9.51	4.93	1.60	10.50	3.37	--------
1874	9.26	8.88	2.11	9.31	4.33	--------
1873	10.06	--------	--------	10.06	5.46	--------
1872	9.20	--------	--------	9.20	4.98	--------
1871	10.86	--------	--------	10.86	5.60	--------
1870	13.47	--------	--------	13.47	5.93	--------

Series G 159–170.—POWER—ANNUAL SUPPLY OF ENERGY FROM MINERAL FUELS AND WATER POWER: 1819 TO 1945

[**In trillions of British thermal units.** Unit heat values employed are: Anthracite, 13,600 B.t.u. per lb.; bituminous coal, 13,100 B.t.u. per lb.; petroleum, 6,000,000 B.t.u. per barrel; natural gas, 1,075 B.t.u. per cu. ft. Water power includes installations owned by manufacturing plants and mines, as well as Government and privately owned public utilities. The fuel equivalent of water power is calculated from the kilowatt-hours of power produced wherever available, as is true of all public-utility plants since 1919. Otherwise the fuel equivalent is calculated from the reported horse-power of installed water wheels, assuming a capacity factor of 20 percent for manufactures and mines and of 40 percent for public utilities]

YEAR OR ANNUAL AVERAGE	GRAND TOTAL ENERGY		WATER POWER		MINERAL FUELS							
						Coal			Petroleum and natural gas			
	With water power at constant fuel equivalent	With water power at prevailing central station equivalent	At constant fuel equivalent [1]	At prevailing central station equivalent [2]	Total mineral fuels	Total coal	Bituminous	Pennsylvania anthracite	Total petroleum and natural gas	Petroleum (total crude, including that refined): Domestic production	Petroleum (total crude, including that refined): Imports	Natural gas (total production)
	159	160	161	162	163	164	165	166	167	168	169	170
1945	36,030	33,009	4,463	1,442	31,567	16,628	15,134	1,494	14,939	10,282	444	4,213
1944	36,451	33,635	4,160	1,344	32,291	17,966	16,233	1,733	14,325	10,067	269	3,989
1943	33,900	31,205	3,999	1,304	29,901	17,113	15,463	1,650	12,788	9,034	83	3,671
1942	32,069	29,720	3,485	1,136	28,584	16,908	15,267	1,641	11,676	8,320	74	3,282
1941	29,549	27,679	2,804	934	26,745	15,004	13,471	1,533	11,741	8,413	304	3,024
1940	27,327	25,587	2,620	880	24,707	13,472	12,072	1,400	11,235	8,119	256	2,860
1939	24,620	23,035	2,423	838	22,197	11,745	10,345	1,400	10,452	7,590	199	2,663
1938	22,765	21,165	2,466	866	20,299	10,387	9,132	1,255	9,912	7,286	158	2,468
1937	25,957	24,382	2,446	871	23,511	13,083	11,673	1,410	10,428	7,675	165	2,588
1936	24,367	22,923	2,256	812	22,111	12,989	11,504	[3] 1,485	9,122	6,598	194	2,330
1935	21,615	20,214	2,207	806	19,408	11,175	9,756	[3] 1,419	8,233	5,980	193	2,060
1934	20,431	19,233	1,896	698	18,535	10,970	9,415	1,555	7,565	5,448	213	1,904
1933	19,317	18,097	1,931	711	17,386	10,089	8,741	1,348	7,297	5,434	191	1,672
1932	18,022	16,835	1,900	713	16,122	9,470	8,114	1,356	6,652	4,711	268	1,673
1931	20,557	19,504	1,721	668	18,836	11,633	10,011	1,622	7,203	5,106	284	1,813
1930	23,842	22,738	1,856	752	21,986	14,136	12,249	1,887	7,850	5,388	373	2,089
1929	26,534	25,421	1,929	816	24,605	16,025	14,017	2,008	8,580	6,044	474	2,062
1928	24,685	23,597	1,942	854	22,743	15,169	13,120	2,049	7,574	5,409	479	1,686
1927	24,741	23,830	1,687	776	23,054	15,744	13,565	2,179	7,310	5,407	350	1,553
1926	25,209	24,445	1,492	728	23,717	17,319	15,022	2,297	6,398	4,625	362	1,411
1925	22,827	22,205	1,290	668	21,537	15,306	13,625	1,681	6,231	4,582	371	1,278
