

## SUMMARY OF THE MINERAL PRODUCTION OF THE UNITED STATES IN 1906.

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### GENERAL REMARKS.

The varied character of the units of measurement employed in the mineral industry makes it impossible to compare the outputs of the several minerals except in the value of the products. The figures given in the following summary show a continuation of the activity in the mineral industries of the United States noted in 1900, 1901, 1902, and 1903, though the value of the output for 1904 was almost 9 per cent less than that for 1903; the value in 1905 was about 9 per cent greater than that for 1903.

In 1906, for the second time, the total value of our mineral production exceeded the enormous sum of \$1,500,000,000.

The exact figures for 1906 are \$1,902,517,565, as compared with \$1,623,928,720 in 1905, with \$1,361,067,554 in 1904, with \$1,491,928,980 in 1903, and with \$1,323,102,717 in 1902; a gain in 1906 over 1905 of \$278,588,845, or 17.15 per cent; a gain in 1906 over 1904 of \$541,450,011, or 39.78 per cent; over 1903 of \$410,588,585, or 27.52 per cent, and over 1902 of \$579,414,848, or 43.79 per cent.

As heretofore, iron and coal are the most important of our mineral products. The value of the iron in 1906 was \$505,700,000; the value of the coal \$513,079,809. The fuels increased from \$602,257,548 in 1905, to \$652,398,476 in 1906, a gain of \$50,140,928, or 8.33 per cent. Anthracite coal showed a decrease in value of \$9,961,306, from \$141,879,000 in 1905 to \$131,917,694 in 1906. The average price of anthracite coal per long ton at the mine was \$2.30, as against \$2.25 in 1905, \$2.35 in 1904, \$2.50 in 1903, and \$2.35 in 1902; and the average price per short ton for bituminous coal at the mine was \$1.11, as against \$1.06 in 1905, \$1.10 in 1904, \$1.24 in 1903, and \$1.12 in 1902. The increase in value of the bituminous coal output over 1905 was \$46,503,821—a combined increase in value of coal of \$36,542,515, or 7.67 per cent.

The gain of \$278,588,845 in the total value of our mineral production is due to gains in both metallic and nonmetallic products, the metallic products showing an increase from \$702,453,101 in 1905 to \$886,110,856 in 1906, a gain of \$183,657,755, and the nonmetallic products showing an increase from \$921,075,619 in 1905 to \$1,016,206,709 in 1906, a gain of \$95,131,090. To these products should be added estimated unspecified products, including molybdenum, bismuth, and other mineral products, valued at \$200,000, making a total mineral production for 1906 of \$1,902,517,565.

## METALS.

*Iron and steel.*—Twenty States produced pig iron in 1906, as against 20 in 1905, 20 in 1904, 22 in 1903, 22 in 1902, 20 in 1901, and 21 in 1900 and 1899. The total production of pig iron in 1906 was 25,307,191 long tons, as against 22,992,380 long tons in 1905; 16,497,033 long tons in 1904; 18,009,252 tons in 1903; 17,821,307 tons in 1902; and 15,878,354 tons in 1901. The production of 1906 shows an increase in quantity of 2,314,811 long tons, or over 10 per cent, over the production of 1905, and an increase in value from \$382,450,000 to \$505,700,000, amounting to \$123,250,000, or 32.25 per cent. The average price per long ton of pig iron increased from \$16.63 in 1905 to \$19.98 in 1906. The average prices per long ton in recent years have been as follows: 1904, \$14.13; 1903, \$19.12; 1902, \$20.92; 1901, \$15.25.

*Iron ores.*—The production of iron ores in 1906 amounted to 47,749,728 long tons, as compared with 42,526,133 long tons in 1905, with 27,644,330 long tons in 1904, with 35,019,308 long tons in 1903, and with 35,554,135 tons in 1902. The value at the mines of the ore mined in 1906 was \$100,597,106, as compared with \$75,165,604 in 1905. As in the seven preceding years, the production of iron ores in the United States in 1906 was never equaled by that of any other country.

*Manganese ores.*—The production of manganese ores was 2,825 long tons, valued at \$25,335, in 1903, and increased to 3,146 long tons, valued at \$29,466, in 1904, and to 4,118 long tons, valued at \$36,214, in 1905. The average price per ton in 1905 was \$8.80, as compared with \$9.37 in 1904 and with \$8.97 in 1903. In 1906 the production of manganese ores was 6,921 long tons, valued at \$88,132. The average price was \$12.73 per ton. Manganiferous iron ores, carrying from 20 to 40 per cent of manganese, were produced to the extent of 41,300 long tons, valued at \$122,400.

*Gold.*—The production of gold increased from 3,910,729 ounces, valued at \$80,835,648, in 1904, to 4,265,742 ounces, valued at \$88,180,700, in 1905, and to 4,565,333 ounces, valued at \$94,373,800, in 1906, an increase in 1906 of 299,591 ounces in quantity and of \$6,193,100 in value.

*Silver.*—The production of silver increased in quantity from 55,999,864 ounces in 1904 to 56,101,600 ounces in 1905, and to 56,517,900 ounces in 1906; it increased in commercial value from \$32,035,378 in 1904 to \$34,221,976 in 1905, and to \$38,256,400 in 1906, a gain in 1906 of \$4,034,424.

*Copper.*—The production of copper increased from 812,537,267 pounds, valued at \$105,629,845, in 1904, to 901,907,843 pounds, valued at \$139,795,716, in 1905, and to 917,805,682 pounds, valued at \$177,595,888, in 1906, an increase in 1906 of 15,897,839 pounds in quantity, and of \$37,800,172 in value.

*Lead.*—The production of lead in 1906 was 350,153 short tons, as against 302,000 short tons in 1905, 307,000 short tons in 1904, and 282,000 short tons in 1903. The value of the production in 1906 was \$39,917,442, as compared with \$28,690,000 in 1905, with \$26,402,000 in 1904, and with \$23,520,000 in 1903.

*Zinc.*—The production of zinc in 1906 was 199,694 short tons, as against 203,849 short tons in 1905, 186,702 short tons in 1904, and

159,219 short tons in 1903. The value of the zinc production in 1906 was \$24,362,668, as compared with \$24,054,182 in 1905, with \$18,670,200 in 1904, and with \$16,717,995 in 1903.

*Bauxite.*—In 1906 the production of bauxite was 75,332 long tons, valued at \$368,311, as compared with 48,129 long tons, valued at \$240,292, in 1905, with 47,661 long tons, valued at \$235,704, in 1904, and with 48,087 long tons, valued at \$171,306, in 1903.

*Aluminum.*—The consumption of aluminum during 1906 was 14,910,000 pounds, valued at 4,262,286, as against 11,347,000 pounds, valued at \$3,246,300, in 1905, and 8,600,000 pounds, valued at \$2,477,000, in 1904.

*Quicksilver.*—The production of quicksilver during 1906 amounted to 26,238 flasks (of 76½ avoirdupois pounds net; 75 avoirdupois pounds net after June, 1904), as compared with 30,451 flasks in 1905, with 34,570 flasks in 1904, with 35,620 flasks in 1903, and with 34,291 flasks in 1902. The value of the quicksilver produced in 1906 was \$958,634, as compared with \$1,103,120 in 1905, with \$1,503,795 in 1904, with \$1,544,934 in 1903, and with \$1,467,848 in 1902. California reported 20,310 flasks, as compared with 24,635 flasks in 1905, with 29,217 flasks in 1904, with 30,526 flasks in 1903, and with 28,972 flasks in 1902; and Texas reported 4,761 flasks, as against 4,723 flasks in 1905, 5,336 flasks in 1904, 5,029 flasks in 1903, and 5,319 flasks in 1902. Utah reported 1,164 flasks and Oregon 3 flasks in 1906.

*Chromic iron ore.*—California was the only State producing chromite during 1906, the quantity being 107 long tons, valued at \$1,800, as compared with 22 long tons, valued at \$375 in 1905, with 123 long tons, valued at \$1,845 in 1904; with 150 long tons, valued at \$2,250, in 1903; and with 315 long tons, valued at \$4,567 in 1902.

*Molybdenum.*—The commercial production of molybdenum in 1906 was approximately the same as the production of 1905, which, in turn, was in excess of the 1904 production of 14.5 short tons of concentrates, valued at \$2,175. The production in 1903 was 795 short tons of concentrates, valued at \$60,865. The value of molybdenum ores fluctuates very greatly.

*Nickel.*—There was no production of metallic nickel reported in 1906 as in 1905, only a small quantity of nickel and cobalt ore being reported as sold. In 1904 the output was 24,000 pounds, as against a production of 114,200 pounds in 1903, and of 5,748 pounds in 1902. The value in 1904 was \$11,400, as against \$45,900 in 1903, and \$2,701 in 1902. The imports of nickel in 1906 were valued at \$1,902,367, as against \$1,962,131 in 1905, \$1,121,491 in 1904, \$1,493,889 in 1903, and \$1,437,649 in 1902.

*Rutile.*—A small production of rutile, chiefly from Virginia, was reported in 1906.

*Tungsten.*—The commercial production of concentrated tungsten ores during 1906 amounted approximately to 928 short tons, valued at \$348,867, as against 803 short tons, valued at \$268,676 in 1905; 740 short tons, valued at \$184,000 in 1904; 292 short tons, valued at \$43,639 in 1903; and 184 short tons in 1902, of which not more than a few tons were sold.

*Uranium and vanadium.*—The production of uranium and vanadium minerals in 1906, as reported to the Survey and included under unspecified products, was the largest of recent years. The produc-

tion in 1905 was valued at \$375, as against \$10,600 in 1904, \$5,625 in 1903, and \$48,125 in 1902.

*Tantalum*.—A commercial production of tantalum in 1906 was reported from Colorado and South Dakota.

*Platinum*.—The production of platinum from domestic ores in 1906 was 1,439 ounces, valued at \$45,189, as compared with 318 ounces, valued at \$5,320, in 1905; with 200 ounces, valued at \$4,160, in 1904; with 110 ounces, valued at \$2,080, in 1903; and with 94 ounces, valued at \$1,814, in 1902. In December, 1904, the price of ingot platinum at New York advanced from \$18.50 to \$19.50 per ounce; in April, 1905, it was \$20.50; in January, 1906, it was \$20.50, in February, 1906, it advanced to \$25; in September, 1906, it rose to \$33; in November it was \$38, remaining at that price until late in February, 1907, when hard platinum was quoted at \$41 per ounce. This price declined on June 15 to \$26 for ordinary, and \$28.50 for hard; then it rose to \$27 and \$29, respectively, on July 27, and stands now (August 3, 1907), at \$28 for ordinary and \$29.50 for hard.

*Antimony*.—The antimony obtained from the smelting of domestic ores in 1906 amounted to 404 short tons, valued at \$58,149, and the antimony obtained from hard lead produced from foreign and domestic lead ores was 1,362 short tons, valued at \$286,004, a total production for 1906 of 1,766 short tons, valued at \$602,949, as compared with 3,240 short tons, valued at \$705,787 in 1905; with 3,057 short tons, valued at \$505,524, in 1904; with 3,128 short tons, valued at \$548,433, in 1903; and with 3,561 short tons, valued at \$634,506, in 1902.

*Bismuth*.—The marketed production of bismuth ore in 1906 was 8,334 pounds, valued at \$12,500; in 1905 it was 24,405 pounds, valued at \$4,187; in 1904 it was 5,184 pounds, valued at \$314. There was no marketed production of bismuth ores in the United States during 1903 or 1902.

*Tin*.—There was a small production of metallic tin in South Dakota in 1906, which, with concentrates from Alaska and from the North Carolina-South Carolina deposits, was valued at \$35,600.

#### FUELS.

*Coal*.—For the first time in the history of the United States the production of coal in 1906 reached a total of over 400,000,000 short tons, showing an actual output of 414,157,278 tons of 2,000 pounds, valued at \$513,079,809. Of this total, the output of anthracite coal amounted to 63,645,010 long tons (equivalent to 71,282,411 short tons), which, as compared with the production of 69,339,152 long tons in 1905, was a decrease of 5,694,142 long tons, or over 8 per cent. The value of anthracite coal at the mines in 1906 was \$131,917,694, as against \$141,879,000 in 1905, \$138,974,020 in 1904, \$152,036,448 in 1903, and \$76,173,586 in 1902. The average price of the marketed anthracite coal sold during the year at the mines was \$2.30 per long ton, as against \$2.25 per long ton in 1905, \$2.35 in 1904, \$2.50 in 1903, and \$2.35 in 1902.

The output of bituminous coal (which includes semianthracite and all semibituminous and lignite coals), amounted in 1906 to 342,874,867 short tons, valued at \$381,162,115, as compared with 315,062,785 short tons, valued at \$334,658,294, in 1905; with 278,659,689 short

tons, valued at \$305,397,001, in 1904; with 282,749,348 short tons, valued at \$351,687,933, in 1903; and with 260,216,844 short tons, valued at \$290,858,483, in 1902. The increase in the production of bituminous coal in 1906 over 1905 was therefore 27,812,082 short tons in quantity and \$46,503,821 in value. The average price of bituminous coal per ton at the mines during 1906 was \$1.11, as against \$1.06 in 1905, \$1.10 in 1904, and \$1.24 per ton in 1903, the highest price recorded by the Survey.

*Coke.*—The coke production of the United States in 1906, which included the output, 4,558,127 short tons, from 3,362 retort or by-product ovens, amounted to 36,401,217 short tons, as compared with 32,231,129 short tons in 1905, with 23,661,106 short tons in 1904, with 25,274,281 short tons in 1903, and with 25,401,730 short tons in 1902. The increase in quantity in 1906 from 1905 was 4,159,088 short tons, or over 12 per cent. The total value was \$91,608,034, as against \$72,476,196 in 1905, a gain of \$19,157,338, or 26 per cent. The average price per ton in 1906 was \$2.52, against \$2.25 in 1905. The average output from the by-product ovens in 1906 was 1,356 tons per oven, against an average of 373.6 tons per oven from the beehive ovens.

*Natural gas.*—The value of the natural gas produced in 1906 was \$46,873,932, as compared with \$41,562,855 in 1905, with \$38,496,760 in 1904, with \$35,807,860 in 1903, and with \$30,867,863 in 1902—a gain of about 13 per cent in 1906 over 1905.

*Gas, coke, tar, and ammonia.*—The aggregate value of all the products obtained from the distillation of coal in gas works and retort ovens in 1905 was \$56,684,972, as against \$51,157,736 in 1904, and \$47,830,600 in 1903. No report has been prepared for 1906; the estimated value of the products is distributed among the respective States in the table of output and value by States.

*Petroleum.*—The total production of crude petroleum in the United States in 1906 was 126,493,936 barrels, as against 134,717,580 barrels in 1905, 117,080,960 barrels in 1904, and 100,461,337 barrels in 1903, a decrease in 1906 of 8,277,644 barrels, or 6.14 per cent from the production of 1905. Among the noteworthy changes in production in 1906 were gains, as compared with 1905, of nearly 10,000,000 barrels in the Mid-Continent field and of over 4,000,000 barrels in the Illinois field; these gains were more than offset by losses of over 15,000,000 barrels in Texas, over 3,000,000 barrels in Indiana, and of over 1,000,000 barrels each in Ohio and West Virginia.

The value of crude petroleum produced during 1906 was \$92,444,735, or an average price of 73.1 cents per barrel, as against \$84,157,399, or an average price of 62.47 cents per barrel, in 1905; against \$101,175,455, or 86.41 cents per barrel, in 1904, and against \$94,694,050, or 94.26 cents per barrel, in 1903.

#### STRUCTURAL MATERIALS.

*Cement.*—The total production of hydraulic cement in the United States in 1906 was 51,000,445 barrels, valued at \$55,302,277, as compared with 40,102,308 barrels, valued at \$35,931,533, in 1905; with 31,675,257 barrels, valued at \$26,031,920, in 1904; with 29,899,140 barrels, valued at \$31,931,341, in 1903, and with 25,753,504 barrels, valued at \$25,366,380, in 1902. The Portland cement production

in 1906 was 46,463,424 barrels, valued at \$52,466,186, as compared with 35,246,812 barrels, valued at \$33,245,867, in 1905; with 26,505,881 barrels, valued at \$23,355,119, in 1904; with 22,342,973 barrels, valued at \$27,713,319, in 1903, and with 17,230,644 barrels, valued at \$20,864,078, in 1902—an increase in quantity in 1906, as compared with 1905, of 11,216,612 barrels, and in value of \$19,220,319. The production of natural cement in 1906 was 4,055,797 barrels, valued at \$2,423,170, as compared with 4,473,049 barrels, valued at \$2,413,052, in 1905; with 4,866,331 barrels, valued at \$2,450,150, in 1904; with 7,030,271 barrels, valued at \$3,675,520, in 1903, and with 8,044,305 barrels, valued at \$4,076,630, in 1902—a decrease in quantity in 1906 of 417,252 barrels and an increase in value of \$10,118. The production of slag cement in 1906 amounted to 481,224 barrels, valued at \$412,921, as against 382,447 barrels, valued at \$272,614, in 1905; 303,045 barrels, valued at \$226,651, in 1904, and 525,896 barrels, valued at \$542,502, in 1903.

*Clay products.*—The activity in all branches of the clay-working industries noted in the reports as true of 1899, 1900, 1901, 1902, and 1903 diminished very slightly during 1904, but increased vigorously in 1905, which increase continued in 1906. The value of all clay products, as reported to this office in 1906, was \$161,032,722, as against \$149,697,188 in 1905, \$131,023,248 in 1904, \$131,062,421 in 1903, and \$122,169,531 in 1902. The brick and tile products in 1906 were valued at \$129,591,838, as against \$121,778,294 in 1905, \$105,864,978 in 1904, \$105,626,369 in 1903, and \$98,042,078 in 1902. The pottery products were valued in 1906 at \$31,440,884, as against \$27,918,894 in 1905, \$25,158,270 in 1904, \$25,436,052 in 1903, and \$24,127,453 in 1902.

The commercial production of clay mined and sold in 1906 by those not manufacturing the clay themselves was valued at \$3,245,256, as against \$2,768,006 in 1905, \$2,320,162 in 1904, and \$2,594,042 in 1903.

*Lime.*—The production of lime in 1906 was 3,197,754 short tons, valued at \$12,480,653, as against 2,984,100 short tons, valued at \$10,941,680, in 1905, and against 2,707,809 short tons, valued at \$9,951,456, in 1904. The output was valued at \$9,255,882 in 1903 and at \$9,335,618 in 1902. The average price per short ton was \$3.67 in 1905 and \$3.90 in 1906.

*Sand-lime brick.*—The production of sand-lime brick in 1906 was valued at \$1,170,005, as against \$972,064 in 1905, \$463,128 in 1904, and \$155,040 in 1903.

*Slate.*—The production of slate in 1906 was valued at \$5,668,346, as against \$5,496,207 in 1905, \$5,617,195 in 1904, \$6,256,885 in 1903, and \$5,696,051 in 1902.

*Stone.*—The value of all kinds of stone produced in the United States during 1906 amounted to \$66,378,794, as compared with \$63,798,748 in 1905, with \$58,765,715 in 1904, with \$57,433,141 in 1903, and with \$54,798,682 in 1902.

Included under stone is the limestone used for fluxing in blast furnaces, which in 1906 was 16,077,202 long tons, valued at \$7,612,692, as compared with 15,387,891 long tons, valued at \$7,004,265, in 1905; with 10,657,038 long tons, valued at \$4,702,768, in 1904, and with 12,029,719 long tons, valued at \$5,423,732, in 1903.

## ABRASIVE MATERIALS.

*Alundum or artificial corundum.*—The production of alundum by the Norton Emery Wheel Company amounted in 1906 to 4,712,000 pounds, valued at \$282,720, an average of 6 cents per pound, as compared with 3,612,000 pounds manufactured in 1905, valued at \$252,840, an average of 7 cents per pound, and with 4,020,000 pounds manufactured in 1904.

*Carborundum.*—The production of carborundum in 1906 was 6,225,300 pounds as against 5,596,000 pounds in 1905, 7,060,380 pounds in 1904, 4,759,890 pounds in 1903, and 3,741,500 pounds in 1902. The value of the carborundum varies from 7 to 10 cents a pound.

*Corundum and emery.*—The combined production of corundum and emery in 1906 amounted to 1,160 short tons, valued at \$44,310, as against 2,126 short tons, valued at \$61,464, in 1905; 1,916 short tons, valued at \$56,985, in 1904; 2,542 short tons, valued at \$64,102, in 1903; and 4,251 short tons, valued at \$104,605, in 1902.

*Crushed steel.*—The production of crushed steel in 1906 was 837,000 pounds, as against 612,000 pounds in 1905, 790,000 pounds in 1904, 755,000 pounds in 1903, and 735,000 pounds in 1902.

*Crystalline quartz.*—In 1906 the production of crystalline quartz included under abrasives amounted to 24,082 short tons, valued at \$121,671, as against 19,039 short tons, valued at \$88,118, in 1905; against 31,940 short tons, valued at \$74,850, in 1904; 8,938 short tons, valued at \$76,908, in 1903, and 15,104 short tons, valued at \$84,335 in 1902.

*Garnet.*—The production of abrasive garnet in the United States during 1906 amounted to 4,650 short tons, valued at \$157,000, as against 5,050 short tons, valued at \$148,095, in 1905; 3,854 short tons, valued at \$117,581, in 1904; 3,950 short tons, valued at \$132,500, in 1903; and 3,926 short tons, valued at \$132,820, in 1902. The average price for the 1906 production is reported at \$33.98 per ton.

*Grindstones.*—The total value of all kinds of grindstones produced during 1906 was \$744,894, as against \$777,606 in 1905, \$881,527 in 1904, \$721,446 in 1903, and \$667,431 in 1902. The production of 1904 was the largest on record for any year. It should be remembered, however, that the price, which ranged from \$15 to \$18 per ton, has decreased to from \$8 to \$11 per ton, and that therefore the tonnage of grindstones used has correspondingly increased within the last few years.

*Infusorial earth and tripoli.*—In 1906 the production of infusorial earth and tripoli amounted to 8,099 short tons, valued at \$72,108, as against 10,977 short tons, valued at \$64,637, in 1905; against 6,274 short tons, valued at \$44,164, in 1904; 9,219 short tons, valued at \$76,273, in 1903; and 5,665 short tons, valued at \$53,244, in 1902.

*Millstones and buhrstones.*—The value of the production of millstones and buhrstones in 1906 was \$48,590, as against \$37,974, in 1905, \$37,338 in 1904, \$52,552 in 1903, and \$59,808 in 1902. From 1886 to 1894 there was a very large decrease—from \$140,000 to \$13,887—in the production of buhrstones. From 1894 to 1902 there was a gradual increase in the production, but there was a comparative decrease in 1903, 1904, 1905, and 1906.

*Oilstones and whetstones.*—There was a continued increase in the commercial domestic production of oilstones and whetstones during 1906, the value rising from \$188,985 in 1904 to \$244,546 in 1905 and to \$268,070 in 1906. The production was valued at \$366,857 in 1903 and at \$221,762 in 1902.

*Pumice.*—The production of pumice amounted in 1906 to 12,200 short tons, valued at \$16,750, as against 1,832 short tons, valued at \$5,540 in 1905; 1,530 short tons, valued at \$5,421, in 1904; 885 short tons, valued at \$2,665, in 1903; and 700 short tons, valued at \$2,750, in 1902.

#### CHEMICAL MATERIALS.

*Arsenious oxide.*—The domestic production of arsenious oxide (white arsenic) in 1906 was 1,474,000 pounds, valued at \$63,460, as against 1,507,386 pounds, valued at \$35,210, in 1905; 72,413 pounds, valued at \$2,185, in 1904; 1,222,000 pounds, valued at \$36,691, in 1903; and 2,706,000 pounds, valued at \$81,180, in 1902.

