

reason the Boundary smelters can successfully compete for the treatment of Rossland custom ores, notwithstanding that they are handicapped by the higher freight charges of the much longer railway haul, is that these ores contain certain constituents that the Boundary ores do not possess in sufficient quantity, so that the loss in transportation charges is offset by the more effective and economical smelting of the much larger tonnage of local ores, made practicable by the admixture of a small proportion of Rossland ores. It is probable that ere long the tables will in some measure be turned; in fact it has already been announced that when the Great Northern Company's railway system shall be extended to Boundary mines the Northport smelter will obtain Boundary ores, the large percentage of lime and silica in which would assist in the more economical smelting of Rossland ores. The Le Roi Company has been notified that the Great Northern Railway Company, which already has a railway running through Grand Forks, expects to commence the construction of a branch thence to Phoenix as soon as the snow goes off the ground this Spring, so that we may expect to see after this year, in both the Rossland and Boundary mining camps, competition between railway and smelting companies that should tend towards a further reduction in transportation and smelting charges, to the advantage of companies mining the immense bodies of low-grade ore characteristic of the Boundary district, and, in smaller degree, to the smelting companies as well.

The annual report of Mr. A. H. Gracey, manager of The Athabasca-Venus, Ltd., operating the Athabasca and Venus gold mines, stamp mill and cyanide plant, situate on Morning Mountain, near Nelson, is published elsewhere in this issue. This report shows the good results that have followed careful and economical management by a competent mine manager. Mr. Gracey's policy has been a progressive one. His experiments have enabled him to considerably raise the percentage of extraction of values from the ore, so that during the last seven months of the period under review the recovery averaged 93.3 per cent. of the total values. Milling costs were reduced from \$1.32 per ton to 81 cents, and cyaniding costs from 85 cents to 80 cents per ton of ore milled. With certain development work kept well ahead of stoving it is estimated that mining costs could be reduced to \$3.85 per ton and that after adding the costs of tramming, milling and cyaniding, management and general expenses, the total cost would be \$5.80 per ton of ore from the Venus mine. The average returns obtained during the last six months of the year showed a recovered value of \$9.55 per ton, so that with ore of similar general grade an average profit of \$3.75 could be looked for. From the ore of the Athabasca mine, which is of a generally higher average grade, more than twice as much profit per ton should be made. It is therefore to be hoped that the directors will see their way clear to authorize the doing of the additional development work requisite to the attainment of these indicated

better results. In any case it has been demonstrated that these mines can be worked at a profit, which is important to the shareholders directly concerned, and to the Nelson district indirectly.

At the annual meeting of the Canadian Mining Institute, held last month in Toronto, the president read a paper on "Some Suggested Improvements in the Mining Laws in Canada." He pointed out that there is an enormous area of Crown-granted mineral lands in Canada lying idle, thereby retarding the development of the mineral resources of the country. He favoured the imposition of assessment work to the value of \$5 per acre per annum, with immediate forfeiture to the Crown in case of non-compliance. He pointed out that only about one-half of one per cent. of the mineral lands Crown-granted in Ontario during the past six years were being worked. He did not give the figures relative to British Columbia, in which province about 4,600 Crown-grants for mineral claims have been issued during eight years, 1896-1903. The percentage of Crown-granted claims being worked in this province whilst so insignificant as to be a serious detriment to the development of its mineral resources, is certainly not so small as that stated to be the case in Ontario. Whilst the tying-up of mineral lands by Crown-granting without adequate provisions for work or heavy taxation, is a growing evil, and one calling for effective measures to remedy it, what a howl there would have been made had the president at the recent Convention of the Provincial Mining Association, or for that matter the Provincial Government, at a session of the local Legislature, advocated an assessment of \$5 an acre, whilst to suggest immediate forfeiture as a penalty for non-compliance, would have called down condemnation on all hands. Yet there are British countries where such requirements in connection with gold mining lands are met without a murmur and as a matter of course.

In a report of the annual meeting of the Rossland Board of Trade published in a local newspaper, it is stated that the report of the retiring president "concluded with a statement of the ore production of the Rossland camp since 1893, and for 1903. His deduction from the figures submitted in this statement and by the Associated Boards' leaflet on the subject of mineral production was that in 1903 the Rossland camp produced about 46 per cent. of the entire mineral wealth mined in British Columbia." If Mr. A. H. McNeill, the retiring president, was correctly reported, either his source of information or his deduction was unreliable. Assuming that the percentage claimed was intended to be in value, not in tonnage (for in tonnage the Trail Creek Mining Division did not contribute more than one-third of the total output of metallic minerals, leaving out consideration the much larger tonnage of non-metallic minerals), we think that when the official figures shall appear it will be found that the Trail Creek Mining Division, which includes the Rossland camp, did not contribute more