1924	22,209	21,690	1,167	648	21,042	15,064	12,672	2,392	5,978	4,284	467	1,228
1923	24,436	23,985	1,136	685	23,300	17,331	14,792	2,539	5,969	4,394	492	1,083
1922	18,504	18,123	1,024	643	17,480	12,551	11,063	1,487	4,929	3,345	764	820
1921	18,563	18,275	908	620	17,655	13,358	10,897	2,461	4,297	2,833	752	712
1920	22,460	22,227	971	738	21,489	17,336	14,899	2,437	4,153	2,658	637	858
1919	18,883	18,709	892	718	17,991	14,602	12,206	2,396	3,389	2,270	317	802
1918	21,842	21,706	837	701	21,005	17,868	15,180	2,688	3,137	2,136	226	775
1917	21,020	20,914	806	700	20,214	17,166	14,457	2,709	3,048	2,012	181	855
1916	19,038	18,969	750	681	18,288	15,548	13,166	2,382	2,740	1,805	125	810
1915	17,184	17,149	694	659	16,490	14,018	11,597	2,421	2,472	1,687	109	676
1914	16,517	16,513	640	636	15,877	13,545	11,075	2,470	2,332	1,595	101	636
1913	17,831	17,852	588	609	17,243	15,025	12,535	2,490	2,219	1,491	102	626
1912	16,609	16,656	538	585	16,071	14,088	11,793	2,295	1,983	1,338	41	604
1911	15,475	15,544	496	565	14,979	13,096	10,635	2,461	1,883	1,323	9	551
1910	15,486	15,572	453	539	15,033	13,226	10,928	2,298	1,807	1,257	3	547
1909	14,182	14,284	411	513	13,771	12,155	9,949	2,205	1,616	1,099	(4)	517
1908	12,846	12,957	365	476	12,481	10,978	8,713	2,265	1,503	1,071	----------	432
1907	14,430	14,546	325	441	14,105	12,671	10,343	2,328	1,434	997	----------	437
1906	12,393	12,513	294	414	12,099	10,982	8,983	1,939	1,177	759	----------	418
1905	11,817	11,938	265	386	11,552	10,367	8,255	2,112	1,185	808	----------	[5] 377
1904	10,561	10,680	235	354	10,326	9,291	7,301	1,990	1,035	702	----------	[5] 333
1903	10,565	10,680	206	321	10,359	9,437	7,408	2,029	922	603	----------	[5] 319
1902	8,956	9,066	179	289	8,777	7,943	6,818	1,125	834	533	----------	[5] 301
1901	8,610	8,715	159	264	8,451	7,752	5,917	1,835	699	416	----------	[5] 283
1900	7,905	8,009	146	250	7,759	7,123	5,563	1,560	636	382	----------	[5] 254
1899	7,426	7,529	135	238	7,291	6,708	5,065	1,643	582	342	----------	[5] 240
1896–1900	6,690	----------	129	----------	6,561	6,006	4,493	1,513	555	357	----------	[5] 198
1891–1895	5,316	----------	104	----------	5,212	4,739	3,286	1,453	473	307	----------	[5] 166
1886–1890	4,221	----------	90	----------	4,131	3,669	2,474	1,195	462	198	----------	[5] 264
1881–1885	3,110	----------	85	----------	3,025	2,848	1,863	985	177	153	----------	[5] 24
1876–1880	1,857	----------	83	----------	1,774	1,673	955	718	101	101	----------	----------
1871–1875	1,520	----------	80	----------	1,440	1,391	754	637	49	49	----------	----------
1889	4,316	----------	91	----------	4,225	3,746	2,507	1,239	479	211	----------	[5] 268
1879	----------	----------	----------	----------	1,934	1,815	993	822	119	119	----------	(6)
1869	----------	----------	----------	----------	904	879	415	464	25	25	----------	----------
1859	----------	----------	----------	----------	419	419	158	262	----------	(6)	----------	----------
1849	----------	----------	----------	----------	173	173	64	109	----------	----------	----------	----------
1839	----------	----------	----------	----------	68	68	41	27	----------	----------	----------	----------
1829	----------	----------	----------	----------	6	6	3	4	----------	----------	----------	----------
1819	----------	----------	----------	----------	(6)	(6)	----------	(6)	----------	----------	----------	----------

