

transportation in their mines, and recently a step in a similar direction was taken by the management of a Boundary district copper mine. That others will ere long find it more profitable to do likewise is a foregone conclusion. Our thanks are hereby accorded to *The Engineering Magazine*, New York, for kind permission, readily given, to reproduce the information contained in the article under notice, and for the loan of three of the blocks used in illustrating it.

It is claimed that the ores of Republic camp, Washington, can be successfully treated by grinding them to 60 and 70 mesh, after which careful concentration will produce one ton of concentrates from 35 to 36 tons of ore, this one ton of concentrates carrying from 60 to 66 per cent of the value. By carefully classifying, 90 per cent of the tailings from the concentration can be cyanided by percolation with a very dilute cyanide solution operating through a long time; 70 to 86 per cent of the gold remaining in the sands after concentration can be extracted. The slimes can be briquetted with the concentrates and make a product desirable to the smelter. The cost of such treatment, if carried out on a sufficiently large scale, can be brought within \$2.15 per ton of ore. While these experiments point to a possibly profitable method of ore treatment, enough work has not yet been done to carry out all the necessary details.

The Atlin-Juneau wagon road project is being persistently supported by the Atlin district board of trade and by the district mining and commercial interests generally. The Juneau chamber of commerce also appears to be alive to the importance of establishing road communication between the mining camps of Atlin and Juneau, and recently it sent a delegate to Atlin to there interview the local board of trade and inform its members what the people of Juneau are prepared to do towards constructing the American end of the road; also to ascertain what action the Atlin people were taking in this matter. On being informed that it was intended to have a survey of the route made as soon as possible, the member for the district having stated that he had secured from the government an appropriation for this purpose, the visiting delegate gave positive assurance that the citizens of Juneau were ready to build their end of the road as soon as they were satisfied that the Atlin people will carry out their part of the undertaking.

To remedy what was regarded as leaving an opening for an improper use of opportunity to secure lands or mineral claims that had been forfeited to the Crown, the Hon. R. G. Tatlow last month, when amendments to the *Assessment Act* were being considered by the local legislature, obtained the following addition to section 70:

"147b. To strike out of section 147 all the words of said section after the word 'sale,' on the fifteenth line thereof, and to substitute therefor the following words:—

"The Chief Commissioner of Lands and Works is

hereby authorized and empowered to dispose of all lands and mineral claims which have been forfeited to the Crown under the provisions of this Act to any person at a price not less than the price of similar lands under the '*Land Act*,' and on such terms and conditions as he may consider right in the interest of the Province, and according to the descriptions in the original Crown grants thereof, and subject to the reservations contained therein, and such lands shall at no time be open for pre-emption under the '*Land Act*,' or for location under the '*Mineral Act*' or '*Placer Mining Act*.'"

Important additions are being made to the plant and machinery at the Granby Consolidated M. S. & P. Company's smelting works at Grand Forks, Boundary district. Electric furnace feeders have taken the place of the mechanical feeders previously in use, with results that, while proving thoroughly effective from a metallurgical point of view, make for economy to an extent hardly credible were it not authoritatively vouched for. With the works running at their full capacity, the saving is at the rate of about \$80,000 per annum, the services of fully 80 men being dispensed with. Two new blast furnaces, of larger treatment capacity than any of the six already in use, are to be installed; a new compressor engine, having a capacity one and a half times greater than that of the engine now operating the converter plant, and admitting of the running of three converters at one time instead of only one, as at present; and additional electric power plant, are included in the extensions arranged for at this up-to-date establishment.

So many mis-statements concerning the condition of the plant of the Hall Mining & Smelting Company's smelter at Nelson have been made of late that we have pleasure in publishing in this number of the *MINING RECORD* some particulars of these works. It will be observed that the furnaces were originally designed so as to admit of their being adapted for lead-smelting whenever such change should be found necessary, the contingency of a possible failure of the local supply of copper ore having been kept in view by the metallurgist who built and equipped the smelter. It is evident that many improvements have been effected and additions of modern facilities made, so that the works may fairly be regarded as suited to the present requirements of the district from which supplies of ore for reduction are drawn. As conditions shall warrant further betterments they will doubtless be made so as to keep pace, as far as shall be practicable, with the improved metallurgical practice characteristic of these progressive times.

With characteristic energy the Crow's Nest Pass Coal Company, Ltd., has made arrangements to replace the trestle and tipples destroyed by fire at its Coal creek colliery, near Fernie, on March 11, ulto. The new structure to be built across the valley to connect the several working mines at Coal creek with the tipples will be of steel, and it will be equipped