SUMMARY OF THE MINERAL PRODUCTION OF THE UNITED STATES IN 1901.

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 remarkable activity in the mineral industries of the United States noted in 1900.

In 1901, for the second time, the total value of our mineral production exceeded the enormons sum of $1,000,000,000, the exact figures being $1,086,529,521, as compared with $1,063,620,548 in 1900, and with $972,152,208 in 1899, a gain of 1901 over 1900 of $22,908,973, or 2.15 per cent, and a gain of 1901 over 1899 of $114,377,313, or 11.77 per cent. Although this gain is not so great either actually or proportionally as was the gain in 1899, when the gain over 1898 was $273,601,810, or 39.17 per cent, it is sufficient to show that the growth of the mineral industries keeps pace with the national prosperity.

The notable gains and losses of the last two decades are as follows:

The largest actual gain was that of 1899 over 1898, $273,601,810, or 39.17 per cent; next that of 1900 over 1899, $91,468,340, or 9.41 per cent; then the gain of 1895 over 1894, which was $94,215,822, or 17.88 per cent, and the gain of 1887 over 1886, $74,927,880, or 16.81 per cent. In other years than those mentioned between 1880 and 1898 the gains were not noteworthy, and in some of the years, notably in 1884, the production decreased $40,451,968, or nearly 9 per cent. During the industrial depression of 1892–1895 the production would have been expected to decline, as it did, going from $648,895,031 in 1892 to $574,464,724 in 1893; to $527,079,225 in 1894, and then rising to $621,295,047 in 1895, and not reaching the output of 1892 until 1898.

As heretofore, iron and coal are the most important of our mineral products. The value of the former in 1901 was $242,174,000 and of the latter $348,910,469. All of the important metals decreased in both output and value, with the exception of the production of pig iron and zinc, and among the less important metals the most remarkable increase both in quantity and value was made in platinum: 1,408

ounces valued at $27,526, as compared with 400 ounces valued at $2,500 in 1900, a gain of 1,001 per cent in value. The fuels increased from $406,359,351 in 1900 to $442,395,304 in 1901, a gain of $36,035,953, or 8.87 per cent. Every variety of fuel increased in value except petroleum, which showed an increase in quantity of 5,768,665 barrels, but a decline in value of $9,571,978, due largely to the less valuable character of the increased product of the new petroleum fields as compared with the older fields. Anthracite coal increased 9,021,207 long tons in output and $26,746,169 in value. The average price of anthracite coal per ton at the mine was $2.05, the highest figure obtained since 1888, as compared with $1.85 in 1900 and $1.80 in 1899; and the average price per ton for bituminous coal at the mine was $1.047, about the same as in 1900.

The gain of $22,908,973 is due entirely to the increase in the nonmetallic products, since the metallic products showed a decline from $550,425,286 in 1900 to $518,268,377 in 1901, a loss of $32,156,909, whereas the nonmetallic products increased from $512,195,262 in 1900 to $567,261,144 in 1901, a gain of $55,065,882. To these products should be added estimated unspecified products, including the rare minerals, lithium, tungsten, vanadium, uranium, etc., bismuth and crystalline quartz, valued at $1,000,000, making the total mineral production for 1901 $1,086,529,521.

For the first time since 1885 the production of bismuth in the United States is noted in this report. The manufacture of arsenious oxide was, for the first time in the United States, in 1901, taken up by the Puget Sound Reduction Company at Seattle, Wash., when an output of 300 short tons was placed on the market. For the first time also, in 1901, the production of rutile on a large scale was realized by the American Rutile Company from the deposits in Nelson County, Va., whose output amounted to about 40,000 pounds.

METALS.

Iron and steel.—The record-breaking output of pig iron in 1899, 13,620,703 long tons, valued at $245,172,654, which was exceeded in 1900, the output being 13,789,242 long tons, valued at $259,944,000, has again been exceeded by the production of 1901, which was 15,878,354 long tons, valued at $242,174,000. This is an increase of 2,089,112 long tons, or 15.15 per cent, in production, and a decline of $17,770,000 in value, or 6.84 per cent, as compared with 1900. In 1899 the production increased 15.69 per cent and the value increased 110.35 per cent over 1898. The average price per ton of pig iron increased from $18 in 1899 to $18.85 in 1900, and the price in 1901 was $15.25. The maximum price so far is $19, which was reached in 1887. The average price per long ton in recent years has been as

follows: 1897, $9.85; 1896, $10.47; 1895, $11.14; 1894, $9.76; 1893, $11.90.

Iron ores.—The production of iron ores in the United States during 1901 amounted to 28,887,479 long tons, as compared with 27,553,161 long tons in 1900, a gain of 1,334,318 long tons, or 5 per cent, as compared with a gain of 12 per cent in 1900 over 1899. The total value at the mines of the ore mined in 1901 was $49,256,245, or a mean value of $1.71 per ton, an apparent decrease of 71 cents, or 29 per cent, from the 1900 figures of $2.42 per ton. The total value of the iron ore mined in 1901 shows a decrease of 26 per cent as compared with the total value, $66,590,504, of the ore produced in 1900. As in 1898, 1899, and 1900, the production of iron ores in 1901 has never been equaled by any other country, the nearest approach to our output being in 1900 by the German Empire, when 18,664,772 long tons were produced.

Copper.—The activity of 1899 and 1900 in the copper industry showed a slight falling off during 1901. The production decreased from 606,117,166 pounds in 1900 to 602,072,519 pounds in 1901, a loss of 4,044,647 pounds, or 0.67 per cent, as compared with an increase of 6.59 per cent in 1900; and the value decreased from $98,494,039 in 1900 to $87,300,515 in 1901, a decrease of $11,193,524, or 11.36 per cent, over 1900.

Lead.—The large increase in the production of lead in 1900 over 1899 was not repeated in 1901, the production of 270,700 short tons in 1901 being 124 short tons less than in 1900, and the value of the product, $23,280,200, being $281,488 less than in 1900.

Zinc.—The production of zinc in 1901 showed a marked increase in quantity over both 1900 and 1899; and the value of the product in 1901 shows an increase as compared with 1900 and a decrease as compared with 1899. The production in 1901 amounted to 140,822 short tons, as compared with 123,886 short tons in 1900; an increase of 16,936 short tons, or over 13 per cent, as compared with 1900, and an increase of 11,771 short tons, or 9 per cent, over 1899. The value of the zinc product in 1901 was $11,265,760, as compared with $10,654,196 in 1900 and with $14,840,865 in 1899.

Gold.—The gold production decreased in 1901, falling from 3,829,897 fine ounces in 1900 to 3,805,500 fine ounces in 1901; and the value decreased from $79,171,000 in 1900 to $78,666,700 in 1901. The decrease was due to the decline in production in Alaska and Colorado. In 1899 the production was valued at $71,053,400.

Silver.—The coining value of the silver production in 1901 was $71,387,800, as compared with $74,533,495 in 1900. The production in 1901 was 55,214,000 fine ounces, as compared with 57,647,000 fine ounces in 1900. The commercial value of the production of 1901 was

$33,128,400, as compared with $35,741,140 in 1900, a decrease of $2,612,740, or 7.31 per cent.

Quicksilver.—The production of quicksilver in 1901 showed an increase of 1,410 flasks of 76½ pounds net over 1900, or 29,727 flasks, as against 28,317 flasks in 1900. The production of 1901 was still 727 flasks below the production of 30,454 flasks in 1899. The value of the quicksilver produced in 1901, $1,382,305, exceeded in value $79,719 the output of 1900, and fell below the production of 1899 in value by $70,440.

Aluminum.—The Pittsburg Reduction Company, operating under the Hall patents, continues to be the only producer of metallic aluminum in the United States. The production in 1901 was 7,150,000 pounds, the same as in 1900, and exceeded by 650,000 pounds the production of 1899, and the value of the product of 1901, $2,238,000, increased $318,000 over that of 1900 and $522,000 over that of 1899.

Antimony—The amount of antimony obtained from ores of domestic production in 1901 was 50 short tons, valued at $10,250; the antimony obtained from the smelting of foreign imported ores was 364 short tons, valued at 74,620, and the antimony obtained from hard or antimonial lead produced from foreign and domestic lead ores was 2,235 short tons, valued at $457,150, a total production for 1901 of 2,649 short tons, valued at $542,020. The estimated total amount of antimony available for consumption in 1901 was 4,486 short tons, including 1,837 short tons of imported antimony regulus, as compared with 6,053 short tons, including 1,827 short tons of imported antimony regulus, in 1900. The decrease in the total quantity of antimony estimated to have been consumed in the United States in 1901, as compared with 1900, was due to the large overimportation of antimony ore, and, to a less extent, of antimony regulus in 1900.

Manganese ores.—The production of manganese ores increased slightly from 11,771 long tons, valued at $100,289, in 1900, to 11,995 long tons, valued at $116,722, in 1901, an increase in quantity of 224 tons, or almost 2 per cent, and in value of $16,433, or over 16 per cent. The average price per ton was $9.73, as compared with $8.52 in 1900 and $8.28 in 1899.

Nickel.—The production of nickel continued to decline from 22,541 pounds in 1899 to 9,715 pounds in 1900 and to 6,700 pounds in 1901. The value of the product decreased from $8,566 in 1899 to $3,886 in 1900 and to $3,551 in 1901. As heretofore noted, all of the domestic product was obtained as a by-product in the smelting of lead ores at Mine La Motte, Mo.

Platinum.—The production of crude platinum in 1901 showed a remarkable increase, although the amount produced still remains small. In 1901 the production was 1,408 ounces, as compared with 400 ounces in 1900, 300 ounces in 1899, 225 ounces in 1898, and 150

ounces in 1897, an increase for 1901 over 1900 of 1,008 ounces, or about 252 per cent. The value of the product obtained in 1901 was $27,526, as compared with $2,500 for 1900 and with $1,800 in 1899, an increase of $25,026, or 1,001 per cent, of the 1901 product over that of 1900.

Bismuth.—The production of bismuth ore in the United States in 1901 amounted to 318.6 short tons, as compared with 220 short tons in 1900. Colorado supplied the entire output. All of the ore contained gold and silver values, for which the producers were paid. As nearly as can be ascertained, the value of the product was $25,488, or an average of $80 per ton, charges for transportation and treatment being deducted.

FUELS.

Coal.—The aggregate production of anthracite and bituminous coal in the United States in 1901 amounted to 293,298,516 short tons, valued at $348,910,469, as compared with 269,682,827 short tons, valued at $306,671,364, in 1900, an increase of 23,615,689 short tons, or 8.76 per cent, in quantity, and of $42,239,105, or 13.8 per cent, in value.

The increase in 1900 over 1899 was 15,942,835 short tons in quantity and $50,593,930 in value.

The production of Pennsylvania anthracite showed a phenomenal increase from 51,221,353 long tons, or 57,367,915 short tons, in 1900 to 60,242,560 long tons, or 67,471,667 short tons, in 1901. This represented a gain of 17.5 per cent, the largest percentage of gain made by the anthracite trade in twenty years. Part of this increase in 1901 was due to the decreased output of anthracite in 1900 as compared with 1899, as, owing to the historic strike of 1900, the output of that year was reduced by over 2,500,000 long tons. The production of 1901 shows an increase over 1899 of 6,297,913 long tons, and but for the strike of 1900 would have shown an increase over that year of 4,500,000 long tons, or about half the increase actually made. The increase in the value of the anthracite product is still more striking, the amount received at the mines in 1901 showing a gain of $26,746,169, or more than 31 per cent, over that of 1900. The average price for the marketed anthracite coal (exclusive of the colliery consumption, which amounted to about 10 per cent of the total) was $2.05, the highest figure obtained since 1888. The production of bituminous coal, lignite, cannel coal, etc., including small amounts of anthracite from Colorado and New Mexico, increased from 212,314,912 short tons in 1900 to 225,826,849 short tons in 1901, a gain of 13,511,937 tons, or about 6 per cent. The value of this product amounted to $236,406,449 as compared with $220,913,513 in 1900, an increase of $15,492,936, or a little more than 7 per cent. The price of the

bituminous product did not show any material advance in 1901, the average price being about 0.8 per cent higher than in 1900. The preliminary report issued by the inspectors of mines for Great Britain shows that the production of coal in the United Kingdom last year was 219,046,945 long tons, a decrease of 6,134,355 long tons from 1900. Reducing the production of the United States to the same unit, we find that it amounted to 261,873,675 long tons, 42,826,730 long tons (nearly 20 per cent) more than that of Great Britain. The coal output of her colonies, dependencies, including India, aggregated in 1900 about 17,000,000 long tons, so taking all of the British Empire as one producer, it still falls short of the coal production of the United States in 1901 by over 20,000,000 long tons.

Our coal production last year was nearly 75 per cent larger than that of Germany's, nearly seven times that of Austria-Hungary, and more than eight times that of France.

Coke.—The total production of coke in the United States in 1901, including the output from 1,165 retort or by-product ovens, was 21,795,883 short tons, valued at $44,445,923, as compared with 20,533,348 short tons, valued at $47,443,331, in 1900, and 19,668,569 short tons, valued at $34,670,417, in 1899. The increase in production in 1901 over 1900 was 1,262,535 short tons, or 6.15 per cent; the value of the product, however, showed a decrease of $2,997,408, or 6.3 per cent.

Petroleum.—The total production of crude petroleum in the United States in 1901 was 69,389,194 barrels, being larger than that of any previous year. It was larger by 5,768,665 barrels, or 9 per cent, than the production of the year 1900. The increase in the production of 1900 over 1899 was 6,549,679 barrels, or 11 per cent, and the increase in 1899 over 1898 was 3 per cent, or an average gain of 7.7 per cent for the last three years. The value of the product in 1901 was $66,417,335 as compared with $75,989,313 in 1900, a decrease of $9,571,978, or about 12.6 per cent. The largest number of barrels marketed in the States outside of the Appalachian and the Lima-Indiana fields was in California, although when the proportionate quantity produced though not sold is considered the State of Texas takes precedence. The gain in new production from these two States alone shows over 8,000,000 barrels, and when the increased yield in Kansas and Colorado is added the percentage of the total petroleum produced outside of the older fields above named is shown to rise from 8.60 per cent in 1900 to nearly 20 per cent in 1901. This is a difference of 11.40 per cent, and indicates that a rapid change is taking place in the localities from which the increased supply of petroleum is to be secured in the future. The quality of the petroleum produced from these new sections is generally much inferior to that produced in the older fields, the quantity of first-class illuminating oil and other valu-

able derivatives being very much less. The greater part, however, is valuable as fuel in its natural state, or after some of the more volatile products have been removed, and is particularly acceptable as such in the absence of deposits of coal in the Southwest and West. The average price per barrel for all the petroleum marketed in the United States during 1901 was 95.7 cents as compared with $1.194 in 1900, $1.132 in 1899, and $0.798 in 1898.

This is a decrease as compared with 1900 of $0.237 per barrel, the lowest average price since 1898. A noteworthy feature of the year, due particularly to the oil excitement in Texas and California, is the formation of 1,578 oil companies with an acknowledged and estimated capitalization of $669,083,000.

Natural gas.—The value of the natural gas product increased in 1901 to $27,067,500 as compared with $23,698,674 in 1900 and with $20,074,873 in 1899. This is a gain of $3,368,826, or 14 per cent in 1901 over 1900.

STRUCTURAL MATERIALS.

Stone.—The value of all kinds of building stone produced in the United States during 1901 amounted to $55,615,926 as compared with $44,321,345 in 1900 and with $44,090,670 in 1899, an increase of $11,294,581, or over 25 per cent in 1901 over 1900. The decline in exports of slate which was noted in this report for last year has continued. The value of the exports decreased from $1,363,617 in 1899 to $950,543 in 1900 and to $898,262 in 1901.

Clays.—The activity in all branches of the clay-working industries noted in the report as true of 1899 and 1900 has continued during 1901. The value of all clay products in 1901, as reported to this office, was $110,211,587 as compared with $96,212,345 for 1900, a gain of $13,999,242, or 14.55 per cent. The brick and tile products in 1901 were valued at $87,747,727 as compared with $76,413,775 in 1900, a gain of $11,333,952, or 14.83 per cent; the pottery products were valued in 1901 at $22,463,860 as compared with $19,798,570 in 1900, a gain of $2,665,290, or 13.46 per cent.

The clay mined and sold by those not manufacturing the product themselves in 1901 was valued at $2,576,932 as compared with clay valued at $1,840,377 sold in 1900.

Cement.—The total production of cement of all kinds in the United States in 1901 was 20,068,737 barrels, valued at $15,786,789, as compared with 17,231,150 barrels in 1900, valued at $13,283,581.

