

and treated in the Boundary district will, during 1902, aggregate not less than 800,000 tons, whilst it is not unreasonable, should no contingency unforeseen arise to check progress at the present rate, to estimate that the total may reach the 1,000,000 tons mark. With such figures, which no one familiar with the situation in the Boundary is likely to successfully challenge, to suggest the increasing development of the mineral resources of the Province—and it must be kept in mind that these relate to only three of the numerous Boundary mining properties, and leave altogether out of consideration the Snowshoe, Brooklyn and Stemwinder group, and half a dozen other properties in the district that can easily be made to appreciably increase the total output—why should we heed the croakings of the pessimist? And if one comparatively small section of the mineral bearing area of the Province is developing so rapidly and extensively, what is there to prevent a dozen other sections of it from adding proportionately to the value of our mineral output should similar confidence induce capital to exhibit a corresponding spirit of enterprise?

IMPORTANT DISCOVERIES OF ORE AT ROSSLAND.

THE recent discovery of a large body of high-grade ore on the Le Roi No. 2, west of what is known as the big fault, must be very encouraging to all those who are interested in the progress and prosperity of the Rossland district. The Le Roi No. 2 covers the Josie, No. 1 and West Le Roi and Josie. It has been mainly dependent on an ore chute of which the outcrop is on the No. 1 ground and which is presumably an extension of the War Eagle vein. Although numerous bunches and deposits of ore belonging apparently to the Le Roi vein system, have been found and worked on the Le Roi No. 2 ground, there have been no developments there at all comparable to those which have made the Le Roi itself and the Centre Star such famous mines, until this discovery made recently. Those familiar with the topography of Red mountain, know that west of the Le Roi boundary line, the mountain sinks rapidly in the direction of the hog back between Trail and Sheep creeks, and that there is a sufficient surface disturbance to render prospecting for the extension of the Le Roi vein system an impossibility upon the surface and a work of difficulty at depth. That difficulty appears to have been overcome and ore in a large solid body definitely located. This means a great extension of the productive area of the Rossland camp and leads to the reasonable expectation that the ore zone has a horizontal expansion much greater than that foreshadowed by mere surface indications. The experience through which Rossland is passing at the present time has been common to most other great mining camps. Those which have begun with a large number of high-grade surface croppings have not been always those of the widest eventually productive area. There was not much said at the annual meeting of the Le Roi No. 2

company of an encouraging nature to its shareholders. But this recent discovery must have relieved their doubts and improved their prospects very materially.

ECONOMIC MINING IN BOUNDARY DISTRICT.

THE paper entitled "A Method of Mining Low-grade Ores in the Boundary Creek District, of British Columbia," prepared by Mr. Frederic Keffer, M. E., of Anaconda, B. C., and read at the recent annual meeting of the Canadian Mining Institute, serves as an effective reminder that the two mining and smelting companies that are operating on a comparatively large scale in the Boundary district, are doing the mining industry valuable service in demonstrating that the low-grade ores prevalent in that district can be mined and their values extracted at a cost leaving a margin of profit, albeit that profit with copper at its present price can only be a small one. When Mr. Keffer, who is general manager for the British Columbia Copper Co., owning the Mother Lode mine in Deadwood camp, and the smelter at Greenwood, commenced in 1896 to open up the Mother Lode there was not on that claim a prospect shaft 25 feet in depth nor a tunnel of that length. Now the extent of work done in underground development of that mine aggregates about 6,000 lineal feet, besides which a quarry has been opened from which, to date, between 60,000 and 70,000 tons of ore have been taken out, this being supplementary to the output from the extensive underground stopes of the mine. Mr. Keffer's Boundary experience, therefore, extending as it has done over nearly half a dozen years and embracing the transformation under his management of a mere prospect into a mine, which last year sent to the smelter about 100,000 tons of ore and which, by the time this comment shall be published, will be maintaining a daily average output of at least 800 tons, is both fairly lengthy and eminently practical; consequently his conclusions carry much more weight than they would do were they based simply on theoretical deductions. Mr. Keffer describes the methods of mining that experience has proved to be best adapted to the economical working of the Mother Lode mine, and states the reasons that led to their adoption. The "pillar and stope" system that was eventually adopted in the mine can only be followed to advantage where, as here, the ore bodies are large. Its use in this instance is, however, an object lesson that will doubtless prove instructive to some of the numerous visitors to the mine, and what is of more importance to the district generally, and to the owning company particularly, be an important factor in solving the question of how best to profitably work the low-grade ores occurring there. In thus giving prominence to the work, the Mother Lode mine is doing, no invidious comparison is intended to be made with that of the Granby Company's mines in the same district, which are, as well, mining at a low cost, though their extensive underground op-