*Borax.*—The reported returns for 1906 gave an aggregate production of crude borax of 58,173 short tons, valued at \$1,182,410, as against 46,334 short tons, valued at \$1,019,154, in 1905; 45,647 short tons, valued at \$698,810, in 1904; and 34,430 short tons, valued at \$661,400, in 1903.

*Bromine.*—The production of bromine in 1906, including the bromine contained in potassium bromide, amounted to 1,283,250 pounds, valued at \$165,204, as compared with 1,192,758 pounds, valued at \$178,914, in 1905; with 897,100 pounds, valued at \$269,130, in 1904; with 598,500 pounds, valued at \$167,580, in 1903; and with 513,893 pounds, valued at \$128,472, in 1902.

*Fluorspar.*—The total commercial production of fluorspar in 1906 was 40,796 short tons, valued at \$244,025, as compared with 57,385 short tons, valued at \$362,488, in 1905; with 36,452 short tons, valued at \$234,755, in 1904; and with 42,523 short tons, valued at \$213,617, in 1903. The prices of crude fluorspar in 1906 were reported as ranging from \$3.60 to \$6 per ton and the prices of ground fluorspar as ranging from \$9 to \$12 per ton.

*Gypsum.*—The output of crude gypsum in 1906 was 1,540,585 short tons, valued in its first marketable condition at \$3,837,975, as compared with 1,043,202 short tons, valued at \$3,029,227, in 1905; with 940,917 short tons, valued at \$2,784,325, in 1904; with 1,041,704 short tons, valued at \$3,792,943, in 1903; and with 816,478 short tons, valued at \$2,089,341, in 1902. The greatly increased production of late years is attributable to the largely increased use of wall plaster and of plaster of Paris in large modern buildings.

*Lithium minerals.*—The production of lithium minerals in 1906 was 383 short tons, valued at \$7,411, as against 79 short tons, valued at \$1,412, in 1905; 577 short tons, valued at \$5,155, in 1904; and 1,155 short tons, valued at \$23,425, in 1903. The output in 1905 and 1906 came from California and South Dakota. There were no imports of lithium salts in either 1905 or 1906.

*Marls.*—The production of marls in the United States in 1906 was 19,104 short tons, valued at \$7,341; in 1905 it was 38,026 short tons, valued at \$16,494; in 1904 it was 18,989 short tons, valued at \$13,145, and in 1903 it was 34,211 short tons, valued at \$22,521.

*Phosphate rock.*—The total commercial production of phosphate rock reported to the Survey in 1906 amounted to 2,080,957 long tons, valued at \$8,579,437, as compared with 1,947,190 long tons, valued at \$6,763,403, in 1905; with 1,874,428 long tons, valued at \$6,580,875, in 1904, and with 1,581,576 long tons, valued at \$5,319,294, in 1903. The total quantity of phosphate rock reported as mined during 1906 was 2,001,394 long tons, as against 2,138,309 long tons mined in 1905 and 1,991,169 long tons mined in 1904.

*Salt.*—The salt product includes salt in the form of brine used in large quantities for the manufacture of soda ash, sodium bicarbonate, caustic soda, and other sodium salts. The domestic production of salt in 1906 amounted to 28,172,380 barrels of 280 pounds, valued at \$6,658,350, as compared with 25,966,122 barrels, valued at \$6,095,922, in 1905; with 22,030,002 barrels, valued at \$6,021,222, in 1904; with 18,968,089 barrels, valued at \$5,286,988, in 1903, and with 23,849,231 barrels, valued at \$5,668,636, in 1902.

*Sulphur and pyrite.*—The domestic production of sulphur in 1906 was 294,153 long tons, valued at \$5,096,678; the production of pyrite was 261,422 long tons, valued at \$931,305. The combined production in 1906 of sulphur and pyrite for the manufacture of sulphuric acid amounted to 555,575 long tons, valued at \$6,027,983, as compared with 434,677 long tons, valued at \$4,645,052, in 1905; with 334,373 long tons, valued at \$3,478,568, in 1904; with 233,127 long tons, valued at \$1,109,818, in 1903, and with 207,874 long tons, valued at \$947,089, in 1902.

#### PIGMENTS.

*Barytes.*—The production of crude barytes in 1906 was 50,231 short tons, valued at \$160,367, as compared with 48,235 short tons, valued at \$148,803, in 1905; with 65,727 short tons, valued at \$174,958, in 1904; with 50,397 short tons, valued at \$152,150, in 1903, and with 61,668 short tons, valued at \$203,154, in 1902.

*Cobalt oxide.*—There was no production of cobalt oxide reported in 1905 and 1906. In 1904 it was 22,000 pounds, valued at \$42,600; in 1903 it was 120,000 pounds, valued at \$228,000; in 1902 it was 3,730 pounds, valued at \$6,714. All the cobalt oxide was obtained as a by-product in smelting lead ores at Mine La Motte, Missouri.

*Mineral paints.*—The commercial production of mineral paints in 1906 amounted to 49,921 short tons, valued at \$521,729, as compared with 56,599 short tons, valued at \$724,933, in 1905; with 52,336 short tons, valued at \$493,434, in 1904; with 56,262 short tons, valued at \$500,922, in 1903; with 60,191 short tons, valued at \$745,227, in 1902.

*Zinc white.*—The production of zinc white in 1906 amounted to 74,680 short tons, valued at \$5,999,375, as compared with 68,603 short tons, valued at \$5,520,240, in 1905; with 63,363 short tons, valued at \$4,808,482, in 1904; with 62,962 short tons, valued at \$4,801,718, in 1903, and with 52,645 short tons, valued at \$4,016,499, in 1902.

#### MISCELLANEOUS.

*Asbestos.*—The asbestos commercially produced in the United States in 1906 was obtained chiefly from deposits in Georgia, Virginia, and Wyoming, with small quantities from Arizona, California,

and Massachusetts. The total commercial production was 1,695 short tons, valued at \$28,565, as against 3,109 short tons, valued at \$42,975, in 1905; against 1,480 short tons, valued at \$25,740, in 1904, and 887 short tons, valued at \$16,760, in 1903.

*Asphalt.*—Under this title are included the various bitumens or hydrocarbons not discussed elsewhere under the heading "Petroleum." The commercial production in 1906 was 138,059 short tons, valued at \$1,290,340, as against 115,267 short tons, valued at \$758,153, in 1905; 108,572 short tons, valued at \$879,836, in 1904; 101,255 short tons, valued at \$1,005,446, in 1903, and 105,458 short tons, valued at \$765,048, in 1902.

*Feldspar.*—The production of feldspar in 1906 was 75,656 short tons, valued at \$401,531, as against 35,419 short tons, valued at \$226,157, in 1905; 45,188 short tons, valued at \$266,326, in 1904; 41,891 short tons, valued at \$256,733, in 1903, and 45,287 short tons valued at \$250,424, in 1902.

*Fibrous talc.*—This variety of talc, or soapstone, occurs in but one locality in the United States—Gouverneur, St. Lawrence County, N. Y. It is used principally as makeweight in the manufacture of paper. In 1906 the production was 61,672 short tons, valued at \$557,200, as against 56,500 short tons, valued at \$445,000, in 1905; 64,005 short tons, valued at \$507,400, in 1904; 60,230 short tons, valued at \$421,600, in 1903, and 71,100 short tons, valued at \$615,350, in 1902.

*Fuller's earth.*—As reported to the Survey, the production of fuller's earth in 1906 was 32,040 short tons, valued at \$265,400, as against 25,178 short tons, valued at \$214,497, in 1905; 29,480 short tons, valued at \$168,500, in 1904, and 20,693 short tons, valued at \$190,277, in 1903. The imports in 1906 were valued at \$108,695, as against \$105,997 in 1905.

*Glass sand.*—The production of glass sand in 1906 was 1,089,430 short tons, valued at \$1,208,788, as against 1,060,334 short tons, valued at \$1,107,730, in 1905; 858,719 short tons, valued at \$796,492, in 1904, and 823,044 short tons, valued at \$855,828, in 1903.

*Graphite.*—The commercial production of crystalline graphite during 1906 amounted to 5,887,982 pounds, valued at \$238,064, as compared with 6,036,567 pounds, valued at \$237,572, in 1905; with 5,681,177 pounds, valued at \$238,447, in 1904, and with 4,538,155 pounds, valued at \$154,170, in 1903. The production of amorphous graphite in 1906 was 16,853 short tons, valued at \$102,175, as compared with 21,953 short tons, valued at \$80,639, in 1905; with 16,927 short tons, valued at \$82,925, in 1904, and with 16,591 short tons, valued at \$71,384, in 1903. The production of artificial graphite in 1906 was 5,074,757 pounds, valued at \$337,204, the average price being 6.64 cents per pound, as compared with 4,591,550 pounds, valued at \$313,980, the average price being 6.83 cents per pound, in 1905; with 3,248,000 pounds, valued at \$217,790, the average price being 6.71 cents per pound, in 1904; with 2,620,000 pounds, valued at \$178,670, in 1903, when the average price was 6.82 cents per pound, and with 2,358,828 pounds, valued at \$110,700, in 1902, when the average price was 4.69 cents per pound.

*Magnesite.*—The production of magnesite in the United States continues to be limited to California. During the year 1906 the commercial production reported was 7,805 short tons, valued at \$23,415, as

compared with 3,933 short tons, valued at \$15,221, in 1905; with 2,850 short tons, valued at \$9,298, in 1904; and with 3,744 short tons, valued at \$10,595, in 1903.

*Mica.*—The total production of mica in 1906 was 1,423,100 pounds of sheet mica, valued at \$252,248, and 1,489 short tons of scrap mica, valued at \$22,742, as against 924,875 pounds of sheet mica, valued at \$160,732, and 1,126 short tons of scrap mica, valued at \$17,856, in 1905; and 668,358 pounds of sheet mica, valued at \$109,462, and 1,096 short tons of scrap mica, valued at \$10,854, in 1904.

*Mineral waters.*—The total production of mineral waters in 1906 was 51,407,668 gallons, valued at \$8,559,650, as compared with 47,590,081 gallons, valued at \$6,811,611, in 1905; with 50,723,500 gallons, valued at \$7,198,450, in 1904; and with 51,242,757 gallons, valued at \$9,041,078, in 1903.

*Monazite and zircon.*—The production of monazite is confined exclusively to North Carolina and South Carolina, about five-sixths being obtained from the former State. In 1906 the production was 847,275 pounds of concentrates, valued at \$152,560. In 1905 the production (including small quantities of zircon and columbite) amounted to 1,352,418 pounds, valued at \$163,908, as compared with 745,999 pounds (including small quantities of zircon, columbite, and gadolinite), valued at \$85,038, in 1904; with 865,000 pounds, valued at \$65,200 (including 3,000 pounds of zircon, valued at \$570), in 1903; and with 802,000 pounds of monazite, valued at \$64,160, in 1902.

*Peat.*—There was no commercial production of peat in 1906. Considerable experimental work has been done in the production of peat bricks for use as fuel under boilers, and in the practical tests of machine peat.

*Potassium salts.*—There was no production of potassium salts in the United States in 1906; the imports amounted to 226,859,750 pounds, valued at \$5,941,217.

*Precious stones.*—The value of the gems and precious stones found in the United States in 1906 was reported as \$208,000, as against \$326,350 in 1905, \$324,300 in 1904, \$307,900 in 1903, and \$328,450 in 1902. There has been a great advance in the lapidary industry in the United States since 1894. The cutting of our native gems has grown to the proportions of an industry.

*Quartz (flint).*—The production of flint in 1906 was 66,697 short tons, valued at \$243,012, as against 51,145 short tons, valued at \$104,109, in 1905; 52,270 short tons, valued at \$100,590, in 1904; 55,233 short tons, valued at \$156,947, in 1903; and 36,365 short tons, valued at \$144,209, in 1902.

*Sand and gravel.*—The production of sand for molding, building, engine, furnace, and other purposes, and of gravel, reported in 1906, was 31,842,572 short tons, valued at \$11,489,420, as against 22,144,633 short tons valued at \$10,115,915, in 1905; and 9,821,009 short tons, valued at \$4,951,607, in 1904.

*Selenium.*—There was a small production of selenium in 1906 in the electrolytic refining of copper.

*Talc and soapstone.*—Exclusive of the production of fibrous talc from Gouverneur, N. Y., the production of talc and soapstone in 1906 amounted to 58,972 short tons, valued at \$874,356, as compared with 40,134 short tons, valued at \$637,062, in 1905; with 27,184 short tons,

valued at \$433,331, in 1904; with 26,671 short tons, valued at \$418,460, in 1903; and with 26,854 short tons, valued at \$525,157, in 1902.

*Cadmium.*—Cadmium is being produced by the Grasselli Chemical Company, of Cleveland, Ohio, and the product is shipped to Germany. It is noteworthy that cadmium is now exported from the United States rather than imported, as has heretofore been the case.

No information is at hand as to the source of the ores nor as to the process used in reducing the metal.

**MINERAL PRODUCTS OF THE UNITED STATES IN 1905  
AND 1906.**

The two following sets of tables should be sharply discriminated. From the tabular statement headed "Mineral products of the United States in 1905 and 1906," including also the tables for the years 1880 to 1906, all unnecessary duplication has been excluded. The manufactured coke product, amounting in 1906 to 36,401,217 short tons and valued at \$91,608,034, is excluded, as the quantity and value of the coal used in its manufacture are included in the statistics of coal production. Similarly, white lead, red lead, sublimed lead, zinc lead, litharge, and orange mineral, whose average aggregate value for the last ten years has largely exceeded \$10,000,000, are not given in the table, the base from which they are made being included in the output of pig lead. Zinc white or zinc oxide, on the other hand, made directly from the ores and consequently not included in spelter production, is tabulated. The production of pig iron and its value are given in the table as the best means of presenting the statistics of the production of iron in the first marketable condition, the value of iron ores being excluded. Similarly, the value of the products of the clay industries is given as being the first marketable condition of the greater part of the clay produced, although the production and value of the clay mined and sold in the raw state by clay miners to manufacturers of clay are elsewhere shown separately, but are not included in the tabular statement, in order to avoid duplication.

In the second large tabular statement, however, under the heading "Output and value, by States and Territories, of mineral products of the United States in the calendar years 1905 and 1906," raw clay, iron ores, lead paints, and the coal products are included under the respective producing States.

It will be seen that the two tabular statements differ materially. They both give the value of the mineral products in the years 1905 and 1906; but the first gives the net value of the mineral products of the whole country in their first marketable form and the second gives the value of these products and, in addition, the value of some of their raw materials or derivatives in their first marketable condition. The first table avoids duplication; the second does not.

The figures for gold and silver for 1905 and 1906 in the first table are the official figures agreed upon by the United States Geological Survey and the Director of the Mint.

## Mineral products of the United

		1905.	
Product.		Quantity.	Value.
METALLIC.			
1	Pig iron, <sup>a</sup> spot value <sup>b</sup> ..... <sup>c</sup> long tons..	22,992,380	\$382,450,000
2	Silver, commercial value <sup>d</sup> ..... troy ounces..	56,101,600	34,221,976
3	Gold, coining value <sup>e</sup> ..... do.....	4,265,742	88,180,700
4	Copper, value at New York City..... pounds..	901,907,843	139,795,716
5	Lead, <sup>f</sup> value at New York City..... short tons..	302,000	28,690,000
6	Zinc, value at New York City..... do.....	203,849	24,054,182
7	Quicksilver, value at San Francisco..... <sup>g</sup> flasks..	30,451	1,103,120
8	Aluminum, value at Pittsburg..... pounds..	<sup>h</sup> 11,347,000	3,246,300
9	Antimony, <sup>i</sup> value at San Francisco..... short tons..	3,240	705,787
10	Nickel, <sup>j</sup> value at Philadelphia..... pounds..		( <sup>k</sup> )
11	Tin..... do.....		( <sup>l</sup> )
12	Platinum, value (crude) at New York City..... troy ounces..	318	5,320
13	Total value of metallic products.....		702,453,101
NONMETALLIC (SPOT VALUES).			
14	Bituminous coal <sup>m</sup> ..... short tons..	315,062,785	334,658,294
15	Pennsylvania anthracite..... long tons..	69,339,152	141,879,000
16	Natural gas.....		41,562,855
17	Petroleum..... <sup>n</sup> barrels..	134,717,580	84,157,399
18	Clay products <sup>o</sup> .....		149,697,188
19	Cement..... <sup>p</sup> barrels..	40,102,308	35,931,533
20	Lime..... short tons..	2,984,100	10,941,680
21	Sand-lime brick.....		972,064
22	Slate.....		5,496,207
23	Stone <sup>q</sup> .....		63,798,748
24	Corundum and emery..... short tons..	2,126	61,464
25	Crystalline quartz..... do.....	19,039	88,118
26	Garnet for abrasive purposes..... do.....	5,050	148,095
27	Grindstones.....		777,606
28	Infusorial earth and tripoli..... short tons..	10,977	64,637
29	Millstones.....		37,974
30	Oilstones, etc.....		244,546
31	Arsenious oxide..... pounds..	1,507,386	35,210
32	Borax (crude)..... short tons..	46,334	1,019,154
33	Bromine..... pounds..	1,192,758	178,914
34	Fluorspar..... short tons..	57,385	362,488
35	Gypsum..... do.....	1,043,202	3,029,227
36	Lithium minerals..... do.....	79	1,412
37	Marls..... do.....	38,026	16,494
38	Phosphate rock..... long tons..	1,947,190	6,763,403
39	Pyrite..... do.....	253,000	938,492
40	Sulphur..... do.....	181,677	3,706,560
41	Salt..... <sup>r</sup> barrels..	25,966,122	6,095,922
42	Barytes (crude)..... short tons..	48,235	148,803
43	Cobalt oxide..... pounds..		( <sup>k</sup> )
44	Mineral paints <sup>s</sup> ..... short tons..	56,599	724,933
45	Zinc white..... do.....	68,603	5,520,240
46	Asbestos..... do.....	3,109	42,975
47	Asphalt..... do.....	115,267	758,153
48	Bauxite..... long tons..	48,129	240,292
49	Chromic iron ore..... do.....	22	375
50	Feldspar..... short tons..	35,419	226,157
51	Fibrous talc..... do.....	56,500	445,000
52	Fuller's earth..... do.....	25,178	214,497
53	Glass sand..... do.....	1,060,334	1,107,730
54	(Graphite (crystalline))..... pounds..	6,036,567	318,211
55	(Graphite (amorphous))..... short tons..	21,953	
	Magnesite..... do.....	3,933	15,221

<sup>a</sup> Production of iron ore—1897: 17,518,046 long tons; value at mines, \$18,953,221. 1898: 19,433,716 long tons; value at mines, \$22,060,887. 1899: 24,683,173 long tons; value at mines, \$34,999,077. 1900: 27,553,161 long tons; value at mines, \$66,590,504. 1901: 28,887,479 long tons; value at mines, \$49,256,245. 1902: 35,554,135 long tons; value at mines, \$65,412,950. 1903: 35,019,308 long tons; value at mines, \$66,328,415. 1904: 27,644,330 long tons; value at mines, \$43,186,741. 1905: 42,526,133 long tons; value at mines, \$75,165,604. 1906: 47,749,728 long tons; value at mines, \$100,597,106. Statistics for iron ore are collected by the Survey; statistics for pig iron are furnished by the American Iron and Steel Association.

<sup>b</sup> By "spot" value is meant value at the point of production.

<sup>c</sup> Long tons are tons of 2,240 avoirdupois pounds; short tons are tons of 2,000 avoirdupois pounds.

<sup>d</sup> Average price per troy ounce in 1906 was 67 cents.

<sup>e</sup> Prior to 1905, coining value, \$20.6718 per troy ounce; in 1905, coining value, \$20.671834; in 1906, coining value, \$20.671834625323.

<sup>f</sup> The product from domestic ores only.

<sup>g</sup> Of 763 avoirdupois pounds net; of 75 avoirdupois pounds net since June, 1904.

<sup>h</sup> Consumption in 1904, 1905, and 1906.

<sup>i</sup> Includes antimony smelted from imported ores and antimony contained in hard lead.

<sup>j</sup> Including nickel in copper-nickel alloy and in exported ore and matte.

## SUMMARY.

27

States in 1905 and 1906.

1906.		Increase (+) or decrease (-) in 1906.		Percentage of increase (+) or decrease (-) in 1906.		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
25,307,191	\$505,700,000	+ 2,314,811	+\$123,250,000	+ 10.07	+ 32.23	1
56,517,900	38,256,400	+ 416,300	+ 4,034,424	+ .74	+ 11.79	2
4,565,333	94,373,800	+ 299,591	+ 6,193,100	+ 7.02	+ 7.02	3
917,805,682	177,595,888	+15,897,839	+ 37,800,172	+ 1.76	+ 27.04	4
350,153	39,917,442	+ 48,153	+ 11,227,442	+ 15.94	+ 39.13	5
199,694	24,362,668	- 4,155	+ 308,486	- 2.04	+ 1.28	6
26,238	958,634	- 4,213	- 144,486	- 13.84	- 13.10	7
<sup>a</sup> 14,910,000	4,262,286	+ 3,563,000	+ 1,015,986	+ 31.40	+ 31.30	8
1,766	602,949	- 1,474	- 102,838	- 45.49	- 14.57	9
	( <sup>k</sup> )					10
	35,600					11
1,439	45,189	+ 1,121	+ 39,869	+ 352.52	+ 749.42	12
	886,110,856		+ 183,657,755		+ 26.15	13
342,874,867	381,162,115	+27,812,082	+ 46,503,821	+ 8.83	+ 13.90	14
63,645,010	131,917,694	- 5,694,142	- 9,961,306	- 8.21	- 7.02	15
	46,873,932		+ 5,311,077		+ 12.78	16
126,493,936	92,444,735	- 8,223,644	+ 8,287,336	- 6.10	+ 9.85	17
	161,032,722		+ 11,335,534		+ 7.57	18
51,000,445	55,302,277	+10,898,137	+ 19,370,744	+ 27.18	+ 53.91	19
3,197,754	12,480,653	+ 213,654	+ 1,538,973	+ 7.16	+ 14.07	20
	1,170,005		+ 197,941		+ 20.36	21
	5,668,346		+ 172,139		+ 3.13	22
	66,378,794		+ 2,580,046		+ 4.04	23
1,160	44,310	- 966	- 17,154	- 45.44	- 27.91	24
24,082	121,671	+ 5,043	+ 33,553	+ 26.49	+ 38.08	25
4,650	157,000	- 400	+ 8,905	- 7.92	+ 6.01	26
	744,894		- 32,712		- 4.21	27
8,099	72,108	- 2,878	+ 7,471	- 26.22	+ 11.56	28
	48,590		+ 10,616		+ 27.96	29
	268,070		+ 23,524		+ 9.62	30
1,474,000	63,460	- 33,386	+ 28,250	- 2.21	+ 80.23	31
58,173	1,182,410	+ 11,839	+ 163,256	+ 25.55	+ 16.02	32
1,283,250	165,204	+ 90,492	+ 13,710	+ 7.59	- 7.66	33
40,796	244,025	- 16,589	- 118,463	- 28.91	- 32.68	34
1,540,585	3,837,975	+ 497,383	+ 808,748	+ 47.68	+ 26.70	35
383	7,411	+ 304	+ 5,999	+ 384.81	+ 424.86	36
19,104	7,341	- 18,922	- 9,153	- 49.76	- 55.49	37
2,080,957	8,579,437	+ 133,767	+ 1,816,034	+ 6.87	+ 26.85	38
261,422	931,305	+ 8,422	- 7,187	+ 3.33	- .77	39
294,153	5,096,678	+ 112,476	+ 1,390,118	+ 61.91	+ 37.50	40
28,172,380	6,658,350	+ 2,206,258	+ 562,428	+ 8.50	+ 9.23	41
50,231	160,367	+ 1,996	+ 11,564	+ 4.14	+ 7.77	42
	( <sup>k</sup> )					43
49,921	521,729	- 6,678	- 203,204	- 11.80	- 28.03	44
74,680	5,999,375	+ 6,077	+ 479,135	+ 8.86	+ 8.68	45
1,695	28,565	- 1,414	- 14,410	- 45.48	- 33.53	46
138,059	1,290,340	+ 22,792	+ 532,187	+ 19.77	+ 70.20	47
75,332	368,311	+ 27,203	+ 128,019	+ 56.52	+ 53.28	48
107	1,800	+ 85	+ 1,425	+ 386.36	+ 380.00	49
75,656	401,531	+ 40,237	+ 175,374	+ 113.00	+ 77.55	50
61,672	557,206	+ 5,172	+ 112,200	+ 9.15	+ 25.21	51
32,040	265,400	+ 6,862	+ 50,903	+ 27.25	+ 23.73	52
1,089,430	1,208,788	+ 29,096	+ 101,058	+ 2.74	+ 9.12	53
5,887,982	238,064	- 148,585	+ 22,028	- 2.46	+ 6.92	54
16,853	102,175	- 5,100	- 23,233	- 23.23	- 23.23	55
7,805	23,415	+ 3,872	+ 8,194	+ 98.45	+ 53.83	55

<sup>a</sup> Including nitrate of soda, carbonate of soda, sulphate of soda, and alum clays used by paper manufacturers; and bismuth, molybdenum, nickel and cobalt, tantalum, titanium, uranium, and vanadium, valued together at \$48,300.