[1] Assuming 4.02 pounds of coal per kilowatt-hour, which is the average of central electric station practice in 1913, the base period used.

[2] Assuming the average central-station practice for each of the years for which data are available, which declined from about 7.05 pounds of coal per kilowatt-hour in 1899 to 1.30 pounds in 1945.

[3] Does not include an unknown amount of bootleg or stolen coal. If this were included, the energy for anthracite would be increased approximately 109 trillion B.t.u. in 1935 and 1936 respectively, and the total energy would be increased accordingly.

[4] Imports negligible.

[5] Based on amount of coal displaced by gas as estimated by gas companies at the time.

[6] Less than 0.5.

Series G 171–182.—POWER—ELECTRIC ENERGY, PRODUCTION BY TYPE OF PRIME MOVER: 1902 TO 1945

[In thousands of kilowatt-hours]

YEAR	TOTAL UTILITY AND INDUSTRIAL				ELECTRIC UTILITIES				INDUSTRIAL ESTABLISHMENTS [1]			
	Total	Hydro	Steam	Internal combustion	Total	Hydro	Steam	Internal combustion	Total	Hydro	Steam	Internal combustion
	171	172	173	174	175	176	177	178	179	180	181	182
1945	271,254,896	84,747,079	181,708,470	4,799,347	222,486,283	79,970,312	140,435,268	2,080,703	48,768,613	4,776,767	41,273,202	2,718,644
1944	279,524,691	78,904,563	195,664,371	4,955,757	228,188,844	73,945,184	152,327,495	1,916,165	51,335,847	4,959,379	43,336,876	3,039,592
1943	267,540,197	79,077,653	183,951,624	4,510,920	217,758,831	73,632,223	142,380,595	1,746,013	49,781,366	5,445,430	41,571,029	2,764,907
1942	233,146,362	69,132,585	159,725,327	4,288,450	185,979,476	63,870,575	120,478,951	1,629,950	47,166,886	5,262,010	39,246,376	2,658,500
1941	208,306,451	55,356,832	149,156,993	3,792,626	164,787,878	50,862,952	112,319,000	1,605,926	43,518,573	4,493,880	36,837,993	2,186,700
1940	179,906,954	51,658,558	124,941,199	3,307,197	141,837,010	47,321,278	93,001,735	1,513,997	38,069,944	4,337,280	31,939,464	1,793,200
1939	161,308,487	47,691,261	110,635,490	2,981,736	127,641,804	43,563,627	82,783,741	1,294,436	33,666,683	4,127,634	27,851,749	1,687,300
1938	141,955,371	48,394,684	93,560,687		113,812,371	44,279,309	68,423,122	1,109,940	28,143,000	4,115,375	24,027,625	
1937	146,475,675	48,272,115	98,203,560		118,912,675	44,012,945	73,890,698	1,009,032	27,563,000	4,259,170	23,303,830	
1936	136,006,033	42,749,647	93,256,386		109,316,033	39,057,647	69,359,153	899,233	26,690,000	3,692,000	22,998,000	
1935	118,935,390	----------	----------		95,287,390	38,372,154	56,144,412	770,824	23,648,000	----------	----------	
1934	110,403,753	----------	----------		87,257,753	32,684,157	53,938,388	635,208	23,146,000	----------	----------	
1933	102,655,069	----------	----------		81,740,069	33,457,189	47,708,527	574,353	20,915,000	----------	----------	
1932	99,358,929	35,997,809	63,361,120		79,392,929	32,877,809	45,922,394	592,726	19,966,000	3,120,000	16,846,000	
1931	109,373,101	----------	----------		87,350,101	29,027,455	57,685,341	637,305	22,023,000	----------	----------	
1930	114,636,548	----------	----------		91,111,548	31,189,554	59,293,363	628,631	23,525,000	----------	----------	
1929	116,747,273	----------	----------		92,180,273	32,647,659	58,965,559	567,055	24,567,000	----------	----------	
1928	108,068,647	----------	----------		82,793,647	32,873,906	49,370,206	549,535	25,275,000	----------	----------	
1927	101,389,741	32,924,237	68,465,504		75,418,306	28,474,237	46,614,831	329,238	25,971,435	4,450,000	21,521,435	
1926	94,221,796	----------	----------		69,352,796	25,602,696	43,422,070	328,030	24,869,000	----------	----------	
1925	84,666,091	----------	----------		61,451,091	21,797,874	39,367,118	286,099	23,215,000	----------	----------	
1924	75,891,796	----------	----------		54,661,796	19,489,596	34,954,601	217,599	21,230,000	----------	----------	
1923	71,398,664	----------	----------		51,228,664	18,939,708	32,092,555	196,401	20,170,000	----------	----------	
1922	61,204,457	21,261,656	39,942,801		43,632,457	16,875,956	26,578,966	177,535	17,572,000	4,385,700	13,186,300	
1921	53,125,123	----------	----------		37,180,123	14,703,013	22,311,423	165,687	15,945,000	----------	----------	
1920	56,558,639	----------	----------		39,404,639	15,760,296	23,488,451	155,892	17,154,000	----------	----------	
1917	43,428,806	13,947,800	29,481,006		25,438,303	10,100,000	15,338,303		17,990,503	3,847,800	14,142,703	
1912	24,752,110	7,387,500	17,364,610		11,569,110	4,500,000	7,069,110		13,183,000	2,887,500	10,295,500	
1907	14,121,277	----------	----------		5,862,277	----------	----------		8,259,000	----------	----------	
1902	5,969,051	----------	----------		2,507,051	----------	----------		3,462,000	----------	----------	

[1] Includes electric railroads and railways. Does not include generation by non utility plants of less than 100 kw capacity or of plants in hotels, apartment houses, office buildings, or other commercial establishments.

Series G 183–190.—POWER—ELECTRIC ENERGY, PRODUCTION BY CLASS OF OWNERSHIP: 1902 TO 1945

[In thousands of kilowatt-hours]

