

FURNAGE BUILDINGS AND SAMPLING WORKS, GRANBY SMELTER, AT GRAND FORKS.

The Granby Consolidated Mining and Smelting Company, in addition to owning the smelter in which the ore of the surrounding mines will be smelted, own the Victoria, Ætna, Phænix and Fourth of July Mining Claims. Of these claims, the Victoria, which adjoins the Old Ironsides, is being actively develored from the 200 and 300foot levels of the Old Ironsides mine. The ere is rich and over 1,100 feet of work have been done. The smelter is situated on the North Fork of the Kettle River, Grand Forks, seventeen miles from the mines down in the valley. The C. P. R. connects the mines with the smelter and has spurs running to the shafts and tunnels of the mines. The difference in altitude between the mines and the smelter is 3,500 feet. The City of Grand Forks, as an inducement for the Company to locate there, granted it a free site of one thousand neres, several hundred town lots, and franchises for electric and steam tramways.

The British kelumbia House in 1897 passed an act granting to the Grand Forks Water Power and Light Co. the right and concession of developing in the North Fork of the Kettle River all the water power from the town of Grand Forks for a distance of 25 miles up the stream, and all streams flowing up the river. This concession gives the company the right to use the land on each side of the river for a width of six miles, and carries with it the right to construct canals and everything necessary to operate water works, electric power plants, pole lines, tramways, etc.

This franchise has been secured by the Granby Co., and under it the water power to operate the smelter has been developed. At the point of construction of the dam, 2,500 horse-power can be developed, and at present 1,200 horse power is developed. The Company have also contracted with the City of Grand Forks to supply them with \$200 horse-power, sufficient to operate the electric light plant, for which they receive \$50 per horse-power per annum. Mr. Graves has also secured for the Company another smelter site at Carson, which carries with it 600 acres of land and includes the town of Carson, about 350 town lots, with the exception of about 50 lots. Carson

is located six miles west of Grand Forks and it is expected the sale of the town lets will realize at least double what was paid for the whole site.

The cost of the smelter is in the neighborhood of \$250,000, but the sum realized from the sale of the town lots in Phenix will be more than sufficient to pay the total cost. Phenix was plotted in October, 1899, and over \$100,000 of lots were sold in two weeks, and since then sales have continued right along. The Phenix Pioneer, speaking of the sale, says:

"The smelter company is largely interested in the sub-division of land which was lately placed on the market in Phonix.

"As is well known, the lots were nearly all sold the day they were put on the market, so great was the demand from all sides. Nothing like it was ever before known in the history of British Columbia. As a result, the smelter company will realize out of the sale of the lots on the unoccupied portion of the claims that had been plotted, nearly enough to pay the entire cost of building the smelter itself.

"Of course, this sale only covers the surface rights, the mines being worked steadily. It was evidently a fine investment for the stockholders in the smelter when they bought in. In future years there is no reason why the customary large profits should not be realized from the operation of the smelter itself."

The present capacity of the smelter is 500 tons per day, but it has been constructed in such a manner, that its capacity can be very readily doubled or trobled. It is equipped with the most modern plant and nothing that experience could suggest, with a view to conomical and efficient working, has been neglected.

A glance at the accompanying illustrations will convey some idea of the extent of the buildings in connection with the smelter and the power house. The flume is the largest and longest one in British Columbia. Over one million feet of lumber were used in its construction, the purpose being to make it big and strong enough to take the entire North Fork of the Kettle River at low water from the dam to the power house. Speaking of this work, the Grand Forks Miner says:

"The construction of the dam and flume is a magnificent piece of engineering. The power house runs out to the edge of the river and is at the base of the hill on which the smelter buildings stand. The location is admirable. The power for the smelter will be conveyed by wire from the dynamos, and in the some manner power will be distributed all over the City of Grand Forks. The engine house, which is built of brick, and the furnace house are completed. Back of the furnace huilding is a large structure of heavy timber in which the ore will be crushed and from which it will be fed to the furnaces. This building is of the most improved design, combining advantages not heretofore seen in any smelter plant in the country. The long brick dust chamber was completed some time ago. Over on the south end of the grounds are three handsome brick buildings. These are the laboratory, the office buildings and the residence of the superintendent. The office building and the superintendent's residence are each two-storey structures of very attractive design; in fact they are not only heautiful in architectural design, but they combine every modern comfort and convenience."

Ample provision has been made for the protection of the various buildings from fire. Fifteen hydrants are conveniently placed and by each hydrant is a box containing one hundred feet of hose. The employees of the company have been thoroughly drilled and understand their different duties and positions in the case of fire.

The month of March will see all the smelter machinery in operation, and it will not be long after that when the shareholders will begin to reap the reward of their faith.

In conclusion, holders of stock in these companies should feel proud of the manner in which these properties have been developed and their interests conserved, and we have every reason to believe that the Canadian public will in the course of a few months join with them in this feeling, as the successful handling of these properties will do much to re-establish their confidence in the mineral wealth of this Canada of ours.