

away of over 20 p. c. in the value of the lead production. The above, taken in connection with the enlarged value of the output of coal and coke of over 14 p. c. gives an average increase of over 27 p. c. for the more important industries of the country. The total value of the non-metallic products shows an increase of 10 p. c. over last year, that of the whole metallic group nearly 6 p. c., while the structural materials remain about the same. The total value of the mineral production of Canada since 1886, when the statistics were first officially compiled, was but a little over one-seventh what it is to-day, although the population has only increased 17 p. c. in that time. The per capita value is now \$12.92 as compared with \$2.23 in 1886.

In regard to their relative importance the metal mining industries led, contributing 61.70 p. c., the non-metallic following with 28.86 p. c., the structural class being credited with 9.31 p. c. Grouping the metalliferous class with coal and coke, over 80 p. c. of the value is accounted for.

The following table gives the relative contributions to the grand total of the different mineral industries. A comparison of the two years given will show many interesting features.

| Product. | 1901. | Per cent. of total Production. |
|--------------------------------------|-------|--------------------------------|
| 1 Gold..... | | 43.28 |
| 2 Coal and coke..... | | 21.62 |
| 3 Building material..... | | 7.48 |
| 4 Nickel..... | | 5.16 |
| 5 Copper..... | | 4.75 |
| 6 Lead..... | | 4.28 |
| 7 Silver..... | | 4.25 |
| 8 Petroleum..... | | 1.78 |
| 9 Asbestos..... | | 1.16 |
| 10 Cement..... | | 1.00 |
| 11 Pig iron (from Canadian ore)..... | | 0.90 |
| 12 Natural gas..... | | 0.65 |
| 13 Salt..... | | 0.43 |

| Product. | 1901. | Per cent. of total Production. |
|-------------------------------------|-------|--------------------------------|
| 1 Gold..... | | 35.24 |
| 2 Coal and coke..... | | 22.96 |
| 3 Copper..... | | 9.51 |
| 4 Building material..... | | 6.94 |
| 5 Nickel..... | | 6.62 |
| 6 Silver..... | | 4.31 |
| 7 Lead..... | | 3.17 |
| 8 Pig iron (from Canadian ore)..... | | 1.75 |
| 9 Asbestos..... | | 1.71 |
| 10 Petroleum..... | | 1.37 |
| 11 Iron ore (export)..... | | 1.10 |
| 12 Cement..... | | 0.91 |
| 13 Gypsum..... | | 0.49 |

The figures tabulated below, give the growth of the various industries for 1901 as compared with 1900:

| Product. | Quantity. | | Value. | |
|--|-----------|-----------|-----------|-----------|
| | Increase. | Decrease. | Increase. | Decrease. |
| Metallic— | | | | |
| Copper..... | 116.25 | ..... | 115.27 | ..... |
| Gold..... | ..... | ..... | ..... | ..... |
| Pig iron (from Canadian ore only)..... | 134.83 | ..... | 107.85 | ..... |
| Pig iron (from both home and imported ores)..... | 184.11 | ..... | 133.93 | ..... |
| Lead..... | ..... | 19.65 | ..... | 20.31 |
| Nickel..... | 29.78 | ..... | 38.07 | ..... |
| Silver..... | 13.65 | ..... | 9.24 | ..... |
| Non-metallic— | | | | |
| Asbestos..... | 30.67 | ..... | 58.52 | ..... |
| Coal..... | 10.30 | ..... | 10.39 | ..... |
| Coke..... | 37.77 | ..... | 94.77 | ..... |
| Cement..... | 29.82 | ..... | ..... | 2.44 |
| Gypsum..... | 16.54 | ..... | 31.33 | ..... |
| Petroleum..... | ..... | 17.17 | ..... | 17.17 |

In *Gold*, according to the figures kindly furnished by the United States mints of purchases of gold from the

Canadian Yukon, there was a considerable falling off of over 12 per cent. this year's yield being less by \$4,275,000. This was partly offset, however, by an increase of almost \$1,000,000 in the output of British Columbia gold. In the other provinces there were no considerable changes.

In *Silver*, whilst the proportional increase in quantity is fair, there is less to record for the value, on account of the lower prices.

In *Lead* the decrease is to be attributed to the difficulties encountered by the operators of the British Columbia mines, which produced all but a very small quantity of the output. Not only were the prices for the year lower, but the industry was seriously crippled by the difficulties encountered in profitably marketing the ores with the smelters in the United States.

Copper.—Commencing as they did in the latter part of December, 1901, the low prices for this metal hardly affected the figures of production. The output showed a very large increase over that of 1900. In the Sudbury district of Ontario, the amount of the copper contained in the shipments of matte was greater by over 25 per cent. British Columbia produced over three times the amount credited to it during last year, due chiefly to the large output of the mines of the Boundary Creek district.

Nickel.—An increase of nearly 30 per cent. in production is recorded. The price of nickel, which, from 1895 to 1898, ranged from 33 to 36 cents per lb. was quoted in the New York market throughout the year 1901, at from 50 to 60 cents per lb. The better prices and increased demand has stimulated production at the Sudbury mines. The output in 1901 was 4,595 tons of nickel as compared with 2,872 tons in 1899 and 1,998 tons in 1897.

Iron ore.—Owing to the exploitation of the large deposit of ore of the Helen mine at Michipicoten, in Ontario, a considerable growth is evident in the country's production of this mineral. Part of the product goes to furnaces in Ontario, but the larger part is exported. Only the exports are credited in the table under this heading, the rest appearing under the item 'pig iron.' Adding to the exports the 156,613 tons of Canadian ore, etc., charged to Canadian furnaces, we arrive at a total production of 462,812 tons. In the returns of ore charged, however, a small proportion of mill cinder is included.

Pig Iron.—In the production of pig iron in Canadian furnaces an increase of over 184 per cent. in quantity is recorded, while the estimated production from Canadian ore alone increased nearly 135 per cent. These increases are due in a large measure to the successful completion and operation of the furnaces of the Dominion Iron and Steel Company at Sydney, N.S. The Midland furnace of the Canada Iron Furnace Co. is also to be credited with a considerable portion of the increase, since they only commenced operations in the latter part of 1900. The various other furnaces continued operations on about the same scale.

Steel.—For obvious reasons the value of the steel product is not included in the general table. There was made, however, in steel furnaces in Canada during the year, 41,948 tons (of 2,000 lbs.) of steel ingots, etc., all of which was worked up into bars, etc. Work was continued on the steel-rail plant at Sault Ste. Marie, and the manufacture of steel is said to have commenced during the present year (1902).

Cement.—The figures of production for cement represent the sales and shipments only. A large amount, some 70,000 barrels remained in stock, however, at the close of the year.