The Portland cement production in 1901 was 12,711,225 barrels, valued at $12,532,360 as compared with 8,482,020 barrels, valued at $9,280,525, in 1900, a gain of 4,229,205 barrels in quantity, or 50 per cent, while the value increased $3,251,835, or over 35 per cent. The

number of plants producing Portland cement increased from 50 in 1900 to 56 in 1901.

The production of natural rock cement decreased from 8,383,519 barrels in 1900 to 7,084,823 barrels in 1901, a loss of 1,298,696, or over 15 per cent. The value decreased from $3,728,848 in 1900 to $3,056,278 in 1901, a loss of 18 per cent. The number of plants in operation in 1901 was 60 as compared with 64 in 1900.

The production of slag cement decreased from 365,611 barrels in 1900 to 272,689 barrels in 1901, while the value decreased from $274,208 in 1900 to $198,151 in 1901.

ABRASIVE MATERIALS.

Carborundum.—In 1901 the total production of carborundum was 3,838,175 pounds, worth from 8 to 10 cents a pound, as compared with 2,634,900 pounds in 1900, with 1,741,245 pounds in 1897, with 52,200 pounds in 1894, and with 15,200 pounds in 1893.

Corundum and emery.—The combined production of corundum and emery in 1901 amounted to 4,305 short tons, valued at $146,040, as compared with 4,305 short tons, valued at $102,715, in 1900, an increase in value of $43,325, or 42 per cent.

Crushed steel.—The production of crushed steel by the Pittsburg Crushed Steel Company in 1901 was 690,000 pounds, 10,000 pounds less than in 1900. Crushed steel is quoted on the market at 5½ cents per pound f. o. b. Pittsburg. The annual production has varied little since 1898.

Crystalline quartz.—The production of crystalline quartz in 1901 was 14,050 short tons, valued at $41,500, as compared with 14,461 tons, valued at $40,705, in 1900. The entire product was from Connecticut.

Garnet.—The amount of abrasive garnet produced in 1901 was 4,444 short tons, valued at $158,100, as compared with 3,185 short tons, valued at $123,475, in 1900, an increase in quantity of 1,259 tons, or about 40 per cent, and in value of $34,625, or about 28 per cent. The average value per ton in 1901 was $35.57 as compared with $38.76 in 1900. Until 1900 the North Carolina garnet was not included in these statistics.

Grindstones.—The production of grindstones of all kinds in 1901 increased in quantity and diminished in value, the total for 1901 being $580,703, as compared with $710,026 in 1900 and with $675,586 in 1899. The increase in the quantity of the production is due both to the domestic demand and to the growth of the export trade. The imports for 1901 amounted in value to $88,871, as compared with $92,581 in 1900. The increase in the domestic demand is due largely to the growth of the manufacture of agricultural machines.

Infusorial earth and tripoli.—The production of infusorial earth

and tripoli increased from 3,615 tons, valued at $24,207, in 1900 to 4,020 short tons, valued at $52,950, in 1901, an increase of 405 tons, or over 11 per cent, in amount, and an increase in value of $28,743, or over 118 per cent. This increase in value is partly due to the large production of the American Tripoli Company, of Seneca, Mo.

Millstones and buhrstones.—The production of millstones in 1901 was valued at $57,179, as compared with $32,858 in 1900 and with $28,115 in 1899. The increase of 1901 over 1900 was $24,321, or a little over 74 per cent.

Oilstones and whetstones.—The value of the oilstones and whetstones made in the United States in 1901 amounted to $158,300, as compared with $174,087 in 1900 and $208,283 in 1899, a decrease in 1901 of $15,787, or 9 per cent. Compared with the production of 1899, which was the largest in the history of the industry, the decrease was $49,983, or 24 per cent.

CHEMICAL MATERIALS.

Arsenious oxide.—For the first time, during 1901, the manufacture of arsenious oxide was begun by the Puget Sound Reduction Company at Seattle, Wash., and an output of 300 short tons was placed on the market.

Borax.—The production of borax in 1901 consisted of 17,887 short tons of crude and 5,344 tons of refined, with a total value of $1,012,118, as compared with 24,235 tons of crude and 1,602 short tons of refined, valued at $1,018,251, in 1900.

Bromine.—The production of bromine in 1901 amounted to 552,043 pounds, valued at $154,572, as compared with 521,444 pounds, valued at $140,790, in 1900. The bromine is obtained from the mother liquor, made in the salt works in Michigan, Ohio, and West Virginia.

Fluorspar.—The total production of fluorspar in 1901 was 19,586 short tons, valued at $113,803, as compared with 18,450 tons, valued at $94,500, in 1900. The great increase in value was due to the larger amount of ground fluorspar sold and to the higher price obtained for it. The average price per ton of crude fluorspar was reported as $5, the same as in 1900. The average price per ton for ground fluorspar was reported as $9.03 in 1901, as compared with $5.66 in 1900.

Gypsum.—The production of gypsum, particularly for the manufacture of calcined plaster, continues to show a remarkable gain. The output of crude gypsum in 1901 amounted 659,659 short tons, valued, in its first marketable condition, at $1,577,493, as compared with 594,462 short tons, valued at $1,627,203, in 1900, an increase in quantity of 65,197 short tons, or 10.97 per cent, and a decrease in value of $49,710. The production in 1899 was 486,235 short tons and in 1898 it was 291,638 short tons. The greatly increased production of the

last three years is attributable to the substitution of plaster of paris for ordinary lime mortar in the manufacture of wall plaster in large buildings; also to the manufacture of staff for temporary buildings.

Phosphate rock.—The production of phosphate rock decreased slightly, from 1,491,216 long tons in 1900 to 1,483,723 long tons in 1901, and the value decreased from $5,359,248 in 1900 to $5,316,403 in 1901.

Pyrite.—During 1901 the production of pyrite used in the manufacture of sulphuric acid was stimulated to the largest yearly quantity yet recorded, amounting to 234,825 long tons, valued at $1,024,449, as compared with the production during 1900 of 204,615 long tons, valued at $749,991, an increase in quantity of 30,210 long tons, or 14.76 per cent, and in value of $274,458, or 36.60 per cent. The greater part of the output was derived from Virginia, Colorado, Massachusetts, and New York, in the order of production.

Salt.—The salt product includes brine salt used in the manufacture of soda ash, caustic soda, etc., at chemical works in Michigan, New York, and Pennsylvania. The production of salt in the United States during 1901 was 20,566,661 barrels of 280 pounds net, a decrease of 302,681 barrels, or 1.45 per cent, from the production in 1900 of 20,869,342 barrels. The value of the salt produced in 1901 was $6,617,449, a decrease of $327,154, or 4.71 per cent, from the 1900 value of $6,944,603. The production of salt in the United States during 1900 and 1901 was the greatest for any two individual years yet recorded.

Sulphur.—The quantity of sulphur produced in the United States has always been insignificant as compared with the total consumption of the country. During 1901 the production of sulphur in the United States was 7,690 short tons, valued at $223,430, as compared with 3,525 short tons, valued at $88,100, in 1900, an increase during 1901 of 4,165 tons in quantity, or about 118 per cent, and of $135,330 in value, or nearly 154 per cent. It is worthy of note that during 1901 Nevada and Oregon reentered the list of producing States, along with Utah and Louisiana.

PIGMENTS.

Barytes.—The output of crude barytes in 1901 was 49,070 short tons, valued at $157,844, a decrease of 18,610 tons from the production of 1900, which was 67,680 tons, valued at $188,089. In 1901, however, the average price per ton was $3.22, as compared with $2.78 in 1900, an increase accounted for by the fact that a better grade of barytes was put on the market.

Cobalt oxide.—The production of cobalt oxide in 1901 was 13,360 pounds, valued at $24,048, as compared with 6,471 pounds, valued at $11,648, in 1900, an increase of over 100 per cent in both quantity and

value. All the cobalt oxide product was obtained as a by-product in smelting lead ores at Mine Lamotte, Mo.

Mineral paint.—The production of mineral paints in 1901 amounted to 61,460 short tons, valued at $789,962, as compared with 72,222 short tons, valued at $881,363, in 1900.

Zinc white.—The production of zinc white showed a slight decline, from 48,840 short tons in 1900 to 46,500 short tons in 1901, a decrease of 2,340 tons, or 4.79 per cent. The value of the product, however, increased from $3,667,210 in 1900 to $3,720,000, a gain of $52,790, or 1.44 per cent.

MISCELLANEOUS.