YEAR	Total utility and industrial	ELECTRIC UTILITIES						Industrial establishments [1]
		Total utilities	Privately owned	Publicly owned				
				Total	Municipal	Federal	Other	
	183	184	185	186	187	188	189	190
1945	271,254,896	222,486,283	180,925,917	41,560,366	9,623,807	28,000,758	3,935,801	48,768,613
1944	279,524,691	228,188,844	185,849,805	42,339,039	9,637,218	28,866,427	3,835,394	51,335,847
1943	267,540,197	217,758,831	180,247,395	37,511,436	9,222,868	24,484,617	3,803,951	49,781,366
1942	233,146,362	185,979,476	158,051,924	27,927,552	7,610,251	16,893,429	3,423,872	47,166,886
1941	208,306,451	164,787,878	144,289,667	20,498,211	7,022,541	10,793,528	2,682,142	43,518,573
1940	179,906,954	141,837,010	125,410,966	16,426,044	6,187,844	8,583,702	1,654,498	38,069,944
1939	161,308,487	127,641,804	115,077,919	12,563,885	5,688,235	5,475,698	1,399,952	33,666,683
1938	141,955,371	113,812,371	104,090,247	9,722,124	5,237,123	3,028,902	1,456,099	28,143,000
1937	146,475,675	118,912,675	110,463,615	8,449,060	5,270,182	1,843,204	1,335,674	27,563,000
1936	136,006,033	109,316,033	102,293,368	7,022,665	4,705,309	1,072,027	1,245,329	26,690,000
1935	118,935,390	95,287,390	89,329,706	5,957,684	4,228,569	555,070	1,174,045	23,648,000
1934	110,403,753	87,257,753	82,079,035	5,178,718	3,833,603	356,886	988,229	23,146,000
1933	102,655,069	81,740,069	76,667,791	5,072,278	3,582,916	458,406	1,030,956	20,915,000
1932	99,358,929	79,392,929	74,488,136	4,904,793	3,516,875	444,780	943,138	19,966,000
1931	109,373,101	87,350,101	82,596,569	4,753,532	3,434,634	497,407	821,491	22,023,000
1930	114,636,548	91,111,548	86,108,428	5,003,120	3,603,725	465,051	934,344	23,525,000
1929	116,747,273	92,180,273	87,513,677	4,666,596	3,497,538	299,618	869,440	24,567,000
1928	108,068,647	82,793,647	78,206,656	4,586,991	3,244,813	356,335	985,843	25,275,000
1927	101,389,741	75,418,306	70,920,454	4,497,852	3,050,680	667,953	779,219	25,971,435
1926	94,221,796	69,352,796	65,479,835	3,872,961	2,832,457	517,635	522,869	24,869,000
1925	84,666,091	61,451,091	58,684,988	2,766,103	2,302,152	103,418	360,533	23,215,000
1924	75,891,796	54,661,796	52,315,022	2,346,774	1,940,164	57,332	349,278	21,230,000
1923	71,398,664	51,228,664	49,044,166	2,184,498	1,851,463	63,044	269,991	20,170,000
1922	61,204,457	43,632,457	41,659,944	1,972,513	1,636,750	55,538	280,225	17,572,000
1921	53,125,123	37,180,123	35,455,605	1,724,518	1,421,864	52,676	249,978	15,945,000
1920	56,558,639	39,404,639	37,715,985	1,688,654	1,373,194	58,231	257,229	17,154,000
1917	43,428,806	25,438,303	24,398,983	1,039,320	[2] 1,039,320	----------	----------	17,990,503
1912	24,752,110	11,569,110	11,031,583	537,527	[2] 537,527	----------	----------	13,183,000
1907	14,121,277	5,862,277	5,572,814	289,463	[2] 289,463	----------	----------	8,259,000
1902	5,969,051	2,507,051	2,311,147	195,904	[2] 195,904	----------	----------	3,462,000

[1] Includes electric railroads and railways. Does not include generation by non-utility plants of less than 100 kw capacity or by plants in hotels, apartment houses, office buildings, or other commercial establishments. In 1927 the total of such generation was approximately 1½ percent of the total generation of utility and non utility establishments. The relative total of the generation excluded has declined materially since 1927.

[2] Municipal class assumed to comprise total publicly owned group.

Series G 191–193.—POWER—ELECTRIC ENERGY, INDUSTRIAL USE: 1902 TO 1945

[In thousands of kilowatt-hours

YEAR	Total	Manufacturing	Extracting	YEAR	Total	Manufacturing	Extracting	YEAR	Total	Manufacturing	Extracting
	191	192	193		191	192	193		191	192	193
1945	143,161,859	131,856,177	11,305,682	1935	63,265,000	56,705,567	6,559,433	1925	45,500,000	39,724,600	5,775,400
1944	158,750,658	147,400,537	11,350,121	1934	56,695,000	50,593,202	6,101,798	1924	40,300,000	34,966,900	5,333,100
1943	158,525,151	146,849,337	11,675,814	1933	52,358,000	46,561,290	5,796,710	1923	38,250,000	32,585,200	5,664,800
1942	133,898,946	122,761,700	11,137,246	1932	48,614,000	43,503,744	5,110,256	1922	32,200,000	27,364,400	4,835,600
1941	113,931,973	104,037,488	9,894,485	1931	56,512,000	50,410,500	6,101,500	1921	28,000,000	23,993,000	4,007,000
1940	92,390,410	83,275,834	9,114,576	1930	61,023,000	53,929,660	7,093,340	1920	31,500,000	26,912,600	4,587,400
1939	79,044,444	70,959,561	8,084,883	1929	63,889,170	55,732,341	8,156,829	1917	23,750,000	20,750,000	3,000,000
1938	65,850,000	58,451,570	7,398,430	1928	59,750,000	52,699,025	7,050,975	1912	11,250,000	9,250,000	2,000,000
1937	73,300,000	64,757,482	8,542,518	1927	57,382,720	51,011,500	6,371,220	1907	6,100,000	5,068,000	1,032,000
1936	70,500,000	62,949,025	7,550,975	1926	52,750,000	46,350,000	6,400,000	1902	1,500,000	1,296,000	204,000

