& the steam pressure is 90 lbs. They are set in 4 batteries of 2 each. Six boilers are sufficient to supply all the steam required, leaving the other two for facilitating cleaning or repairs. The boilers are heated by the waste gas from the furnace, & so arranged that coal or wood can be burned, as desired

The chimney is constructed of steel, is 8 ft. 6 ins. in diameter, 174 ft. high, & is erected on a massive square base of concrete, faced with granite. The base is 20 ft. square at the bottom, & 20 ft. at the top, & stands 21 ft. high. The top of the chimney is ornamented with a substantial gallery of steel, which is protected with an iron railing, & which can be reached by means of an iron ladder on the outside of the chimney. This chimney is lined with fire-brick, & the inside diameter is 7 ft.

This tank is used partially as a stand-pipe, and partially as a reserve supply in case of accident to the pumps.

The hoist engine which operates the elevator is double cylinder, size 10 x 12 in., & is erected on a solid concrete foundation, capped with a massive block of granite.

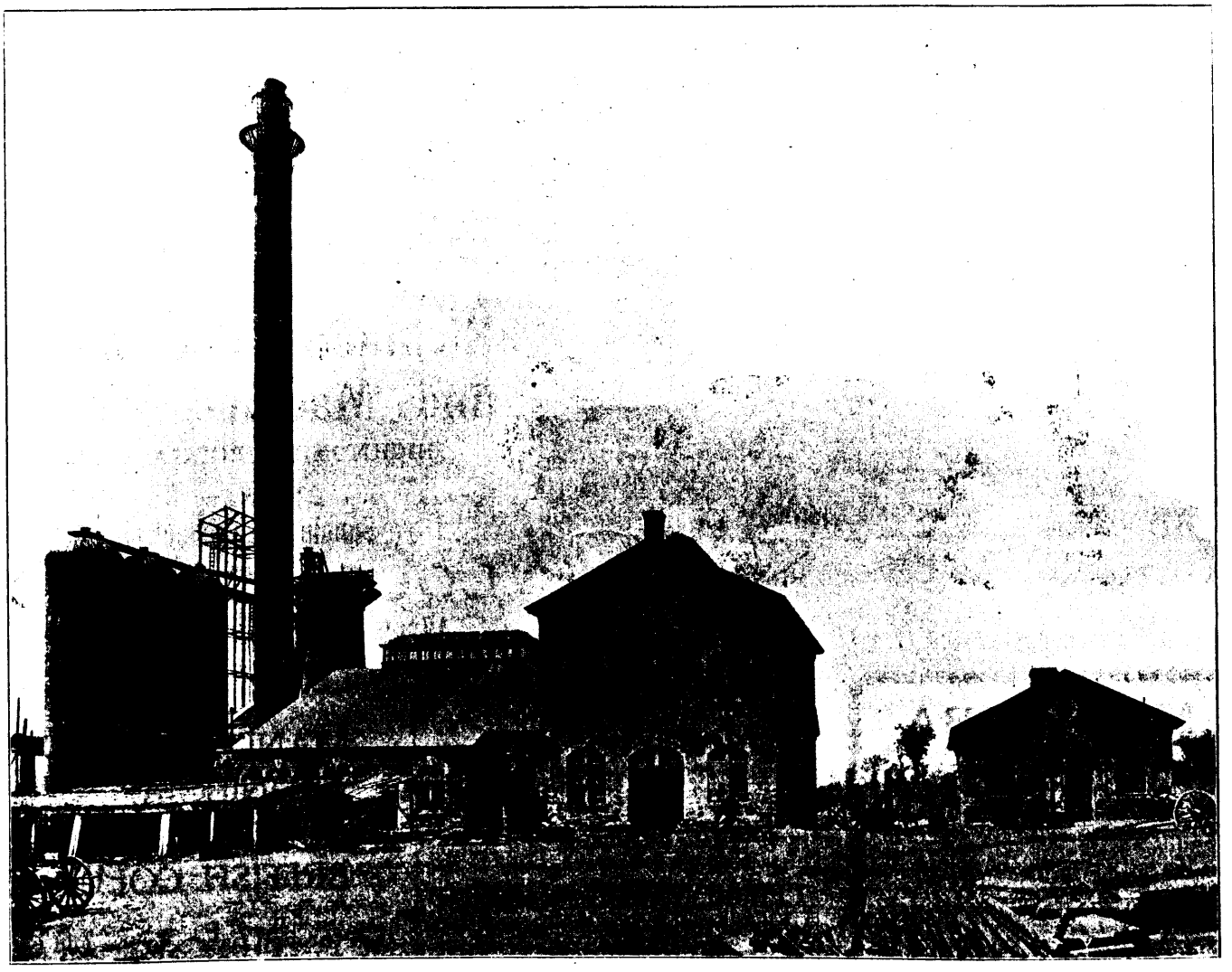
The stone-crushing equipment consists of one gyratory machine, capable of crushing 100 tons an hour, & is driven by a 25-h.p. boiler & engine; & one 10-in. stone-crusher, capable of crushing 25 tons an hour.