Asbestos.—As in 1900, nearly the entire product continued to come from the Sall Mountain mines, in White County, Ga., with small additions from California and Massachusetts. The production in 1901 was 747 short tons, valued at $13,498, as compared with 1,054 short tons, valued at 16,310, in 1900. The production promises to be considerably greater in 1902.

Asphaltum.—Under this title are included all the numerous varieties of bitumens or hydrocarbons occurring in the United States and not discussed in the chapter on petroleum. The production in 1901 was greater than that of 1900, though less than that of preceding years as far back as 1895. The amount was 63,134 short tons, valued at $555,335, as compared with 54,389 short tons, valued at $415,958, in 1900, and with 75,085 short tons in 1899, valued at $553,904.

Bauxite.—The production of bauxite continued to decrease in 1901, when it amounted to 18,905 long tons, valued at $79,914, as compared with 23,184 tons, valued at $89,676, in 1900, and with 35,280 tons, valued at $125,598, in 1899.

Chromic iron ore.—Since 1896, when the output of 786 long tons, worth $6,667, was obtained, there has been very little production of chromite in the United States until 1901, when California produced 368 long tons, valued at $5,790.

Feldspar.—The production of feldspar in 1901 showed a decided increase in quantity, 34,741 short tons, as against 24,821 short tons in 1900; also an increase in value, $220,422 in 1901, as against $180,971 in 1900.

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 a makeweight in the manufacture of medium grades of paper. The production in 1901, 69,200 short tons, valued at $483,600, is the largest yet recorded, though the value is less than the product of 1900.

Flint.—The production of flint in 1901 amounted to 34,420 short tons, an increase of 1,925 tons over 1900, and was valued at $149,297, an increase of $62,946 over 1900.

Fuller's earth.—The production of fuller's earth in 1901 showed an increase over the production of 1900, being 14,112 short tons, valued at $96,835, as compared with 9,698 short tons, valued at $67,535, in 1900. The maximum production of fuller's earth was obtained in 1897, when the output was 17,113 short tons.

Graphite.—The production of crystalline graphite in the United States for 1901 was 3,967,612 pounds, valued at $135,914, as compared with 5,507,855 pounds, valued at $178,761, in 1900. The production of amorphous graphite in 1901 was 809 short tons, valued at $31,800. In addition to this production there was considerable activity in developing the graphite mines in Georgia, Montana, Dakota, and New Jersey, in the aggregate some 2,500 tons of material being mined.

The production of artificial graphite was 2,500,000 pounds, valued at $119,000, the average price being 4.75 cents, as compared with 860,750 pounds, valued at $68,860, the average price being 8 cents per pound in 1900.

Limestone for iron flux.—The amount of limestone used for fluxing in blast furnaces in 1901 was 8,540,168 long tons, valued at $4,659,836, as compared with 7,495,435 long tons, valued at $3,687,394 in 1900.

Lithium.—The production of lithium minerals in 1901, amounting to 1,750 tons, valued at $43,000, was more than three times the production of 1900, which was about 520 tons. The average price received for these lithium minerals in 1901 was $23.68 per ton. It is expected that there will be a further increase in the production of lithium in 1902.

Magnesite.—This product comes entirely from California. The production in 1901 was by far the largest yet obtained, rising from 2,252 short tons in 1900, the maximum at that date, to 13,172 tons in 1901, an increase of 10,920 tons, or 484.9 per cent. The value of the product increased from $19,333 in 1900 to $43,057 in 1901, a gain of $23,724, or 122.7 per cent.

Mica.—The total production of plate mica in 1901 was 360,060 pounds, valued at $98,859, as compared with 456,283 pounds in 1900, valued at $92,758, a decrease of 96,223 pounds, or 21.09 per cent, and a gain of $6,101, or 6.58 per cent. The production of scrap mica showed a still greater falling off, or from 5,497 tons in 1900 to 2,171 tons in 1901, a decrease of 3,326 tons, or 60.50 per cent, while the value decreased from $55,202 in 1900 to $19,719 in 1901, a loss of $35,483, or 64.28 per cent. The falling off in the production of scrap mica is probably due to the exhaustion of the large piles of scrap that had accumulated when there was a market only for plate mica.

Mineral waters.—The amount of commercial natural waters sold in 1901 was, as it was also in 1900, about 8,000,000 gallons more than in the preceding year, but unlike 1900 there was a very considerable gain in value in 1901. In 1901 55,771,188 gallons were sold, valued at

$7,586,962, as compared with 47,558,784 gallons, valued at $6,245,172 in 1900, a gain of $1,341,790 in 1901.

Monazite.—The production of monazite in 1901 amounted to 748,736 pounds, valued at $59,262, as compared with 908,000 pounds, valued at $48,805, for 1900, an increase of $10,457 in value and a decrease of 159,264 pounds in amount, both increase and decrease being probably caused by the improved condition in which the crude material was marketed.

Molybdenum.—The production of molybdenite in the United States in 1901 has probably not exceeded 10 to 15 tons. The quotations of prices vary widely from 10 to 15 cents a pound to $1.10 a pound. The production of 1902 will probably greatly exceed that of 1901.

Precious stones.—The value of the gems and precious stones found in the United States in 1901 was $289,050, as compared with $233,170 in 1900, and with $185,770 in 1899. The principal features connected with this industry in 1901 were the increased mining of the fine blue sapphires in Fergus County, Mont.; the extensive working of a deposit of rhodolite garnet in the Cowee valley, Macon County, N. C.; the active working of the tourmaline deposits at Mesa Grande, San Diego County, Cal., and the discovery of a new nearby deposit; the formation of several new turquoise companies for mining in New Mexico; the finding of one diamond in Lee County, Ga., and the finding of magnificent epidote crystals in Prince of Wales Island, Alaska.

Pumice stone.—No pumice was produced in 1901.

Rutile.—The production of rutile in 1901 rose from 300 pounds, valued at $1,300, in 1900 to 44,250 pounds, valued at $5,710, in 1901. This great increase in the production of cheap rutile was due to the development of the deposits in Nelson County, Va.

Soapstone.—Exclusive of the production of fibrous talc from Gouverneur, N. Y., the production of soapstone and talc amounted in 1901 to 28,643 short tons, valued at $424,888, as compared with 27,943 short tons, valued at $383,541, in 1900. The output for 1901 was the largest on record, exceeding that of 1900, the year of previous largest production, by 700 short tons in amount and $41,347 in value, as 1900 had exceeded 1899 by 3,178 short tons in amount and $52,736 in value.

Tungsten.—The production of tungsten ores in 1901 amounted to 179 short tons, concentrated from 1,221 short tons of crude ore, and was valued at $27,720, an average price of $154.86 per ton. The price of tungsten ores has decreased from 50 to 75 per cent during the last two years.

Uranium and vanadium.—The production, confined chiefly to Colorado, of the minerals containing uranium and vanadium in 1901 amounted to about 375 short tons. The value of this product is difficult to estimate, some of the crude ore selling for $150 per ton and some of the uranium oxide selling for $1.20 per pound.

