

where he is drawn to the surface, and conveyed to the hospital or to his home. I do not recommend an injured person being conveyed on a springless tub to the shaft bottom in any case, let alone a case of internal injury.

If possible, I should see him placed in the ambulance car and accompany him to his home, see that he was carried upstairs head first, with stretcher nearly horizontal, lift him off stretcher in same manner as he was placed on, and lift him over foot of bed into it. Remove all clothes by cutting from him, adjust clean linen, and gently withdraw blanket pending the arrival of the doctor. A contingency to be carefully guarded against during the whole of these operations is that of the collier's collapse from shock, and his condition must be carefully watched, and every precaution taken to guard against it. On no account allow his temperature to fall, as this would soon have a fatal tendency. After I had done this I should consider that I had taken the best means to save his life.

MINERAL PRODUCTION OF CANADA.

From the preliminary report of the Geo. Survey Department we learn that the mineral industry in Canada has in the aggregate more than held its own despite the large decreases in the prices of the metals. That this fall in the prices of the metals has been an important and serious question for the metal mining industries will be better realized when it is stated, that had the metals, copper, silver, lead and nickel maintained as high average prices in 1908 as in 1907, their total production in Canada in 1908 would have been worth over \$8,000,000 dollars more to the producers than was actually the case.

The outstanding feature of the mining industry during the year has undoubtedly been the silver production, a total increase of over 72 per cent. being shown in the number of ounces produced. The metals copper and gold also show important increases in quantity produced, whilst iron, lead and nickel were produced in slightly smaller quantity than in 1907.

In the non-metallic class, decreases in gypsum and petroleum are more than counterbalanced by increases in coal, asbestos, natural gas, salt, etc. The Portland cement industry shows a small increase in sales and a large increase in quantity of cement made with large stocks on hand at the close of the year.

For the first time in nine years the gold output shows an increase over the previous year. The Yukon output in 1908 is estimated at about \$3,600,000 as compared with \$3,150,000 in 1907 while a considerably increased production is also shown in the province of British Columbia, derived chiefly from the Trail Creek ores, the placer workings having shown a smaller output. In Nova Scotia the output in 1907 was \$282,686. Complete returns are not yet available for 1908, but the output was probably not over \$225,000. Of the total gold output in 1908, over 44 per cent. was obtained from placer and hydraulic workings and 56 per cent. from sulphuret and quartzite ores.

The estimated silver production of Canada in 1908 was 22,470,212 ounces, shipped as fine bars, silver bullion, and obtained in matte, ore, etc., as compared with 12,779,799 ounces produced in 1907, an increase of over 72 per cent. Owing, however, to the much lower price received in 1908, the total value shows an increase of only 40 per cent. Over 87 per cent. of the output was obtained from Ontario, and the increase is all to be credited to this province, since there was a slight falling

off in the silver output of British Columbia. The price of refined silver varied between a maximum of 57 cents on the 8th. January and a minimum of 47½ cents on the 2nd. of December, the average monthly price being 52.864 cents per ounce, as compared with 65.327 cents in 1907. The output from the Cobalt district in the province of Ontario again shows a very large increase over the previous year, nearly twice as much silver having been produced. Returns from 29 shipping mines show the ore and concentrates shipped, as approximately 25,497 tons, containing 19,296,430 ounces of silver as compared with 14,644 tons containing 9,082,363 ounces in 1907. Valued at the average price of refined silver for the year, the production in 1908 would be worth \$10,200,865, and it represents an average return of 736 ounces of silver or \$400 per ton of ore shipped as compared with an average return of 681 ounces of silver or \$445 per ton of ore shipped in 1907. If the output of this district continues to increase at the present rate, Canada will in the immediate future, become one of the chief silver producing countries of the world. The total silver production of the world in 1907 was approximately 193 million ounces, the chief contributing countries being, Mexico 65 million ounces, United States 59 million ounces, Australia 17 million ounces, Canada nearly 13 million ounces, Germany 12 million ounces. With an output of 22 million ounces in 1908 Canada probably moves up to third place, but still does not produce more than from 10 to 12 per cent. of the world's output.

Statistics of copper production in 1908 show a total output of 64,361,636 lbs., an increase of over 900,000 lbs. in the copper from the Sudbury mines, while preliminary statistics of production in British Columbia appear to show a very important increase in production in that province of over 7,000,000 pounds.

The New York price of electrolytic copper varied but slightly during the year the lowest being 12 cents in February and the highest 14½ cents in December, the average for the year being 13.208 cents. The total exports of copper in ore, matte and blister, being, according to Customs Department returns 25,568 tons.

All the lead production shown in the general table viz.: 45,725,886 pounds valued at \$1,920,487 was obtained in the province of British Columbia. The production in 1907 was 47,738,703 pounds valued at \$2,542,086, a decrease in quantity being therefore shown of about 4 per cent.

The total amount paid as bounty on lead production was, during the twelve months \$139,064.57. The exports of lead in ore, etc., during the year were 2,256 tons, and of pig lead 6,971 tons or a total of 9,227 tons.

The price of lead in New York during the year varied between 3.60 and 4.60 cents averaging about 4.2 cents per pound.

With the exception of the nickel contained in the ores shipped from the Cobalt district, the production of nickel in Canada is derived entirely from the well known nickel-copper deposits of the Sudbury district. Previous to 1906 the output had been increasing steadily for a number of years. During the past three years, however, the production has not varied very greatly. About 815 tons less matte was shipped in 1908 than in 1907. The nickel contents were also somewhat lower in 1908, averaging about 45.1 per cent. as compared with 48.1 per cent. in 1907. On the other hand the copper contents were higher in 1908. Two companies are carrying on active operations: The Mond Nickel Co., at Victoria Mines, and the Canadian Copper Co., at Copper Cliff. The ore is first roasted and then smelted to a Bessemer matte containing from 77 to 80 per cent. of the combined

(Continued on Page 18)