Series G 194–199.—POWER—ELECTRIC ENERGY, CONSUMPTION OF FUELS BY ELECTRIC UTILITIES: 1920 TO 1945

Represents fuel consumed for production of electric energy]

YEAR	Net generation by fuel [1]	FUEL CONSUMED: Total coal and equivalent		Coal	Fuel oil	Gas	YEAR	Net generation by fuel [1]	FUEL CONSUMED: Total coal and equivalent		Coal	Fuel oil	Gas
		Quantity	Pounds per KWH						Quantity	Pounds per KWH			
	194	195	196	197	198	199		194	195	196	197	198	199
	1,000 kwh	*Short tons*	*Pounds*	*Short tons*	*42 gal. bbls.*	*1,000 cu. ft.*		*1,000 kwh*	*Short tons*	*Pounds*	*Short tons*	*42 gal. bbls.*	*1,000 cu. ft.*
1945	142,331,104	92,641,901	1.30	74,724,956	20,228,215	326,211,969	1932	46,421,716	34,488,962	1.49	28,055,962	7,582,625	107,102,791
1944	153,867,569	99,250,520	1.29	80,083,539	20,862,171	358,783,574	1931	58,014,025	43,954,088	1.52	36,115,088	7,922,035	138,458,318
1943	143,785,367	93,274,914	1.30	77,300,574	17,985,598	301,936,871							
1942	121,584,578	79,075,132	1.30	66,256,667	15,235,851	235,208,023	1930	59,582,842	47,544,989	1.60	40,277,989	8,804,530	119,552,711
1941	113,272,492	75,699,849	1.34	62,667,734	20,077,128	201,763,432	1929	59,154,239	49,039,358	1.66	41,827,358	9,782,920	112,353,453
							1928	49,621,527	43,020,077	1.73	38,042,077	6,817,794	77,154,508
1940	93,962,747	62,942,344	1.34	51,473,881	16,325,122	180,096,185	1927	46,659,959	42,491,616	1.82	38,198,616	6,552,206	62,485,022
1939	83,627,710	57,598,037	1.38	44,538,529	17,138,911	188,876,692	1926	43,471,619	41,341,930	1.90	36,841,930	8,999,424	52,646,798
1938	69,255,364	48,559,770	1.40	38,393,533	12,942,387	165,504,219							
1937	74,501,856	53,559,609	1.44	42,929,609	13,829,222	169,127,305	1925	39,442,625	40,014,365	2.0	35,615,365	9,793,922	45,471,839
1936	69,823,024	50,144,035	1.44	40,085,035	14,078,929	154,084,268	1924	34,963,452	38,855,334	2.2	32,790,334	16,059,942	47,301,272
							1923	32,088,103	38,404,380	2.4	33,636,380	13,925,308	29,340,456
1935	56,688,508	40,796,761	1.44	32,714,761	11,256,565	124,117,769	1922	26,561,006	33,401,800	2.5	29,192,800	12,442,935	24,995,847
1934	54,417,880	39,366,879	1.45	31,413,879	10,258,241	127,071,042	1921	22,343,460	30,435,972	2.7	26,603,972	11,504,999	21,700,882
1933	48,170,167	35,273,854	1.46	28,542,854	9,606,208	101,984,743							
							1920	23,494,710	35,790,765	3.0	31,639,765	12,689,634	22,136,176

[1] Excludes generation by wood and waste fuels.

Series G 200–204.—POWER—GENERATING PLANTS AND PRODUCTION PER KILOWATT OF INSTALLED GENERATING CAPACITY, ELECTRIC UTILITIES: 1902 TO 1945

[Production in kilowatt-hours]

YEAR	NUMBER OF ELECTRIC UTILITY GENERATING PLANTS [1]: Total	Hydro	Steam	Internal combustion	Production per kilowatt of installed generating capacity [2]	YEAR	NUMBER OF ELECTRIC UTILITY GENERATING PLANTS [1]: Total	Hydro	Steam	Internal combustion	Production per kilowatt of installed generating capacity [2]
	200	201	202	203	204		200	201	202	203	204
1945	3,886	1,505	1,057	1,324	4,440	1930	4,043	1,446	1,626	971	2,813
1944	3,933	1,510	1,082	1,341	4,639	1929	3,838	1,389	1,693	756	3,089
1943	3,959	1,507	1,101	1,351	4,541	1928	3,830	1,370	1,717	743	2,978
1942	3,899	1,489	1,100	1,310	4,128	1927	3,707	1,299	1,869	539	3,007
1941	3,882	1,473	1,116	1,293	3,886	1926	3,742	1,287	1,964	491	2,966
1940	3,918	1,474	1,153	1,291	3,552	1925	3,738	1,250	2,004	484	2,862
1939	3,938	1,487	1,195	1,256	3,284	1924	3,783	1,221	2,169	393	3,092
1938	3,903	1,479	1,252	1,172	3,036	1923	3,768	1,191	2,224	353	3,275
1937	3,918	1,473	1,283	1,162	3,338	1922	3,722	1,142	2,276	304	3,074
1936	3,896	1,471	1,337	1,088	3,116	1921	3,726	1,120	2,324	282	2,750
1935	4,023	1,476	1,424	1,123	2,767	1920	3,831	1,125	2,422	284	3,099
1934	3,999	1,471	1,454	1,074	2,557	1917	4,364				2,828
1933	4,012	1,482	1,514	1,016	2,363	1912	3,520				2,240
1932	4,027	1,460	1,553	1,014	2,309	1907	3,200				2,164
1931	4,037	1,461	1,577	999	2,592	1902	2,250				2,068