<sup>b</sup> Nineteen short tons of high-grade concentrates shipped to England from South Carolina in 1903. In 1904 about 142 short tons of concentrates from South Carolina, South Dakota, and Alaska shipped to England. In 1905 no production. In 1906, 2,500 pounds of metallic tin, 55 short tons of concentrates from Alaska, and 14 short tons of concentrates from North Carolina and South Carolina.

<sup>c</sup> Including brown coal and lignite, and anthracite mined elsewhere than in Pennsylvania. Coke—1902: 25,401,730 short tons; value at ovens, \$93,339,167. 1903: 25,274,281 short tons; value at ovens, \$66,498,664. 1904: 23,661,106 short tons; value at ovens, \$46,144,941. 1905: 32,231,129 short tons; value at ovens, \$72,476,196. 1906: 36,401,217 short tons; value at ovens, \$91,608,034.

<sup>d</sup> Of 42 gallons.

<sup>e</sup> Value of clay mined and sold as unmanufactured clay. 1897: \$978,448. 1898: \$1,384,766. 1899: Census returns, \$1,645,328. 1900: \$1,840,377. 1901: \$2,576,932. 1902: \$2,061,072. 1903: \$2,594,042. 1904: \$2,320,162. 1905: \$2,768,006. 1906: \$3,245,256.

<sup>f</sup> Of 380 pounds net.

<sup>g</sup> Including limestone for iron flux, but not including grindstones.

<sup>h</sup> Of 280 pounds net. Value is for net product exclusive of cost of packages.

<sup>i</sup> Including metallic paint, ochre,umber, mortar colors, sienna, and ground slate.

*Mineral products of the United*

Product.	1905.	
	Quantity.	Value.
NONMETALLIC (SPOT VALUES)—continued.		
56 Manganese ores.....long tons..	4,118	\$36,214
Manganiferous iron ores.....do.....		
57 Mica (sheet).....pounds..	924,875	160,732
58 Mica (scrap).....short tons..	1,126	17,856
59 Mineral waters.....gallons sold..	47,590,081	6,811,611
60 Monazite and zircon.....pounds..	1,352,418	163,908
61 Precious stones.....		326,350
62 Pumice stone.....short tons..	1,832	5,540
63 Quartz (flint).....do.....	51,145	104,109
64 Rutile.....		
65 Sand, molding, building, etc., and gravel.....short tons..	22,144,633	10,115,915
66 Tale and soapstone.....do.....	40,134	637,062
67 Tungsten.....do.....	803	268,676
Uranium and vanadium.....do.....	4	375
68 Total value of nonmetallic mineral products.....		921,075,619
69 Total value of metallic products.....		702,453,101
70 Estimated value of mineral products unspecified <sup>a</sup> .....		400,000
71 Grand total.....		1,623,928,720

<sup>a</sup>Including nitrate of soda, carbonate of soda, sulphate of soda, and alum clays used by paper manufacturers; and bismuth, molybdenum, nickel and cobalt, tantalum, titanium, uranium, and vanadium, valued together at \$48,300.

## SUMMARY.

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*States in 1905 and 1906—Continued.*

1906.		Increase (+) or decrease (−) in 1906.		Percentage of increase (+) or decrease (−) in 1906.		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
6,921	\$88,132	+ 2,803	+ \$51,918	+ 68.07	+143.36	56
41,300	122,400					
1,423,100	252,248	+ 498,225	+ 91,516	+ 53.87	+ 56.94	57
1,489	22,742	+ 363	+ 4,886	+ 32.24	+ 27.36	
51,407,668	8,559,650	+ 3,817,587	+ 1,748,039	+ 8.02	+ 25.66	58
847,275	152,560		11,348		− 6.92	59
	208,000		118,350		− 36.26	60
12,200	16,750	+ 10,368	+ 11,210	+565.94	+202.35	61
66,697	243,012	+ 15,552	+ 138,903	+ 30.41	+133.42	62
	(a)					63
31,842,572	11,489,420	+ 9,697,939	+ 1,373,505	+ 43.79	+ 13.58	64
58,972	874,356	+ 18,838	+ 237,294	+ 46.94	+ 37.25	65
928	348,867	+ 125	+ 80,191	+ 15.57	+ 29.85	66
	(a)					67
	1,016,206,709		+ 95,131,090		+ 10.33	68
	886,110,856		+ 183,657,755		+ 26.15	69
	200,000		− 200,000		− 50.00	70
	1,902,517,565		+ 278,588,845		+ 17.15	71

*Mineral products of the United States*

Product.		1880.	
		Quantity.	Value.
METALLIC.			
1	Pig iron, value at Philadelphia.....long tons..	3,375,912	\$89,315,569
2	Silver, commercial value.....troy ounces..	30,318,700	34,717,000
3	Gold, coining value.....do.....	1,741,500	36,000,000
4	Copper, value at New York City.....pounds..	60,480,000	11,491,200
5	Lead, value at New York City.....short tons..	97,825	9,782,500
6	Zinc, value at New York City.....do.....	23,239	2,277,432
7	Quicksilver, value at San Francisco.....flasks..	59,926	1,797,780
8	Nickel, value at Philadelphia.....pounds..	233,893	257,282
9	Aluminum, value at Pittsburg.....do.....		
10	Antimony, value at San Francisco.....short tons..	50	10,000
11	Platinum (crude) value at San Francisco.....troy ounces..	100	400
12	Total value of metallic products.....		185,649,163
NONMETALLIC (SPOT VALUES).			
13	Bituminous coal.....short tons..	38,242,641	53,443,718
14	Pennsylvania anthracite.....long tons..	25,580,189	42,196,678
15	Stone.....		18,356,055
16	Petroleum.....barrels..	26,286,123	24,183,233
17	Lime.....do.....	28,000,000	19,000,000
18	Natural gas.....		
19	Cement.....barrels..	2,072,943	1,852,707
20	Salt.....do.....	5,961,060	4,829,566
21	Phosphate rock.....long tons..	211,377	1,123,823
22	Limestone for iron flux.....do.....	4,500,000	3,800,000
23	Mineral waters.....gallons sold..	2,000,000	500,000
24	Zinc white.....short tons..	10,107	763,738
25	Potters' clay.....do.....	28,877	200,457
26	Mineral paints.....do.....	3,604	135,840
27	Borax.....pounds..	3,692,443	277,233
28	Gypsum.....short tons..	90,000	400,000
29	Grindstones.....		500,000
30	Fibrous talc.....short tons..	4,210	54,730
31	Pyrite.....long tons..	2,000	5,000
32	Soapstone.....short tons..	8,441	66,665
33	Manganese ores.....long tons..	5,761	86,415
34	Asphalt.....short tons..	444	4,440
35	Precious stones.....		100,000
36	Bromine.....pounds..	404,690	114,752
37	Corundum.....short tons..	1,044	29,280
38	Barytes (crude).....do.....	20,000	80,000
39	Graphite.....pounds..		49,800
40	Millstones.....		200,000
41	Oilstones, etc. <sup>a</sup> .....pounds..	420,000	8,000
42	Marls.....short tons..	1,000,000	500,000
43	Flint.....long tons..	20,000	80,000
44	Fluorspar.....short tons..	4,000	16,000
45	Chromic iron ore.....long tons..	2,288	27,808
46	Infusorial earth.....short tons..	1,833	45,660
47	Feldspar.....long tons..	12,500	60,000
48	Mica.....pounds..	81,669	127,825
49	Cobalt oxide.....do.....	7,251	24,000
50	Slate ground as a pigment.....short tons..	1,000	10,000
51	Sulphur.....do.....	600	21,000
52	Asbestos.....do.....	150	4,312
53	Rutile.....pounds..	100	400
54	Lithographic stone.....short tons..		
55	Total value of nonmetallic mineral products.....		173,279,135
56	Total value of metallic products.....		185,649,163
57	Estimated value of mineral products unspecified.....		6,000,000
58	Grand total.....		364,928,298

<sup>a</sup> Prior to 1889 quantity and value are for rough stone quarried; since 1890 they are for finished product.

## SUMMARY.

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for the calendar years 1880-1906.

1881.		1882.		1883.		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
4,144,254	\$87,029,334	4,623,323	\$106,336,429	4,595,510	\$91,910,200	1
33,257,800	37,657,500	36,196,900	41,105,900	35,732,800	39,618,400	2
1,678,612	34,700,000	1,572,187	32,500,000	1,451,250	30,000,000	3
71,680,000	12,175,600	91,646,232	16,038,091	117,151,795	18,064,807	4
117,085	11,240,160	132,890	12,624,550	143,957	12,322,719	5
26,800	2,680,000	33,765	3,646,620	36,872	3,311,106	6
60,851	1,764,679	52,732	1,487,042	46,725	1,253,632	7
265,668	292,235	281,616	309,777	58,800	52,920	8
50	10,000	60	12,000	83	875	9
100	400	200	600	60	12,000	10
				200	600	11
	187,549,908		214,061,009		196,547,259	12
48,179,475	60,224,344	60,861,190	76,076,487	68,531,500	82,237,800	13
28,500,016	64,125,036	31,358,264	70,556,094	34,336,469	77,257,055	14
	20,000,000		21,000,000		20,000,000	15
27,661,238	25,448,339	30,510,830	24,065,988	23,449,633	25,790,252	16
30,000,000	20,000,000	31,000,000	21,700,000	32,000,000	19,200,000	17
			215,000		475,000	18
2,500,000	2,000,000	3,250,000	3,672,750	4,190,000	4,293,500	19
6,200,000	4,200,000	6,412,873	4,320,140	6,192,231	4,211,042	20
266,734	1,980,259	332,077	1,992,462	378,380	2,270,280	21
6,000,000	4,100,000	3,850,000	2,310,000	3,814,273	1,907,136	22
3,700,000	700,000	5,000,000	800,000	7,529,423	1,119,603	23
10,000	700,000	10,000	700,000	12,000	840,000	24
28,000	200,000	33,600	240,000	35,840	250,000	25
6,000	100,000	7,000	105,000	7,000	84,000	26
4,046,000	304,461	4,236,291	338,903	6,500,000	585,000	27
85,000	350,000	100,000	450,000	90,000	420,000	28
	500,000		700,000		600,000	29
5,000	60,000	6,000	75,000	6,000	75,000	30
10,000	60,000	12,000	72,000	25,000	137,500	31
7,000	75,000	6,000	90,000	8,000	150,000	32
4,895	73,425	4,532	67,980	6,155	92,325	33
2,000	8,000	3,000	10,500	3,000	10,500	34
	110,000		150,000		207,050	35
300,000	75,000	250,000	75,000	301,100	72,264	36
500	80,000	500	80,000	550	100,000	37
20,000	80,000	20,000	80,000	27,000	108,000	38
400,000	30,000	425,000	34,000	575,000	46,000	39
	150,000		200,000		150,000	40
500,000	8,580	600,000	10,000	600,000	10,000	41
1,000,000	500,000	1,080,000	540,000	972,000	486,000	42
25,000	100,000	25,000	100,000	25,000	100,000	43
4,000	16,000	4,000	20,000	4,000	20,000	44
2,000	30,000	2,500	50,000	3,000	60,000	45
1,000	10,000	1,000	8,000	1,000	5,000	46
14,000	70,000	14,000	70,000	14,100	71,112	47
100,000	250,000	100,000	250,000	114,000	285,000	48
8,280	25,000	11,653	32,046	1,096	2,795	49
1,000	10,000	2,000	24,000	2,000	24,000	50
600	21,000	600	21,000	1,000	27,000	51
200	7,000	1,200	36,000	1,000	30,000	52
200	700	500	1,800	550	2,000	53
50	1,000					54
	206,783,144		231,340,150		243,812,214	55
	187,549,908		214,061,009		196,547,259	56
	6,500,000		6,500,000		6,500,000	57
	400,833,052		451,901,159		446,859,473	58

*Mineral products of the United States for*

		1884.	
Product.		Quantity.	Value.
METALLIC.			
1	Pig iron, value at Philadelphia.....long tons..	4,097,868	\$73,761,624
2	Silver, commercial value.....troy ounces..	37,743,800	41,921,300
3	Gold, coining value.....do.....	1,489,950	30,800,000
4	Copper, value at New York City.....pounds..	145,221,934	17,789,687
5	Lead, value at New York City.....short tons..	139,897	10,537,042
6	Zinc, value at New York City.....do.....	38,544	3,422,707
7	Quicksilver, value at San Francisco.....flasks..	31,913	936,327
8	Nickel, value at Philadelphia.....pounds..	64,550	48,412
9	Aluminum, value at Pittsburg.....do.....	150	1,350
10	Antimony, value at San Francisco.....short tons..	60	12,000
11	Platinum (crude), value at San Francisco.....troy ounces..	150	450
12	Total value of metallic products.....		179,230,899
NONMETALLIC (SPOT VALUES).			
13	Bituminous coal.....short tons..	73,730,539	77,417,066
14	Pennsylvania anthracite.....long tons..	33,175,756	66,351,512
15	Stone.....		19,000,000
16	Petroleum.....barrels..	24,218,438	20,595,966
17	Lime.....do.....	37,000,000	18,500,000
18	Natural gas.....		1,460,000
19	Brick clay.....		
20	Clay (all other than brick).....short tons..	39,200	270,000
21	Cement.....barrels..	4,000,000	3,720,000
22	Salt.....do.....	6,514,937	4,197,734
23	Phosphate rock.....long tons..	431,779	2,374,784
24	Limestone for iron flux.....do.....	3,401,930	1,700,965
25	Mineral waters.....gallons sold..	10,215,328	1,459,143
26	Zinc white.....short tons..	13,000	910,000
27	Mineral paints.....do.....	7,000	84,000
28	Borax.....pounds..	7,000,000	490,000
29	Gypsum.....short tons..	90,000	390,000
30	Grindstones.....		570,000
31	Fibrous talc.....short tons..	10,000	110,000
32	Pyrite.....long tons..	35,000	175,000
33	Soapstone.....short tons..	10,000	200,000
34	Manganese ores.....long tons..	10,180	122,160
35	Asphalt.....short tons..	3,000	10,500
36	Precious stones.....		222,975
37	Bromine.....pounds..	281,100	67,464
38	Corundum.....short tons..	600	108,000
39	Barytes (crude).....do.....	25,000	100,000
40	Graphite.....pounds..		
41	Millstones.....		150,000
42	Oilstones, etc. <sup>a</sup> .....pounds..	800,000	12,000
43	Marls.....short tons..	875,000	437,500
44	Flint.....long tons..	30,000	120,000
45	Fluorspar.....short tons..	4,000	20,000
46	Chromic iron ore.....long tons..	2,000	35,000
47	Infusorial earth.....short tons..	1,000	5,000
48	Feldspar.....long tons..	10,900	55,112
49	Mica.....pounds..	147,410	368,525
50	Colbalt oxide.....do.....	2,000	5,100
51	Slate ground as a pigment.....short tons..	2,000	20,000
52	Sulphur.....do.....	500	12,000
53	Asbestos.....do.....	1,000	30,000
54	Rutile.....pounds..	600	2,000
55	Lithographic stone.....short tons..		
56	Total value of nonmetallic mineral products.....		221,879,506
57	Total value of metallic products.....		179,230,899
58	Estimated value of mineral products unspecified.....		5,000,000
59	Grand total.....		406,110,405

<sup>a</sup> Prior to 1889 quantity and value are for rough stone quarried; since 1890 they are for finished product.

## SUMMARY.

33

the calendar years 1880-1906—Continued.

1885.		1886.		1887.		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
4,044,425	\$64,712,400	5,683,329	\$95,195,760	6,417,148	\$121,925,800	1
39,909,400	42,503,500	39,694,000	39,482,400	41,721,000	40,887,200	2
1,538,373	31,801,000	1,686,788	34,869,000	1,603,049	33,136,000	3
170,962,607	18,292,999	161,235,381	16,527,651	185,227,331	21,115,916	4
129,412	10,469,431	130,629	12,200,749	145,700	13,113,000	5
40,688	3,539,856	42,641	3,752,408	50,340	4,782,300	6
32,073	979,189	29,981	1,060,000	33,825	1,429,000	7
277,904	179,975	214,992	127,157	205,566	133,200	8
283	2,550	3,000	27,000	18,000	59,000	9
50	10,000	35	7,000	75	15,000	10
250	187	50	100	448	1,838	11
	172,491,087		203,249,225		236,598,254	12
64,840,668	82,347,648	73,707,957	78,481,056	87,887,360	98,004,656	13
34,228,548	76,671,948	34,853,077	76,119,120	37,578,747	84,552,181	14
	19,000,000		19,000,000		25,000,000	15
21,847,205	19,198,243	28,064,841	19,996,313	28,278,866	18,877,094	16
40,000,000	20,000,000					17
	4,857,200		10,012,000		15,817,500	18
			6,200,000		7,000,000	19
40,320	275,000	44,800	325,000	48,160	340,000	20
4,150,000	3,492,500	4,500,000	3,990,000	6,602,744	5,674,377	21
7,038,653	4,825,345	7,707,081	4,736,585	7,831,962	4,093,846	22
437,856	2,846,064	430,549	1,872,936	480,558	1,836,818	23
3,356,956	1,678,478	4,717,163	2,830,297	5,377,000	3,226,200	24
9,148,401	1,312,845	8,950,317	1,284,070	8,259,609	1,261,463	25
15,000	1,050,000	18,000	1,440,000	18,000	1,440,000	26
3,950	43,575	18,800	315,000	22,000	330,000	27
8,000,000	480,000	9,778,290	488,915	11,000,000	550,000	28
90,405	405,000	95,250	428,625	95,000	425,000	29
	500,000		250,000		224,400	30
10,000	110,000	12,000	125,000	15,000	160,000	31
49,000	220,500	55,000	220,000	52,000	210,000	32
10,000	200,000	12,000	225,000	12,000	225,000	33
23,258	190,281	30,193	277,636	34,524	333,844	34
3,000	10,500	3,500	14,000	4,000	16,000	35
	209,900		119,056		163,600	36
310,000	89,900	428,334	141,350	199,087	61,717	37
600	108,000	645	116,190	600	108,000	38
15,000	75,000	10,000	50,000	15,000	75,000	39
327,883	26,231	415,525	33,242	416,000	54,000	40
	100,000		140,000		100,000	41
1,000,000	15,000	1,160,000	15,000	1,200,000	16,000	42
875,000	437,500	800,000	400,000	600,000	300,000	43
30,000	120,000	30,000	120,000	32,000	128,000	44
5,000	22,500	5,000	22,000	5,000	20,000	45
2,700	40,000	2,000	30,000	3,000	40,000	46
1,000	5,000	1,200	6,000	3,000	15,000	47
13,600	68,000	14,900	74,500	10,200	61,200	48
92,000	161,000	40,000	70,000	70,000	142,250	49
68,723	65,373	35,000	36,878	18,340	18,774	50
1,975	24,687					51
715	17,875	2,500	75,000	3,000	100,000	52
300	9,000	200	6,000	150	4,500	53
600	2,000	600	2,000	1,000	3,000	54
						55
	241,312,093		230,088,769		270,989,420	56
	172,491,087		203,249,225		236,598,254	57
	5,000,000		800,000		800,000	58
	418,803,180		434,137,994		508,387,674	59

*Mineral products of the United States for*

Product.		1888.	
		Quantity.	Value.
METALLIC.			
1	Pig iron, value at Philadelphia.....long tons.	6,489,738	\$107,000,000
2	Silver, commercial value.....troy ounces.	45,792,700	43,045,100
3	Gold, coining value.....do.	1,604,478	33,167,500
4	Copper, value at New York City.....pounds.	231,270,622	33,833,954
5	Lead, value at New York City.....short tons.	151,919	13,399,256
6	Zinc, value at New York City.....do.	55,903	5,500,855
7	Quicksilver, value at San Francisco.....flasks.	33,250	1,413,125
8	Aluminum, value at Pittsburg.....pounds.	19,000	65,000
9	Antimony, value at San Francisco.....short tons.	100	20,000
10	Nickel, value at Philadelphia.....pounds.	204,328	127,632
11	Tin.....do.		
12	Platinum (crude), value at San Francisco.....troy ounces.	500	2,000
13	Total value of metallic products.....		237,574,422
NONMETALLIC (SPOT VALUES).			
14	Bituminous coal.....short tons.	102,039,838	101,860,529
15	Pennsylvania anthracite.....long tons.	41,624,611	89,020,483
16	Stone.....		25,500,000
17	Petroleum.....barrels.	27,612,025	17,947,620
18	Natural gas.....		22,629,875
19	Brick clay.....		7,500,000
20	Clay (all other than brick).....short tons.	41,160	300,000
21	Cement.....barrels.	6,503,295	5,021,139
22	Mineral waters.....gallons sold.	9,578,648	1,679,302
23	Phosphate rock.....long tons.	448,567	2,018,552
24	Salt.....barrels.	8,055,881	4,374,203
25	Limestone for iron flux.....long tons.	5,438,000	2,719,000
26	Zinc white.....short tons.	20,000	1,600,000
27	Gypsum.....do.	110,000	550,000
28	Borax.....pounds.	7,589,000	455,340
29	Mineral paints.....short tons.	26,500	405,000
30	Grindstones.....		281,800
31	Fibrous talc.....short tons.	20,000	210,000
32	Asphalt.....do.	53,800	331,500
33	Soapstone.....do.	15,000	250,000
34	Precious stones.....		139,850
35	Pyrite.....long tons.	54,331	167,658
36	Corundum.....short tons.	589	91,620
37	Oilstones, etc. <sup>a</sup> .....pounds.	1,500,000	18,000
38	Mica.....do.	48,000	70,000
39	Barytes (crude).....short tons.	20,000	110,000
40	Bromine.....pounds.	307,386	95,290
41	Fluorspar.....short tons.	6,000	30,000
42	Feldspar.....long tons.	8,700	50,000
43	Manganese ores.....do.	29,198	279,571
44	Flint.....do.	30,000	127,500
45	Graphite.....pounds.	400,000	33,000
46	Bauxite.....long tons.		
47	Sulphur.....short tons.		
48	Marls.....do.	300,000	150,000
49	Infusorial earth.....do.	1,500	7,500
50	Millstones.....		81,000
51	Chromic iron ore.....long tons.	1,500	20,000
52	Cobalt oxide.....pounds.	8,491	15,782
53	Magnesite.....short tons.		
54	Asbestos.....do.	100	3,000
55	Rutile.....pounds.	1,000	3,000
56	Ozocerite (refined).....do.	43,500	3,000
57	Total value of nonmetallic mineral products.....		286,150,114
58	Total value of metallic products.....		237,574,422
59	Estimated value of mineral products unspecified.....		900,000
60	Grand total.....		524,624,536

<sup>a</sup> Prior to 1889 quantity and value are for rough stone quarried; since 1890 they are for finished product.

