

his purse for investment in mines. And as British Columbia doubtless contains many undiscovered and undeveloped Le Roi his good opinion is of vital importance to the country. From this point of view, as well as from that of the more direct advantage of the communities in which these mines are situated, the rehabilitation of British Columbia in the minds of investors is a consummation devoutly to be wished. The indications so far are very good. The development of the Centre Star and its economical equipments are now almost completed. Extensive improvements are being carried on at the Trail smelter which indicate that a large supply of copper ore is expected there in the near future. Ore is now being delivered to the Granby smelter at Grand Forks from the Phoenix mines and a rate has been quoted by that smelter for custom ore which should render the profitable mining of the Knob Hill and Ironsides ores probable. The great record also made by the Le Roi mine should do much to re-establish confidence. The Le Roi mine now exports £45,000 worth of gold, silver and copper every month, an output greatly in excess of that of the Alaska-Treadwell, which has long been a household word as one of the great mines of the North American continent. It is evident that this production does not require to be increased but only steadily maintained to place the Le Roi in the very front rank of the world's gold mines. During this year of great production British Columbia has suffered from the untoward disturbances in the industry which occurred last year. It is comforting to reflect that it is equally inevitable that we must eventually reap the benefit of the magnificent showing being made now.

Apropos of cheap smelting in Boundary Creek it is clear that the copper ores of this district are susceptible of treatment at a much lower cost than those of Rossland. There is more copper in them in the first place. The chief part of the values from a number of the Boundary properties is in copper. In addition to this there is enough lime in the ores to make them practically self-fluxing. There is a steady flow of lime rock from Kootenay Lake to the Trail smelter every day of the year for fluxing purposes. The cost of reducing the ore is thereby added to considerably. At the Northport smelter the supply of lime on the spot was not found adequate and lime has to be shipped to that point also. Another difficulty with the Rossland ores has always been lack of copper to collect the gold. Ore containing a high percentage of copper has always been in great demand both at these points and at Nelson. A Rossland mine-owner who had a chute of solid copper pyrites averaged about nine per cent. used to sell his ore to the smelter at great advantage and was in the habit of saying that the smelter charge was sprinkled with his ore out of a pepper pot. Actual experiment with the British Columbia ore at the Trail smelter has demonstrated the fact that nearly twice the amount of ore may be run through the furnace in the same time required to treat Trail Creek ore. The cost of fluxes is thus done away with to a large extent and the labour expense also diminished. It does not follow from this that the cost of smelting in the Boundary will be reduced below \$3.50 a ton. But it must be remembered that \$3.50 a ton is not the real cost of smelting copper ore. There is a deduction made of 1.3-10 per cent. of the copper in the ore which the smelter ap-

propriates to cover cost of shipping the matte to refineries, bullion brokerage and so forth. Why this charge, necessary and legitimate as it is, should be expressed in a percentage of the value in the ore and not reduced to dollars and cents is one of the hermetic mysteries of smelting. It may shrewdly be suspected that it originated in a device to cover from the miner's eyes the fact that he was paying more for the treatment of his ore than he justly ought. But however it originated the keen competition for copper ores has reduced it to a minimum.

The Americans are nothing if not a practical people, and perhaps to this quality is due in a large measure the flourishing condition of the mining industry in their country. The mining press of the States is equally notable for its eminent practicability, and we extract the following from the columns of our excellent contemporary, the *Mining Reporter*, of Denver, Colorado, as most fittingly illustrating this statement:

“TO EASTERN READERS.

“If you are contemplating an investment in mining in any part of the West, investigate along some of the following lines:

“Send for a copy of the local paper and give it careful study. If you observe that it contains a number of patent application advertisements, you may be assured that the mine owners think well enough of the region to secure a perfect title to their ground. If you observe in it the card of two or more deputy United States mineral surveyors, and of several assayers, you may safely conclude that the district is an active one, that the prospectors are interested, and that the professional men are making a fair living. If you find the advertisement of a sampling works, or of parties who buy ore, it is a sure proof that a number of the mines are producing with considerable regularity, and that some of them are making money. Or in the absence of this testimony, if a railroad has been built to the town, the same conclusion may safely be drawn. If the paper contains the advertisement of one or more banks, the prosperity of the place may be considered certain. It is then only necessary to ascertain whether it is what the miner calls a ‘One Mine Camp’ or otherwise. One mine camps are settlements around a mine which has proved to be pre-eminently profitable. In such places the mine generally owns the principal stores and the bank, is interested in all the public utilities such as water, light and telephone plants, and does not encourage the coming of outsiders; and outsiders will often do well to stay away from such districts, for the proper place to search for a bonanza, is at some little distance from one already discovered.

“Usually the local weekly publication will, to the careful observer, tell a plain story. If the signs mentioned are found, open correspondence with an assayer and surveyor, enclosing a cash fee of say \$10 in your letter, and ask their professional view on the locality. These people are generally gentlemen and men of honour. Often they are college graduates. Their opinions are worth having. After obtaining them, if the outlook is favourable, subscribe for the local paper and also for the weekly mining journal of the nearest large commercial centre. Study both carefully as they come along, and explore the advertising columns of the latter for the names and ad-