[1] Each prime mover type in combination plants counted separately.

[2] Based on capacity in service at end of year.

Series G 205–216.—POWER—INSTALLED GENERATING CAPACITY BY TYPE OF PRIME MOVER: 1902 TO 1945

[In kilowatts]

YEAR	TOTAL UTILITY AND INDUSTRIAL				ELECTRIC UTILITIES				INDUSTRIAL ESTABLISHMENTS [1]			
	Total	Hydro	Steam	Internal combustion	Total	Hydro	Steam	Internal combustion	Total	Hydro	Steam	Internal combustion
	205	206	207	208	209	210	211	212	213	214	215	216
1945	62,867,814	15,891,718	45,248,054	1,728,042	50,110,928	14,911,617	34,112,603	1,086,708	12,756,886	980,101	11,135,451	641,334
1944	62,065,736	15,696,283	44,636,894	1,732,559	49,189,072	14,586,324	33,540,807	1,061,941	12,876,664	1,109,959	11,096,087	670,618
1943	60,539,370	14,991,110	43,840,106	1,708,154	47,950,767	13,883,583	33,014,581	1,052,603	12,588,603	1,107,527	10,825,525	655,551
1942	57,237,187	13,946,933	41,593,304	1,696,950	45,052,950	12,841,933	31,168,567	1,042,450	12,184,237	1,105,000	10,424,737	654,500
1941	53,995,245	12,912,374	39,474,094	1,608,777	42,405,436	11,817,374	29,599,285	988,777	11,589,809	1,095,000	9,874,809	620,000
1940	50,962,343	12,303,729	37,137,919	1,520,695	39,926,881	11,223,729	27,774,957	928,195	11,035,462	1,080,000	9,362,962	592,500
1939	49,438,165	12,074,939	35,931,950	1,431,276	38,862,716	11,003,939	27,008,613	850,164	10,575,449	1,071,000	8,923,337	581,112
1938	46,873,095	11,682,162	35,190,933		37,492,095	10,657,162	26,066,106	768,827	9,381,000	1,025,000	8,356,000	
1937	44,370,011	11,185,663	33,184,348		35,620,011	10,175,663	24,762,910	681,438	8,750,000	1,010,000	7,740,000	
1936	43,581,569	11,037,165	32,544,404		35,081,569	10,037,165	24,441,077	603,327	8,500,000	1,000,000	7,500,000	
1935	----------	----------	----------		34,435,768	9,398,662	24,470,821	566,285	----------	----------	----------	
1934	----------	----------	----------		34,118,741	9,344,933	24,253,061	520,747	----------	----------	----------	
1933	----------	----------	----------		34,586,688	9,333,695	24,759,185	493,808	----------	----------	----------	
1932	42,849,239	10,257,651	32,591,588		34,386,739	9,257,651	24,645,949	483,139	8,462,500	1,000,000	7,462,500	
1931	----------	----------	----------		33,698,256	9,090,613	24,161,890	445,753	----------	----------	----------	
1930	----------	----------	----------		32,384,363	8,585,164	23,385,522	413,677	----------	----------	----------	
1929	----------	----------	----------		29,839,459	7,813,448	21,703,992	322,019	----------	----------	----------	
1928	----------	----------	----------		27,804,576	7,702,433	19,789,664	312,479	----------	----------	----------	
1927	34,574,025	7,927,351	26,646,674		25,079,025	6,802,351	18,077,937	198,737	9,495,000	1,125,000	8,370,000	
1926	----------	----------	----------		23,386,194	6,405,462	16,792,031	188,701	----------	----------	----------	
1925	----------	----------	----------		21,472,077	5,921,965	15,368,252	181,860	----------	----------	----------	
1924	----------	----------	----------		17,680,743	5,023,872	12,534,567	122,304	----------	----------	----------	
1923	----------	----------	----------		15,642,537	4,507,020	11,025,811	109,706	----------	----------	----------	
1922	20,467,622	5,228,476	15,239,146		14,191,922	4,128,476	9,965,384	98,062	6,275,700	1,100,000	5,175,700	
1921	----------	----------	----------		13,518,734	3,901,661	9,526,573	90,500	----------	----------	----------	
1920	----------	----------	----------		12,713,608	3,703,531	8,919,727	90,350	----------	----------	----------	
1917	15,494,407	3,885,897	11,608,510		8,994,407	2,785,897	6,128,510	80,000	6,500,000	1,100,000	5,400,000	
1912	10,980,439	2,794,000	8,186,439		5,165,439	1,694,000	3,395,439	76,000	5,815,000	1,100,000	4,715,000	
1907	6,809,225	1,906,000	4,903,225		2,709,225	906,000	1,765,225	38,000	4,100,000	1,000,000	3,100,000	
1902	2,987,235	1,140,000	1,847,235		1,212,235	290,000	914,235	8,000	1,775,000	850,000	925,000	