## SUMMARY.

35

the calendar years 1880-1906—Continued.

1889.		1890.		1891.		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
7,603,642	\$120,000,000	9,202,703	\$151,200,410	8,279,870	\$128,387,985	1
50,094,500	46,838,400	54,516,300	57,242,100	58,330,000	57,630,000	2
1,594,775	32,967,000	1,588,877	32,845,000	1,604,840	33,175,000	3
231,246,214	26,907,809	265,115,133	30,848,797	295,812,076	38,455,300	4
156,397	13,794,235	143,630	12,668,166	178,554	15,534,198	5
58,800	5,791,824	63,683	6,266,407	80,873	8,033,700	6
26,484	1,190,500	22,926	1,203,615	22,904	1,036,386	7
47,468	97,335	61,281	61,281	150,000	109,000	8
115	28,000	938	177,508	1,289	217,957	9
252,663	151,598	223,488	134,093	118,498	71,099	10
500	2,000	600	2,500	125,289	25,058	11
				100	500	12
	247,768,701		292,649,877		282,617,183	13
95,685,543	94,504,745	111,320,016	110,420,801	117,901,237	117,188,400	14
40,714,721	65,879,514	41,489,858	66,383,772	45,236,992	73,944,735	15
	42,809,706		47,000,000		47,294,746	16
35,163,513	26,963,340	45,822,672	35,365,105	54,291,980	30,526,553	17
	21,097,099		18,792,725		15,500,084	18
	8,000,000		8,500,000		9,000,000	19
329,665	635,578	392,000	755,000	448,000	900,000	20
7,000,000	5,000,000	8,000,000	6,000,000	8,222,792	6,680,951	21
12,780,471	1,748,458	13,907,418	2,600,750	18,392,732	2,996,259	22
550,245	2,937,776	510,499	3,213,795	587,988	3,651,150	23
8,005,565	4,195,412	8,776,991	4,752,286	9,987,945	4,716,121	24
6,318,000	3,159,000	5,521,622	2,760,811	5,000,000	2,300,000	25
16,970	1,357,600		1,600,000	23,700	1,600,000	26
267,769	764,118	182,995	574,523	208,126	628,051	27
8,000,000	500,000	9,500,000	617,500	13,380,000	869,700	28
34,307	483,766	47,732	681,992	49,652	678,478	29
	439,587		450,000		476,113	30
23,746	244,170	41,354	389,196	53,054	493,068	31
51,735	171,537	40,841	190,416	45,054	242,204	32
12,715	231,708	13,670	252,309	16,514	243,981	33
	188,807		118,833		235,300	34
93,705	202,119	99,854	273,745	106,536	338,880	35
2,245	105,565	1,970	89,395	2,265	90,230	36
5,982,000	32,980		69,909	1,375,000	150,000	37
49,500	50,000	60,000	75,000	75,000	100,000	38
19,161	106,313	21,911	86,505	31,069	118,363	39
418,891	125,667	387,847	104,719	343,000	54,880	40
9,500	45,835	8,250	55,328	10,044	78,330	41
6,970	39,370	8,000	45,200	10,000	50,000	42
24,197	240,559	25,684	219,050	23,416	239,129	43
21,113	89,730	13,000	57,400	15,000	60,000	44
	72,662		77,500		110,000	45
728	2,366	1,844	6,012	3,593	11,675	46
1,150	7,850			1,200	39,600	47
139,522	63,956	153,620	69,880	135,000	67,500	48
3,466	23,372	2,532	50,240		21,988	49
	35,155		23,720		16,587	50
2,000	30,000	3,599	53,985	1,372	20,580	51
13,955	31,092	6,788	16,291	7,200	18,000	52
				439	4,390	53
30	1,800	71	4,560	66	3,390	54
1,000	3,000	400	1,000	300	800	55
50,000	2,500	350,000	26,250	50,000	7,000	56
	282,673,812		312,826,503		321,767,846	57
	247,768,701		292,649,877		282,617,183	58
	1,000,000		1,000,000		1,000,000	59
	531,392,513		606,476,380		605,385,029	60

*Mineral products of the United States for*

		1892.	
Product.		Quantity.	Value.
METALLIC.			
1	Pig iron, spot value..... long tons	9,157,000	\$131,161,039
2	Silver, commercial value..... troy ounces	63,500,000	55,662,500
3	Gold, coining value..... do.	1,597,098	33,015,000
4	Copper, value at New York City..... pounds	352,971,744	37,977,142
5	Lead, value at New York City..... short tons	173,654	13,892,320
6	Zinc, value at New York City..... do.	87,260	8,027,920
7	Quicksilver, value at San Francisco..... flasks	27,993	1,245,689
8	Aluminum, value at Pittsburg..... pounds	259,885	172,824
9	Antimony, value at San Francisco..... short tons	1,790	276,416
10	Nickel, value at Philadelphia..... pounds	92,252	50,739
11	Tin..... do.	162,000	32,400
12	Platinum, value (crude) at San Francisco..... troy ounces	80	550
13	Total value of metallic products.....		281,514,539
NONMETALLIC (SPOT VALUES).			
14	Bituminous coal..... short tons	126,856,567	125,124,381
15	Pennsylvania anthracite..... long tons	46,850,450	82,442,000
16	Natural gas.....		14,870,714
17	Petroleum..... barrels	50,509,136	26,034,196
18	Brick clay.....		9,000,000
19	Cement..... barrels	8,758,621	7,152,750
20	Stone.....		48,706,625
21	Corundum and emery..... short tons	1,771	181,300
22	Crystalline quartz..... do.		
23	Garnet for abrasive purposes..... do.		
24	Grindstones.....		272,244
25	Infusorial earth and tripoli..... short tons		43,655
26	Millstones.....		23,417
27	Oilstones, etc.....		146,730
28	Borax..... pounds	13,500,000	900,000
29	Bromine..... do.	379,480	64,502
30	Fluorspar..... short tons	12,250	89,000
31	Gypsum..... do.	256,259	695,492
32	Marls..... do.	125,000	65,000
33	Phosphate rock..... long tons	681,571	3,296,227
34	Pyrite..... do.	109,788	305,191
35	Salt..... barrels	11,698,890	5,654,915
36	Sulphur..... short tons	2,688	80,640
37	Barytes (crude)..... do.	32,108	130,025
38	Cobalt oxide..... pounds	7,869	15,738
39	Mineral paints..... short tons	51,704	767,766
40	Zinc white..... do.	27,500	2,200,000
41	Asbestos..... do.	104	6,416
42	Asphalt..... do.	87,680	445,375
43	Bauxite..... long tons	10,518	34,183
44	Chromic iron ore..... do.	1,500	25,000
45	Clay (all other than brick)..... short tons	470,400	1,000,000
46	Feldspar..... do.	16,800	75,000
47	Fibrous talc..... do.	41,925	472,485
48	Flint..... do.	22,400	80,000
49	Fuller's earth..... do.		
50	Graphite..... pounds		104,000
51	Limestone for iron flux..... long tons	5,172,114	3,620,480
52	Magnesite..... short tons	1,004	10,040
53	Manganese ores..... long tons	13,613	129,586
54	Mica..... pounds	75,000	100,000
55	Mineral waters..... gallons sold	21,876,604	4,905,970
56	Monazite..... pounds		
57	Ozocerite (refined)..... do.	60,000	8,000
58	Precious stones.....		312,050
59	Pumice stone..... short tons		
60	Rutile..... pounds	100	300
61	Soapstone..... short tons	23,908	437,449
62	Total value of nonmetallic mineral products.....		340,028,842
63	Total value of metallic products.....		281,514,539
64	Estimated value of mineral products unspecified.....		1,000,000
65	Grand total.....		622,543,381

<sup>a</sup> Including copper made from imported pyrites.

the calendar years 1880-1906—Continued.

1893.		1894.		1895.		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
7,124,502	\$84,810,426	6,657,388	\$65,007,247	9,446,308	\$105,198,550	1
60,000,000	46,800,000	49,500,000	31,422,100	55,727,000	36,445,500	2
1,739,323	35,955,000	1,910,813	39,500,000	2,254,760	46,610,000	3
339,785,972	32,054,601	364,866,808	33,141,142	<sup>a</sup> 385,913,404	38,012,470	4
163,982	11,839,590	159,331	9,942,254	170,000	11,220,000	5
78,832	6,306,560	75,328	5,288,026	89,686	6,278,020	6
30,164	1,108,527	30,416	934,000	36,104	1,337,131	7
339,629	266,903	550,000	316,250	920,000	464,600	8
1,503	270,540	1,387	249,706	2,013	304,169	9
49,399	22,197	9,616	3,269	10,302	3,091	10
8,938	1,788					11
75	517	100	600	150	900	12
	219,426,649		185,804,594		245,874,431	13
128,385,231	122,751,618	118,820,405	107,653,501	135,118,193	115,779,771	14
48,185,306	85,687,078	46,358,144	78,488,063	51,785,122	82,019,272	15
	14,346,250		13,954,400		13,006,650	16
48,412,666	28,932,326	49,344,516	35,522,095	52,892,276	57,632,296	17
	9,000,000		<sup>b</sup> 64,655,388		<sup>b</sup> 65,409,806	18
8,002,467	6,262,841	8,362,245	5,030,081	8,731,401	5,482,254	19
	33,885,573		36,534,788		33,319,131	20
1,713	142,325	1,495	95,936	2,102	106,256	21
		6,024	18,054	9,000	27,000	22
				3,325	95,050	23
	338,787		223,214		205,768	24
	22,582	2,584	11,718	4,954	20,514	25
	16,645		13,887		22,542	26
	135,173		136,873		155,881	27
8,690,000	652,425	14,680,130	974,445	11,918,000	595,900	28
348,399	104,520	379,444	102,450	517,421	134,343	29
12,400	84,000	7,500	47,500	4,000	24,000	30
253,615	696,615	239,312	761,719	265,503	797,447	31
75,000	40,000	75,000	40,000	60,000	30,000	32
941,368	4,136,070	996,949	3,479,547	1,038,551	3,606,094	33
75,777	256,552	105,940	363,134	99,549	322,845	34
11,816,772	4,054,668	12,967,417	4,739,285	13,669,649	4,423,084	35
1,200	42,000	500	20,000	1,800	42,000	36
28,970	88,506	23,335	86,983	21,529	68,321	37
8,422	10,346	6,763	10,145	14,458	20,675	38
37,724	530,384	41,926	498,093	50,695	621,552	39
24,059	1,804,420	19,987	1,399,090	20,710	1,449,700	40
50	2,500	325	4,463	795	13,525	41
47,779	372,232	60,570	353,400	68,163	348,281	42
9,079	29,507	11,066	35,818	17,069	44,000	43
1,450	21,750	3,680	53,231	1,740	16,795	44
448,000	900,000					45
20,578	68,307	19,264	167,000	8,523	30,000	46
35,861	403,436	39,906	435,060	39,240	370,897	47
33,231	63,792	42,560	319,200	13,747	21,038	48
				6,900	41,400	49
843,103	63,232	918,000	64,010		52,582	50
3,958,055	2,374,833	3,698,550	1,849,275	5,247,949	2,623,974	51
704	7,040	1,440	10,240	2,220	17,000	52
7,718	66,614	6,308	53,635	9,547	71,769	53
66,971	88,929		52,388		55,831	54
23,544,495	4,246,734	21,569,608	3,741,846	21,463,543	4,254,237	55
130,000	7,600	546,855	36,193	1,573,000	137,150	56
	264,041		132,250		113,621	57
		150	450	100	350	58
21,071	255,067	23,144	401,325	21,495	266,495	59
	323,257,318		362,570,173		393,897,097	60
	219,436,649		185,804,594		245,874,431	61
	1,000,000		1,000,000		1,000,000	62
	543,693,967		549,374,767		640,771,528	63
						64
						65

<sup>b</sup> Clay products.

*Mineral products of the United States for*

Product.		1896.	
		Quantity.	Value.
METALLIC.			
1	Pig iron, spot value.....long tons..	8,623,127	\$90,250,000
2	Silver, commercial value.....troy ounces..	58,834,800	39,654,600
3	Gold, coining value.....do.....	2,568,132	53,088,000
4	Copper, value at New York City.....pounds..	460,061,430	49,456,603
5	Lead, value at New York City.....short tons..	188,000	10,528,000
6	Zinc, value at New York City.....do.....	81,499	6,519,920
7	Quicksilver, value at San Francisco.....flasks..	30,765	1,075,449
8	Aluminum, value at Pittsburg.....pounds..	1,300,000	520,000
9	Antimony, value at San Francisco.....short tons..	2,478	347,539
10	Nickel, value at Philadelphia.....pounds..	17,170	4,464
11	Tin.....do.....		
12	Platinum, value (crude) at New York City.....troy ounces..	163	944
13	Total value of metallic products.....		251,445,519
NONMETALLIC (SPOT VALUES).			
14	Bituminous coal.....short tons..	137,640,276	114,891,515
15	Pennsylvania anthracite.....long tons..	48,523,287	81,748,651
16	Natural gas.....		13,002,512
17	Petroleum.....barrels..	60,960,361	58,518,709
18	Clay products.....		63,110,408
19	Cement.....barrels..	9,513,473	6,473,213
20	Lime.....		6,327,900
21	Slate.....		2,746,205
22	Stone.....		23,965,229
23	Corundum and emery.....short tons..	2,120	113,246
24	Crystalline quartz.....do.....	6,000	18,000
25	Garnet for abrasive purposes.....do.....	2,686	68,877
26	Grindstones.....		326,826
27	Infusorial earth and tripoli.....short tons..	3,846	26,792
28	Millstones.....		22,567
29	Oilstones, etc.....		127,068
30	Borax.....pounds..	13,508,000	675,400
31	Bromine.....do.....	546,580	144,501
32	Fluorspar.....short tons..	6,500	52,000
33	Gypsum.....do.....	224,254	573,344
34	Marls.....do.....	60,000	30,000
35	Phosphate rock.....long tons..	930,779	2,803,372
36	Pyrite.....do.....	115,483	320,163
37	Salt.....barrels..	13,850,726	4,040,839
38	Sulphur.....short tons..	5,260	87,200
39	Barytes (crude).....do.....	17,068	46,513
40	Cobalt oxide.....pounds..	10,700	15,301
41	Mineral paints.....short tons..	43,894	459,089
42	Zinc white.....do.....	20,000	1,400,000
43	Asbestos.....do.....	504	6,100
44	Asphalt.....do.....	80,503	577,563
45	Bauxite.....long tons..	18,364	47,338
46	Chromic iron ore.....do.....	786	6,667
47	Feldspar.....short tons..	10,203	35,200
48	Fibrous talc.....do.....	46,089	399,443
49	Fuller's earth.....do.....	9,872	59,360
50	Graphite (crystalline).....pounds..	535,858	48,460
51	Graphite (amorphous).....short tons..	760	
52	Magnesite.....do.....	1,500	11,000
53	Manganese ores.....long tons..	10,088	90,727
54	Mica (sheet).....pounds..	49,156	65,441
55	Mica (scrap).....short tons..	222	1,750
56	Mineral waters.....gallons sold..	25,795,312	4,136,192
57	Monazite.....pounds..	30,000	1,500
58	Ozocerite (refined).....do.....		
59	Precious stones.....		97,850
60	Pumice stone.....short tons..		
61	Quartz (flint).....do.....	12,458	24,226
62	Rutile.....pounds..	100	350
63	Soapstone.....short tons..	22,183	354,065
64	Total value of nonmetallic mineral products.....		388,098,702
65	Total value of metallic products.....		251,445,519
66	Estimated value of mineral products unspecified.....		1,000,000
67	Grand total.....		640,544,221

## SUMMARY.

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the calendar years 1880-1906—Continued.

1897.		1898.		1899.		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
9,652,680	\$95,122,299	11,773,934	\$116,557,000	13,620,703	\$245,172,654	1
53,800,000	32,316,000	54,438,000	32,118,400	54,764,500	32,858,700	2
2,774,935	57,363,000	3,118,398	64,463,000	3,437,210	71,053,400	3
494,078,274	54,080,180	526,512,987	61,865,276	568,666,921	101,222,712	4
212,000	14,885,728	222,000	16,650,000	210,500	18,945,000	5
99,980	8,498,300	115,399	10,385,910	129,051	14,840,865	6
26,648	993,445	31,092	1,188,627	30,454	1,452,745	7
4,000,000	1,500,000	5,200,000	1,716,000	6,500,000	1,716,000	8
3,081	442,300	3,238	532,101	2,861	559,189	9
23,707	7,823	11,145	3,956	22,541	8,566	10
150	900	225	1,913	300	1,800	11
265,209,975		305,482,183		487,831,631		12
147,617,519	119,595,224	166,593,623	132,608,713	193,323,187	167,952,104	13
46,974,714	79,301,954	47,663,076	75,414,537	53,944,647	88,142,130	14
60,475,516	13,826,422	55,364,233	15,296,813	57,070,850	20,074,873	15
10,989,463	40,874,072	12,111,208	44,193,359	15,520,445	64,003,904	16
	62,359,991		74,487,680		95,797,370	17
	8,178,283		9,859,501		12,889,142	18
	6,390,487		6,886,549		6,983,067	19
	3,524,614		3,723,540		3,962,733	20
	26,876,671		28,635,175		35,244,717	21
2,165	106,574	4,064	275,064	4,900	150,600	22
7,500	22,500	8,312	23,990	13,600	39,000	23
2,554	80,853	2,967	86,850	2,765	98,325	24
3,883	368,058	2,733	489,769	4,334	675,586	25
	22,835		16,691		37,032	26
	25,932		25,934		28,115	27
	140,970		180,486		208,283	28
16,000,000	1,080,000	16,000,000	1,120,000	40,714,000	1,139,882	29
487,149	129,094	486,979	126,614	433,004	108,251	30
5,062	37,159	7,675	63,050	15,900	96,650	31
288,982	755,864	291,638	755,280	486,235	1,287,080	32
60,000	30,000	60,000	30,000	60,000	30,000	33
1,039,345	2,673,202	1,308,885	3,453,460	1,515,702	5,084,076	34
143,201	391,541	193,364	593,801	174,734	543,249	35
15,973,202	4,920,020	17,612,634	6,212,554	19,708,614	6,867,467	36
2,275	45,590	1,200	32,960	4,830	107,509	37
26,042	58,295	31,306	108,339	41,894	139,528	38
19,520	31,232	6,247	9,371	10,230	18,512	39
47,308	501,029	48,479	534,345	51,020	517,328	40
25,000	1,750,000	33,000	2,310,000	40,146	3,211,680	41
580	6,450	605	10,300	681	11,740	42
75,945	664,632	76,337	675,649	75,085	553,904	43
20,590	57,652	25,149	75,437	35,280	125,598	44
12,516	43,100	13,440	32,395	24,202	211,545	45
57,009	396,936	54,356	411,430	54,655	438,150	46
17,113	112,272	14,860	106,500	12,381	79,644	47
{ 1,361,706 }	65,730	{ 2,360,000 }	75,200	{ 2,900,732 }	167,106	48
1,070		890		2,324		49
1,143	13,671	1,263	19,075	1,280	18,480	50
11,108	95,505	15,957	129,185	9,935	82,278	51
82,676	80,774	129,520	103,534	108,570	70,587	52
740	14,452	3,999	27,564	1,505	50,878	53
23,255,911	4,599,106	28,853,464	8,051,833	39,562,136	6,948,030	54
44,000	1,980	250,776	13,542	350,000	20,000	55
	130,675		160,920		185,770	56
158		600	13,200	400	10,000	57
13,466	26,227	21,425	42,670	29,852	180,345	58
100	350	140	700	230	1,030	59
21,923	365,629	22,231	287,112	24,765	330,805	60
	380,782,607		417,790,671		525,524,074	61
	265,209,975		305,482,183		487,831,631	62
	1,000,000		1,000,000		1,000,000	63
	646,992,582		724,272,854		1,014,355,705	64

*Mineral products of the United States for*

Product.		1900.	
		Quantity.	Value.
METALLIC.			
1	Pig iron, value at Philadelphia.....long tons..	13,789,242	\$259,944,000
2	Silver, commercial value.....troy ounces..	57,647,000	35,741,100
3	Gold, coining value.....do.....	3,829,897	79,171,000
4	Copper, value at New York City.....pounds..	606,117,166	98,494,039
5	Lead, value at New York City.....short tons..	270,824	23,561,688
6	Zinc, value at New York City.....do.....	123,886	10,654,196
7	Quicksilver, value at San Francisco.....flasks..	28,317	1,302,586
8	Aluminum, value at Pittsburg.....pounds..	7,150,000	1,920,000
9	Antimony, value at San Francisco.....short tons..	4,226	837,896
10	Nickel, value at Philadelphia.....pounds..	9,715	3,886
11	Tin.....do.....		
12	Platinum, value (crude) at New York City.....troy ounces..	400	2,500
13	Total value of metallic products.....		511,632,891
NONMETALLIC (SPOT VALUES).			
14	Bituminous coal.....short tons..	212,316,112	220,930,313
15	Pennsylvania anthracite.....long tons..	51,221,353	85,757,851
16	Natural gas.....		23,698,674
17	Petroleum.....barrels..	63,620,529	75,989,313
18	Clay products.....		96,212,345
19	Cement.....barrels..	17,231,150	13,283,581
20	Lime.....		6,797,496
21	Sand-lime brick.....		
22	Slate.....		4,240,466
23	Stone.....		36,970,777
24	Corundum and emery.....short tons..	4,305	102,715
25	Crystalline quartz.....do.....	14,461	40,705
26	Garnet for abrasive purposes.....do.....	3,185	123,475
27	Grindstones.....		710,026
28	Infusorial earth and tripoli.....short tons..	3,615	24,207
29	Millstones.....		32,858
30	Oilstones, etc.....		174,087
31	Arsenious oxide.....pounds..		
32	Borax.....short tons..	61,602	170,036
33	Bromine.....pounds..	24,235	848,215
34	Fluorspar.....short tons..	521,444	140,790
35	Gypsum.....do.....	18,450	94,500
36	Lithium.....do.....	594,462	1,627,203
37	Marls.....do.....	520	
38	Phosphate rock.....long tons..	60,000	30,000
39	Pyrite.....do.....	1,491,216	5,359,248
40	Sulphur.....short tons..	204,615	749,991
41	Salt.....barrels..	3,525	88,100
42	Barytes (crude).....short tons..	20,869,342	6,944,603
43	Cobalt oxide.....pounds..	67,680	188,089
44	Mineral paints.....short tons..	6,471	11,648
45	Zinc white.....do.....	57,426	644,089
46	Asbestos.....do.....	48,840	3,667,210
47	Asphalt.....do.....	1,054	16,310
48	Bauxite.....do.....	54,389	415,958
49	Chromic iron ore.....long tons..	23,184	89,676
50	Feldspar.....do.....	140	1,400
51	Fibrous talc.....short tons..	24,821	180,971
52	Fuller's earth.....do.....	63,500	499,500
53	Glass sand.....do.....	9,698	67,535
54	Graphite (crystalline).....pounds..	5,507,855	
55	Graphite (amorphous).....short tons..	611	197,579
56	Magnetite.....do.....	2,252	19,333
57	Manganese ores.....long tons..	11,771	100,289
58	Mica (sheet).....pounds..	456,283	92,758
59	Mica (scrap).....short tons..	5,497	55,202
60	Mineral waters.....gallons sold..	47,558,784	6,245,172
61	Monazite and zircon.....pounds..	908,000	48,805
62	Precious stones.....		233,170
63	Pumice stone.....short tons..		
64	Quartz (flint).....do.....	32,495	86,351
65	Rutile.....pounds..	300	1,300
66	Talc and soapstone.....short tons..	27,943	383,541
67	Tungsten.....do.....	46	11,040
68	Uranium and vanadium.....do.....		
69	Total value of nonmetallic mineral products.....		504,398,501
70	Total value of metallic products.....		511,632,891
71	Estimated value of mineral products unspecified.....		1,000,000
72	Grand total.....		1,107,031,392

<sup>a</sup> No metallic tin; about 20 tons of high-grade concentrates shipped to England from South Carolina.

