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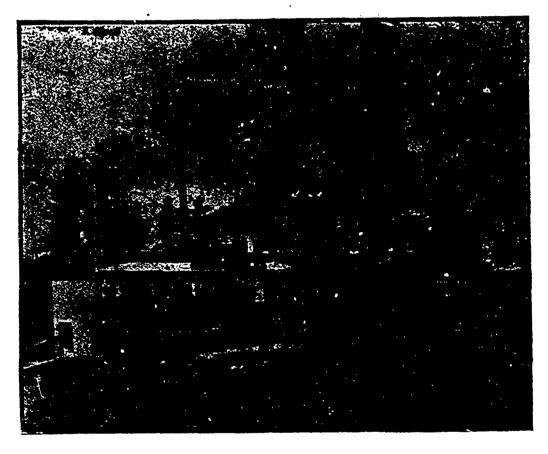
No. 9.

METROPOLITAN STREET RAILWAY.

THE Metropolitan Street Railway Company is the first that has been successful in substituting electrical for animal power for the propulsion of street cars in Toronto. It has accordingly met with the favor and patronage of the public.

The company commenced electrical operations on the first of September, 1890, under the following management:—Chas. D. Warren, President; R. C. Warren, Secretary and Superintendent. The head office and power house is a neat structure of brick

revolutions per minute. Upon this great wheel is a perforated belt 83 feet long and 28 inches wide for transmitting the power to the shafting, which is built upon five stone pillars projecting up through the floor. Provision has been made for an additional engine of a similar description, and it will not be long before this is taken advantage of. Alongside the engine is a Thomson-Houston 500 volt Jynamo, the armature of which runs at a speed of 900 revolutions per minute, provision also having been made for further generator power. At the west end of the room is a



POWER HOUSE, METROPOLITAN STREET RAILWAY. TORONTO.

and stone, situated on the west side of Yonge street, about five minutes ride from the railway crossing at North Toronto.

The boiler house is a lofty, solid brick building, 35 feet by 25 feet, and contains two boilers each measuring 66 feet by 14 feet, both carrying 20 square feet of grating surface, having a working pressure of 125 lbs. each. They were built by Messrs. Goldie & McCulloch, of Galt, and are fed by a No. 6 Northey feed pump-sufficient room has here been reserved for the addition of another boiler of the same size and capacity.

The company have obtained permission to extend their track north as far as Richmond Hill. This extension will be commenced early in the spring, and when completed the length of the line will be 16 miles.

The engine room, which is on the south side of the boiler house, is 39 feet in width by 58 feet in depth, and is a model power house. Here is located a Wheelock compound condensing engine, with high pressure 13" cylinder, low pressure 23" cylinder, 30" stroke, 100 h. p., the driving wheel of which measures 15 feet in diameter and 38 inches across the face, and runs at the rate of 95

switch board containing voltmeter, ammeter, rheostadt, circuit breaker, main line switch and apparatus for taking potential of circuit. On the north side are the steam and vacuum gauges; in front, on the north side of the entrance, the offices and lavatory; and on the south side, a cosily furnished waiting-room. Over these offices Engineer Outhwaite has a well arranged suite of rooms, with every modern household convenience, including bathroom, heating apparatus, incandescent lights and lavatory, with hot and cold water arrangements.

Beneath the engine house is the condensing machinery, hot water well and pumps, the supply of water being taken from running springs at the back of the premises.

The car shed is located at the rear of the main buildings. As the cars come in, they are run on a transfer car and placed side by side. Hydrants have been placed in different parts of the building and every provision made in case of fire. The whole of the inside electrical plant was built by the Thomson-Houston Co. The machinery is of the latest pattern, and is arranged with a view to obtaining the best results. The premises and cars are