

There are also, however, already known in Cariboo District well defined and wide veins, which appear to occupy true fissures; and, doubtless, there will be found in abundance metaliferous veins of every other variety known to miners, in so rich and extensive a district. Cariboo, in fact, has reached that stage (well remembered in California and Colorado) at which people without experience or means are found propounding to themselves the question, "Will quartz mining pay?" Its richer deposits and permanent veins are being segregated from the worthless by intelligent miners and prospectors. Obstacles heretofore sufficient to keep out the necessary capital and practical skill with which to handle quartz will not much longer be suffered by investors to retard the development of this promising district.

Permanent veins.

Discrimination.

The way out of the difficulty with quartz in Cariboo is by close attention to the details and economics of handling any given ore. The conditions must be met, usually with capital. The amount of capital necessary will be somewhat governed by the knowledge of details and skill possessed. Taking, for example, the sulphuret ores of the Burns Mountain, the Enterprise, and the Cariboo Companies, where separation, roasting and chlorination may be necessary, the costs of labour and material might readily be deduced from a working test made at Grass Valley, San Francisco, or Chicago. Applied to the conditions obtaining in Cariboo, the investor, once sure of his rock and of his process, can calculate in advance the quality and extent of his bonanza. Free milling ores are now worked profitably in California and Wyoming, at an assay value of \$3.50 per ton. The assay value per ton of a "bonanza" ledge must rise with the costs of material, labour, and process, to the proper relative figure. Even a \$60 ore (as at Austin, Nevada, not many years ago) may have to be thrown upon the dump as worthless.

Economics.

Several quartz mining and milling enterprises of Cariboo are worthy of note. Struggling under adverse circumstances for several years, toward the solution of the problem under consideration, were the Nason, the Beedy, the British Columbia and the Enterprise mills—the last two being valuable properties placed on the ground by capitalized milling and mining companies. Facilities for the reduction of free milling ores, more or less complete and available, belonging to these concerns, remain on the ground, at Barkerville, the Meadows, and at Van Winkle.

Showing vitality and a degree of persistent confidence significant by reason of the character of the stockholders, are the Burns Mountain and the Hixon Creek Mining Companies. These companies are composed mainly of resident and non-resident old Cariboo miners, who are now by avocation independent of mining, yet who have shown much enterprise in the development of their respective properties.

It is still, however, largely a matter of transportation and supplies. Freights from the coast averaged this season \$240 per ton—as much as they were fifteen years ago. With these conditions somewhat improved, and the necessary facts concerning the country and its resources made known on good authority, capital and skill will both speedily find a foothold in the district. Such, at least, is my firm conviction, based on the observations so far made.

There are engaged in actual mining in Cariboo District at the present time about 1,200 men, of whom four-fifths are Chinese. The total product of placer gold for the year 1885 amounted (according to Mr. Bowman's reported figures) to \$350,000. In former years (1875-76-77) those engaged in mining comprised sixty-five per cent. of the entire population in the diggings. The total population of the district closely connected with or dependent upon the mining industry may now be reckoned at more than double the mining population; or including Indians inhabiting the district in its wider sense, of which Quesnelle is the centre, at more than treble. Including the fur, stock and agricultural interests, it is presumed that the total wealth produced, from the plateau north of the railway, might be reckoned at about double the product of the mines.

Population and wealth produced.