## SUMMARY.

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the calendar years 1880-1906—Continued.

1901.		1902.		1903.		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
15,878,354	\$242,174,000	17,821,307	\$372,775,000	18,009,252	\$344,350,000	1
55,214,000	33,128,400	55,500,000	29,415,000	54,300,000	29,322,000	2
3,805,500	78,666,700	3,870,000	80,000,000	3,560,000	73,591,700	3
602,072,519	87,300,515	659,508,644	76,568,954	698,044,517	91,506,006	4
270,700	23,280,200	270,000	22,140,000	282,000	23,520,000	5
140,822	11,265,760	156,927	14,625,596	159,219	16,717,995	6
29,727	1,382,305	34,291	1,467,848	35,620	1,544,934	7
7,150,000	2,238,000	7,300,000	2,284,590	7,500,000	2,284,900	8
2,639	539,902	3,561	634,506	3,128	548,433	9
6,700	3,551	5,748	2,701	114,200	45,900	10
1,408	27,526	94	1,814	(a)	2,080	11
	480,006,859		599,916,009		583,433,948	12
						13
225,828,149	236,422,049	260,216,844	290,858,483	282,749,348	351,687,933	14
60,242,560	112,504,020	36,940,710	76,173,586	60,613,454	152,036,448	15
	27,066,077		30,867,863		35,807,860	16
69,389,194	66,417,335	88,766,916	71,178,910	100,461,337	94,694,050	17
	110,211,587		122,169,531		131,062,421	18
20,068,737	15,786,789	25,753,504	25,366,380	29,899,140	31,931,341	19
	8,204,054		9,335,618		9,255,882	20
	4,787,525		5,696,051		155,040	21
	47,284,183		54,798,682		6,256,885	22
4,305	146,040	4,251	104,605	2,542	57,433,141	23
14,050	41,500	15,104	84,335	8,938	64,102	24
4,444	158,100	3,926	132,820	3,950	76,908	25
	580,703		667,431		132,500	26
4,020	52,950	5,665	53,244	9,219	721,446	27
	57,179		59,808		76,273	28
	158,300		221,762		52,552	29
600,000	18,000	2,706,000	81,180	1,222,000	366,857	30
b 5,344	697,307	b 17,404	2,447,614	c 34,430	36,691	31
c 17,887	314,811	c 2,600	91,000		661,400	32
552,043	154,572	513,893	128,472	598,500	167,580	33
19,586	113,803	48,018	271,832	42,523	213,617	34
633,791	1,506,641	816,478	2,089,341	1,041,704	3,792,943	35
1,750	43,200	1,245	25,750	1,155	23,425	36
99,880	124,880	12,439	12,741	34,211	22,521	37
1,483,723	5,316,403	1,490,314	4,693,444	1,581,576	5,319,294	38
241,691	1,257,879	207,874	947,089	d 233,127	1,109,818	39
(d)	(d)	(d)	(d)			40
20,566,661	6,617,449	23,849,231	5,668,636	18,968,089	5,286,988	41
49,070	157,844	61,668	203,154	50,397	152,150	42
13,360	24,048	3,730	6,714	120,000	228,000	43
52,209	636,145	60,191	745,227	56,262	500,922	44
46,500	3,720,000	52,645	4,016,499	62,962	4,801,718	45
747	13,498	1,005	16,200	887	16,760	46
63,134	555,335	105,458	765,048	101,255	1,005,446	47
18,905	79,914	27,322	120,366	48,087	171,306	48
368	5,790	315	4,567	150	2,250	49
34,741	220,422	45,287	250,424	41,891	256,733	50
69,200	483,600	71,100	615,350	60,230	421,600	51
14,112	96,835	11,492	98,144	20,693	190,277	52
		943,135	807,797	823,044	855,828	53
3,967,612	107,714	3,936,824	182,108	4,538,155	225,554	54
899		4,739		16,591		55
3,500	10,500	2,830	8,490	3,744	10,595	56
11,995	116,722	7,477	60,911	2,825	25,335	57
360,060	98,859	373,266	83,843	619,600	118,088	58
2,171	19,719	1,400	35,006	1,659	25,040	59
55,771,188	7,586,962	64,859,451	8,793,761	51,242,757	9,041,078	60
748,736	59,262	802,000	64,160	865,000	65,200	61
	289,050		328,450		307,900	62
		700	2,750	885	2,665	63
34,420	149,297	36,365	144,209	55,233	156,947	64
44,250	5,710	(e)				65
28,643	424,888	26,854	525,157	26,671	418,460	66
179	27,720	184	34,040	292	43,639	67
375		3,810	48,125	30	5,625	68
	660,993,170		722,186,708		907,495,032	69
	480,006,859		599,916,009		583,433,948	70
	1,000,000		1,000,000		1,000,000	71
	1,142,000,029		1,323,102,717		1,491,928,980	72

b Refined. c Crude. d Included under pyrite. e Included under estimated unspecified products.

*Mineral products of the United States for the calendar years 1880-1906—Continued.*

Product.	1904.		1905.	
	Quantity.	Value.	Quantity.	Value.
<b>METALLIC.</b>				
Pig iron (spot value).....long tons..	16,497,033	\$233,025,000	22,992,380	\$382,450,000
Silver, commercial value.....troy ounces..	55,999,864	32,035,378	56,101,600	34,221,976
Gold, coining value.....do.....	3,910,729	80,835,648	4,265,742	88,180,700
Copper, value at New York City.....pounds..	812,537,267	105,629,845	901,907,843	139,795,716
Lead, value at New York City.....short tons..	307,000	26,402,000	302,000	28,690,000
Zinc, value at New York City.....do.....	186,702	18,670,200	203,849	24,054,182
Quicksilver, value at San Francisco.....flasks..	34,570	1,503,795	30,451	1,103,120
Aluminum, value at Pittsburg.....pounds..	8,600,000	2,477,000	11,347,000	3,246,300
Antimony, value, San Francisco.....sh. tons..	3,057	505,524	3,240	705,787
Nickel, value at Philadelphia.....pounds..	24,000	11,400	None.	
Tin.....do.....			None.	
Platinum, value (crude) at New York City, troy ounces.....	200	4,160	318	5,320
Total value of metallic products.....		501,099,950		702,453,101
<b>NONMETALLIC (spot values).</b>				
Bituminous coal.....short tons..	278,659,689	305,397,001	315,062,785	334,658,294
Pennsylvania anthracite.....long tons..	65,318,490	138,974,020	69,339,152	141,879,000
Natural gas.....do.....		38,496,760		41,562,855
Petroleum.....barrels..	117,080,960	101,175,455	134,717,580	84,157,399
Clay products.....		131,023,248		149,697,188
Cement.....barrels..	31,675,257	26,031,920	40,102,308	35,931,533
Lime.....short tons..	2,707,809	9,951,456	2,984,100	10,941,680
Sand-lime brick.....		463,128		972,064
Slate.....		5,617,195		5,496,207
Stone.....		58,765,715		63,798,748
Corundum and emery.....short tons..	1,916	56,985	2,126	61,464
Crystalline quartz.....do.....	31,940	74,850	19,039	88,118
Garnet for abrasive purposes.....do.....	3,854	117,581	5,050	148,095
Grindstones.....		881,527		777,606
Infusorial earth and tripoli.....short tons..	6,274	44,164	10,977	64,637
Millstones.....		37,338		37,974
Oilstones, etc.....		188,985		244,546
Arsenious oxide.....pounds..	72,413	2,185	1,507,386	35,210
Borax (crude).....short tons..	45,647	698,810	46,334	1,019,154
Bromine.....pounds..	897,100	269,130	1,192,758	178,914
Fluorspar.....short tons..	36,432	234,755	57,385	362,488
Gypsum.....do.....	940,917	2,784,325	1,043,202	3,029,227
Lithium minerals.....do.....	577	5,155	79	1,412
Marls.....do.....	18,989	13,145	38,026	16,494
Phosphate rock.....long tons..	1,874,428	6,580,875	1,947,190	6,763,403
Pyrite.....do.....		253,000		938,492
Sulphur.....do.....	334,373	3,478,568	181,677	3,706,560
Salt.....barrels..	22,030,002	6,021,222	25,966,122	6,095,922
Barytes (crude).....short tons..	65,727	174,958	48,235	148,803
Cobalt oxide.....pounds..	22,000	42,600		
Mineral paints.....short tons..	52,336	493,434	56,599	724,933
Zinc white.....do.....	63,363	4,808,482	68,603	5,520,240
Asbestos.....do.....	1,480	25,740	3,109	42,975
Asphalt.....do.....	108,572	879,836	115,267	758,153
Bauxite.....long tons..	47,661	235,704	48,129	240,292
Chromic iron ore.....do.....	123	1,845	25	375
Feldspar.....short tons..	45,188	266,326	35,419	226,157
Fibrous talc.....do.....	64,005	507,400	56,500	445,000
Fuller's earth.....do.....	29,480	168,500	25,178	214,497
Glass sand.....do.....	858,719	796,492	1,060,334	1,107,730
Graphite (crystalline).....pounds..	5,681,177	321,372	6,036,567	318,211
Graphite (amorphous).....short tons..	16,927		21,953	
Magnesite.....do.....	2,850	9,298	3,933	15,221
Manganese ores.....long tons..	3,146	29,466	4,118	36,214
Mica (sheet).....pounds..	668,358	109,462	924,875	160,732
Mica (scrap).....short tons..	1,096	10,854	1,126	17,856
Mineral waters.....gallons sold..	50,723,500	7,198,450	47,590,081	6,811,611
Monazite and zircon.....pounds..	745,999	85,038	1,352,418	163,908
Precious stones.....		324,300		326,350
Pumice stone.....short tons..	1,530	5,421	1,832	5,540
Quartz (flint).....do.....	52,270	100,590	51,145	104,109
Rutile.....pounds..		7,000		
Sand, molding, etc., and gravel.....sh. tons..	9,821,009	\$4,951,607	22,144,633	\$10,115,915
Talc and soapstone.....do.....	27,184	433,331	40,134	637,062
Tungsten.....do.....	740	184,000	803	268,676
Uranium and vanadium.....do.....	45	10,600	4	375
Total value of nonmetallic mineral products.....		859,567,604		921,075,619
Total value of metallic products.....		501,099,950		702,453,101
Estimated value of mineral products unspecified.....		400,000		400,000
Grand total.....		1,361,067,554		1,623,928,720

*Mineral products of the United States for the calendar years 1880-1906—Continued.*

Product.	1906.	
	Quantity.	Value.
<b>METALLIC.</b>		
Pig iron (spot value).....long tons..	25,307,191	\$505,700,000
Silver, commercial value.....troy ounces..	56,517,900	38,256,400
Gold, coining value.....do.....	4,565,333	94,373,800
Copper, value at New York City.....pounds..	917,805,682	177,595,888
Lead, value at New York City.....short tons..	350,153	39,917,442
Zinc, value at New York City.....do.....	199,694	24,362,668
Quicksilver, value at San Francisco.....flasks..	26,238	958,634
Aluminum, value at Pittsburgh.....pounds..	14,910,000	4,262,286
Antimony, value at San Francisco.....short tons..	1,766	602,949
Nickel, value at Philadelphia.....pounds..		
Tin.....do.....		35,600
Platinum, value (crude) at New York City.....troy ounces..	1,439	45,189
Total value of metallic products.....		\$86,110,856
<b>NONMETALLIC (spot values).</b>		
Bituminous coal.....short tons..	342,874,867	381,162,115
Pennsylvania anthracite.....long tons..	63,645,010	131,917,694
Natural gas.....do.....		46,873,932
Petroleum.....barrels..	126,493,936	92,444,735
Clay products.....do.....		161,032,722
Cement.....barrels..	51,000,445	55,302,277
Lime.....short tons..	3,197,754	12,480,653
Sand-lime brick.....do.....		1,170,005
Slate.....do.....		5,668,346
Stone.....do.....		66,378,794
Corundum and emery.....short tons..	1,160	44,310
Crystalline quartz.....do.....	24,082	121,671
Garnet for abrasive purposes.....do.....	4,650	157,000
Grindstones.....do.....		744,894
Infusorial earth and tripoli.....short tons..	8,099	72,108
Millstones.....do.....		48,590
Oilstones, etc.....do.....		268,070
Arsenious oxide.....pounds..	1,474,000	63,460
Borax (crude).....short tons..	58,173	1,182,410
Bromine.....pounds..	1,283,250	165,204
Fluorspar.....short tons..	40,796	244,025
Gypsum.....do.....	1,540,585	3,837,975
Lithium minerals.....do.....	383	7,411
Marls.....do.....	19,134	7,341
Phosphate rock.....long tons..	2,080,957	8,579,437
Pyrite.....do.....	261,422	931,305
Sulphur.....do.....	294,153	5,096,678
Salt.....barrels..	28,172,380	6,658,350
Barytes (crude).....short tons..	50,231	160,367
Cobalt oxide.....pounds..		
Mineral paints.....short tons..	49,921	521,729
Zinc white.....do.....	74,680	5,999,375
Asbestos.....do.....	1,695	28,565
Asphaltum.....do.....	138,059	1,290,340
Bauxite.....long tons..	75,332	368,311
Chromic iron ore.....do.....	107	1,800
Feldspar.....short tons..	75,656	401,531
Fibrous talc.....do.....	61,672	557,200
Fuller's earth.....do.....	32,040	265,400
Glass sand.....do.....	1,089,430	1,208,788
Graphite (Crystalline).....pounds..	5,887,982	238,064
Graphite (Amorphous).....short tons..	16,853	102,175
Magnesite.....do.....	7,805	23,415
Manganese ores.....long tons..	6,921	88,132
Manganiferous iron ores.....do.....	41,300	122,400
Mica (Sheet).....pounds..	1,423,100	252,248
Mica (Scrap).....short tons..	1,489	22,742
Mineral waters.....gallons sold..	51,407,668	8,559,650
Monazite and zircon.....pounds..	847,275	152,560
Precious stones.....do.....		208,000
Pumice stone.....short tons..	12,200	16,750
Quartz (flint).....do.....	66,697	243,012
Rutile.....pounds..		
Sand, molding, etc., and gravel.....short tons..	31,842,572	11,489,420
Talc and soapstone.....do.....	58,972	874,356
Tungsten.....do.....	928	348,867
Uranium and vanadium.....do.....		
Total value of nonmetallic mineral products.....		1,016,206,709
Total value of metallic products.....		886,110,856
Estimated value of mineral products unspecified.....		200,000
Grand total.....		1,902,517,565

OUTPUT AND VALUE, BY STATES AND TERRITORIES, OF THE  
MINERAL PRODUCTS OF THE UNITED STATES IN THE CALENDAR  
YEARS 1905 AND 1906.

In the following table are shown the quantity and the value, by States and Territories, of the mineral products of the United States in 1905 and 1906, including both certain raw materials and also certain derivative materials in their first marketable condition, which do not appear in the table of mineral products of the United States as a whole. For example, both pig iron and iron ores are included as important products entering into the commerce of certain States; and in like manner are included both pig lead and lead paints; both clay products and raw clay; both coal and its immediate derivatives, coke, gas coke, illuminating gas, ammonium sulphate, and coal tar; both bauxite and aluminum, and also alum and aluminum sulphate.

These derivatives and raw materials are here given, regardless of the consequent duplication of values, in response to a constant demand for this information thus arranged by States. Unfortunately, it has not been possible to give separately the values of all of the products under the respective States because of the necessity of preventing the disclosure of individual returns. These values will be found grouped together under the headings "Other products" and "Miscellaneous," except in those few cases in which the products of two or more States are combined.

The values for gold and silver in 1905 and 1906 given under the different States are the values for the output reported to the United States Geological Survey directly from the producing mines as given in the respective sections of the chapter on gold and silver; the values for 1905 and 1906 in the preceding table are the official figures agreed upon by the United States Geological Survey and the Director of the Mint. The figures for copper, lead, and zinc are taken from their respective chapters and are based on smelter reports; they differ somewhat from the corresponding figures in the chapter on gold and silver, which are based on mines reports. The figures for the tonnage (not the value) of pig iron in 1905 and 1906 are taken from the annual reports prepared by Mr. James M. Swank, general manager of the American Iron and Steel Association.<sup>a</sup>

The total value of the output, raw materials and derivatives, by States, as shown in this statement for 1906 is \$2,186,086,366, as against \$1,853,874,155 in 1905, a gain in 1906 of \$332,212,211.

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<sup>a</sup> Ann. Statist. Rept. Amer. Iron and Steel Association for the years 1905 and 1906.

*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906.*

## ALABAMA.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay..... short tons..	56,365	\$22,924	45,871	\$20,564
Clay products.....		1,392,871		1,688,899
Coal..... short tons..	11,866,069	14,387,721	13,107,963	17,514,786
Coke..... do.....	2,576,986	7,646,957	3,034,501	8,477,899
Ammonium sulphate..... pounds..	230,207	<sup>a</sup> 253,453		
Coal tar..... gallons..	4,592,516	128,271		
Gas, illuminating..... cubic feet..	1,905,498,180	429,817		
Gas coke..... short tons..	384,206	1,157,987		
Glass sand..... do.....	162	130		
Gold (mines report)..... fine ounces (troy)...	2,009	41,530	1,205.51	24,921
Iron ores..... long tons..	3,782,831	4,257,155	3,995,098	5,123,539
Iron, pig..... do.....	1,604,062	<sup>b</sup> 22,680,000	1,674,848	<sup>b</sup> 28,450,000
Lime..... short tons..	79,973	292,162	92,402	341,627
Mineral waters..... gallons sold..	57,269	23,704	65,450	26,075
Natural gas.....				( <sup>c</sup> )
Sand and gravel..... short tons..	197,942	93,022	216,037	129,916
Sand-lime brick.....		23,727		( <sup>d</sup> )
Silver (mines report)..... fine ounces (troy)...	336	203	124	83
Stone.....		560,210		704,811
Other products.....		<sup>d</sup> 193,444		<sup>d</sup> 376,553
Total.....		53,585,288		65,046,153

<sup>a</sup> Includes Georgia.

<sup>b</sup> Estimated.

<sup>c</sup> Included under Texas.

<sup>d</sup> Includes in 1905: Bauxite, cement, graphite, natural gas, and pyrite. Includes in 1906: Barytes, bauxite, Portland and slag cement, graphite, ocher, pyrite, sand-lime brick, sienna, Venetian red.

## ALASKA.

Coal..... short tons..	3,774	\$13,250	5,541	\$17,974
Copper..... pounds..	4,900,866	759,634	8,685,646	1,676,330
Gold (mines report)..... fine ounces (troy)...	756,101.28	15,630,000	1,066,049.91	22,036,794
Lead..... short tons..		( <sup>a</sup> )	8	912
Silver (mines report)..... fine ounces (troy)...	132,724	80,165	166,068	111,266
Stone.....		710		( <sup>b</sup> )
Other products.....				<sup>b</sup> 28,379
Total.....		16,483,759		23,871,655

<sup>a</sup> Included under Miscellaneous.

<sup>b</sup> Includes in 1906: Gypsum, marble, mineral waters.

## ARIZONA.

Clay products.....		\$90,436		\$93,694
Copper..... pounds..	235,908,150	36,565,763	262,566,103	50,675,257
Gold (mines report)..... fine ounces (troy)...	135,412	2,799,214	143,416.55	2,964,683
Lead..... short tons..	1,986	188,670	2,884	328,776
Lime..... do.....	5,298	32,557	14,084	96,470
Silver (mines report)..... fine ounces (troy)...	2,605,712	1,573,850	3,026,438	2,027,714
Stone.....		69,393		65,231
Zinc..... short tons..			64	7,808
Other products.....		<sup>a</sup> 26,251		<sup>a</sup> 106,256
Total.....		41,346,134		56,365,889

<sup>a</sup> Includes in 1905: Asbestos, clay molybdenum, mineral waters, sand-lime brick, and tungsten. Includes in 1906: Asbestos, clay, Portland cement, mineral waters, precious stones, tungsten.

*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## ARKANSAS.

Product.	1905.		1906	
	Quantity.	Value.	Quantity.	Value.
Asphalt.....short tons..	1,000	\$3,000	900	\$5,400
Bauxite.....long tons..	32,956	164,780	50,267	242,876
Clay products.....		643,959		532,194
Coal.....short tons..	1,934,673	2,880,738	1,864,268	3,000,339
Coal tar.....gallons..	66,900	3,677		
Gas, illuminating.....cubic feet..	51,914,400	72,026		<sup>a</sup> 101,145
Gas coke.....short tons..	3,894	16,247		
Lime.....do.....	29,424	114,846	30,348	121,953
Manganese ores.....long tons..			62	290
Manganiferous iron ores.....do.....			8,900	24,800
Mineral waters.....gallons sold..	474,005	50,501	727,765	105,286
Natural gas.....				<sup>b</sup> 34,500
Sand and gravel.....short tons..	122,364	50,485	214,425	104,212
Slate.....		10,000		5,000
Stone.....		304,291		240,350
Zinc.....short tons..			1,801	219,722
Other products.....		<sup>c</sup> 168,587		<sup>c</sup> 195,852
Total.....		4,483,137		4,933,899

<sup>a</sup> Estimated.

<sup>b</sup> Includes Wyoming.

<sup>c</sup> Includes in 1905: Iron ores, natural gas, oilstones, and sand-lime brick. Includes in 1906: Fuller's earth, oilstones, phosphate rock, sand-lime brick, slate and shale.