Mineral products of the United

	Product.	1900.	
		Quantity.	Value.
	METALLIC.		
1	Pig iron, spot value ..... long tons..	13,789,242	$259,944,000
2	Silver, coining value ..... troy ounces..	57,647,000	74,533,495
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....	None.	.....
12	Platinum, value (crude) at San Francisco ..... troy ounces..	400	2,500
13	Total value of metallic products	.....	550,425,286
	NONMETALLIC (SPOT VALUES).		
14	Bituminous coal ..... short tons..	212,314,912	220,913,513
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	Brick clay	.....	12,000,000
19	Cement ..... barrels..	17,231,150	13,283,581
20	Stone	.....	44,321,345
21	Corundum and emery ..... short tons..	4,305	102,715
22	Garnet for abrasive purposes ..... do....	3,185	123,475
23	Grindstones	.....	710,026
24	Infusorial earth and tripoli ..... short tons..	3,615	24,207
25	Millstones	.....	32,858
26	Oilstones, etc	.....	174,087
27	Borax ..... short tons..	[a] 1,602 [b] 24,235	170,036 848,215
28	Bromine ..... pounds..	521,444	140,790
29	Fluorspar ..... short tons..	18,450	94,500
30	Gypsum ..... do....	594,462	1,627,203
31	Marls ..... do....	60,000	30,000
32	Phosphate rock ..... long tons..	1,491,216	5,359,248
33	Pyrite ..... do....	204,615	749,991
34	Salt ..... barrels..	20,869,342	6,944,603
35	Sulphur ..... short tons..	3,525	88,100
36	Barytes (crude) ..... do....	67,680	188,089
37	Cobalt oxide ..... pounds..	6,471	11,648
38	Mineral paints ..... short tons..	72,222	881,363
39	Zinc white ..... do....	48,840	3,667,210
40	Asbestos ..... do....	1,054	16,310
41	Asphaltum ..... do....	54,389	415,958
42	Bauxite ..... long tons..	23,184	89,676
43	Chromic iron ore ..... do....	140	1,400
44	Clay (all other than brick) ..... do....	.....	1,840,377
45	Feldspar ..... short tons..	24,821	180,971
46	Fibrous talc ..... do....	63,500	499,500
47	Flint ..... do....	32,495	86,351
48	Fuller's earth ..... do....	9,698	67,535
49	Graphite	[c] 5,507,855 [d] 611	197,579
50	Limestone for iron flux ..... long tons..	7,495,435	3,687,394
51	Magnesite ..... short tons..	2,252	19,333
52	Manganese ore ..... long tons..	11,771	100,289
53	Mica (sheets) ..... pounds..	456,283	92,758
54	Mica (scrap) ..... short tons..	5,497	55,202
55	Mineral waters ..... gallons sold..	47,558,784	6,245,172
56	Monazite ..... pounds..	908,000	48,805
57	Ozocerite, refined ..... do....	None.	None.
58	Precious stones	.....	233,170
59	Pumice stone ..... short tons..	None.	None.
60	Rutile ..... pounds..	300	1,300
61	Soapstone ..... short tons..	27,943	383,541
62	Total value of nonmetallic mineral products	.....	512,195,262
63	Total value of metallic products	.....	550,425,286
64	Estimated value of mineral products unspecified	.....	1,000,000
65	Grand total	.....	1,063,620,548

[a] Refined.
[b] Crude.
[c] Crystalline; pounds.
[d] Amorphous; short tons.

States in 1900 and 1901.

1901.		Increase (+) or decrease (−) in 1901.		Per cent of increase (+) or decrease (−).		
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
15,878,354	$242,174,000	+ 2,089,112	−$17,770,000	+ 15.15	− 6.84	1
55,214,000	71,387,800	− 2,433,000	− 3,145,695	− 4.22	− 4.22	2
3,805,500	78,666,700	− 24,397	− 504,300	− 0.64	− 0.64	3
602,072,519	87,300,515	− 4,044,647	− 11,193,524	− 0.67	− 11.36	4
270,700	23,280,200	− 124	− 281,488	− 0.05	− 1.19	5
140,822	11,265,760	+ 16,936	+ 611,564	+ 13.67	+ 5.74	6
29,727	1,382,305	+ 1,410	+ 79,719	+ 4.98	+ 6.12	7
7,150,000	2,238,000	.....	+ 318,000	.....	+ 16.56	8
2,649	542,020	− 1,577	− 295,876	− 37.32	− 35.31	9
6,700	3,551	− 3,015	− 335	− 31.03	− 8.62	10
None.	.....	.....	.....	.....	.....	11
1,408	27,526	+ 1,008	+ 25,026	+252.00	+1,001.00	12
.....	518,268,377	.....	− 32,156,909	.....	− 5.84	13
225,826,849	236,406,449	+13,511,937	+ 15,492,936	+ 6.36	+ 7.01	14
60,242,560	112,504,020	+ 9,021,207	+ 26,746,169	+ 17.61	+ 31.19	15
.....	27,067,500	.....	+ 3,368,826	.....	+ 14.22	16
69,389,194	66,417,335	+ 5,768,665	− 9,571,978	+ 9.06	− 12.60	17
.....	13,800,000	.....	+ 1,800,000	.....	+ 15.00	18
20,068,737	15,786,789	+ 2,837,587	+ 2,503,208	+ 16.47	+ 18.84	19
.....	55,615,926	.....	+ 11,294,581	.....	+ 25.48	20
4,305	146,040	.....	+ 43,325	.....	+ 42.18	21
4,444	158,100	+ 1,259	+ 34,625	+ 39.53	+ 28.04	22
.....	580,703	.....	− 129,323	.....	− 18.21	23
4,020	52,950	+ 405	+ 28,743	+ 11.20	+ 118.74	24
.....	57,179	.....	+ 24,321	.....	+ 74.02	25
.....	158,300	.....	− 15,787	.....	− 9.07	26
[a] 5,344	697,307	+ 3,742	+ 527,271	+233.58	+ 310.09	27
[b] 17,887	314,811	− 6,348	− 533,404	− 26.19	− 62.89	27
552,043	154,572	+ 30,599	+ 13,782	+ 5.87	+ 9.79	28
19,586	113,803	+ 1,136	+ 19,303	+ 6.16	+ 20.43	29
659,659	1,577,493	+ 65,197	− 49,710	+ 10.97	− 3.05	30
99,880	124,880	+ 39,880	+ 94,880	+ 66.47	+ 316.27	31
1,483,723	5,316,403	− 7,493	− 42,845	− 0.50	− 0.80	32
234,825	1,024,449	+ 30,210	+ 274,458	+ 14.76	+ 36.59	33
20,566,661	6,617,449	− 302,681	− 327,154	− 1.45	− 4.71	34
7,690	223,430	+ 4,165	+ 135,330	+118.16	+ 153.61	35
49,070	157,844	− 18,610	− 30,245	− 27.50	− 16.08	36
13,360	24,048	+ 6,889	+ 12,400	+106.46	+ 106.46	37
61,460	789,962	− 10,762	− 91,401	− 14.90	− 10.37	38
46,500	3,720,000	− 2,340	+ 52,790	− 4.79	+ 1.44	39
747	13,498	− 307	− 2,812	− 29.12	− 17.24	40
63,134	555,335	+ 8,745	+ 139,377	+ 16.08	+ 33.51	41
18,905	79,914	− 4,279	− 9,762	− 18.46	− 10.89	42
368	5,790	+ 228	+ 4,390	+162.86	+ 313.57	43
.....	2,576,932	.....	+ 736,555	.....	+ 40.02	44
34,741	220,422	+ 9,920	+ 39,451	+ 39.97	+ 21.80	45
69,200	483,600	+ 5,700	− 15,900	+ 8.98	− 3.18	46
34,420	149,297	+ 1,925	+ 62,946	+ 5.92	+ 72.90	47
14,112	96,835	+ 4,414	+ 29,300	+ 45.51	+ 43.38	48
[c] 3,967,612	167,714	− 1,540,243	− 29,865	− 27.96	− 15.12	49
[d] 809		+ 198		+ 32.41		49
8,540,168	4,659,836	+ 1,044,733	+ 972,442	+ 13.94	+ 26.37	50
13,172	43,057	+ 10,920	+ 23,724	+484.90	+ 122.71	51
11,995	116,722	+ 224	+ 16,433	+ 1.90	+ 16.39	52
360,060	98,859	− 96,223	+ 6,101	− 21.09	+ 6.58	53
2,171	19,719	− 3,326	− 35,483	− 60.50	− 64.28	54
55,771,188	7,586,962	+ 8,212,404	+ 1,341,790	+ 17.27	+ 21.49	55
748,736	59,262	− 159,264	+ 10,457	− 17.54	+ 21.43	56
None.	None.	.....	.....	.....	.....	57
.....	289,050	.....	+ 55,880	.....	+ 23.97	58
None.	None.	.....	.....	.....	.....	59
44,250	5,710	.....	+ 4,410	.....	+ 339.23	60
28,643	424,888	+ 700	+ 41,347	+ 2.51	+ 10.78	61
.....	567,261,144	.....	+ 55,065,882	.....	+ 10.75	62
.....	518,268,377	.....	− 32,156,909	.....	− 5.84	63
.....	1,000,000	.....	1,000,000	.....	.....	64
.....	1,086,529,521	.....	+ 22,908,973	.....	+ 2.15	65

[a] Refined.
[b] Crude.
[c] Crystalline; pounds.
[d] Amorphous; short tons.