The machine & repair shop consists of a brick building 30 x 60 ft. x 11 ft. 6 in. high, erected on a concrete foundation, capped with granite. The shop is equipped with a complete blacksmith shop & tools, carpenter shop with rip & cross-cut saws, band-saw,

dump of stone. Inside of this is filled with solid earth, & the outside consists of the usual wooden pile wharf, which protects vessels from the stone front.

The vessel discharging ore at the wharf delivers it on to the stock ground, immediately in the rear of the furnace elevator. From this pile it is shovelled direct to the furnace barrows.

The pig iron is delivered from the front of the cast house on to the weighing & grading platform, whence it can be handled direct into railway cars or trams for conveyance to the wharf for shipment by water. The slag can either be delivered into a slag car or allowed to spread over the ground & broken up for the purpose of grading up the grounds generally & building wharves, & is run from



THE CANADA IRON FURNACE CO.'S PLANT AT MIDLAND, ONT.

It serves for both the boilers & the hot-blast stoves.

Hot-blast stove equipment consists of 3 fire-brick stoves of the two pass type. They are 16 ft. in diameter, 60 ft. high, & made of 5-16-in. steel, double riveted. The whole are provided with a complete outfit of modern valves, &c., & are erected on a solid concrete foundation, faced with granite, the size of which is 6 ft. 2 in. x 27 ft. 2 in. These stoves are capable of heating the blast up to 1,400 deg. Fah.

The water tank, or tower, is situated on the hill in the rear of the furnace, & is cylindrical in shape, 12 ft. diameter, 40 ft. high, made of 5-16-in. steel plate, double riveted. This tank is erected on a concrete foundation, the top of which is 72 ft. above the bay level.

lathe, & buzz planer, &c., and the machine shop with Bertram 20 x 16 in. lathe, emery stand, & two drilling machines, also a laboratory sample grinder, a 20-h.p. steam boiler & engine, shafting, pulleys, &c., & a steam pump.

The laboratory is situated in the temporary office building, & is fully equipped & up-to-date in every way. The staff consists of two chemists.

The Co.'s water front has an extent of about 1,700 ft., the greater portion of which has an available depth of 20 to 30 ft. of water. The wharf front now has an extent of 1,200 ft., & the solidity of the wharves already built can be judged by the fact that they now carry upwards of 54,000 tons of ore. The entire front of the wharf is faced with a heavy

the furnace at a point most convenient for al these purposes.

The ore used at the Midland furnace is from the Helen mine, from which it is carried over the Algoma Central Ry. to Michipocoton Harbor, & thence by that Co.'s steamers to Midland.

Chateau Frontenac Advertising.—A correspondent of Profitable Advertising is having some fun with the following, which is now running in a number of papers:

"Why go South when you have an ideal winter resort in the Chateau Frontenac, Quebec, Canada, the most attractive and one of the most comfortable hotels in the world, and has the grandest scenery, built at a cost of about a million dollars?"

The question is, who built the scenery at a cost of $1,000,000?