## CALIFORNIA.

Asphalt.....short tons..	91,076	\$568,403	91,957	\$758,579
Borax.....do.....	46,334	1,019,154	58,173	1,182,410
Cement, Portland.....barrels..	1,225,429	1,671,816	1,310,435	2,110,294
Chromite.....long tons..	22	375	107	1,800
Clay.....short tons..	50,850	50,290	57,413	67,418
Clay products.....		3,865,147		4,364,230
Coal.....short tons..	77,050	382,725	25,290	60,710
Coal tar.....gallons..	27,220	2,212		
Gas, illuminating.....cubic feet..	30,474,033	47,793		<sup>a</sup> 73,027
Gas coke.....short tons..	1,710	16,384		
Copper.....pounds..	16,697,489	2,588,111	28,153,202	5,433,568
Glass sand.....short tons..	9,257	8,122	7,324	6,124
Gold (mines report).....fine ounces (troy)..	914,217.14	18,898,545	906,182.36	18,732,452
Lead.....short tons..	110	10,450	432	49,248
Lime.....do.....	67,476	535,157	73,941	601,557
Lithium minerals.....do.....	21	252		<sup>(b)</sup>
Magnesite.....do.....	3,933	15,221	7,805	23,415
Manganese ores.....long tons..	1	5		<sup>(b)</sup>
Mineral waters.....gallons sold..	1,934,784	675,214	1,487,975	520,515
Natural gas.....		133,696		134,560
Ocher.....short tons..	780	5,900	500	4,470
Petroleum.....barrels..	33,427,473	8,201,846	33,098,598	9,553,430
Platinum.....crude ounces (troy)..		3,320		<sup>(b)</sup>
Precious stones.....				121,600
Pyrite.....long tons..	61,748	247,712	52,926	236,867
Quicksilver.....flasks..	24,635	886,081	20,310	730,808
Salt.....barrels..	664,099	188,330	806,788	291,528
Sand and gravel.....short tons..	141,636	62,985	228,050	103,300
Sand-lime brick.....		34,689		61,189
Silver (mines report).....fine ounces (troy)..	1,076,174	650,009	1,220,641	817,830
Slate.....squares..	5,000	40,000	10,000	80,000
Stone.....		2,531,928		2,254,626
Other products.....		<sup>b</sup> 64,386		<sup>b</sup> 1,661,854
Total.....		43,406,258		50,037,409

<sup>a</sup> Estimated.

<sup>b</sup> Includes in 1905: Asbestos, gypsum, infusorial earth, metallic paint, talc, and tungsten. Includes in 1906: Arsenic, asbestos, fuller's earth, gypsum, infusorial earth and tripoli, litharge, lithium minerals, manganese ore, metallic paint, orange mineral, platinum, tungsten, red lead, white lead, zinc lead.

## SUMMARY.

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Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## COLORADO.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Bismuth.....pounds..	2,288	\$4,187	8,334	\$12,500
Clay.....short tons..	41,317	42,669	71,796	70,597
Clay products.....		1,633,231		1,831,088
Coal.....short tons..	8,826,429	10,810,978	10,111,218	12,735,616
Coke.....do.....	1,378,824	<sup>a</sup> 4,157,517	( <sup>b</sup> )	( <sup>b</sup> )
Ammonium sulphate.....pounds..	243,756	<sup>c</sup> 9,289		
Coal tar.....gallons..	698,527	26,758		<sup>d</sup> 880,028
Gas, illuminating.....cubic feet..	496,695,079	556,917		
Gas coke.....short tons..	35,089	140,673		
Copper.....pounds..	9,404,830	1,457,749	7,427,253	1,433,460
Fluorspar.....short tons..	1,156	8,200		( <sup>e</sup> )
Glass sand.....do.....	1,500	1,875	750	938
Gold (mines report).....fine ounces (troy)...	1,210,534.73	25,023,973	1,122,814.17	23,210,629
Iron ores.....long tons..	133,471	398,700	14,078	22,525
Iron, pig.....do.....		( <sup>f</sup> )		( <sup>b</sup> )
Lead.....short tons..	53,806	5,111,570	50,497	5,756,658
Lime.....do.....	10,115	48,459	6,595	32,020
Manganiferous iron ores.....long tons..			32,400	97,600
Mineral waters.....gallons sold..	903,600	130,623	829,850	116,366
Natural gas.....		20,752		22,800
Petroleum.....barrels..	376,238	337,606	327,582	262,675
Precious stones.....				2,000
Sand and gravel.....short tons..	21,295	12,870	47,456	19,589
Silver (mines report).....fine ounces (troy)...	11,499,307	6,945,581	12,216,830	8,185,276
Stone.....		816,751		725,124
Uranium and vanadium.....short tons..	4	<sup>a</sup> 375		( <sup>b</sup> )
Zinc.....do.....	6,599	778,682	32,456	3,959,632
Other products.....		<sup>b</sup> 804,959		<sup>b</sup> 10,457,460
Total.....		59,280,944		69,834,581

<sup>a</sup> Includes Utah.

<sup>b</sup> Includes in 1905: Cement, graphite, mica, sand-lime brick, and tungsten. Includes in 1906: Cement, coke, fuller's earth, graphite, gypsum, mica, pig iron, sand-lime brick, tantalum, tungsten, uranium, vanadium.

<sup>c</sup> Includes Washington.

<sup>d</sup> Estimated.

<sup>e</sup> Included under Kentucky.

<sup>f</sup> Included under miscellaneous.

## CONNECTICUT.

Clay products.....		<sup>a</sup> \$1,608,578		<sup>a</sup> \$1,747,205
Coal products:				
Ammonium sulphate.....pounds..		( <sup>b</sup> )		( <sup>b</sup> )
Coal tar.....gallons..	712,328	35,980		
Gas, illuminating.....cubic feet..	527,103,580	579,553		<sup>c</sup> 823,834
Gas coke.....short tons..	37,958	133,407		
Feldspar.....do.....	19,541	<sup>d</sup> 107,536		( <sup>e</sup> )
Flint.....do.....		( <sup>f</sup> )		( <sup>e</sup> )
Iron, pig.....long tons..	12,521	<sup>c</sup> 220,000		( <sup>e</sup> )
Lime.....short tons..	70,558	261,509	90,457	411,853
Mineral waters.....gallons sold..	205,115	23,362	453,473	76,827
Precious stones.....				200
Sand and gravel.....short tons..	12,821	6,958	14,633	5,466
Stone.....		1,014,064		1,386,540
Other products.....		<sup>e</sup> 107,678		<sup>e</sup> 2,217,363
Total.....		4,098,625		6,669,288

<sup>a</sup> Includes Rhode Island.

<sup>b</sup> Included under Rhode Island.

<sup>c</sup> Estimated.

<sup>d</sup> Includes Maine and New York.

<sup>e</sup> Includes in 1905: Clay, crystalline quartz, infusorial earth, and iron ores. Includes in 1906: Clay, feldspar, infusorial earth, iron ores, metallic paint, mica, pig iron, crystalline quartz, quartz (flint), sandstone.

<sup>f</sup> Included under Maryland.

*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## DELAWARE.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay products.....		\$227,064		\$237,768
Coal products:				
Ammonium sulphate.....pounds..		(a)		(a)
Coal tar.....gallons..	76,606	2,725		
Gas, illuminating.....cubic feet..	60,690,000	61,226		b 84,360
Gas coke.....short tons..	4,128	12,740		
Sand and gravel.....do.....	160,881	65,181	84,871	35,191
Stone.....		178,428		146,346
Other products.....		c 215,580		c 310,461
Total.....		762,944		814,126

a Included under Maryland.

b Estimated.

c Includes in 1905: Clay, pigments (unclassified), and sand-lime brick. Includes in 1906: Clay, lithophone, sand-lime brick.

## DISTRICT OF COLUMBIA.

Clay products.....		\$317,021		\$335,139
Coal products:				
Ammonium sulphate.....pounds..		(a)		(a)
Coal tar.....gallons..		(a)		(a)
Gas, illuminating.....cubic feet..		(a)		(a)
Gas coke.....short tons..		(a)		(a)
Mineral waters.....gallons sold..		(b)		
Other products.....		(b)		c 26,900
Total.....		317,021		362,039

a Included under Maryland.

b Included under Miscellaneous.

c Includes in 1906: Mineral waters, pottery.

## FLORIDA.

Clay products.....		\$329,738		\$289,644
Coal products:				
Coal tar.....gallons..		(a)		(a)
Gas, illuminating.....cubic feet..		(a)		(a)
Gas coke.....short tons..		(a)		(a)
Lime.....do.....	10,719	63,950	18,362	71,382
Mineral waters.....gallons sold..	140,920	28,170	71,494	22,049
Phosphate rock.....long tons..	1,194,106	4,251,845	1,304,505	5,585,578
Sand-lime brick.....				89,306
Stone.....		5,800		1,450
Other products.....		b 149,280		b 336,416
Total.....		4,828,783		6,395,825

a Included under Louisiana.

b Includes in 1905: Pottery, sand and gravel, and sand-lime brick. Includes in 1906: Clay, fuller's earth, pottery, and sand and gravel.

## GEORGIA.

Cement, natural.....barrels..	89,167	\$51,040	180,500	\$98,075
Clay.....short tons..	29,028	102,467	38,979	156,690
Clay products.....		2,119,746		2,400,624
Coal.....short tons..	353,548	a 456,184	332,107	424,004
Coke.....do.....	70,593	224,260	70,280	277,921
Ammonium sulphate.....pounds..		(b)		
Coal tar.....gallons..	712,799	24,604		
Gas, illuminating.....cubic feet..	468,572,850	491,138		c 678,615
Gas coke.....short tons..	34,720	101,181		
Copper.....pounds..			17,182	3,316
Glass sand.....short tons..	4,500	4,050	6,000	6,000
Gold (mines report).....fine ounces (troy)..	4,688	96,910	1,502.05	31,050
Iron ores.....long tons..	200,842	296,561	411,230	734,780

a Includes North Carolina.

b Included under Alabama.

c Estimated.

## SUMMARY.

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*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## GEORGIA—Continued.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Iron, pig.....long tons.....		(a)		(b)
Lime.....short tons.....	16,200	\$49,580	18,903	\$72,840
Manganese ores.....long tons.....	150	900		
Mineral waters.....gallons sold.....	270,249	37,619	130,900	14,535
Ocher.....short tons.....	4,209	43,481	5,550	58,350
Sand and gravel.....do.....	80,503	37,203	329,797	111,816
Silver (mines report).....fine ounces (troy).....	1,040	628	599	402
Slate.....squares.....	1,500	7,500	1,000	5,000
Stone.....		1,754,787		1,727,713
Other products.....		b 697,376		b 2,125,630
Total.....		6,597,215		8,927,361

<sup>a</sup> Included under Miscellaneous.

<sup>b</sup> Includes in 1905: Asbestos, bauxite, Portland cement, graphite, infusorial earth, iron ores, mica, pyrite, and talc. Includes in 1906: Asbestos, asphalt, bauxite, Portland cement, fuller's earth, graphite, infusorial earth, pig iron, pyrite, sand-lime brick, talc, and soapstone.

## IDAHO.

Clay products.....		\$212,780		(a)
Coal.....short tons.....	5,882	b 17,846	5,365	\$18,538
Coal tar.....gallons.....		(c)		(c)
Gas, illuminating.....cubic feet.....		(c)		(c)
Gas coke.....short tons.....		(c)		(c)
Copper.....pounds.....	7,321,585	1,134,846	8,578,046	1,655,563
Gold (mines report).....fine ounces (troy).....	52,033	1,075,618	55,587.73	1,149,100
Lead.....short tons.....	94,076	8,937,125	117,117	13,351,338
Lime.....do.....	6,694	44,733	5,932	39,840
Precious stones.....				400
Pumice.....short tons.....		(d)		
Salt.....barrels.....			1,574	1,867
Silver (mines report).....fine ounces (troy).....	8,679,093	5,242,172	9,018,815	6,042,606
Stone.....		37,870		24,969
Zinc.....short tons.....		(e)	573	69,906
Other products.....		a 65,865		a 367,047
Total.....		16,768,855		22,721,174

<sup>a</sup> Includes in 1905: Clay, mineral waters, and salt. Includes in 1906: Antimony, clay, clay products, mica, mineral waters, phosphate rock, sand-lime brick.

<sup>b</sup> Includes Nevada.

<sup>c</sup> Included under Utah.

<sup>d</sup> Included under Nebraska.

<sup>e</sup> Included under Miscellaneous.

## ILLINOIS.

Cement, natural.....barrels.....	368,645	\$116,549	365,843	\$118,221
Cement, Portland.....do.....	1,545,500	1,741,150	1,858,403	2,461,494
Clay.....short tons.....	127,728	120,410	139,704	131,272
Clay products.....		12,361,786		12,634,181
Coal.....short tons.....	38,434,363	40,577,592	41,480,104	44,763,062
Coke.....do.....	10,307	27,681	268,693	1,205,462
Ammonium sulphate.....pounds.....	312,926	22,956		
Coal tar.....gallons.....	2,415,023	49,714		a 2,720,641
Gas, illuminating.....cubic feet.....	1,768,186,332	1,912,868		
Gas coke.....short tons.....	129,564	487,772		
Fluorspar.....do.....	33,275	220,206	28,268	160,623
Glass sand.....do.....	234,391	146,605	238,178	156,684
Iron, pig.....long tons.....	2,034,483	a 37,040,000	2,156,866	a 47,128,000
Lead.....short tons.....		(b)	572	65,208
Lime.....do.....	98,907	421,589	121,546	534,118
Mineral waters.....gallons sold.....	425,750	47,995	574,453	77,287
Natural gas.....		7,223		87,211
Petroleum.....barrels.....	181,084	116,561	4,397,050	3,274,818
Sand and gravel.....short tons.....	1,393,012	547,167	2,419,381	886,357
Stone.....		3,541,005		2,961,456
Zinc.....short tons.....	46,606	5,499,508	282	34,404
Other products.....		c 59,230		c 1,787,807
Total.....		105,065,567		121,188,306

<sup>a</sup> Estimated.

<sup>b</sup> Included under Miscellaneous.

<sup>c</sup> Includes in 1905: Slag, cement, and sand-lime brick. Includes in 1906: Alum and aluminum sulphate, slag cement, infusorial earth, sand-lime brick, Venetian red, and white lead.

Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## INDIANA.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Cement, natural.....barrels..	527,600	\$211,040	600,000	\$240,000
Cement, Portland.....do.....	3,127,042	3,134,219	3,951,836	4,964,855
Clay.....short tons..	76,951	79,945	63,279	62,974
Clay products.....		6,499,573		7,158,234
Coal.....short tons..	11,895,252	12,492,255	12,092,500	13,116,261
Ammonium sulphate.....pounds..	33,769	22,630		
Coal tar.....gallons..	1,712,397	44,198		
Gas, illuminating.....cubic feet..	1,216,172,974	1,169,947		a 1,694,141
Gas coke.....short tons..	90,927	303,354		
Glass sand.....do.....	1,640	2,169	38,940	29,250
Lime.....do.....	106,408	366,866	114,819	353,648
Mineral waters.....gallons sold..	897,175	435,182	464,988	452,360
Natural gas.....		3,094,134		1,750,715
Oilstones.....		(b)		23,806
Petroleum.....barrels..	10,964,247	9,404,909	7,673,477	6,770,066
Pyrite.....long tons..	3,107	11,491	2,579	7,179
Sand and gravel.....short tons..	3,148,543	1,239,181	6,182,835	1,006,093
Sand-lime brick.....		65,905		86,880
Stone.....		3,204,680		3,756,305
Total.....		41,781,678		34,472,776

a Estimated.

b Included under Miscellaneous.

## INDIAN TERRITORY.

Asphalt.....short tons..	2,936	\$27,790	2,690	\$18,461
Clay products.....		374,235		299,790
Coal.....short tons..	2,924,427	5,145,358	2,860,200	5,482,366
Coke.....do.....	54,781	199,424	49,782	204,205
Coal tar.....gallons..	54,002	a 3,323		
Gas, illuminating.....cubic feet..	52,194,000	a 55,792		b 83,232
Gas coke.....short tons..	3,636	a 16,551		
Lime.....do.....	100	650	510	3,350
Mineral waters.....gallons sold..		(c)		(d)
Natural gas.....		a 130,137		
Petroleum.....barrels..		(e)		(f)
Stone.....		9,510		45,237
Other products.....				d 3,805
Total.....		5,962,770		6,140,446

a Includes Oklahoma.

d Includes in 1906: Clay, mineral waters.

b Estimated.

e Included under Kansas.

c Included under Miscellaneous.

f Included under Oklahoma.

## IOWA.

Clay.....short tons..			2,005	\$1,910
Clay products.....		\$3,392,122		3,469,027
Coal.....short tons..	6,798,609	10,586,381	7,266,224	11,619,455
Coal tar.....gallons..	633,598	14,775		
Gas, illuminating.....cubic feet..	534,747,650	633,557		a 910,651
Gas coke.....short tons..	39,369	179,533		
Gypsum.....do.....		589,055		573,498
Lead.....do.....		(b)	270	30,780
Lime.....do.....	19,360	76,904	17,497	78,366
Mineral waters.....gallons sold..	303,500	31,300	227,500	23,700
Sand and gravel.....short tons..	325,882	92,287	184,673	74,380
Sand-lime brick.....		38,652		38,255
Stone.....		461,126		499,416
Zinc.....short tons..			201	24,522
Other products.....		c 2,336		c 3,840
Total.....		16,098,028		17,347,800

a Estimated.

b Included under Miscellaneous.

c Includes in 1905: Clay, iron ores, and ocher. Includes in 1906: Ocher, shale, Venetian red.

## SUMMARY.

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*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## KANSAS.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Cement, natural.....barrels..	230,686	<sup>a</sup> \$110,750	<sup>b</sup> 3,020,862	\$3,908,708
Clay products.....		1,906,360		2,432,371
Coal.....short tons..	6,423,979	9,350,542	6,024,775	8,979,553
Coke.....do.....	4,425	13,818	1,698	4,101
Coal tar.....gallons..	205,690	10,898		
Gas, illuminating.....cubic feet..	151,847,400	194,310		<sup>c</sup> 264,514
Gas coke.....short tons..	9,749	35,260		
Gypsum.....do.....		150,402		247,572
Lead.....do.....		( <sup>d</sup> )	1,932	220,248
Lime.....do.....	2,795	17,242	1,560	10,217
Mineral waters.....gallons sold..	213,050	47,708	305,957	89,807
Natural gas.....		2,261,836		4,010,986
Petroleum.....barrels..	12,013,495	<sup>e</sup> 6,546,398		( <sup>f</sup> )
Salt.....do.....	2,098,585	576,139	2,198,837	681,322
Sand and gravel.....short tons..	70,988	21,552	293,918	66,762
Stone.....		1,003,006		892,012
Zinc.....short tons..	114,287	13,485,866	3,902	476,044
Other products.....		<sup>g</sup> 2,349,861		<sup>g</sup> 299,859
Total.....		38,081,948		22,584,076

<sup>a</sup> Includes Texas.

<sup>b</sup> Portland cement.

<sup>c</sup> Estimated.

<sup>d</sup> Included under Miscellaneous.

<sup>e</sup> Includes Indian Territory and Oklahoma.

<sup>f</sup> Included under Oklahoma.

<sup>g</sup> Includes in 1905: Portland cement, pottery, and sand-lime brick. Includes in 1906: Natural cement, emery, pottery, sand-lime brick, zinc lead, zinc white.

## KENTUCKY.

Asphalt.....short tons..	8,834	\$66,420	4,172	\$31,488
Barytes.....do.....		( <sup>a</sup> )		( <sup>a</sup> )
Cement, natural.....barrels..	207,500	83,000		( <sup>b</sup> )
Clay.....short tons..	43,536	57,090	45,910	59,780
Clay products.....		2,406,350		2,592,423
Coal.....short tons..	8,432,523	8,385,232	9,653,647	9,809,938
Coke.....do.....	79,487	159,659	74,064	169,846
Ammonium sulphate.....pounds..	310,934	15,495		
Coal tar.....gallons..	959,293	17,942		<sup>d</sup> 831,887
Gas, illuminating.....cubic feet..	596,328,520	539,724		
Gas, coke.....short tons..	56,328	183,100		
Fluorspar.....do.....	22,694	132,362	<sup>c</sup> 12,528	83,402
Glass sand.....do.....	739	480	2,400	2,040
Iron, pig.....long tons..	63,735	<sup>d</sup> 1,120,000	98,127	<sup>d</sup> 2,077,000
Lead.....short tons..		( <sup>e</sup> )	44	5,016
Lime.....do.....	9,556	28,393	9,784	28,081
Mineral waters.....gallons sold..	383,750	42,415	547,605	76,141
Natural gas.....		<sup>f</sup> 237,590		287,501
Petroleum.....barrels..	<sup>f</sup> 1,217,337	<sup>f</sup> 943,211	<sup>f</sup> 1,213,548	<sup>f</sup> 1,031,629
Precious stones.....				250
Sand and gravel.....short tons..	727,131	282,464	584,477	291,096
Stone.....		1,025,044		920,531
Zinc.....short tons..			335	40,870
Other products.....		<sup>b</sup> 45,840		<sup>b</sup> 419,978
Total.....		15,771,811		18,758,897

<sup>a</sup> Included under Tennessee.

<sup>b</sup> Includes in 1905: Cement, iron ores, and sand-lime brick. Includes in 1906: Barytes, cement (Portland, natural, and slag), infusorial earth, iron ores, ocher, and sand-lime brick.

<sup>c</sup> Includes Colorado and Tennessee.

<sup>d</sup> Estimated.

<sup>e</sup> Included under Miscellaneous.

<sup>f</sup> Includes Tennessee.

Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## LOUISIANA.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay products.....		\$821, 109		\$900, 697
Coal products:				
Coal tar.....gallons..	87, 226	<i>a</i> 5, 710		
Gas, illuminating.....cubic feet..	67, 703, 000	<i>a</i> 90, 989		<i>b</i> 135, 313
Gas coke.....short tons..	6, 180	<i>a</i> 26, 313		
Mineral waters.....gallons sold..	774, 652	62, 106		
Natural gas.....		1, 500		( <i>c</i> )
Petroleum.....barrels..	8, 910, 416	1, 601, 325	9, 077, 528	3, 557, 838
Salt.....do..	1, 055, 186	303, 507	1, 179, 528	268, 005
Sand and gravel.....short tons..	350, 669	189, 962	941, 734	448, 449
Sulphur.....long tons..	181, 677	<i>d</i> 3, 706, 560		
Other products.....		6, 349		5, 023, 728
Total.....		6, 815, 430		10, 334, 030

*a* Includes Florida and Mississippi.

*b* Estimated.

*c* Included under Texas.

*d* Includes Nevada and Utah.

## MAINE.

Clay products.....		\$619, 294		\$680, 370
Coal products:				
Ammonium sulphate.....pounds..		( <i>a</i> )		( <i>a</i> )
Coal tar.....gallons..	212, 445	9, 983		
Gas, illuminating.....cubic feet..	154, 068, 475	212, 257		<i>b</i> 300, 842
Gas coke.....short tons..	10, 746	51, 253		
Copper.....pounds..		( <i>c</i> )		
Feldspar.....short tons..		( <i>d</i> )		( <i>e</i> )
Lime.....do..	220, 927	971, 305	228, 208	1, 066, 275
Mineral waters.....gallons sold..	1, 167, 787	246, 159	1, 127, 928	258, 585
Precious stones.....				6, 500
Slate.....		224, 254		238, 681
Stone.....		2, 721, 223		2, 562, 021
Other products.....		<i>e</i> 10, 076		<i>e</i> 113, 948
Total.....		5, 065, 804		5, 227, 222

*a* Included under New Hampshire.

*b* Estimated.

*c* Included under Miscellaneous.

*d* Included under Connecticut.

*e* Includes in 1905: Pottery, sand, and gravel. Includes in 1906: Feldspar, pottery, sand, and gravel.

## MARYLAND.

Cement, natural.....barrels..	55, 324	\$28, 694	63, 350	\$32, 675
Clay.....short tons..	12, 080	24, 405	18, 413	39, 078
Clay products.....		2, 249, 367		2, 136, 539
Coal.....short tons..	5, 108, 539	5, 831, 760	5, 435, 453	6, 474, 793
Ammonium sulphate.....pounds..	2, 234, 627	<i>a</i> 434, 385		
Coal tar.....gallons..	4, 155, 460	<i>b</i> 87, 512		<i>f</i> 2, 697, 773
Gas, illuminating.....cubic feet..	1, 753, 770, 009	<i>b</i> 596, 358		
Gas coke.....short tons..	406, 764	1, 334, 266		
Feldspar.....do..	15, 878	<i>c</i> 118, 621	10, 229	34, 507
Flint.....do..	12, 777	<i>d</i> 73, 450		( <i>e</i> )
Glass sand.....do..	17, 899	20, 108	10, 000	14, 000
Gold (mines report).....fine ounces (troy)...	717	14, 821		
Iron ores.....long tons..	8, 269	14, 291		( <i>e</i> )
Iron, pig.....do..	332, 096	<i>f</i> 5, 850, 000	386, 709	<i>f</i> 8, 187, 000
Lime.....short tons..	134, 431	360, 247	127, 863	350, 460
Metallic paint and mortar colors.....do..	1, 174	3, 812		( <i>e</i> )
Mineral waters.....gallons sold..	456, 214	44, 627	593, 671	58, 334
Sand and gravel.....short tons..	447, 278	416, 720	604, 217	271, 797

*a* Includes District of Columbia and Delaware.

