

TORONTO ELECTRIC LIGHT COMPANY.

The above company was incorporated on the 25th day of September, 1883, but since then its constitution has undergone several important changes.

The present officers of the company are: Mr A. H. Campbell, President; W. H. Howland, Vice-President; Samuel Trees, Treasurer; H. M. Pellatt, Secretary, and J. J. Wright, Manager, with a board of nine directors, viz: Hugh Blain, A. H. Campbell, W. H. Howland, John Leys, S. F. McKinnon, H. M. Pellatt, Samuel Trees, F. B. Polson, and Thomas Walmsley.

The first year the company commenced by making a number of commercial lights for use in hotels and larger business houses, and the year following supplied the street lights for Yonge, King and part of Queen streets. To day they are illuminating all the principal streets in the city, and in some cases beyond its limits. The company claim to have the most efficient electric plant in Canada, and they certainly possess the finest and most powerful engines in the city of Toronto. The original plant of the company, consisting of Excelsior and Thomson-Houston dynamos, was erected in a building on Sherbourne street, but it was found that larger premises would be required. Consequently the present site on the water front at the foot of Scott street was purchased, and many important new features added to the works.

The company manufacture all their own plant, having every facility for constructing their own machinery dynamos and lamps, according to the latest and most approved practice.

On the north side of the boiler house there are six 100 h. p. boilers built by the Polson Iron Works Co., and on the south side seven more of a similar capacity, one of which is opened and cleaned out each day in turn. The consumption of coal varies very much at this season of the year, depending upon the number of lights in use, the average being from 20 to 25 tons per day. At the east side of the boiler house is the smoke stack, a pile of masonry towering 110 feet high, the inside diameter of which is five feet. The chimney, boiler, and engine houses all stand on very deep, solid foundations built upon piles driven down 25 feet to the rock. A little farther south is the machine shop, in which about 25 men are employed as blacksmiths, machinists and carpenters. Here there are various kinds of lathes, milling machines, planers, drills, screwing machines, rack and gear cutters, and other special machinery used in the construction of dynamos and lamps. Work has here been commenced on the materials, including junction boxes, manholes, etc., with which to construct a system of underground iron conduit, but this work cannot be carried on to any great extent at present owing to insufficient accommodation, and on account of the increased demand for city lighting under the new contract. In order to meet these requirements the company are extending the docks out into the bay as far as the "new windmill line," so as to provide room for the erection of additional workshops.

In an upper room over the machine shops is a special new feature of the construction department—braiding and winding machines, which are used for insulating the copper wire. There are several men and boys employed at this work, and in scrap-

ing the old braiding off wire that has been in use and requires re-insulating.

The engine house is a spacious one, and contains two pairs of high pressure condensing engines of 500 h. p. each, and two pairs of compound condensing engines of 500 h. p. each. These engines are of the Brown-Corliss type, and were manufactured by the Polson Iron Works, of Toronto, their flywheels measuring 15 feet in diameter and weighing over 10 tons each; there are four belts on these flywheels, each measuring 110 feet in length by 38 inches in width, supplied by Messrs. F. E. Dixon & Co., of this city. In the same room are three Worthington steam pumps for feeding the boilers and for fire purposes. The steam and vacuum gauges and other indicators are all mounted on an ornamental board in the centre of the engine house, so that the engineer in charge can observe at a glance the condition of the various engines in operation. Everything is kept in the best of order, being a pleasant and interesting sight for anyone to witness, and reflecting the greatest credit on those employed there.

The shafting house is on the same floor as the engine house, but is divided by a partition. From this room the tremendous power of these gigantic engines is transmitted to the dynamos on the floor above. In this room there is also a 50 h. p. engine which generates the electricity for lighting the works.

In the dynamo room there are 48 dynamos, each having an average capacity of 35 lights, and nearly all of which have been manufactured on the premises. There are at present in the city over 1,000 electric lights, and the new contract calls for nearly 500 more. At the north-end of this room is located a switch-board by means of which connections are made between the dynamos and the circuits. At the back of this room, and alongside the offices, is another large room in which is being erected a new pair of compound engines of 500 h.

p., to meet the increased demand for lights which will come in operation at the beginning of the new year. In the office there is a switch-board for testing the various circuits during the day or at night when in operation. The lines are tested every few hours during the day, so that all crosses, grounds or breaks are discovered and remedied at once. The outside plant covering the city consists of over 250 miles of copper wire.

The company have a system of telegraphy for the use of the patrol and linemen at their various stations in different parts of the city. By means of these facilities constant communication can be made between the men at their stations and the works. The company's old contract with the city of Toronto expired with the year 1890, and a new one for 5 years goes into operation immediately.

PUBLICATIONS.

The publishers of "The Electrician" Electrical Trades Directory and Hand Book, Salisbury Court, Fleet street, London, E.C., inform us that the edition for 1891 of this carefully compiled and valuable budget of information will shortly make its appearance.

A Buffalo despatch of December 8th says the Brush Electric Company has recovered judgment for \$412 against the Hamilton Ont., Electric Light Company and R. M. Wanzer & Co., in the Supreme Court, being for the same cause of action on which judgment had already been obtained in a Canadian court.

