vein at fifty feet below the surface. After having satisfied himself as to the character and richness of the vein he ceased development work until he shall be able to get in the machinery necessary to continue them effectively. Mr. Halstead states that he is not at liberty to make public just what the plans of future operations are on the part of those interested in the property. He wished to say,

the cheapest smelting ores, it would still be a greater paying proposition than refactory ores of average richness.

The Scramble mine is a notable instance of what has been done by, we are compelled to say, too few of the local men, in the way of actual development. There are a few men in the district—and certainly Mr. Halstead is one of them—to whom special credit



RAT PORTAGE IN THE WINTER OF 1880.

also, that certain statements had been published that were without authority. As far as the future is concerned, all Mr. Halstead was in a position to state was that he had no doubt that operations will be pushed in a thorough and practical manner as soon as the season will permit the necessary arrangements to be completed.

With regard to the capacity with which it is intended to start milling, Mr. Halstead cannot say definitely, but certainly not less than ten stamps will be put in at first, with provision for increase of capacity as soon as the mine is opened up sufficiently.

Mr. Halstead is associated in the matter of the Scramble mine with Mr. L. W. Partridge, director of the chamber of commerce, Detroit.

In comparing the district generally with others, Mr. Halstead said that the ores here are all free milling, whereas, the ores of a district sucn as the Kootenay are refractory. The difference is a notable one in favor of the local ores, and may be clearly shown by a few figures. While ores this district can in be treatfrom 60 at cents ed to \$1 ton. those of the Kootenay cost from \$8 to \$12 a ton for treatment. At Cripple Creek the difference is still greater, for there it costs from \$8 to \$20 a ton for treatment. This advantage in favor of free milling ores is thus so great that if such deposits of ore as the Scramble were to yield not more than half what it costs to treat

is due for their years of undaunted perseverance, and determination to demonstrate the mining wealth of this district. Although still a young man he is looked upon as one of the pioneers of the mining interests of the country. Unswerving faith in the capabilities of the district, and sincerity in his business undertakings seem to have characterized his actions. and whatever benefits may accrue to him from the "Scramble," or other interests that he may have here, will certainly be entirely due to the energy and strong tenacity of purpose with which he sticks to his enterprises.

## The Non-Such Gold Mine.

This mine is owned by Mr. O. Daunias, who is one of the pioneers of the district. It is about 18 miles from Rat Portage; and Mr. Daunias has worked at its development since last August. A shaft has been sunk about 60 feet or more. At 26 feet, a cross cut was made, but as water began to come in, it was abandoned, and another cross-cut was made at a depth of 60 feet. Here the width of the vein was found to be 50 feet. All the way down assays were made, and the lowest result obtained was six dollars per ton, the highest being as much as sixty-five dollars. There are pockets of ore very much richer even than this. Since then, about a week ago, in fact, Mr. Daunias sent orders to the mine to have the sinking of the shaft continued, as he is quite satisfied that he has a very rich property. The vein has already been traced on the surface for twelve miles.

Mr. Daunias has spent a good deal of money in developing other properties in proximity to the Non-Such, and he intends to put up a mill upon the latter, and bring ore there from his other properties.

He considers the Non-Such the most promising of his properties, and that is the reason that he gave it the name that it bears. From all accounts this name is an appropriate one.

## The Views of Mr. R. H. Ahn

## Manager of the Gold Hill Mine, and Other Properties.

Mr. Robt. H. Ahn came to Rat Portage, first, about two years ago, and has resided there steadily for the last eighteen months. As an authority on gold-mining, he is one of the most widely experienced men in the district. He has gained his experience in the mining camps of many of the most famous gold fields in the world, among other places having been a practical assayer in Sudbury, in California, in Australia, and in New Zealand. For twenty-five years, indeed, he has been associated with mining; and though not always entirely occupied in it, he has always given more or less attention to it. It will, therefore, be seen that his opinion is of value, and is probably nearer the actual facts than the conjectures of a hundred amateur prespectors.

He states emphatically that, so far as he can judge (which, on the basis of what we have said above, should be something considerable) there is in in this district every feature necessary for a permanent gold field. He says that, though differing somewhat in general topographical features. there are, he has no doubt, a large number of auriferous veins. The area of this gold field, so far as known. and established by the Geological department at Ottawa, is over 500 miles in length by 100 miles in breadth, extending from the north shore of Lake Superior to Lake Winnipeg, and from the international boundary to as great a distance north as it has ever yet been explored.

This immense region is probably all mineral bearing, and is practically so far as its capabilities in that respect are concerned, still a terra incognita; though in a few districts, such as this which we are now describing it has been more or less prospected. Mr. Ahm says that he knows a number of prospects in the district that when assayed from surface ore that does not