

copper, 39,500,000 pounds, \$4,890,100; zinc, 2,600,000 pounds, \$127,400; coal, 2,435,000 long tons, \$8,522,500; coke, 77,500 tons, \$465,000; building materials, etc., \$2,000,000. The proportion of metalliferous minerals is \$12,224,316, of coal and coke \$8,987,500, and of miscellaneous \$2,000,000. The decrease in value of production is attributable chiefly to the strike of the coal-mine employees in the Crow's Nest district, which involved non-production of coal and coke from Crow's Nest collieries in the province over a period of practically eight months, and, too, seriously interfered with the production of metals from Boundary district mines.

**Quesnel.**—It has been ascertained that the water system of the Quesnelle Hydraulic Gold Mining Company, the construction of which was sufficiently advanced to allow of a commencement to hydraulic gold-bearing gravel being made last August, has been found in operation to be most effective for the purpose for which it was designed and established. There was practically no interruption from the time operations were commenced until the cold weather of the approaching winter season necessitated the close-down customary in Cariboo district until the return of weather conditions suitable for hydraulicking.

Necessarily a large amount of preliminary washing had to be done in order to get the pits open, so that the work for some time could not be expected to result in the saving of nearly as much gold as when everything shall have been placed in such condition as will admit of practically all the work being productive. It has not yet been made public what quantity of gold was recovered last season, the information having to be first reported to the directors of the company, which has its headquarters in Philadelphia, Pennsylvania.

Minor defects were developed in the paving of the sluices, but as from the first it had been intended to eventually substitute steel plates for the diorite boulders put in with the idea that these could be made use of until the opening of the Grand Trunk Pacific Railway would lessen the present high cost of getting in heavy materials, the necessity for this change had been foreseen. However, it has been decided that it will be to the greater ultimate advantage of the company, owing to the excessive wear on the diorite lining of the sluice, to at once put in steel at the lower end of the sluice as a tail-race. The plates, which are now in course of transit to the mine, are made of high carbon steel from 0.80 to 1.20 per cent. carbon; they are half-inch plated, 58 inches square. The physical test to which they were subjected before being shipped from the manufactory showed that, although they are extremely hard, they have not the usual brittleness of such high carbon steel.

These steel plates will be placed in the tail-race two inches apart and will be so arranged that each will be half-an-inch lower than the one preceding it. This method of arrangement will have the effect of reducing to a minimum the wear on the upper part of each plate, and it is expected that the maintenance charge will be lower and that the use of these plates will admit of the property being worked with fewer men than under former conditions.

The head of the sluice will be provided with 40-pound manganese rails, placed transversely, which will act as a gold-saver. Manganese rails have been selected for the reason that they afford great resistance to abrasion, and the life of such rails in the sluice had already been determined to be many times that of the ordinary steel rail, which will last only a few months under conditions such as prevail in the sluice of this company at its mines in Quesnel mining division.

While, as already stated, the quantity of gold saved last season has not yet been made public, the fact that the company has gone to the heavy expense of putting in the steel

equipment above mentioned would appear to indicate that the management has full confidence that results will be profitable from washing the two and a half million cubic yards of gravel it is estimated will be moved next season.

**Slocan.**—The Spokesman-Review, of Spokane, Washington, included the following information relative to the Rambler-Cariboo mine, in Slocan district, in the mining news printed in its issue of January 13th: "Mr. A. F. McLaine, president of the Rambler-Cariboo Mines, Limited, yesterday stated that he had just received a delayed report from Mr. W. E. Zwicky, of Kaslo, the company's manager. During the two or three weeks the report covered, the drift on the 1200-foot level had continued to show a good body of shipping ore, while the other workings in the mine revealed no material change in conditions. The orebody had not yet been reached on the 1400-foot level. The heavy snowfall of the previous week had completely blocked the sleigh road to Three Forks, over which the ore has to be hauled to the railway for shipment to the smelter. All the men from the mine had been employed for two days in clearing the snow off the road, so as to admit of the shipment of ore being continued." To the Spokesman-Review's news may be added the information that in November 117 tons and in December 151 tons of Rambler-Cariboo ore was received at the Trail smelter, making the total quantity from that mine received in 1911, 1801 tons.

**Trail.**—The figures showing quantity of ore treated at the smelter at Trail of the Consolidated Mining and Smelting Company of Canada, Limited, during the calendar year 1911, together with the gross value of the metals recovered therefrom, are as follows: Tons of ore and concentrate treated, 330,668 (of which 324,431 tons was from British Columbia mines and 6,237 from the United States). Gross value of metals recovered: Gold, \$2,754,189; silver, \$773,906; lead, \$834,644; copper, \$522,774; total, \$4,885,513. The proportion of gold was 56.4 per cent. of the whole value. The report for the month of December gave this information: "During December the Consolidated Company received 22,622 tons of ore and smelted 24,512 tons. The value of the month's production was \$313,320, of which 38 per cent. was gold; the value of six months' production was \$2,477,112, of which 58 per cent. was gold."

**Gold at Hedley.**—The Hedley Gazette, in a review, printed a short time ago, stated that the new policy inaugurated by the present owners of the Nickel Plate group of mines, situated in Hedley camp, Similkameen, of keeping development work ahead, is being rigidly pursued, and the year 1911 saw much more done than had been for years previously. Continuing, The Gazette mentioned that one of the important works done by the company last year, in addition to the development above referred to, was the excavation of 7,000 feet of ditch, for the purpose of adding to the water supply stored for use as required. The result of the year's development underground in discovering and blocking out new ore bodies, although not yet made public, is known to be very satisfactory. A comparatively large reserve of ore broken down is maintained in the mines. The Gazette closed its instructive and interesting review with complimentary mention of the management, thus: "Altogether the year has been one which must prove gratifying to the resident general manager, Mr. G. P. Jones, under whose careful supervision the results have been obtained, and to the president of the Hedley Gold Mining Company, Mr. I. L. Merrill, of Los Angeles and New York, who has given the mines and works his special attention."

**About Princeton.**—The prospecting of the Voight group of mineral claims, on Copper Mountain, near Princeton, by the British Columbia Copper Company, which is doing development work under a bond and option of purchase, gives much encouragement to those interested in metalliferous mining in this