

## SPARKS.

The town of North Toronto may install an incandescent lighting plant.

A fire alarm system may be installed by the corporation of Hintonburg, Ont.

The Kingsville Electric Light Company have installed a Leonard self oiling engine.

Cope & Frey, dealers in electric and gas supplies, have commenced business at Vancouver, B. C.

The power house of the Niagara Falls Park & River Railway at Niagara Falls, Ont., is being rebuilt.

The Cataract Power Company, of Hamilton, have made another reduction in their rates for lighting.

The Electric Development Company, of Philadelphia, purpose opening Canadian offices in the city of Hamilton.

The corporation of Cannington, Ont., is considering the purchase of the electric light plant from the present owners.

The electric lighting plant at Amherstburg, Ont., has been taken over by Mr. R. M. Saxby, late of the Royal Electric Company.

A proposition has been made by Tuerk Bros. to establish a factory in Berlin, Ont., to manufacture gasoline engines and automobiles.

A convention of electrical contractors of the United States was held in Pittsburg on March 16th.

The town council of Perth, Ont., have been looking into the question of electric lighting, and a report has been submitted recommending municipal control.

The streets of Port Dalhousie, Ont., are now lighted by electricity from the power house of the Toronto Rubber Shoe Company. There are fourteen arc lights in the streets.

G. Filieux, a lineman in the employ of the Royal Electric Company, Montreal, was recently killed by an electric shock at the corner of St. Lawrence street and Mount Royal avenue.

A considerable portion of the British Columbia Electric Railway Company's lines in Victoria will be double-tracked this year. It is also the intention to put in service several new cars.

Dr. Edward Gahan, of Boston, is understood to be in negotiation for the purchase of the electric light plant at Digby, N.S. If purchased, an additional dynamo and engine will be installed.

The tender of the Royal Electric Company has been accepted by the city of Halifax, N. S., for the supply and installation of an electric light plant. The tender is understood to have been \$19,438.

The Bay of Quinte Railway Company, of Deseronto, is seeking authority from the Dominion Government to operate mines, supply electrical power and manufacture electrical machinery. It is improbable that their requests will be granted.

McColl Bros. have been given the contract for boiler compound required by the city of Toronto, at 4 cents per pound, and for cylinder oil at 35 cents per gallon. The Atlantic Refining Company secured the contract for lubricating grease, at 10 cents per pound.

A Paris newspaper gives the following as the number of automobiles in use: Automobiles registered in Paris, 3,701; in the suburbs of Paris, 1,219; in the rest of France, 2,445; in the whole of Germany, 1,427; in the whole of England, 530; in the United States, less than 300.

The Railway Committee of the Ontario Legislature has reported the bill reviving the charter of the Ingersoll Radial Electric Railway, granted in 1897. The line will connect Ingersoll with Tilsonburg. The town council of Ingersoll have also decided to grant a franchise to the company.

The Engineering Society of the School of Practical Science, Toronto, have elected officers for 1900 as follows: President, F. W. Thorold; Vice-Pres., W. G. Chace; Graduate Reporter, C. H. Fullerton; 4th Year Reporter, R. Roaf; 3rd Year Reporter, J. T. Broughton; Treas., R. W. Morley; Cor. Sec., W. Brereton; Rec. Sec. A. Lang.

A charter has been granted to the Electrical Maintenance and Construction Company, Limited, of Toronto, with an authorized capital of \$250,000. The provisional directors are: P. H. Patriarche, H. L. Dunn and P. D. Ball. The charter gives the company power to manufacture and operate electrical machinery,

and to carry on the business of an electrical, mechanical, hydraulic and civil engineer.

Sir William Van Horne and James Hutchison, of Montreal, B. F. Pearson and Charles H. Cahan, of Halifax, and other Canadian capitalists, have obtained an exclusive franchise to operate electric railways and furnish light and power in the city of Port of Spain and the suburbs to a distance of five miles. The capital of the company will be \$1,000,000.

The Hamilton, Grimsby and Beamsville Electric Railway Company sued the Bell Telephone Company in the Division Court, Hamilton, for \$60 damages for injuries to its poles and wires caused by the defendant's removal of its broken wires and poles after the snow-storm of December, 1898. Judge Monck has ruled that the defendant is not liable under the circumstances.

The new power house and plant of the Ottawa Electric Railway Company was completed last month. The work was supervised by Mr. W. H. Baldwin, hydraulic engineer of the company, and upon the inauguration of the plant he was presented with a beautiful gold watch by the president and directors in recognition of his efficient and faithful services. In a later issue we hope to publish a complete description of this power house.

The Society of Applied Science of McGill University, Montreal, have elected the following officers for the coming year: President, H. A. Burson; first vice-president, B. S. McKenzie; second vice-president, S. B. Clement; third vice-president, R. C. Wilson; treasurer, A. E. Beck; second year representative, E. Mackay; chief of the editorial board, A. R. Archer; members of the editorial board, H. E. Scott, G. Pike and J. A. Heamen.

The Cataract Power Company have commenced work on the construction of their second transmission line from the power house near St. Catharines to the city of Hamilton. It is expected that the line will be completed by the first of July next. The new line will have twice the capacity of the present wires, and will necessitate the increasing of the plant at the Victoria avenue transforming station in Hamilton. The investment for copper wire alone will be about \$50,000.

Mr. W. T. Steward, electrical engineer, has submitted a report to the town council of Toronto Junction on the required changes in the lighting system of the town. Mr. Steward estimates the cost of putting in a lighting plant at the present power station at \$16,000, and to place it at the water-works station at \$12,000 additional. He recommends two 50 arc light dynamos at a cost of \$1,000 each, one 100 k. w. alternator with instruments and switchboard, at a cost of \$2,500, one 150 h. p. high speed compound engine at \$1,650, and two 150 h. p. boilers at \$1,200 each. The cost of transformers for 1,200 lights is placed at \$1,800. Upon the basis of his estimate, the cost of lighting the streets with 100 arc lamps would be \$3,419 per annum.

An interesting legal suit is now being heard in the Assize Court at Toronto. It will be remembered that in September, 1899, the warehouse of W. G. Harris, scrap merchant, was destroyed by fire, and that suit was brought against the Toronto Electric Light Company to recover damages, on the ground that the fire was caused by an electric wire. The action has already been tried and a verdict for the full amount given in favor of the plaintiffs, but the defendants claim that Judge Ferguson, who tried the case, failed to point out to the jury in his charge the exact hour of the fire. Harris claims that the company wrongfully placed wires on his building, and failed to properly insulate them, while the company claim that they were properly insulated, and that the fire was caused by spontaneous combustion.

In one branch of engineering, the development of steam turbines, much greater progress has been made in Great Britain and on the Continent than in the United States. In the electric lighting plant in Cambridge, England, several prime movers of this type are in successful operation. A Parsons steam turbine, directly coupled to a 500-kilowatt alternator, has been added lately. It runs at a high speed, 2,700 revolutions a minute. The regulation of the turbine is secured by an electric device, so that it can work in parallel with the other machines of the station when desired. A surface condenser leads from the turbine by piping and is installed in a space below the floor level. Beside it are the pumps for the water circulation, which are worked by gearing and endless screw from the main shaft. The alternator is of the four-pole type, with fixed field, and gives a voltage of 2,000 at 90 cycles. For the excitation 35 kilowatts is required at full load. The exciter, at 5 kilowatts, is connected directly to the shaft of the alternator.