

THE MINING RECORD.

COMPANY MEETINGS AND REPORTS.

LE ROI.

THE following is the report of the General Manager, Mr. Mackenzie, as presented to the shareholders at the annual meeting recently held in London:—

Middle Vein.—This is the main vein, and upon it is located both the old and the new shafts, the latter being the main working shaft through which all mining operations are carried on, the North and South veins being reached by cross-cuts. The Combination Shaft has reached a depth of 1,284½ feet, and extensive exploration work is being carried on in the 9th, 1,050 and 12th levels. As the work on the latter level has only just begun it is impossible to predict whether or not valuable discoveries of ore will be made at this point. On the 1,050 level, at about 125 feet east from the main shaft, a body of ore of fair shipping grade has been developed, the shoot being 62 feet long, with an average width of 10 feet. Between the 9th and 1,050 levels, west of the main shaft, a body of high-grade ore is being opened up by a winze from the 900. This winze is down 75 feet below the 900, and is in ore the whole distance which will average \$18 per ton. By judicious exploration work above the 7th level, I believe a considerable tonnage of high-grade ore can be developed between, and adjoining, the stopes now being worked. In the haste to attain depth and explore the lower levels much virgin territory has been left between the Tregear shoot on the extreme western limits of the known ore body and the Miller shoot which adjoins the Centre Star mine on the eastern boundary.

South Vein.—This has been developed by cross-cuts at the 5th and 7th levels, and a large tonnage of ore is blocked out that will realize a profit when operating expenses are reduced to \$9 per ton, or the value of copper rises to 15 cents per pound. A raise on this vein from the 7th to the 5th level proves that the ore body is continuous between them, and contains average values of \$8 per ton—proper sorting will bring the shipping grade up to \$10 per ton.

North Vein.—The outcrop of this vein at the western end is very promising, and should be further prospected to determine its value. Although it is small it carries high values in gold and copper. The vein is intersected by cross-cuts on the 4th, 7th and 9th levels, but no exploration work has been done under where the outcrop is most promising.

Ore Reserves.

Mr. R. J. Frecheville, M.E., in his report to the Directors and Shareholders of your company, dated December 4th, 1901, estimated the ore reserves of shipping grade at that time as 483 tons, valued at \$11.75—the basis of values being: Gold at \$20 per ounce, silver 60 cents per ounce, and copper 16 1-2 cents per pound. The present prices of these metals are: Gold \$20 per ounce, silver 53 cents per ounce, and copper 11 1-2 cents per pound, which reduces the value of these reserves to \$10.37 per ton. From the date of Mr. Frecheville's report an additional tonnage, amounting to 93,121, of an average value of \$10.26, has been developed. The extraction during the same period was 129,635 1-2 tons, containing gross values of \$1,517,064.66, equal to \$11.70 per ton. By making due allowance for the fact that the grade of ore extracted was higher than the average of the mine, I estimate the reserves at the close of the fiscal year at 447,358 tons of an average of \$9.96 based on the present values of metals.

Ore Production, Etc.

The ore mined and shipped to Northport during the year amounted to 155,765.407 dry tons, its metal values averaging: Gold .373 ounces, silver .709 ounces and copper 1.526 per cent. per ton. The gross value of this ore was \$1,821,773.05, equal to \$11.695 per ton. The location and area of the ore extracted is shown by heavy black contour lines on the vertical projection of the working which accompanies this report.

The mining operations embrace only a period of 263 days, as during the months of July, August and September prac-

tically no work was carried on owing to the strike existing at your mine and smelter.

There were shipped to the smelters at Trail and Northport, during the year, 14,333.101 dry tons of second-class dump ore, which contained average metal values of: Gold .377 oz., silver .485 oz., and copper .827 per cent. per ton. The gross value amounted to \$147,517.36, equal to 10.29 per ton.

Assuming that the average value of the ore mined during the year was \$11.695 per ton, and deducting the operating expenses for the same period, \$10.652 per ton, a profit of \$1.043 is shown to have been made on the first-class ore, equal to \$162,460.00. The gross value of the second-class dump ore treated during the year was \$10.29 per ton, the total expenses incurred in connection with same was \$5.35 per ton, leaving a profit of \$4.94 per ton, equal to \$70,830.00. The total profits, therefore, amounted to \$233,290.00.

Working Costs.

Messrs. Price, Waterhouse & Co., your auditors, in their report, gave our total operating expenses, which embraced mining, freighting of ore, smelting and realization of matte values, for the year ending June 30th, 1901, as \$10.724 per ton. Apparently, they failed to make any allowance for the regular metal losses in slag, as is shown by the subjoined table, which gives the comparative costs under this head for the years 1901 and 1902:—

	Per Ton. 1901	Per Ton. 1902
Stopping and loading on railroad	\$3.487	\$3.100
Exploration	.423	.451
Depreciation:—		
Mine equipment	.080	.138
Surface improvements	.050	.061
Mine machinery	.106	.125
Freight on ore to smelter	.510	.400
Smelter expense	4.405	4.205
Depreciation of smelter plant	.232	.110
Interest and discount on ore in yards and		
matte in transit	.229	.233
Freight on matter to refiners	.536	.404
Sacking and crushing matte	.044	.043
Eastern representation, assaying, etc. . . .	.028	.013
Refiners' tolls and deductions	.534	.579
Metal losses in smelting		.781
	<u>\$10.724</u>	<u>\$10.652</u>

Although nearly \$53,000 of the exploration costs carried forward in Capital Account from the years 1900 and 1901, have been charged to the present year's cost, and an extremely liberal allowance made for the depreciation of the development performed in 1902, the cost of mining and smelting was reduced 74 cents per ton, in spite of the fact that the tonnage mined was nearly one-fourth less than that treated during the previous year. The metal losses in slag, however, which were not taken into consideration in that period, more than offsets this saving.

The working costs of the year do not provide a correct index of what can be done in the future, as I believe that under reasonably favourable conditions the costs can be cut down to \$9 per ton. We have been heavily handicapped by labour troubles, besides high freight rates and fuel costs, which I have every reason to believe will be reduced in the near future.

Review of Mine Expenditure.

During the year the gross expenditures for operating and equipping the mine amounted to \$503,896.93.

The amount expended on Revenue Account segregated as below was	\$487,000 77
Stopping ore from mine	\$482,500 60
Loading second-class ore	4,500 17