

The slope of the hill occupied by the claims is sufficient to allow open cut work to be advantageously carried on. The deposits lie one above the other, so that a number of faces can be worked at the same time. The ore is hard and would require blasting. Figuring all expenses in, the costs of extraction are not likely to exceed \$1.00 per ton. In the case of the lower grade



Falls of Bull River, showing remains of old bridge.

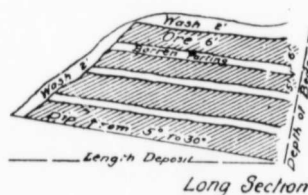
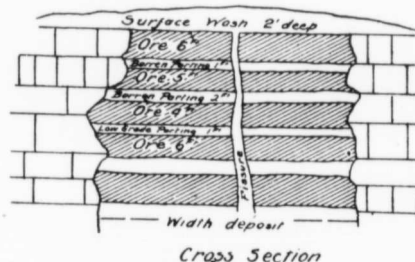
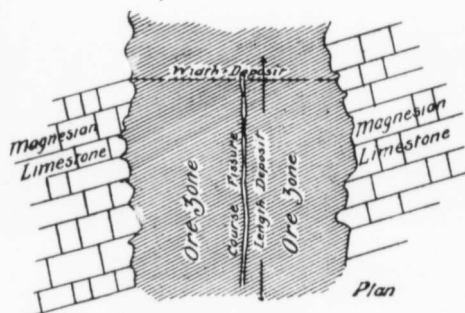
ores a certain amount of mechanical sorting can be done at very slight extra expense since the ore will break out in massive pieces and the remaining waste can be easily shovelled aside.

The falls on Bull River, two and a half miles from the claims, afford a magnificent opportunity for power. The river drops 200 feet within a distance of one mile and has a flow of about 6,000 inches. A good site is available for the instalment of a plant which might be made sufficiently large not only to generate electricity for this mine alone but for use in the surrounding towns. The alteration of the Great Fall smelter from a lead to an iron furnace, which is now proceeding, should give a market for the ores, but it is interesting to see whether reduction could not be effected as economically on the spot. In the following tables Pittsburg is taken as the centre of the iron smelting industry in the United States and the comparison is made of the cost of assembling the raw materials for reduction. It should be noticed that there is a difference in the price of coke at Fernie of \$4.25 per ton as against \$2.24 per ton in the United States.

Table showing flat costs of making one ton Pig at Pittsburg, U. S., and Bull River, B. C.

Mined and Shipped from	To Smelting Point at	Distance miles	Cost at mine or shipping point	Freight at .4 per ton mile	Quantity used to make 1 ton pig iron	Freight on quantity used in 1 ton pig iron	Cost of material for 1 ton pig iron at shipping point	Total cost at Smelting Point	Totals
COKE: Connelsville, Pittsburg.	80	2 50	32	1.7	54	4 25	4 79		
LIME: Tyrone	"	.130	50	.52	.5	26	51		
ORE: Lake Superior	"	.360	2 81	1 44	1.8	2 59	5 05	7 64	\$12 94
COKE: Morrissey, Bull River....	30	4 25	12	1.5	18	6 37	6 55		
LIME: Bull River, "	....	00	50	....	.5	....	25	25	
ORE: "	....	00	2 81	....	1.8	....	5 05	5 05	\$11 85
									\$1 09

The above table shows that the flat costs of smelting and manufacturing one ton of pig iron is \$1.09 less at Bull River than at Pittsburg. With regard to the



profit on one ton of pig iron on the Pacific Coast and in the Orient the following table is designed to show the comparative rates and prices between Bull River and Pittsburg: