

OTTAWA LETTER.

(Correspondence of the CANADIAN ELECTRICAL NEWS.)

THE Ottawa Electric Railway Co. have purchased a large parcel of property near the Experimental Farm. Sixteen acres of this is wooded with elm, maples and birch, and is known as the "West End Park." The Somerset street cars furnish a five minute service during the evening, and less frequently during the day. The park was opened on Saturday evening, July 18th, when 4000 people were there. The company have erected an open air theatre, with seating capacity for 1600 people. A commodious stage, with electric foot-lights, a good orchestra and high class performances, fill this enclosure every evening. Edison's late invention, the Vitascopie, has been running for three weeks. It requires two currents to operate it. The trolley circuit was used to revolve the films before the aperture and an alternating circuit to project the views on the canvas. The grounds are lighted by numerous arc lights. Five swings and a piano are operated by an ordinary street car motor. The company deserve great praise for supplying pleasant recreation for the warm summer evenings.

Ottawa possesses a large number of electrical firms, of which the following are a portion :

Godard, Garrioch & Co. have been very busy, and have a neat display of electric fixings connected with installations of light or power.

The young firm of O'Reilly & Murphy have in a little over a year built up a satisfactory business. They had as many as fifteen jobs on hand at once this summer.

Chubbuch & Simpson, a new firm, are doing a good business, and have a lot of work on hand.

H. McColl, agent for the Chanteloup Mfg. Co., Montreal, reports business fair.

Mr. Cotter has invented an electric carpet heater. It is a simple little affair, but is a marvel to work.

R. Anderson, general electrician, is installing an electric lighting plant of 75 lights, on the steamer Empress for the O.R.N. Co., and a 25-light plant on J. G. Brigham's ferry wharf.

Ottawa No. 7, C. A. S. E., who have a number of members on the river, hold their election of officers in December instead of May, and their semi-monthly meetings on the 2nd and 4th Fridays. Their last meeting, July 31st, was one of the best they have had. The officers are as follows: President, T. J. Merrill; Vice-President, A. Gaul; Financial Secretary, T. Robert; Recording Secretary, T. G. Johnson; Treasurer, Wm. Hill; Conductor, John Harris; Door-Keeper, J. F. Peters; Trustees, Thos. Wensley, John Cowan, F. G. Johnston. The delegates to the Kingston convention will be T. J. Merrill, F. G. Johnson and F. W. Donaldson.

VERTICAL STEAM BOILERS.

TAKE an ordinary horizontal tubular boiler, one of the kind used in hot water heating plants, with the space inside the shell completely filled with tubes—set it on end, with a furnace below and a chimney connection above, and you have pretty nearly what, for many years, has been the standard type of vertical boiler. And a good serviceable kind of boiler, too, it has been, with all its shortcomings. In cost it was moderate; no special setting was required for it; repairs were easily made, the compactness and a reasonable degree of efficiency were secured with it, so that even to-day it has not outlived its period of usefulness, but continues

in favor and is employed in a wide variety of cases where, all things considered, no other form of boiler will give the same degree of satisfaction.

And yet, for large powers, for high economy, for standard use in high-class power station work, even its distinctly good points could not command its application, except in forms so modified that in many cases little semblance remains to the early upright tubular boiler as we all know it. The designs have been carefully worked over, all with the end in view of turning out something better than the original, and the result is that while the later boilers also are vertical, in the sense, primarily, that they take up more head room than ground space, their tubes are not always vertical nor even approximately vertical, and there is not in every case the conventional shell within which tubes and flues are disposed.

Nor are the tubes always fire tubes, as in the ordinary vertical boiler, for conveying the products of combustion from the furnace to the chimney; frequently in the newer and more complex designs they are water tubes instead and do not always run in straight lines, but often curve and twist in vertical and horizontal planes, in helical paths, in almost all directions imaginable, with the one aim of making them efficient heaters of water, by promoting circulation and absorbing, to the greatest possible extent, the heat of the fuel liberated in the furnace. Albert Spies, in *Cassiers' Magazine* for December.

RECENT CANADIAN PATENTS.

Canadian patents have been granted for the following electrical and steam engineering devices:

Insulating joint—Chicago Gas & Electric Fixture Manufacturing Co., Chicago.

Valve for boilers—John Harrison, Winnipeg, Man.

Electrical indicating mechanism for journal boxes—Wm. B. Chockly, Denver, Col., U. S.

Electric railway—W. B. Purvis and M. M. Armstrong, Philadelphia, U. S.

Filaments and carbons for electric lamps—J. H. D. Willan, 16 Helens Place, London, Eng.

Bonding device for electric railways—Wilson Brown, Camden, U. S.

Electric lamp hanger—Wm. A. Thompson, Toronto, Ont.

Turbine water wheel—John H. Staple, York, Penn., U. S.

Steam boiler furnace—Thomas York, Portsmouth, Ohio, and James E. York, Duluth, U. S.

Turbine water wheel—John B. McCormick, jr., and James Dixon, York, Penn., U. S.

High pressure engine—John Wand, London, Ont.

Appliances for cleaning car tracks—Samuel Irwin and Albert S. Geiger, Waterloo, Ont.

Split switch—Uldarique Gilbeault, St. Isidore Junction, Que.

Force pump—Wm. E. McCall, Peterborough, Ont.

Electric safety appliance for railroads—Edward Levi Orcutt, Sommerville, Mass., U. S.

Turbine water wheel—Wm. O. Crocker, Turner's Falls, Mass., U. S.

Electric railway—John F. and John A. Jordan, Brooklyn, N. Y.

Electric railway gate—Herman Biermann, Breslau, Germany. Machine for raising and lowering electric light—Nelson McLeod, Cammington Ont.

Electric locomotive—J. J. Heilmann, Paris, France.

Balanced steam engine—J. J. Heilmann, Paris, France.

Queen Victoria has had several telephones installed in Windsor Castle. They are placed on her majesty's study table and communicate with Lord Salisbury at the Home Office, Marlborough House and Buckingham Palace. In a few days an electrophone will be introduced at Windsor Castle, and the Queen will be enabled to hear all the latest entertainments in the London theatres and concert halls.