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, coining value ..... troy ounces..	30,320,000	39,200,000
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..	329,968	164,984
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	.....	190,039,865
	NONMETALLIC (SPOT VALUES).		
13	Bituminous coal ..... long tons..	38,242,641	53,443,718
14	Pennsylvania anthracite ..... do....	25,580,189	42,196,678
15	Stone ..... do....	.....	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 ..... long tons..	25,783	200,457
26	Mineral paints ..... short tons..	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	Pyrites ..... long tons..	2,000	5,000
32	Soapstone ..... short tons..	8,441	66,665
33	Manganese ore ..... long tons..	5,761	86,415
34	Asphaltum ..... 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. *a* ..... 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	.....	190,039,865
57	Estimated value of mineral products unspecified.	.....	6,000,000
58	Grand total	.....	369,319,000

a Prior to 1889, quantity and value are for rough stone quarried; since 1890 they are for finished product.

for the calendar years 1880 to 1901.

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
33,077,000	43,000,000	36,197,695	46,800,000	35,733,622	46,200,000	2
1,676,300	34,700,000	1,572,186	32,500,000	1,451,249	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
				83	875	9
50	10,000	60	12,000	60	12,000	10
100	400	200	600	200	600	11
	192,892,408		219,755,109		203,128,859	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	6,412,373	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
25,000	200,000	30,000	240,000	32,000	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
	192,892,408		219,755,109		203,128,859	56
	6,500,000		6,500,000		6,500,000	57
	406,175,552		457,595,259		453,441,073	58

Mineral products of the United States for

	Product.	1884.	
		Quantity.	Value.
	METALLIC.		
1	Pig iron, value at Philadelphia ..... long tons..	4,097,868	$73,761,624
2	Silver, coining value ..... troy ounces..	37,744,605	48,800,000
3	Gold, coining value ..... do....	1,489,949	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	.....	186,109,599
	NONMETALLIC (spot values).		
13	Bituminous coal ..... long tons..	73,730,539	77,417,066
14	Pennsylvania anthracite ..... do....	33,175,756	66,351,512
15	Stone ..... do....	.....	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) ..... long tons..	35,000	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	Pyrites ..... long tons..	35,000	175,000
33	Soapstone ..... short tons..	10,000	200,000
34	Manganese ore ..... long tons..	10,180	122,160
35	Asphaltum ..... 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.[a] ..... 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	Cobalt 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	.....	186,109,599
58	Estimated value of mineral products unspecified ..	.....	5,000,000
59	Grand total	.....	412,989,105

[a] Prior to 1889, quantity and value are for rough stone quarried; since 1890 they are for finished product.

the calendar years 1880 to 1901 —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
39,910,279	51,600,000	39,445,312	51,000,000	41,269,240	53,350,000	2
1,538,376	31,800,000	1,881,250	35,000,000	1,596 500	33,000,000	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
----	181,586,587	----	214,897,825	----	248,925,054	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
36,000	275,000	40,000	325,000	43,000	340,000	20
4,150,000	3,492,500	4,500,000	3,990,000	6,692,744	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	34,000	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
----	181,586,587	----	214,897,825	----	248,925,054	57
----	5,000,000	----	800,000	----	800,000	58
----	427,898,680	----	445,786,594	----	520,714,474	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, coining value ..... troy ounces..	45,783,632	59,195,000
3	Gold, coining value ..... do....	1,604,927	33,175,000
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	.....	253,731,822
	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) ..... long tons..	36,750	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	Asphaltum ..... do....	53,800	331,500
33	Soapstone ..... do....	15,000	250,000
34	Precious stones	.....	139,850
35	Pyrites ..... long tons..	54,331	167,658
36	Corundum ..... short tons..	589	91,620
37	Oilstones, etc. *a* ..... 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 ore ..... 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	.....	253,731,822
59	Estimated value of mineral products unspecified ...	.....	900,000
60	Grand total	.....	540,781,936

a Prior to 1889, quantity and value are for rough stone quarried; since 1890 they are for finished product.

the calendar years 1880 to 1901—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	$128,337,985	1
51,354,851	66,396,988	54,500,000	70,464,645	58,330,000	75,416,565	2
1,590,869	32,886,744	1,588,880	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
58,860	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	100,000	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
.....	.....	.....	.....	125,289	25,058	11
500	2,000	600	2,500	100	500	12
.....	267,247,033	.....	305,872,422	.....	300,403,748	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	.....	18,742,725	.....	15,500,084	18
.....	8,000,000	.....	8,500,000	.....	9,000,000	19
294,344	635,578	350,000	756,000	400,000	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	242,264	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	3,960	54
1,000	3,000	400	1,000	300	800	55
50,000	2,500	350,000	26,250	50,000	7,000	56
.....	282,623,812	.....	312,776,503	.....	321,767,846	57
.....	267,247,033	.....	305,872,422	.....	300,403,748	58
.....	1,000,000	.....	1,000,000	.....	1,000,000	59
.....	550,870,845	.....	619,648,925	.....	623,171,594	60

Mineral products of the United States for

	Product.	1892.	
		Quantity.	Value.
	METALLIC.		
1	Pig iron, spot value ..... long tons..	9,157,000	$131,161,039
2	Silver, coining value ..... troy ounces..	63,500,000	82,099,150
3	Gold, coining value ..... do....	1,596,375	33,000,000
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	.....	307,936,189
	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	.....	14,800,714
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	Garnet for abrasive purposes ..... do....	.....	.....
23	Grindstones	.....	272,244
24	Infusorial earth and tripoli ..... short tons..	.....	43,655
25	Millstones	.....	23,417
26	Oilstones, etc	.....	146,730
27	Borax ..... pounds..	13,500,000	900,000
28	Bromine ..... do....	379,480	64,502
29	Fluorspar ..... short tons..	12,250	89,000
30	Gypsum ..... do....	256,259	695,492
31	Marls ..... do....	125,000	65,000
32	Phosphate rock ..... long tons..	681,571	3,296,227
33	Pyrite ..... do....	109,788	305,191
34	Salt ..... barrels..	11,698,890	5,654,915
35	Sulphur ..... short tons..	2,688	80,640
36	Barytes, crude ..... do....	32,108	130,025
37	Cobalt oxide ..... pounds..	7,869	15,738
38	Mineral paints ..... short tons..	51,704	767,766
39	Zinc white ..... do....	27,500	2,200,000
40	Asbestos ..... do....	104	6,416
41	Asphaltum ..... do....	87,680	445,375
42	Bauxite ..... long tons..	10,518	34,183
43	Chromic iron ore ..... do....	1,500	25,000
44	Clay, all other than brick ..... do....	420,000	1,000,000
45	Feldspar ..... short tons..	16,800	75,000
46	Fibrous talc ..... do....	41,925	472,485
47	Flint ..... do....	22,400	80,000
48	Fuller's earth ..... do....	.....	.....
49	Graphite ..... pounds..	.....	104,000
50	Limestone for iron flux ..... long tons..	5,172,114	3,620,480
51	Magnesite ..... short tons..	1,004	10,040
52	Manganese ore ..... long tons..	13,613	129,586
53	Mica ..... pounds..	75,000	100,000
54	Mineral waters ..... gallons sold..	21,876,604	4,905,970
55	Monazite ..... pounds..	.....	.....
56	Ozocerite, refined ..... do....	60,000	8,000
57	Precious stones	.....	312,050
58	Pumice stone ..... short tons..	.....	.....
59	Rutile ..... pounds..	100	300
60	Soapstone ..... short tons..	23,908	437,449
61	Total value of nonmetallic mineral products	.....	339,958,842
62	Total value of metallic products	.....	307,936,189
63	Estimated value of mineral products unspecified	.....	1,000,000
64	Grand total	.....	648,895,031

