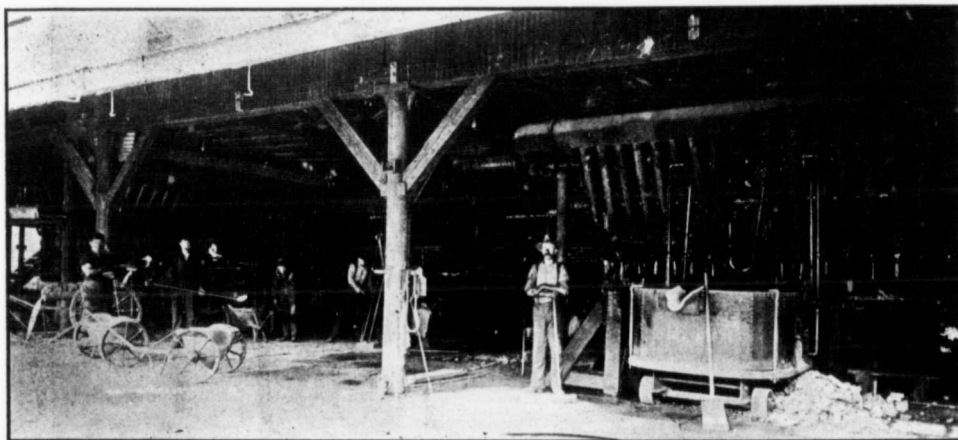


7 and one No. 7 1-2, each having its own direct-connected 75-h.p. Erie steam engine, and one No. 8 blower with a 125-h.p. engine now being installed, the last being large enough to provide blast for two furnaces; also a condenser, and a 250-light Siemens-Halske dynamo run by a 15-h.p. high-speed Atlas engine, for electric lighting purposes. In the adjoining boiler house are two 125 and two 75-h.p. horizontal return tubular steam boilers and a water heater. In the pump house below are three Stilwell-Bierce & Smith-Vaile Co.'s pumps, which pump water direct from Boundary Creek to the furnaces, for cooling the jackets and granulating the slag. In the sample mill are a No. 5 Gates rock crusher, a 7 x 10 Blake rock crusher, two sets of 12 x 20 rolls, two 36-inch and two 48-inch automatic samplers, a Bridgman sampler complete, two belt elevators, etc., the power for driving these being furnished by a duplex engine of 85-h.p. Seven slag trucks having a holding capacity of

stoppage of a few hours for repairs, No. 1 furnace was run continuously from the time of blowing in until the coke supply again gave out after the strike at the Crow's Nest Pass Coal Company's collieries last February. Meanwhile No. 2 furnace had also been running for a short time. Up to January 1 there were treated at these works 33,433 tons of ore from the Snowshoe, B. C. and Sunset mines, and there were shipped 1070 tons of matte of about 45 per cent. copper, 1.5 oz. gold, and 18 oz. silver. The strike kept down the tonnage materially, for both furnaces were idle for several weeks, and after operations were eventually resumed at the coal mines it was not until early in July that sufficient coke was received to admit of both furnaces at the smelter being run at the same time. Ore is now being received from the Snowshoe, B. C., Athelstan, Oro Denoro, Providence, and Sunset mines, the last-mentioned mine being owned by the Montreal & Boston Copper Company. All



Furnaces, Boundary Falls' Smelter.

about five tons each have lately been received from the Union Iron Works, Spokane, Wash., where two of the furnaces were also manufactured, and a locomotive for hauling same has been ordered to arrive shortly, the intention being to in the future dump the slag hot, instead of granulating it as at present. The smelter has its own railroad scales (Fairbanks) and other necessities.

The assay office and laboratory are equipped with modern apparatus and appliances suited to the requirements, for assay and analysis purposes, of a custom smelter. Offices, storehouses, mechanics' shops, residence accommodation for officials, etc., are all provided on or near the works, which are easily accessible, being situate but a short distance from the larger mines and alongside the Columbia & Western Railway to Midway.

During 1902 a failure of the coke supply necessitated a suspension of smelting operations from July 12 to September 17, otherwise, save for an occasional

these are Boundary mines. Not much ore has yet been received at this smelter from Republic camp situate south of the international boundary line, in the adjoining State of Washington, but after the capacity of the smelter shall have been further increased the shipment of the ores from that camp will no doubt also be encouraged.

It is understood that the management of the company has under consideration plans for a considerable enlargement of its operations so soon as conditions shall be favourable to the investment of the additional capital this will require. At the time of writing Mr. Goodell is in the East, having last month gone to Montreal to consult with the directors upon this and contingent matters. It is evident that either existing smelters must have their treatment capacity enlarged or another smelter must be built, for not only is the output of the mines owned by the two companies operating at or near Greenwood being restricted so as to allow of custom ores being treated instead, but