*b* Includes District of Columbia.

*c* Includes Pennsylvania.

*d* Includes Pennsylvania and Connecticut.

*e* Includes in 1905: Slag cement, coke, sand-lime brick, and talc. Includes in 1906: Slag cement, coke, quartz (flint), infusorial earth, iron ores, metallic paint and mortar colors, sand-lime brick, and Venetian red.

*f* Estimated.

*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## MARYLAND—Continued.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Silver (mines report).....fine ounces (troy) ..	93	\$56		
Slate.....		151,215		\$130,969
Stone.....		1,257,838		1,239,955
Talc and soapstone.....short tons..			2,956	23,310
Other products.....		<sup>a</sup> 1,135,704		<sup>a</sup> 1,248,704
Total.....		20,048,257		22,939,894

<sup>a</sup> Includes in 1905: Slag cement, coke, sand-lime brick, and talc. Includes in 1906: Slag cement, coke, quartz (flint), infusorial earth, iron ores, metallic paint and mortar colors, sand-lime brick, and Venetian red.

## MASSACHUSETTS.

Clay.....short tons..			4,411	\$6,442
Clay products.....		\$2,050,457		2,172,733
Coal products:				
Ammonium sulphate.....pounds..	774,715	377,260		
Coal tar.....gallons..	10,017,517	285,666		
Gas, illuminating.....cubic feet..	4,975,461,725	3,574,116		<sup>a</sup> 7,132,527
Gas coke.....short tons..	670,542	2,247,074		
Copper.....pounds..			9,744	1,881
Glass sand.....short tons..	4,600	12,000	6,829	31,738
Iron, pig.....long tons..	3,466	<sup>a</sup> 60,000		<sup>(b)</sup>
Lime.....short tons..	84,380	395,326	119,267	563,100
Mineral waters.....gallons sold..	4,202,263	208,419	3,857,955	210,152
Precious stones.....				500
Sand and gravel.....short tons..	180,422	118,086	106,824	61,354
Stone.....		3,263,058		4,333,616
Other products.....		<sup>b</sup> 1,432,738		<sup>b</sup> 2,556,518
Total.....		14,024,200		16,770,561

<sup>a</sup> Estimated.

<sup>b</sup> Includes in 1905: Asbestos, clay, coke, emery, infusorial earth, iron ores, pyrite, salt, and talc. Includes in 1906: Alum and aluminum sulphate, asbestos, coke, corundum and emery, fuller's earth, iron ores, litharge, pig iron, pyrite, red lead, salt, talc and soapstone, Venetian red, and white lead.

## MICHIGAN.

Bromine.....pounds..	1,192,758	<sup>a</sup> \$178,914		<sup>(b)</sup>
Cement, Portland.....barrels..	2,773,283	2,921,507	3,747,525	\$4,814,965
Clay.....short tons..	951	3,354	1,989	5,455
Clay products.....		1,765,707		1,844,477
Coal.....short tons..	1,473,211	2,512,697	1,346,338	2,427,404
Ammonium sulphate.....pounds..	2,654,323	271,333		
Coal tar.....gallons..	5,958,602	116,809		
Gas, illuminating.....cubic feet..	3,263,603,059	2,325,377		<sup>c</sup> 4,736,349
Gas coke.....short tons..	470,718	1,592,253		
Copper.....pounds..	230,287,992	35,694,639	229,695,730	44,790,667
Glass sand.....short tons..			600	3,000
Grindstones.....		111,500		<sup>(b)</sup>
Gypsum.....		634,434		753,878
Iron ores.....long tons..	10,885,902	23,367,233	11,822,874	31,145,087
Iron, pig.....do..	288,704	<sup>c</sup> 5,750,000	369,456	<sup>c</sup> 8,841,000
Lime.....short tons..	48,089	192,844	68,133	281,465
Mineral waters.....gallons sold..	2,684,800	277,188	902,528	73,357
Salt.....barrels..	9,492,173	1,851,332	9,936,802	2,018,760
Sand and gravel.....short tons..	414,509	210,609	597,189	194,699
Sand-lime brick.....		169,302		174,921
Silver (mines report).....fine ounces (troy) ..	253,011	152,819	<sup>d</sup> 244,113	163,556
Stone.....		667,877		721,664
Other products.....		<sup>b</sup> 992,413		<sup>b</sup> 1,433,844
Total.....		81,760,141		104,424,548

<sup>a</sup> Includes Ohio and West Virginia.

<sup>b</sup> Includes in 1905: Asbestos, coke, graphite, petroleum, and whetstones. Includes in 1906: Aluminum salts, bromine, coke, graphite, grindstones, and whetstones.

<sup>c</sup> Estimated.

<sup>d</sup> From smelter reports.

Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## MINNESOTA.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay products.....		\$1,499,386		\$1,603,279
Coal products:				
Ammonium sulphate.....pounds..	771,900	59,724		
Coal tar.....gallons..	2,111,083	54,823		
Gas, illuminating.....cubic feet..	834,691,210	842,599		
Gas coke.....short tons..	134,670	569,964		
Iron ores.....long tons..	21,735,182	35,895,001	25,364,077	51,799,256
Iron, pig.....do..		(b)		(c)
Lime.....short tons..	18,977	81,093	19,920	93,555
Mineral waters.....gallons sold..	7,681,650	132,970	8,621,979	175,677
Sand and gravel.....short tons..	109,576	71,375	145,020	77,941
Stone.....		1,331,949		1,543,817
Other products.....		c 766,491		c 3,892,104
Total.....		41,305,375		60,865,450

a Estimated.

b Included under Miscellaneous.

c Includes in 1905: Cement, coke, feldspar, pottery, and sand-lime brick. Includes in 1906: Natural cement, coke, corundum, feldspar, pig iron, pottery, and sand-lime brick.

## MISSISSIPPI.

Clay products.....		\$818,897		\$851,080
Coal products:				
Coal tar.....gallons..		(a)		(a)
Gas, illuminating.....cubic feet..		(a)		(a)
Gas coke.....short tons..		(a)		(a)
Mineral waters.....gallons sold..	306,000	53,347	254,279	52,820
Sand and gravel.....short tons..	6,320	2,035	68,563	33,260
Sand-lime brick.....		(b)		
Other products.....				17,399
Total.....		874,279		954,559

a Included under Louisiana.

b Included under Miscellaneous.

## MISSOURI.

Barytes.....short tons..	26,761	\$84,095	28,869	\$93,479
Clay.....do..	172,724	322,425	165,258	365,793
Clay products.....		6,203,411		6,696,275
Coal.....short tons..	3,983,378	6,291,661	3,758,008	6,118,733
Coke.....do..	1,580	4,072		
Ammonium sulphate.....pounds..	784,433	56,597		
Coal tar.....gallons..	2,486,575	86,515		
Gas, illuminating.....cubic feet..	1,672,955,701	1,556,117		
Gas coke.....short tons..	124,886	439,920		
Copper.....pounds..		(b)	54,347	10,489
Glass sand.....short tons..	123,467	66,401	101,862	65,393
Iron ores.....long tons..	113,012	161,878	80,910	158,109
Iron, pig.....do..		(b)		(c)
Lead.....short tons..		(b)	111,075	12,662,550
Lime.....do..	186,173	787,069	207,334	916,693
Mineral waters.....gallons sold..	470,750	77,480	618,400	96,545
Natural gas.....		7,390		7,210
Petroleum.....barrels..			d 3,500	4,890
Sand and gravel.....short tons..	1,961,873	668,153	2,962,796	970,985
Silver.....fine ounces (troy)..	e 12,900	7,869	e 31,268	20,950
Stone.....		2,446,429		2,159,294
Sublimed white lead.....short tons..			7,968	958,440
Zinc.....do..	11,844	1,397,582	130,348	15,902,456
Other products.....		c 2,378,694		c 5,934,970
Total.....		23,043,768		55,496,317

a Estimated.

b Included under Miscellaneous.

c Includes in 1905: Cement, grindstones, infusorial earth, petroleum, pigments (unclassified), and zinc white. Includes in 1906: Portland cement, grindstones, infusorial earth, litharge, pig iron, red lead, Venetian red, white lead, zinc lead, and zinc white.

d Includes Michigan.

e From smelter reports.

## SUMMARY.

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Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## MONTANA.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay.....short tons.....	5,546	\$33,983	1,615	\$3,598
Clay products.....		313,006		297,299
Coal.....short tons.....	1,643,832	2,823,350	1,829,921	3,240,357
Coke.....do.....	31,482	211,351	38,182	266,024
Coal tar.....gallons.....		(a)		(a)
Gas, illuminating.....cubic feet.....		(a)		(a)
Gas coke.....short tons.....		(a)		(a)
Copper.....pounds.....	314,750,582	48,786,340	294,701,252	56,877,341
Gold (mines report).....fine ounces (troy).....	213,913.75	4,794,083	216,188.56	4,469,014
Lead.....short tons.....	2,097	199,215	2,485	283,290
Lime.....do.....	4,073	22,436	4,745	30,098
Sand and gravel.....do.....			2,000	900
Silver (mines report).....fine ounces (troy).....	13,231,300	7,991,705	11,980,705	8,027,072
Stone.....		274,669		292,549
Zinc.....short tons.....		(b)	1,415	172,630
Other products.....		c 50,911		c 166,395
Total.....		65,501,049		74,126,567

<sup>a</sup> Included under Nevada.

<sup>b</sup> Included under Miscellaneous.

<sup>c</sup> Includes in 1905: Abrasive corundum, grindstones, gypsum, iron ores, mineral waters, molybdenum, pottery, and tungsten. Includes in 1906: Arsenic, grindstones, gypsum, iron ores, mineral waters, molybdenum, pottery, precious stones, and tungsten.

## NEBRASKA.

Clay products.....		\$1,006,743		\$990,708
Coal products:				
Coal tar.....gallons.....	82,393	2,426		
Gas, illuminating.....cubic feet.....	65,553,100	83,563		
Gas coke.....short tons.....	4,916	26,135		a 123,336
Pumice.....do.....	1,832	b 5,540		
Sand and gravel.....do.....	12,900	8,200	177,417	38,308
Sand-lime brick.....do.....		(c)		
Stone.....short tons.....		225,239		283,280
Other products.....				d 617,468
Total.....		1,357,846		2,053,100

<sup>a</sup> Estimated.

<sup>b</sup> Includes Idaho and South Dakota.

<sup>c</sup> Included under Miscellaneous.

<sup>d</sup> Includes in 1906: Litharge, mineral waters, pumice, red lead, sand-lime brick, and white lead.

## NEVADA.

Coal.....short tons.....		(a)	800	\$5,700
Coal tar.....gallons.....	89,226	b \$3,496		
Gas, illuminating.....cubic feet.....	62,522,700	b 114,953		c 159,276
Gas coke.....short tons.....	4,017	b 26,348		
Copper.....pounds.....	413,292	64,060	1,090,635	210,493
Gold (mines report).....fine ounces (troy).....	254,927.51	5,269,819	506,520.31	10,470,704
Lead.....short tons.....	2,096	199,025	1,669	190,266
Lime.....do.....			150	1,600
Salt.....barrels.....			11,249	6,420
Silver (mines report).....fine ounces (troy).....	6,482,081	3,915,177	6,770,612	4,536,310
Stone.....		1,500		5,000
Sulphur.....long tons.....		(d)		(c)
Zinc.....short tons.....			1,768	215,696
Other products.....		e 279,007		e 189,198
Total.....		9,873,385		15,990,663

<sup>a</sup> Included under Idaho.

<sup>b</sup> Includes Montana and New Mexico.

<sup>c</sup> Estimated.

<sup>d</sup> Included under Louisiana.

<sup>e</sup> Includes in 1905: Clay products, graphite, gypsum, iron ores, and salt. Includes in 1906: Antimony, clay products, graphite, gypsum, iron ores, sulphur, tungsten.

*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## NEW HAMPSHIRE.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay products.....		\$554,734		\$726,051
Coal products:				
Ammonium sulphate.....pounds..	69,586	<sup>a</sup> 3,578		
Coal tar.....gallons..	265,556	<sup>b</sup> 13,177		
Gas, illuminating.....cubic feet..	190,765,514	<sup>b</sup> 255,540		<sup>c</sup> 381,873
Gas coke.....short tons..	14,095	<sup>b</sup> 74,863		
Mica.....				9,884
Mineral waters.....gallons sold..	813,050	197,350	781,500	230,650
Stone.....		838,371		818,131
Other products.....		<sup>d</sup> 91,025		<sup>d</sup> 81,338
Total.....		2,028,638		2,247,927

<sup>a</sup> Includes Maine.

<sup>b</sup> Includes Vermont.

<sup>c</sup> Estimated.

<sup>d</sup> Includes in 1905: Mica, pottery, and whetstones. Includes in 1906: Pottery, precious stones, whetstones.

## NEW JERSEY.

Cement, Portland.....barrels..	3,654,777	\$2,775,768	3,423,648	\$4,445,364
Clay.....short tons..	440,645	616,459	470,174	680,999
Clay products.....		16,699,525		17,362,269
Coal products:				
Ammonium sulphate.....pounds..	1,165,550	96,752		
Coal tar.....gallons..	2,774,725	84,243		
Gas, illuminating.....cubic feet..	1,483,032,012	1,585,683		<sup>a</sup> 2,651,728
Gas coke.....short tons..	191,824	643,984		
Glass sand.....do..	65,673	54,005	102,658	83,031
Iron ores.....long tons..	526,271	1,269,374	542,518	1,570,578
Iron, pig.....do..	311,039	<sup>a</sup> 5,150,000	379,390	<sup>a</sup> 7,542,000
Lime.....short tons..	40,659	168,775	42,714	187,978
Marls.....do..	38,026	<sup>b</sup> 16,494	19,104	7,341
Mineral waters.....gallons sold..	394,060	45,397	585,215	237,137
Sand and gravel.....short tons..	1,236,870	749,344	1,516,804	875,284
Slate.....		5,360		
Stone.....		1,276,781		1,394,393
Zinc.....short tons..		( <sup>c</sup> )	11,206	1,367,132
Other products.....		<sup>d</sup> 628,177		<sup>d</sup> 1,449,463
Total.....		31,842,121		39,854,697

<sup>a</sup> Estimated.

<sup>b</sup> Includes Virginia.

<sup>c</sup> Included under Miscellaneous.

<sup>d</sup> Includes in 1905: Slag cement, coke, metallic paint, pigments (unclassified), pyrite, sand-lime brick, talc. Includes in 1906: Slag cement, coke, lithophone, quartz (flint), sand-lime brick, talc and soapstone, white lead.

## NEW MEXICO.

Clay products.....		\$141,722		\$152,599
Coal.....short tons..	1,649,933	2,190,231	1,964,713	2,638,986
Coke.....do..	89,638	253,229	147,747	442,712
Gas, illuminating.....cubic feet..		( <sup>a</sup> )		( <sup>a</sup> )
Gas coke.....short tons..		( <sup>a</sup> )		( <sup>a</sup> )
Copper.....pounds..	5,334,192	826,800	7,099,842	1,370,270
Gold (mines report).....fine ounces (troy)..	15,359.56	317,510	14,174.80	293,019
Lead.....short tons..	1,170	111,055	640	72,960
Lime.....do..	400	2,625	1,790	9,975
Mineral waters.....gallons sold..	75,500	16,020	94,000	17,700
Precious stones.....				16,000
Sand and gravel.....short tons..			1,250	1,500
Silver (mines report).....fine ounces (troy)..	369,192	222,992	491,127	329,055
Stone.....		110,922		168,567
Zinc.....short tons..		( <sup>b</sup> )	555	67,710
Other products.....		<sup>c</sup> 189,008		<sup>c</sup> 224,197
Total.....		4,382,114		5,805,250

<sup>a</sup> Included under Nevada.

<sup>b</sup> Included under Miscellaneous.

<sup>c</sup> Includes in 1905: Gypsum, iron ores, mica, and salt. Includes in 1906: Clay, gypsum, iron ores, mica, salt, tungsten.

Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## NEW YORK.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Cement, natural.....barrels	1,926,837	\$1,332,809	1,515,866	\$1,055,785
Portland.....do	2,111,411	2,044,253	2,414,362	2,725,744
Clay.....short tons	8,056	18,161	6,864	9,933
Clay products.....		14,486,347		13,876,607
Coal products:				
Ammonium sulphate.....pounds	2,787,317	171,946		
Coal tar.....gallons	7,349,569	189,866		
Gas, illuminating.....cubic feet	5,004,667,394	5,090,057		d 7,465,935
Gas coke.....short tons	423,167	1,335,345		
Feldspar.....do		(a)		(c)
Flint.....do		(b)		(c)
Glass sand.....do	3,165	3,115	1,500	1,200
Gypsum.....		771,138		749,896
Iron ores.....long tons	1,139,937	3,197,919	1,041,992	2,635,639
Iron, pig.....do	1,198,068	d 19,940,000	1,552,659	d 31,022,000
Lime.....short tons	114,876	490,845	114,620	519,855
Metallic paint and mortar colors.....do	7,159	76,990	7,106	79,060
Millstones.....		25,915		28,848
Mineral waters.....gallons sold	5,619,878	652,680	6,481,074	893,476
Natural gas.....		623,251		672,795
Petroleum.....barrels	1,117,582	1,557,630	1,243,517	1,995,377
Pyrite.....long tons	11,935	39,883	25,616	76,516
Salt.....barrels	8,359,121	2,167,931	8,978,630	2,098,686
Sand and gravel.....short tons	3,587,590	1,703,431	4,077,985	1,371,969
Sand-lime brick.....		123,104		191,321
Slate.....		66,646		72,360
Stone.....		5,364,222		5,596,053
Talc, fibrous.....short tons	56,500	445,000	61,672	557,200
Other products.....		e 3,137,803		e 19,174,650
Total.....		65,056,287		92,870,905

a Included under Connecticut.

b Included under North Carolina.

c Includes in 1905: Aluminum, slag cement, coke, emery, abrasive garnet, graphite, infusorial earth, shale, and sienna. Includes in 1906: Aluminum, aluminum salts, slag cement, coke, emery, feldspar, fuller's earth, abrasive garnet, graphite, infusorial earth, litharge, orange mineral, quartz (flint), red lead, sandstone, shale, sienna, and white lead.

d Estimated.

## NORTH CAROLINA.

Barytes.....short tons	5,519	\$21,545	(a)	(a)
Clay.....do	11,095	86,141	12,010	\$90,358
Clay products.....		1,020,161		1,182,338
Coal.....short tons		(a)		
Coal tar.....gallons	74,503	4,355		
Gas, illuminating.....cubic feet	58,848,230	86,011		b 131,580
Gas coke.....short tons	5,373	29,253		
Copper.....pounds		(c)	582,209	112,366
Flint.....short tons	38,368	d 30,659		(c)
Gold (mines report).....fine ounces (troy)	6,080	125,685	3,973.16	82,131
Iron ores.....long tons	56,282	73,540	56,057	75,638
Lime.....short tons	1,792	7,980	5,896	41,468
Mica.....		88,275		217,696
Millstones.....		2,522		
Mineral waters.....gallons sold	181,000	33,744	156,352	31,413
Monazite and zircon.....pounds	1,352,418	f 163,908	698,375	125,758
Precious stones.....				5,000
Sand-lime brick.....		29,103		32,975
Silver (mines report).....fine ounces (troy)	20,230	12,219	30,769	20,615
Stone.....		585,561		812,961
Talc and soapstone.....short tons	(a)	(a)	4,009	66,729
Other products.....		e 158,941		e 33,821
Total.....		2,486,063		3,062,847

a Included under Georgia.

b Estimated.

c Included under Miscellaneous.

d Includes New York.

e Includes in 1905: Abrasive corundum and garnet, graphite, iron ores, sand and gravel, and talc. Includes in 1906: Barytes, graphite, quartz (flint), millstones, sand, and gravel.

f Includes South Carolina and South Dakota.

Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## NORTH DAKOTA.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay products.....		\$232, 432		\$209, 873
Coal.....short tons..	317, 542	424, 778	305, 689	451, 382
Coal tar.....gallons..		(a)		(a)
Gas, illuminating.....cubic feet..		(a)		(a)
Gas coke.....short tons..		(a)		(a)
Stone.....		1, 055		44
Other products.....		b 7, 215		b 10, 506
Total.....		665, 480		731, 805

<sup>a</sup> Included under Utah.

<sup>b</sup> Includes in 1905: Cement, clay, and mineral waters. Includes in 1906: Natural cement, clay, and mineral waters.

## OHIO.

Product.	Quantity.	1905.		1906.	
		Quantity.	Value.	Quantity.	Value.
Bromine.....pounds..			(a)		(b)
Cement, Portland.....barrels..	1, 312, 977	\$1, 390, 481	1, 422, 901	\$1, 709, 918	
Clay.....short tons..	239, 718	217, 302	248, 995	251, 301	
Clay products.....		28, 303, 039		31, 014, 165	
Coal.....short tons..	25, 552, 950	26, 486, 740	27, 731, 640	30, 346, 580	
Coke.....do.....	277, 130	970, 897	293, 994	1, 013, 248	
Ammonium sulphate.....pounds..	1, 117, 271	88, 243			
Coal tar.....gallons..	8, 479, 198	270, 325			
Gas, illuminating.....cubic feet..	4, 728, 777, 755	3, 280, 672			
Gas coke.....short tons..	497, 208	1, 446, 382			
Glass sand.....do.....	76, 460	79, 999	71, 329	71, 246	
Grindstones and pulpstones.....		644, 315		644, 720	
Iron ores.....long tons..	19, 989	26, 624	17, 384	29, 706	
Iron, pig.....do.....	4, 586, 110	c 75, 530, 000	5, 327, 133	c 105, 244, 000	
Lime.....short tons..	327, 373	1, 056, 721	331, 972	1, 100, 133	
Metallic paint and mortar colors.....	1, 589	20, 360	(a)	(a)	
Mineral waters.....gallons sold..	943, 114	117, 733	1, 790, 767	164, 007	
Natural gas.....		5, 721, 462		7, 145, 809	
Oilstones and whetstones.....				46, 042	
Petroleum.....barrels..	10, 346, 660	17, 054, 877	14, 787, 763	16, 997, 000	
Pyrite.....long tons..	8, 944	32, 770	4, 732	14, 439	
Salt.....barrels..	2, 526, 558	565, 946	3, 236, 785	789, 237	
Sand and gravel.....short tons..	2, 205, 379	1, 033, 763	2, 352, 945	1, 183, 196	
Sand-lime brick.....		14, 058		10, 184	
Stone.....		4, 595, 265		4, 451, 683	
Other products.....		b 255, 736		b 2, 156, 132	
Total.....		169, 203, 710		209, 976, 930	

<sup>a</sup> Included under Michigan.

<sup>b</sup> Includes in 1905: Cement, gypsum, and oilstones. Includes in 1906: Aluminum salts, bromine, gypsum, litharge, natural cement, metallic paint and mortar colors, orange mineral, red lead, slag cement, and white lead.

<sup>c</sup> Estimated.

## OKLAHOMA.

Product.	Quantity.	1905.		1906.	
		Quantity.	Value.	Quantity.	Value.
Clay products.....			\$222, 064		\$241, 111
Coal products:					
Coal tar.....gallons..		(a)		(a)	
Gas, illuminating.....cubic feet..		(a)		(a)	
Gas coke.....short tons..		(a)		(a)	
Lime.....do.....	400	4, 000	120	1, 500	
Natural gas.....		(a)		259, 862	
Petroleum.....barrels..		(b)	c 21, 718, 648	c 9, 615, 198	
Salt.....do.....	(a)	(a)	9, 893	4, 965	
Stone.....		195, 216		186, 454	
Other products.....		d 202, 023		d 377, 150	
Total.....			623, 333		10, 686, 240

<sup>a</sup> Included under Indian Territory.

<sup>b</sup> Included under Kansas.

<sup>c</sup> Includes Indian Territory and Kansas.

<sup>d</sup> Includes in 1905: Gypsum, mineral waters, salt, and sand and gravel. Includes in 1906: Gypsum, mineral waters, and sand and gravel.

## SUMMARY.

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Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## OREGON.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay products.....		\$380,575		\$506,192
Coal.....short tons.....	109,641	282,495	79,731	212,338
Coal tar.....gallons.....	21,452	2,145		
Gas, illuminating.....cubic feet.....	18,131,200	39,675		<sup>a</sup> 55,842
Gas coke.....short tons.....	1,327	8,946		
Copper.....pounds.....		<sup>(b)</sup> 545,859		105,351
Gold (mines report).....fine ounces (troy).....	67,978.23	1,405,235	66,123.79	1,366,900
Lead.....short tons.....		<sup>(b)</sup>		
Lime.....do.....	7,886	74,745	3,934	32,388
Mineral waters.....gallons sold.....	33,085	8,107	30,850	12,523
Platinum.....fine ounces (troy).....		2,000		
Quicksilver.....flasks.....	43	1,677	3	109
Sand and gravel.....short tons.....			246,250	107,644
Silver (mines report).....ounces.....	90,636	54,744	79,346	53,162
Stone.....		95,159		92,391
Other products.....		<sup>c</sup> 86,470		<sup>c</sup> 95,566
Total.....		2,441,973		2,640,406

<sup>a</sup> Estimated.

<sup>b</sup> Included under Miscellaneous.

<sup>c</sup> Includes in 1905: Gypsum, nickel ore, pottery, and sand-lime brick. Includes in 1906: Clay, gypsum, nickel and cobalt, platinum, and pottery.

## PENNSYLVANIA.

Cement:				
Natural.....barrels.....	748,057	\$306,555	744,403	\$560,534
Portland.....do.....	13,813,487	11,195,940	18,645,015	18,598,439
Clay.....short tons.....	235,510	406,388	386,038	572,331
Clay products.....		19,124,553		21,774,611
Coal:				
Anthracite.....long tons.....	69,339,152	141,879,000	63,645,010	131,917,694
Bituminous.....short tons.....	118,413,637	113,390,507	129,293,206	130,290,651
Coke.....do.....	20,573,736	42,253,178	23,060,511	54,184,531
Ammonium sulphate.....pounds.....	5,880,172	620,068		
Coal tar.....gallons.....	14,249,781	319,201		
Gas, illuminating.....cubic feet.....	3,910,669,305	2,268,505		<sup>c</sup> 7,822,548
Gas coke.....short tons.....	1,374,815	3,903,634		
Feldspar.....do.....		<sup>(a)</sup> 18,467		132,230
Flint.....do.....		<sup>(a)</sup>		<sup>(b)</sup>
Glass sand.....do.....	361,829	482,937	342,967	510,910
Iron ores.....long tons.....	808,717	1,060,162	949,429	1,246,267
Iron, pig.....do.....	10,579,127	<sup>c</sup> 177,090,000	11,247,869	<sup>c</sup> 225,970,000
Lime.....short tons.....	620,018	1,672,267	624,060	1,857,754
Metallic paint and mortar colors.....do.....	8,596	123,570	11,021	136,086
Millstones.....		1,351		2,624
Mineral waters.....gallons sold.....	1,322,594	194,113	1,506,286	280,054
Natural gas.....		19,197,336		18,558,245
Ocher.....short tons.....	7,789	72,360	8,597	79,244
Petroleum.....barrels.....	10,437,195	14,653,278	10,256,893	16,596,943
Sand and gravel.....short tons.....	3,666,975	1,753,372	4,889,908	1,969,901
Sand-lime brick.....		63,226		62,921
Slate.....		3,491,905		3,522,149
Stone.....		7,956,177		8,804,776
Umber.....short tons.....		9,704		10,000
Other products.....		<sup>b</sup> 6,339,386		<sup>b</sup> 11,952,337
Total.....		569,828,673		657,413,780

<sup>a</sup> Included under Maryland.

<sup>b</sup> Includes in 1905: Aluminum, slag cement, abrasive garnet, graphite, pigments (unclassified), crystalline quartz, salt, shale, sienna, talc, and zinc white. Includes in 1906: Aluminum, aluminum salts, bromine, slag cement, abrasive garnet, graphite, litharge, lithophone, orange mineral, crystalline quartz, quartz (flint), red lead, salt, shale, sienna, talc, Venetian red, white lead, zinc white.

<sup>c</sup> Estimated.

*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## RHODE ISLAND.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay products.....		(a)		(b)
Coal products:				
Ammonium sulphate.....pounds..	262,786	<sup>c</sup> \$8,868		
Coal tar.....gallons..	710,069	20,400		
Gas, illuminating.....cubic feet..	490,466,400	548,633		
Gas coke.....short tons..	34,868	135,018		
Graphite.....		( <sup>c</sup> )	( <sup>b</sup> )	( <sup>b</sup> )
Lime.....short tons..	6,461	42,743	7,003	54,569
Mineral waters.....gallons sold..	210,830	15,469	220,770	16,161
Stone.....		556,664		623,490
Other products.....				<sup>b</sup> 237,179
Total.....		1,327,795		1,715,609

<sup>a</sup> Included under Connecticut.

<sup>b</sup> Includes in 1906: Clay products, graphite, and talc.

<sup>c</sup> Includes Connecticut.

<sup>d</sup> Estimated.

<sup>e</sup> Included under Miscellaneous.

## SOUTH CAROLINA.

Clay.....short tons..	45,595	\$146,790	44,665	\$175,351
Clay products.....		749,835		830,481
Coal products:				
Coal tar.....gallons..	158,361	5,315		
Gas, illuminating.....cubic feet..	116,931,170	159,709		
Gas coke.....short tons..	11,823	42,992		
Gold (mines report).....fine ounces (troy)...	4,601	95,111	3,819.63	78,959
Lime.....short tons..	7,955	34,440	7,134	34,719
Mineral waters.....gallons sold..	858,830	78,837	1,458,494	348,744
Monazite.....pounds..		( <sup>b</sup> )	148,900	26,802
Phosphate rock.....long tons..	270,225	878,169	223,675	817,068
Silver (mines report).....fine ounces (troy)...	111	67	92	62
Stone.....		297,284		258,398
Other products.....		<sup>c</sup> 5,908		707
Total.....		2,494,457		2,800,108

<sup>a</sup> Estimated.

<sup>b</sup> Included under North Carolina.

<sup>c</sup> Includes in 1905: Sand and gravel and sand-lime brick.

## SOUTH DAKOTA.

Clay products.....		\$58,271		\$58,175
Columbite.....		( <sup>a</sup> )		
Gold (mines report).....fine ounces (troy)...	338,116.70	6,989,492	330,956.06	6,841,469
Lead.....short tons..		( <sup>b</sup> )		
Lime.....do.....	4,165	26,308	3,666	23,930
Natural gas.....		15,200		15,400
Precious stones.....				4,000
Pumice.....short tons..		( <sup>c</sup> )		
Silver (mines report).....fine ounces (troy)...	182,749	110,381	150,875	101,086
Stone.....		200,061		145,966
Other products.....		<sup>d</sup> 171,860		<sup>d</sup> 319,881
Total.....		7,571,573		7,509,907

<sup>a</sup> Included under North Carolina.

<sup>b</sup> Included under Miscellaneous.

<sup>c</sup> Included under Nebraska.

<sup>d</sup> Includes in 1905: Cement, clay, copper, gypsum, mica, mineral waters, pyrite, sand-lime brick, and tungsten. Includes in 1906: Portland cement, clay, gypsum, lithium minerals, mica, mineral waters, sand-lime brick, and tantalum.

## SUMMARY.

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Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## TENNESSEE.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Barytes.....short tons..	a 9,487	\$15,325	5,247	\$8,782
Clay.....do.....	67,531	94,201	58,938	104,397
Clay products.....		1,493,279		1,620,226
Coal.....short tons..	5,766,690	6,577,881	6,259,275	7,667,415
Coke.....do.....	468,092	1,184,442	483,428	1,350,856
Ammonium sulphate.....pounds..	91,794	5,135		
Coal tar.....gallons..	721,411	29,663		
Gas, illuminating.....cubic feet..	430,175,200	434,718		
Gas coke.....short tons..	39,159	135,790		
Copper.....pounds..		(b)	17,809,442	3,437,222
Fluorspar.....short tons..	260	1,720		(c)
Gold (mines report).....fine ounces (troy)..	211	4,362	234.06	4,838
Iron ores.....long tons..	734,770	918,850	370,734	1,307,433
Iron, pig.....do.....	372,692	d 5,260,000	426,874	d 7,251,000
Lead.....short tons..			11	1,254
Lime.....do.....	75,667	252,908	83,047	307,165
Manganese ores.....long tons..	20	100	30	300
Metallic paints and mortar colors.....short tons..	5,035	36,380		(e)
Mineral waters.....gallons sold..	1,254,018	135,861	411,698	58,471
Natural gas.....		(c)		300
Petroleum.....barrels..		(c)		(c)
Phosphate rock.....long tons..	482,859	1,633,389	547,677	2,147,991
Sand and gravel.....short tons..	414,478	157,594	632,006	259,063
Sand-lime brick.....		(b)		(e)
Silver (mines report).....fine ounces (troy)..	95,522	57,695	55,931	37,474
Stone.....		992,566		1,131,909
Zinc.....short tons..		(b)	124	15,128
Other products.....				e 67,210
Total.....		19,441,859		27,444,570

a Includes small production from Kentucky.

b Included under Miscellaneous.

c Included under Kentucky.

d Estimated.

e Includes in 1906: Metallic paint and mortar colors, sand-lime brick, and Venetian red.

## TEXAS.

Asphalt.....			24,900	\$306,750
Clay products.....		\$1,718,945		1,969,598
Coal.....short tons..	1,200,684	1,968,558	1,312,873	2,178,901
Coal tar.....gallons..	236,341	15,140		
Gas, illuminating.....cubic feet..	166,917,672	253,566		
Gas coke.....short tons..	11,984	54,531		
Copper.....pounds..			51,377	9,916
Gold (mines report).....fine ounces (troy)..	12	248	b 77	1,592
Iron ores.....long tons..		(c)	36,660	36,660
Iron, pig.....do.....		(d)		(c)
Lead.....short tons..		(d)		
Lime.....do.....	31,984	142,470	41,183	192,527
Mineral waters.....gallons sold..	1,526,970	144,421	1,045,315	122,085
Natural gas.....				e 150,695
Petroleum.....barrels..	28,136,189	7,552,262	12,567,897	6,565,578
Quicksilver.....flasks..	4,723	173,362	4,761	178,829
Salt.....barrels..	444,832	142,993	360,733	170,559
Sand and gravel.....short tons..	363,085	146,462	314,110	159,367
Silver (mines report).....fine ounces (troy)..	387,506	234,054	301,772	202,187
Stone.....		427,321		518,719
Zinc.....short tons..			8	976
Other products.....		c 778,013		c 1,630,538
Total.....		13,752,346		14,751,037

a Estimated.

b From smelter reports.

c Includes in 1905: Cement, clay, gypsum, iron ores, natural gas, and sand-lime brick. Includes in 1906: Natural cement, Portland cement, clay, gypsum, pig iron, and sand-lime brick.

d Included under Miscellaneous.

e Includes Alabama and Louisiana.

*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## UTAH.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Asphalt.....short tons..	11,421	\$92,540	12,947	\$159,960
Clay.....do.....			4,713	11,416
Clay products.....		544,578		634,444
Coal.....short tons..	1,332,372	1,793,510	1,772,551	2,408,381
Coke.....do.....		(a)		(b)
Coal tar.....gallons..	85,458	c 6,830		
Gas, illuminating.....cubic feet..	108,204,812	c 166,705		d 128,103
Gas coke.....short tons..	7,642	c 42,923		
Copper.....pounds..	58,153,393	9,013,776	50,329,119	9,713,520
Gold (mines report).....fine ounces (troy)..	248,692	5,140,920	252,439.42	5,218,386
Lead.....short tons..	42,746	4,160,870	56,260	6,413,640
Lime.....do.....	12,765	69,089	17,461	86,518
Manganese ores.....long tons..			800	10,000
Precious stones.....				2,500
Quicksilver.....flasks..	1,050	42,000	1,164	48,888
Salt.....barrels..	177,342	135,465	262,212	169,635
Silver (mines report).....fine ounces (troy)..	11,036,471	6,666,028	11,550,634	7,738,925
Stone.....		290,728		292,745
Sulphur.....long tons..		(e)		(b)
Uranium and vanadium.....short tons..		(a)		
Zinc.....do.....		(f)	2,449	298,778
Other products.....		b 281,837		b 1,832,652
Total.....		28,447,799		34,998,856

a Included under Colorado.

b Includes in 1905: Cement, gypsum, iron ores, pottery, and sand and gravel. Includes in 1906: Antimony, Portland cement, coke, gypsum, iron ores, mineral waters, sand and gravel, and sulphur.

c Includes Idaho, North Dakota, and Wyoming.

d Estimated.

e Included under Louisiana.

f Included under Miscellaneous.

## VERMONT.

Clay.....short tons..	(a)	5,392	\$37,325
Clay products.....	\$112,967		112,368
Coal products:			
Coal tar.....gallons..	(b)		(b)
Gas, illuminating.....cubic feet..	(b)		(b)
Gas coke.....short tons..	(b)		(b)
Copper.....pounds..	(c)	11,694	2,257
Lime.....short tons..	39,620	188,921	32,755
Mineral waters.....gallons sold..	73,000	20,550	77,500
Sand and gravel.....short tons..	86,527	10,535	81,587
Silver (mines report).....fine ounces (troy)..		1,323	886
Slate.....		1,352,541	1,441,330
Stone.....		6,993,765	7,526,466
Talc and soapstone.....short tons..	(a)	10,413	101,057
Other products.....	a 118,555		a 29,660
Total.....		8,797,834	9,452,504

a Includes in 1905: Clay, ocher, talc, and whetstones. Includes in 1906: Metallic paint, ocher, whetstones.

b Included under New Hampshire.

c Included under Miscellaneous.

## SUMMARY.

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Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## VIRGINIA.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Arsenic.....pounds.....		(a)		
Barytes.....short tons.....	6,468	\$27,838	11,775	\$45,336
Clay.....do.....			2,903	24,354
Clay products.....		1,994,578		1,966,078
Coal.....short tons.....	4,275,271	3,777,325	4,254,879	4,183,991
Coke.....do.....	1,499,481	2,869,452	1,577,659	3,611,659
Ammonium sulphate.....pounds.....		(b)		
Coal tar.....gallons.....	691,530	21,152		
Gas, illuminating.....cubic feet.....	420,420,478	485,368		
Gas coke.....short tons.....	32,422	116,879		c 685,738
Copper.....pounds.....		(a)		
Gold (mines report).....fine ounces (troy).....	241	4,982	717.50	14,832
Iron ores.....long tons.....		(d)	828,081	1,579,817
Iron, pig.....do.....	510,210	c 7,540,000	483,525	c 8,591,000
Lead.....short tons.....		(a)		
Lime.....do.....	114,221	396,434	104,486	382,083
Manganese ores.....long tons.....	3,947	35,209	6,028	77,522
Marl.....short tons.....		(c)		
Millstones.....		8,186		15,611
Mineral waters.....gallons sold.....	2,340,287	549,102	1,997,207	418,908
Precious stones.....				500
Pyrite.....long tons.....	123,183	426,008	128,794	431,388
Sand and gravel.....short tons.....	351,115	154,580	335,178	121,951
Silver (mines report).....fine ounces (troy).....	177	107	250	168
Slate.....		146,786		172,857
Stone.....		667,050		606,343
Talc and soapstone.....short tons.....		(d)	23,624	590,800
Zinc.....do.....			1,143	139,446
Other products.....		d 2,530,950		d 990,432
Total.....		21,751,986		24,650,814

a Included under Miscellaneous.

b Included under West Virginia.

c Estimated.

d Includes in 1905: Asbestos, cement, gypsum, iron ores, metallic paint, ocher, pottery, salt, sand-lime brick, talc, and titanium. Includes in 1906: Asbestos, natural cement, Portland cement, gypsum, mica, ocher, pottery, quartz (flint), salt, sand-lime brick, titanium.

e Included under New Jersey.

## WASHINGTON.

Arsenic.....pounds.....		(a)		
Clay products.....		\$1,175,032		\$1,499,884
Coal.....short tons.....	2,864,926	5,141,258	3,276,184	5,908,434
Coke.....do.....	53,137	251,717	45,642	226,977
Ammonium sulphate.....pounds.....		(b)		
Coal tar.....gallons.....	465,380	32,268		
Gas, illuminating.....cubic feet.....	359,180,276	459,103		
Gas coke.....short tons.....	28,006	109,032		c 660,443
Copper.....pounds.....	223,328	34,616	290,823	56,129
Gold (mines report).....fine ounces (troy).....	19,595.63	405,078	10,722.22	221,648
Lead.....short tons.....	53	5,035	46	5,244
Lime.....do.....	27,935	160,985	59,094	347,924
Mineral waters.....gallons sold.....	30,000	10,101	39,500	10,800
Sand and gravel.....short tons.....			293,571	144,725
Silver (mines report).....fine ounces (troy).....	125,376	75,727	45,878	30,738
Stone.....		919,110		738,652
Zinc.....short tons.....			7	854
Other products.....		a 11,482		d 83,691
Total.....		8,790,544		9,936,143

a Included under Miscellaneous.

b Included under Colorado.

c Estimated.

d Includes in 1905: Sand and gravel, sand-lime brick, and talc. Includes in 1906: Antimony, arsenic, clay, marble, molybdenum, platinum, tungsten.

Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.

## WEST VIRGINIA.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Bromine.....pounds.....		(a)		(b)
Clay.....short tons.....	81,880	\$52,640	54,207	\$36,377
Clay products.....		2,018,795		2,783,312
Coal.....short tons.....	37,791,580	32,341,790	43,290,350	41,051,939
Coke.....do.....	3,400,593	6,548,205	3,713,514	8,192,956
Ammonium sulphate.....pounds.....	1,002,058	c 86,530		
Coal tar.....gallons.....	1,766,066	50,542		d 720,934
Gas, illuminating.....cubic feet.....	129,935,260	102,855		
Gas coke.....short tons.....	119,369	415,468		
Glass sand.....do.....	155,052	225,734	158,093	227,225
Grindstones.....				21,304
Iron, pig.....long tons.....	298,179	d 5,250,000	304,534	d 6,447,000
Lime.....short tons.....	104,156	255,337	98,447	257,333
Mineral waters.....gallons sold.....	90,728	50,063	122,880	57,460
Natural gas.....		10,075,804		13,735,343
Petroleum.....barrels.....	11,578,110	16,132,631	10,120,935	16,170,293
Salt.....do.....	202,151	74,063	200,055	57,584
Sand and gravel.....short tons.....	135,049	86,161	236,765	113,149
Stone.....		842,627		741,971
Zinc.....short tons.....		(c)		
Other products.....		b 122,131		b 80,408
Total.....		74,731,376		90,694,588

a Included under Michigan.

b Includes in 1905: Cement, grindstones, and iron ores. Includes in 1906: Bromine, Portland cement, iron ores.

c Includes Virginia.

d Estimated.

e Included under Miscellaneous.

## WISCONSIN.

Cement, natural.....barrels.....	139,128	\$63,737		(a)
Clay products.....		1,382,115		\$1,227,342
Coal products:				
Ammonium sulphate.....pounds.....	1,727,733	121,464		
Coal tar.....gallons.....	1,905,217	94,305		b 3,352,287
Gas, illuminating.....cubic feet.....	2,126,338,477	1,579,659		
Gas coke.....short tons.....	293,759	1,252,106		
Iron ores.....long tons.....	859,283	1,718,890	848,133	2,033,217
Iron, pig.....do.....		b 5,510,000		(a)
Lead.....short tons.....		(c)	1,753	199,842
Lime.....do.....	214,872	726,071	225,633	769,808
Mineral waters.....gallons sold.....	6,676,834	1,454,715	8,252,718	2,422,694
Sand and gravel.....short tons.....	181,946	96,288	301,610	171,474
Sand-lime brick.....				36,850
Stone.....		1,791,447		1,871,945
Zinc.....short tons.....		(c)	11,057	1,348,954
Other products.....		a 1,013,814		a 8,371,362
Total.....		16,804,611		21,805,775

a Includes in 1905: Cement, clay, coke, graphite, metallic paint, crystalline quartz, sand-lime brick. Includes in 1906: Natural cement, clay, coke, graphite, metallic paint and mortar colors, pig iron, crystalline quartz, zinc white.

b Estimated.

c Included under Miscellaneous.

## SUMMARY.

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*Output and value, by States and Territories, of the mineral products of the United States in the calendar years 1905 and 1906—Continued.*

## WYOMING.

Product.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Clay.....short tons			719	\$3,986
Clay products.....		\$34,556		74,321
Coal.....short tons	5,602,021	7,336,951	6,133,994	8,013,528
Coal tar.....gallons		(a)		(a)
Gas, illuminating.....cubic feet		(a)		(a)
Gas coke.....short tons		(a)		(a)
Copper.....pounds	2,530,531	392,232	106,177	20,492
Gold (mines report).....fine ounces (troy)	1,293.81	26,745	315.46	6,521
Gypsum.....		71,560		(b)
Lime.....short tons	262	3,099	396	4,265
Petroleum.....barrels	8,454	51,545	c 7,000	49,000
Precious stones.....				1,000
Silver (mines report).....fine ounces (troy)	3,655	2,208	136	91
Stone.....		59,431		80,098
Other products.....		b 678,875		b 810,547
Total.....		8,657,202		9,063,849

<sup>a</sup> Included under Utah.

<sup>b</sup> Includes in 1905: Asbestos, clay, coke, grindstones, iron ores, mineral waters, natural gas, and sand and gravel. Includes in 1906: Asbestos, coke, grindstones, gypsum, iron ores, mineral waters, sand and gravel, and sulphur.

<sup>c</sup> Estimated.

## MISCELLANEOUS PRODUCTS.

METALLIC.				
Antimony.....		\$705,787		
Copper.....		2,345,919		
Iron, pig.....		8,460,000		
Lead.....		9,890,640		\$280,212
Zinc.....		2,892,534		
Total.....		24,294,880		280,212
NONMETALLIC:				
Alum and aluminum sulphate, arsenic		1,985,441		
Fuller's earth.....		214,497		
Gas, coke, tar, ammonia, graphite, oilstones, and mineral waters.....		39,163		36,996
Precious stones.....		326,350		
Salt and sand and gravel.....		19,416		
Sand-lime brick and stone.....		73,450		
White lead.....		15,838,649		
Other lead paints.....		5,564,236		
Total.....		24,061,202		36,996
Grand total.....		48,356,082		317,208