the calendar years 1880 to 1901—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	77,575,757	49,501,122	64,000,000	55,727,000	72,051,000	2
1,739,081	35,950,000	1,910,816	39,500,000	2,254,760	46,610,000	3
339,785,972	32,054,601	364,866,808	33,141,142	392,639,964	38,682,347	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	None.	.....	None.	.....	11
75	517	100	600	150	900	12
.....	250,207,406	.....	218,382,494	.....	282,149,808	13
128,385,231	122,751,618	118,820,405	107,653,501	135,118,193	115,749,771	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	.....	9,000,000	.....	9,000,000	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
.....	.....	.....	.....	.....	.....	22
.....	338,787	.....	223,214	.....	205,768	23
.....	22,582	2,584	11,718	4,954	20,514	24
.....	16,645	.....	13,887	.....	22,542	25
.....	135,173	.....	136,873	.....	155,881	26
8,699,000	652,425	14,680,130	974,445	11,918,000	595,900	27
348,399	104,520	379,444	102,450	517,421	134,343	28
12,400	84,000	7,500	47,500	4,000	24,000	29
253,615	696,615	239,312	761,719	265,503	807,447	30
75,000	40,000	75,000	40,000	60,000	30,000	31
941,368	4,136,070	996,949	3,479,547	1,038,551	3,606,094	32
75,777	256,552	105,940	363,134	99,549	322,845	33
11,816,772	4,054,668	12,967,417	4,739,285	13,669,649	4,423,084	34
1,200	42,000	500	20,000	1,800	42,000	35
28,970	88,506	23,335	86,983	21,529	68,321	36
8,422	10,346	6,763	10,145	14,458	20,675	37
37,724	530,384	41,926	498,093	50,695	621,552	38
24,059	1,804,420	19,987	1,399,090	20,710	1,449,700	39
50	2,500	325	4,463	795	13,525	40
47,779	372,232	60,570	353,400	68,163	348,281	41
9,079	29,507	11,066	35,818	17,069	44,000	42
1,450	21,750	3,680	53,231	1,740	16,795	43
400,000	900,000	360,000	800,000	360,000	800,000	44
20,578	68,307	19,264	167,000	8,523	30,000	45
35,861	403,436	39,906	435,060	39,240	370,895	46
33,231	63,792	42,560	319,200	13,747	21,038	47
.....	.....	.....	.....	6,900	41,400	48
843,103	63,232	918,000	64,010	.....	52,582	49
3,958,055	2,374,833	3,698,550	1,849,275	5,247,949	2,623,974	50
704	7,040	1,440	10,240	2,200	17,000	51
7,718	66,614	6,308	53,635	9,547	71,769	52
66,971	88,929	.....	52,388	.....	55,831	53
23,544,495	4,246,734	21,569,608	3,741,846	21,463,543	4,254,237	54
130,000	7,600	546,855	36,193	1,573,000	137,150	55
.....	.....	.....	.....	None.	None.	56
.....	264,041	.....	132,250	.....	113,621	57
.....	.....	.....	.....	.....	.....	58
.....	.....	150	450	100	350	59
21,071	255,067	23,144	401,325	21,495	266,495	60
.....	323,257,318	.....	307,696,731	.....	338,145,239	61
.....	250,207,406	.....	218,382,494	.....	282,149,808	62
.....	1,000,000	.....	1,000,000	.....	1,000,000	63
.....	574,464,724	.....	527,079,225	.....	621,295,047	64

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, coining value ..... troy ounces..	58,834,800	76,069,236
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....	None.	.....
12	Platinum, value (crude) at San Francisco ..... troy ounces..	163	944
13	Total value of metallic products	.....	287,860,155
	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	Brick clay	.....	9,000,000
19	Cement ..... barrels..	9,513,473	6,473,213
20	Stone	.....	30,142,661
21	Corundum and emery ..... short tons..	2,120	113,246
22	Garnet for abrasive purposes ..... do....	.....	.....
23	Grindstones	.....	326,826
24	Infusorial earth and tripoli ..... short tons..	3,846	26,792
25	Millstones	.....	22,567
26	Oilstones, etc	.....	127,098
27	Borax ..... pounds..	13,508,000	675,400
28	Bromine ..... do....	546,580	144,501
29	Fluorspar ..... short tons..	6,500	52,000
30	Gypsum ..... do....	224,139	573,344
31	Marls ..... do....	60,000	30,000
32	Phosphate rock ..... long tons..	930,779	2,803,372
33	Pyrite ..... do....	115,483	320,163
34	Salt ..... barrels..	13,850,726	4,040,839
35	Sulphur ..... short tons..	5,260	87,200
36	Barytes, crude ..... do....	17,068	46,513
37	Cobalt oxide ..... pounds..	10,700	15,301
38	Mineral paints ..... short tons..	48,032	530,455
39	Zinc white ..... do....	20,000	1,400,000
40	Asbestos ..... do....	504	6,100
41	Asphaltum ..... do....	80,503	577,563
42	Bauxite ..... long tons..	18,364	47,338
43	Chromic iron ore ..... do....	786	6,667
44	Clay, all other than brick ..... do....	360,000	800,000
45	Feldspar ..... short tons..	10,203	35,200
46	Fibrous talc ..... do....	46,089	399,443
47	Flint ..... do....	12,458	24,226
48	Fuller's earth ..... do....	9,872	59,360
49	Graphite, crystalline ..... pounds....	535,858	48,460
50	Graphite, amorphous ..... short tons..	760	
51	Limestone for iron flux ..... long tons..	4,120,102	2,060,000
52	Magnesite ..... short tons..	1,500	11,000
53	Manganese ore ..... long tons..	10,088	90,727
54	Mica, sheet ..... pounds..	.....	65,441
55	Mica, scrap ..... short tons..	.....	1,750
56	Mineral waters ..... gallons sold..	25,795,312	4,136,192
57	Monazite ..... pounds..	30,000	1,500
58	Ozocerite, refined ..... do....	None.	None.
59	Precious stones	.....	97,850
60	Pumice stone ..... short tons..	.....	.....
61	Rutile ..... pounds..	100	350
62	Soapstone ..... short tons..	22,183	354,065
63	Total value of nonmetallic mineral products	.....	333,936,110
64	Total value of metallic products	.....	287,860,155
65	Estimated value of mineral products unspecified	.....	1,000,000
66	Grand total	.....	622,796,265

the calendar years 1880 to 1901—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
53,860,000	69,637,172	54,438,000	70,384,485	54,764,500	70,806,626	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	5,200,000	1,716,000	8
3,061	442,300	3,238	532,101	2,861	559,189	9
23,707	7,823	11,145	3,956	22,541	8,566	10
None.	.....	None.	.....	None.	.....	11
150	900	225	1,913	300	1,800	12
.....	302,531,147	.....	343,748,268	.....	525,779,557	13
147,609,985	119,567,224	166,592,023	132,586,313	193,321,987	167,935,304	14
46,974,714	79,301,954	47,663,076	75,414,537	53,944,647	88,142,130	15
.....	13,826,422	.....	15,296,813	.....	20,074,873	16
60,475,516	40,874,072	55,364,233	44,193,359	57,070,850	64,603,904	17
.....	8,000,000	.....	9,000,000	.....	11,250,000	18
10,989,463	8,178,283	12,111,208	9,859,501	15,520,445	12,889,142	19
.....	34,667,772	.....	36,607,264	.....	44,090,670	20
2,165	106,574	4,064	275,064	4,900	150,600	21
2,554	80,853	2,967	86,850	2,765	98,325	22
.....	368,058	.....	489,769	.....	675,586	23
3,833	22,835	2,733	16,691	4,334	37,032	24
.....	25,932	.....	25,934	.....	28,115	25
.....	149,970	.....	180,738	.....	208,283	26
16,000,000	1,080,000	16,000,000	1,120,000	40,714,000	1,139,882	27
487,149	129,094	486,979	126,614	433,004	108,251	28
5,062	37,159	7,675	63,050	15,900	96,650	29
288,982	755,864	291,638	755,280	486,235	1,287,080	30
60,000	30,000	60,000	30,000	60,000	30,000	31
1,039,345	2,673,202	1,308,885	3,453,460	1,515,702	5,084,076	32
143,201	391,541	193,364	593,801	174,734	543,249	33
15,973,202	4,920,020	17,612,634	6,212,554	19,708,614	6,867,467	34
2,275	45,590	1,200	32,960	4,830	107,500	35
26,042	58,295	31,306	108,339	41,894	139,528	36
19,520	31,232	6,247	9,371	10,230	18,512	37
60,913	795,793	58,850	694,856	63,111	728,389	38
25,000	1,750,000	33,000	2,310,000	40,146	3,211,680	39
580	6,450	605	10,300	681	11,740	40
75,945	664,632	76,337	675,649	75,085	553,904	41
20,590	57,652	25,149	75,437	35,280	125,598	42
None.	None.	None.	None.	None.	None.	43
.....	1,000,000	.....	1,384,766	.....	1,645,328	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
13,466	26,227	21,425	42,670	29,852	180,345	47
17,113	112,272	14,860	106,500	12,381	79,644	48
1,254,402	54,277	2,360,000	75,200	2,900,732	167,106	49
1,108		890		2,324		50
4,247,688	2,124,000	5,275,819	2,638,000	6,707,435	4,695,205	51
1,143	13,671	1,263	19,075	1,280	18,480	52
11,108	95,505	15,957	129,185	9,935	82,278	53
82,676	80,774	129,520	103,534	108,570	70,587	54
740	14,452	3,999	27,564	1,505	50,878	55
23,255,911	4,599,106	28,853,464	8,051,833	39,562,136	6,948,030	56
44,000	1,980	250,776	13,542	350,000	20,000	57
None.	None.	None.	None.	None.	None.	58
.....	130,675	.....	160,920	.....	185,770	59
158	.....	600	13,200	400	10,000	60
100	350	140	700	230	1,030	61
21,923	365,629	22,231	287,112	24,765	330,805	62
.....	327,655,427	.....	353,802,130	.....	445,372,651	63
.....	302,531,147	.....	343,748,268	.....	525,779,557	64
.....	1,000,000	.....	1,000,000	.....	1,000,000	65
.....	631,186,574	.....	698,550,398	.....	972,152,208	66

Mineral products of the United States for the calendar years 1880–1901—Continued.