[1] Includes electric railroads and railways. Does not include capacity of non utility plants of less than 100 kw or of plants in hotels, apartment houses, office buildings or other commercial establishments.

Series G 217–224.—POWER—INSTALLED GENERATING CAPACITY, BY CLASS OF OWNERSHIP: 1902 TO 1945

[In kilowatts]

YEAR	Total utility and industrial	ELECTRIC UTILITIES						Industrial establishments [1]
		Total utilities	Privately owned	Publicly owned				
				Total	Municipal	Federal	Other	
	217	218	219	220	221	222	223	224
1945	62,867,814	50,110,928	40,307,179	9,803,749	3,586,284	5,081,172	1,136,293	12,756,886
1944	62,065,736	49,189,072	39,732,753	9,456,319	3,446,690	4,886,032	1,123,597	12,876,664
1943	60,539,370	47,950,767	39,127,827	8,822,940	3,418,978	4,321,857	1,082,105	12,588,603
1942	57,237,187	45,052,950	37,441,750	7,611,200	3,330,770	3,216,357	1,064,073	12,184,237
1941	53,995,245	42,405,436	36,041,274	6,364,162	3,158,485	2,370,817	834,860	11,589,809
1940	50,962,343	39,926,881	34,398,576	5,528,305	2,976,728	1,944,000	607,577	11,035,462
1939	49,438,165	38,862,716	33,907,963	4,954,753	2,806,852	1,650,325	497,576	10,575,449
1938	46,873,095	37,492,095	33,246,341	4,245,754	2,631,018	1,156,080	458,656	9,381,000
1937	44,370,011	35,620,011	31,958,043	3,661,968	2,476,429	832,530	353,009	8,750,000
1936	43,581,569	35,081,569	31,786,653	3,294,916	2,163,856	803,613	327,447	8,500,000
1935	----------	34,435,768	31,820,357	2,615,411	2,001,637	299,641	314,133	----------
1934	----------	34,118,741	31,547,337	2,571,404	1,962,969	287,777	320,658	----------
1933	----------	34,586,688	32,162,935	2,423,753	1,879,133	232,297	312,323	----------
1932	42,849,239	34,386,739	32,033,125	2,353,614	1,827,614	232,110	293,890	8,462,500
1931	----------	33,698,256	31,498,435	2,199,821	1,695,721	230,710	273,390	----------
1930	----------	32,384,363	30,285,252	2,099,111	1,600,706	226,390	272,015	----------
1929	----------	29,839,459	27,952,571	1,886,888	1,424,082	213,900	248,906	----------
1928	----------	27,804,576	25,990,445	1,814,131	1,346,525	213,100	254,506	----------
1927	34,574,025	25,079,025	23,417,863	1,661,162	1,209,783	208,800	242,579	9,495,000
1926	----------	23,386,194	21,818,983	1,567,211	1,203,972	205,600	157,639	----------
1925	----------	21,472,077	20,044,597	1,427,480	1,125,386	197,775	104,319	----------
1924	----------	17,680,743	16,739,732	941,011	824,272	13,865	102,874	----------
1923	----------	15,642,537	14,787,086	855,451	751,994	13,865	89,592	----------
1922	20,467,622	14,191,922	13,418,505	773,417	685,279	10,456	77,682	6,275,700
1921	----------	13,518,734	12,796,859	721,875	634,102	10,456	77,317	----------
1920	----------	12,713,608	12,022,329	691,279	601,232	10,090	79,957	----------
1917	15,494,407	8,994,407	8,411,944	582,463	[2] 582,463	----------	----------	6,500,000
1912	10,980,439	5,165,439	4,768,762	396,677	[2] 396,677	----------	----------	5,815,000
1907	6,809,225	2,709,225	2,500,209	209,016	[2] 209,016	----------	----------	4,100,000
1902	2,987,235	1,212,235	1,098,855	113,380	[2] 113,380	----------	----------	1,775,000

[1] Includes electric railroads and railways. Does not include capacity of non-utility plants of less than 100 kw or of plants in hotels, apartment houses, office buildings or other commercial establishments.

[2] Municipal class assumed to comprise total publicly owned group.

