

marked vein of the St. Elmo-Cliff-Monte Christo has produced several hundred tons of ore that averages about \$20, and a considerable tonnage of low grade ore that has an excess of iron over silica, such as is desired by some of the smelters; small quantities of good grade ore have come from other properties. To the north of the camp and in the South Belt, bodies of low grade ore have been exposed. There are large numbers of claims that have a considerable amount of work done on them. Many have proved to be of little worth. In other cases the result of the work, while not absolutely conclusive, has been discouraging. Some may have had ore that, while too low grade to be worked some time ago, would be payable today. It must, however, be remarked that the work done in a

extracted. Where geological conditions are dissimilar to those in the productive area, and where no pay ore is exposed on the surface or elsewhere in the vicinity, the possibilities of the presence of ore are meagre. Considerable stretches of the surface are drift-covered, and of these, if the area be considerable, little certain knowledge is to be had, for changes in the formations in this camp are too numerous and irregular to make interpolations thoroughly reliable.

Judging from the surrounding rocks, and from what few exposures are to be seen, the ground between the Annie, Le Roi, and Centre Star, and a line a little west of south from the Spitzee should, in certain portions at least, resemble closely, in its geology, the ore-producing ground, and might very well con-



Hauling Ore to Trail from Rossland Mines in the Early Days of the Camp.

surprisingly large number of cases has been of such a nature as to furnish little evidence regarding the value of the veins. In more than one instance it seems to have been a matter of unusual good fortune if the vein was touched once or twice in the whole extent of the workings. It is evident that the nature of the ore bodies, and the effects of dykes and faults were not understood when the earlier work in the camp was carried out.

From the remarks made concerning the occurrence of pay shoots in the productive ground, it follows that a vein or claim should not be condemned simply because a limited amount of prospect work has failed to reveal pay ore. Occasionally, a productive vein, or the productive part of a vein, has an insignificant outcrop, or none at all. Where, however, the ground is excessively dyked and broken by numerous fractures and faults into small blocks, it would seem to have little chance of containing ore shoots that can be profitably

tain important ore bodies.

The contact of the alkali-syenite (Pulaskite) at the Spitzee and at the Jumbo, is ore-bearing, and might be at other points as well. The South Belt, along the southern edge of the monzonite area, has a number of veins, from some of which good values have been reported. The only shipments of importance were from the Crown Point, near the southeastern edge of the monzonite area. This claim is reported to have had a good shoot of ore, until a fault was encountered, below which nothing has been found. It has shown, however, that at least at one point in this belt, shipping ore occurs. All but a very small fraction of the ore so far produced has come from an area covering scarcely 100 acres on the northwest corner of the monzonite area, which was the first ground staked on the Red Mountain. When it is remembered that many of the good ore shoots did not outcrop and that mineralisation is heavy over a very large area in the