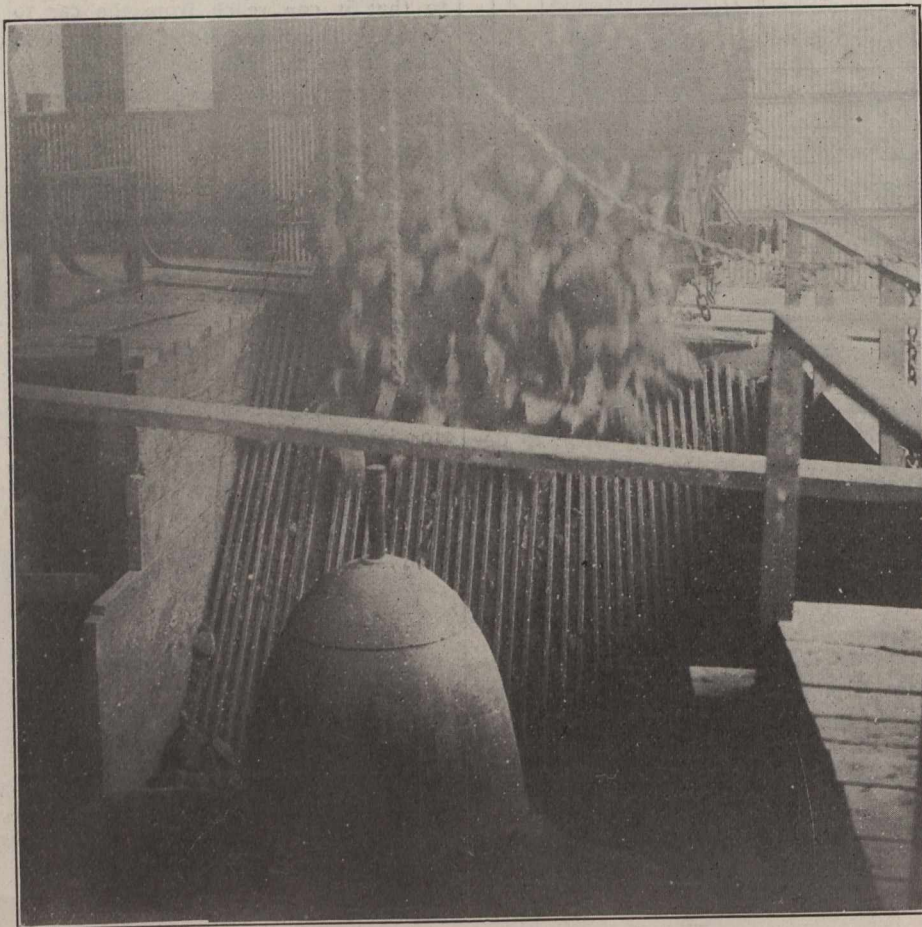


Condensed steam from the auxiliaries is sent through a water heater and steam pressure upon the boilers is maintained at a constant amount of 160 lbs. by an automatic blast arrangement. The steam plant is one of the most economical that can be installed, the advantage of which is seldom appreciated in a rock crushing plant.

Hoists:

The hoists are of the Allis-Chalmers friction type. There are three hoists, one for the haulage system with a 4-ft. drum long enough to wind 1,500 feet of rope upon it, which operates the haulage system with two ropes, the down-going cars balancing in part the weight of the up-going loaded cars. The hoist is reversible and operated with a rope speed of 250 feet per minute, bringing a train of cars from the extreme end of the quarry to the plant, in approximately 5

any of the heavy parts of the crusher should occasion require to make repairs. The track for these blocks, which are fastened to a trolley or crawl, may be seen upon the illustration, showing how any part may be lifted clear of the building or a new part lifted in. Smaller crawls and chain blocks are provided over the number sixes and elsewhere around the plant. There is a belt conveyer for carrying coal direct from cars to the boiler house. There is a large machine and blacksmith's shop alongside of the plant, provided with a 24-in. and 18-ft. lathe, a planer, radial drill, blacksmith's forge, steam hammer and other proper equipment. This shop is driven by an Allis-Chalmers-Bullock induction motor, so that it may also be operated when the crushing plant is not running, receiving current from the generator described in the power house.



Dumping Rock Into No. 21 Crusher.

minutes. The remaining two hoists are for the two incline trestles, hoisting by a friction band and lowering by a band brake. The speed of these hoists is also 250 feet per minute, bringing a car from the foot of the incline trestles to the crusher hopper, in about 45 seconds. The three hoists work in unison and are all controlled by one operator, located above the crushing floor at a point where he can see the cars both at the bottom of the incline and at the dumping point. The speed of the hoisting equipment is such, that by the time a train of four empty cars has been lowered to the quarry and four loaded cars have been crushed and returned to the empty track, four additional loaded cars have been brought up from the quarry.

Over the No. 21 crusher are installed two Yale & Towne triplex chain blocks, of 20-ton capacity each, for handling

The reservoir, which will be the largest in Montreal, was designed by Frank H. Pitcher, Chief Engineer of the Montreal Water and Power Company. Approximately one-half of this reservoir is to be completed first and put into operation, while the remaining half is being completed. The main water pipe leading from this reservoir is now being laid by Messrs. Laurin and Leitch, and consists of a line of 60-in. cast iron pipe, the laying of which, with its valves, etc., is in itself an item of considerable interest, but which is dwarfed in comparison with the quarrying and crushing operations going on.

This plant is unusual in many respects: primarily, on account of its size and initial cost in proportion to the amount of work to be done under this contract. The size

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