Product.	1900.	
	Quantity.	Value.
METALLIC.		
Pig iron, spot value ..... long tons..	13,789,242	$259,944,000
Silver, coining value ..... troy ounces..	57,647,000	74,533,495
Gold, coining value ..... do..	3,829,897	79,171,000
Copper, value at New York City ..... pounds..	606,117,166	98,494,039
Lead, value at New York City ..... short tons..	270,824	23,561,688
Zinc, value at New York City ..... do....	123,886	10,654,196
Quicksilver, value at San Francisco ..... flasks..	28,317	1,302,586
Aluminum, value at Pittsburg ..... pounds..	7,150,000	1,920,000
Antimony, value at San Francisco ..... short tons..	4,226	837,896
Nickel, value at Philadelphia ..... pounds..	9,715	3,886
Tin ..... do....	None.	.....
Platinum, value (crude) at San Francisco ..... troy ounces..	400	2,500
Total value of metallic products	.....	550,425,286
NONMETALLIC (SPOT VALUES).		
Bituminous coal ..... short tons..	212,314,912	220,913,513
Pennsylvania anthracite ..... long tons..	51,221,353	85,757,851
Natural gas	.....	23,698,674
Petroleum ..... barrels..	63,620,529	75,989,313
Brick clay	.....	12,000,000
Cement ..... barrels..	17,231,150	13,283,581
Stone	.....	44,321,345
Corundum and emery ..... short tons..	4,305	102,715
Garnet for abrasive purposes ..... do....	3,185	123,475
Grindstones	.....	710,026
Infusorial earth and tripoli ..... short tons..	3,615	24,207
Millstones	.....	32,858
Oilstones, etc	.....	174,087
Borax ..... short tons..	[a] 1,602 [b] 24,235	170,036 848,215
Bromine ..... pounds..	521,444	140,790
Fluorspar ..... short tons..	18,450	94,500
Gypsum ..... do....	594,462	1,627,203
Marls ..... do....	60,000	30,000
Phosphate rock ..... long tons..	1,491,216	5,359,248
Pyrite ..... do....	204,615	749,991
Salt ..... barrels..	20,869,342	6,944,603
Sulphur ..... short tons..	3,525	88,100
Barytes, crude ..... do....	67,680	188,089
Cobalt oxide ..... pounds..	6,471	11,648
Mineral paints ..... short tons..	72,222	881,363
Zinc white ..... do....	48,840	3,667,210
Asbestos ..... do....	1,054	16,310
Asphaltum ..... do....	54,389	415,958
Bauxite ..... long tons..	23,184	89,676
Chromic iron ore ..... do....	140	1,400
Clay, all other than brick	.....	1,840,377
Feldspar ..... short tons..	24,821	180,971
Fibrous talc ..... do....	63,500	499,500
Flint ..... do....	32,495	86,351
Fuller's earth ..... do....	9,698	67,535
Graphite, crystalline ..... pounds..	5,507,855	197,579
Graphite, amorphous ..... short tons..	611	
Limestone for iron flux ..... long tons..	7,495,435	3,687,394
Magnesite ..... short tons..	2,252	19,333
Manganese ore ..... long tons..	11,771	100,289
Mica, sheet ..... pounds..	456,283	92,758
Mica, scrap ..... short tons..	5,497	55,202
Mineral waters ..... gallons sold..	47,558,784	6,245,172
Monazite ..... pounds..	908,000	48,805
Ozocerite, refined ..... do....	None.	None.
Precious stones	.....	233,170
Pumice stone ..... short tons..	None.	None.
Rutile ..... pounds..	300	1,300
Soapstone ..... short tons..	27,943	383,541
Total value of nonmetallic mineral products	.....	512,195,262
Total value of metallic products	.....	550,425,286
Estimated value of mineral products unspecified	.....	1,000,000
Grand total	.....	1,063,620,548

[a] Refined. [b] Crude.

Mineral products of the United States for the calendar years 1880–1901—Continued.

Product.	1901.	
	Quantity.	Value.
METALLIC.		
Pig iron, spot value ..... long tons..	15,878,354	$242,174,000
Silver, coining value ..... troy ounces..	55,214,000	71,387,800
Gold, coining value ..... do....	3,805,500	78,666,700
Copper, value at New York City ..... pounds..	602,072,519	87,300,515
Lead, value at New York City ..... short tons..	270,700	23,280,200
Zinc, value at New York City ..... do....	140,822	11,265,760
Quicksilver, value at San Francisco ..... flasks..	29,727	1,382,305
Aluminum, value at Pittsburg ..... pounds..	7,150,000	2,238,000
Antimony, value at San Francisco ..... short tons..	2,649	542,020
Nickel, value at Philadelphia ..... pounds..	6,700	3,551
Tin ..... do....	None.	.....
Platinum, value, crude at San Francisco ..... troy ounces..	1,408	27,526
Total value of metallic products	.....	518,268,377
NONMETALLIC (SPOT VALUES).		
Bituminous coal ..... short tons..	225,826,849	236,406,449
Pennsylvania anthracite ..... long tons..	60,242,560	112,504,020
Natural gas	.....	27,067,500
Petroleum ..... barrels..	69,389,194	66,417,335
Brick clay	.....	13,800,000
Cement ..... barrels..	20,068,737	15,786,789
Stone	.....	55,615,926
Corundum and emery ..... short tons..	4,305	146,040
Garnet for abrasive purposes ..... do....	4,444	158,100
Grindstones	.....	580,703
Infusorial earth and tripoli ..... short tons..	4,020	52,950
Millstones	.....	57,179
Oilstones, etc.	.....	158,300
Borax ..... tons..	[a] 5,344	697,307
	[b] 17,887	314,811
Bromine ..... pounds..	552,043	154,572
Fluorspar ..... short tons..	19,586	113,803
Gypsum ..... do....	659,659	1,577,493
Marls ..... do....	99,880	124,880
Phosphate rock ..... long tons..	1,483,723	5,316,403
Pyrite ..... do....	234,825	1,024,449
Salt ..... barrels..	20,566,661	6,617,449
Sulphur ..... short tons..	7,690	223,430
Barytes, crude ..... do....	49,070	157,844
Cobalt oxide ..... pounds..	13,360	24,048
Mineral paints ..... short tons..	61,460	789,962
Zinc white ..... do....	46,500	3,720,000
Asbestos ..... do....	747	13,498
Asphaltum ..... do....	63,134	555,335
Bauxite ..... long tons..	18,905	79,914
Chromic iron ore ..... do....	368	5,790
Clay, all other than brick ..... do....	.....	2,576,932
Feldspar ..... short tons..	34,741	220,422
Fibrous talc ..... do....	69,200	483,600
Flint ..... do....	34,420	149,297
Fuller's earth ..... do....	14,112	96,835
Graphite, crystalline ..... pounds..	3,967,612	167,714
Graphite, amorphous ..... short tons..	809	
Limestone for iron flux ..... long tons..	8,540,168	4,659,836
Magnesite ..... short tons..	13,172	43,057
Manganese ore ..... long tons..	11,995	116,722
Mica (sheet) ..... pounds..	360,060	98,859
Mica (scrap) ..... tons..	2,171	19,719
Mineral waters ..... gallons sold..	55,771,188	7,586,962
Monazite ..... pounds..	748,736	59,262
Ozocerite, refined ..... do....	None.	None.
Precious stones	.....	289,050
Pumice stone ..... short tons..	None.	None.
Rutile ..... pounds..	44,250	5,710
Soapstone ..... short tons..	28,643	424,888
Total value of nonmetallic mineral products	.....	567,261,144
Total value of metallic products	.....	518,268,377
Estimated value of mineral products unspecified	.....	1,000,000
Grand total	.....	1,086,529,521

[a] Refined. [b] Crude.