Series G 225–233.—POWER—ELECTRIC UTILITIES, SALES TO ULTIMATE CONSUMERS: 1902 TO 1945

YEAR	ULTIMATE CONSUMERS [1]			RESIDENTIAL CONSUMERS			COMMERCIAL AND INDUSTRIAL CONSUMERS		
	Number, December 31	Kilowatt-hours (thousands)	Revenues (dollars)	Number, December 31	Kilowatt-hours (thousands)	Revenues (dollars)	Number, December 31	Kilowatt-hours (thousands)	Revenues (dollars)
	225	226	227	228	229	230	231	232	233
1945	34,031,073	193,558,015	3,341,518,400	28,116,998	34,183,915	1,167,356,000	4,560,522	137,928,373	1,852,170,100
1944	33,048,392	198,160,611	3,276,751,400	27,371,260	31,266,439	1,097,725,500	4,415,047	145,024,604	1,860,747,200
1943	32,396,300	185,889,261	3,077,642,900	26,872,639	28,621,403	1,029,259,700	4,314,838	134,849,298	1,737,869,200
1942	32,210,440	159,407,704	2,855,843,000	26,620,456	26,936,773	990,185,300	4,369,385	115,611,617	1,595,596,700
1941	31,607,371	140,060,159	2,665,057,000	26,025,513	25,123,900	938,228,600	4,472,653	100,688,521	1,483,200,100
1940	30,191,001	118,643,297	2,440,217,500	24,951,906	23,317,569	895,951,400	4,438,160	81,930,003	1,320,681,000
1939	29,105,306	105,767,509	2,289,582,600	23,965,035	21,083,507	843,157,600	4,399,553	71,830,376	1,233,342,300
1938	28,063,710	93,731,327	2,156,579,500	23,111,762	19,371,156	802,532,100	4,319,079	62,277,019	1,150,784,900
1937	27,262,319	99,358,791	2,160,797,500	22,372,385	17,690,741	759,824,200	4,268,895	69,434,154	1,199,635,100
1936	26,205,879	90,044,265	2,044,586,900	21,754,153	15,659,181	730,999,300	4,105,313	64,266,855	1,143,270,900
1935	25,312,802	77,596,025	1,911,988,900	21,018,952	13,977,920	700,358,300	4,015,363	54,452,769	1,050,319,700
1934	24,662,828	71,081,598	1,831,870,500	20,400,211	12,658,180	674,826,500	3,993,946	49,221,042	989,871,900
1933	24,027,153	65,915,703	1,754,566,100	19,808,356	11,747,355	648,839,000	3,955,424	45,446,163	940,170,000
1932	23,877,741	63,710,792	1,813,717,100	19,643,326	11,875,166	665,633,600	3,974,498	43,070,229	975,417,700
1931	24,489,770	71,901,882	1,975,944,500	20,151,247	11,737,924	678,611,300	4,072,273	50,481,231	1,109,252,600
1930	24,555,732	74,906,092	1,990,955,100	20,331,551	11,018,072	664,441,200	3,972,390	54,091,732	1,142,065,800
1929	24,150,183	75,294,467	1,938,520,200	19,965,154	9,772,788	618,798,800	3,962,163	56,077,102	1,146,679,300
1928	23,155,252	66,987,950	1,784,309,100	19,087,882	8,618,884	571,619,800	3,868,804	49,407,386	1,049,130,900
1927	21,786,212	61,251,119	1,661,032,000	17,950,934	7,675,970	523,688,800	3,668,767	45,305,801	986,624,000
1926	20,295,458	56,089,370	1,520,159,000	16,706,621	6,827,305	478,181,800	3,437,362	41,477,443	903,594,400
1925	18,472,146	50,460,570	1,377,573,600	15,123,304	6,020,000	439,460,000	3,238,769	37,900,000	833,820,000
1924	16,768,509	45,205,305	1,238,625,400	13,438,929	5,079,900	369,752,900	3,221,799	33,720,000	758,975,500
1923	15,350,200	42,299,508	1,158,005,000	12,440,000	4,579,900	331,852,800	2,701,941	31,640,000	721,395,600
1922	13,655,600	35,883,332	993,975,300	10,907,000	3,915,600	290,671,300	2,470,312	26,264,000	601,435,600
1921	12,580,100	30,874,374	875,356,800	10,180,000	3,532,400	261,048,800	2,245,000	22,568,000	531,625,000
1920	11,634,400	32,536,410	914,273,500	9,410,000	3,190,000	237,655,000	2,100,000	24,130,000	676,620,000
1917	7,889,000	21,490,000	629,610,000	6,460,000	1,731,300	130,193,800	1,350,000	15,359,000	407,020,000
1912	4,264,000	9,833,600	293,010,000	3,500,000	910,000	82,810,000	720,000	6,250,000	159,400,000
1907	2,164,000	5,160,000	175,250,000	----------	----------	----------	----------	----------	----------
1902	650,000	2,200,000	86,500,000	----------	----------	----------	----------	----------	----------

[1] Includes rural under distinct rural rates, street and highway lighting, other public authorities, railways and railroads, and interdepartmental, as well as residential, commercial, and industrial consumers. Federal Power Commission data for 1945 shows customers, 34,330,464; kilowatt-hours (thousands), 196,437,748; and revenues, $3,354,463,572. Differences attributable primarily to coverage of publicly-owned systems.