The whole situation as regards electric traction is excellently summed up in a few words spoken by Mr. George Westinghouse, during the opening exercises of the American Railway Appliance Exhibition, held in Washington, in connection with the International Railway Congress. He stated the case as follows: "A new era in railway operation has dawned with its many new prob-lems. I refer to the growing use of electricity for the movement of trains. There have already been such demonstrations of the benefits to be derived from the substitution of the electric motor for the steam locomotive, that it requires no great prophet electric traction upon the great railways of the world, and the eventual replacement of the steam locomotive. Fortunately, the time element, which is such a controller of events, and the financial problems involved, will ensure gradual development and extension of the use of electricity. With these changes have come vastly different encircular and extensions of the use of electricity. engineering problems and new sources of danger, which should, and will, command and receive that attention which is essential to the surmounting of every difficulty as it arises" as it arises.

The foregoing was read at a recent meeting of the Canadian Railway Club.

Projects, Construction and Betterments.

Brantford and Hamilton Ry.—The promoters of the Hamilton, Ancaster and Brantford Ry. have completed negotiations with the owners of the B. and H. Ry., by which they secure the Dominion charter to construct an electric railway to connect Hamilton and Brantford, Ont., in addition to the Provincial one they previously owned. The transfer of the charter was signed at Brantford, Sept. 6, on which day the franchise granting an entrance into Brantford was also signed. C. D. Haines subsequently stated that the line would be constructed under the charter of the Brantford and Hamilton Ry., that grading would be gone on with at once, and that orders for rails, cars, etc., would be placed as quickly as possible. Under the Hamilton by-law the line has to be in operation by Nov., 1906. (July, pg. 313).

of the Kensington-Brandon Land and Development Co. has applied to the Brandon, railway there. J. Curry, broker, Toronto, which company, which compans considerable real estate in Brandon.

British Columbia Electric Ry.—Arrangements are in progress for the construction of a branch in North Vancouver, B.C., at a cost of about \$200,000. The surveys for the line are to be made at once. (Aug., pg. 369).

Ruckingham Electric Ry., Light and Power Co.—At the last session of the Quebec Legislature several sections of the act incorporating added. In the first place the name of the company were repealed and new sections added. In the first place the name of the company is changed to the Lievre Valley Power, Traction and Manufacturing Co., and the constructed is defined in the new clause to be from Hull to the mouth of the Du Lievre River Chardien, and along the Lievre River valley to meet the G.T. Pacific Ry. The company is given extensive rights to develop water powers, work mines, carry on business as shipwharfinger and warehouseman. The line has not be completed within 15 years, but if it has kiamika within that period, the company of 50 years; if at the end of 15 years the line completed to Kiamika River, the \$1,000 a

year will not be payable until the lapse of 100 years from the passing of the act.

Fraser Valley Electric Ry. and Power Co.—
J. B. Morgan, the General Manager and promoter of the company, which was originally called the Chilliwack Power and Light Co., has been spending a good deal of time in canvassing the municipalities to be served by the proposed line. A meeting was held in New Westminster, B.C., Sept. 8, when Mr. Morgan explained that in connection with the power development plant on the Chilliwack River it was desired to construct an electric railway from Chilliwack to New Westminster. The route had been surveyed, and the report of the engineer showed that a line could be constructed with a maximum gradient of 1%, with very easy curves. Work had been started on the power station and a portion of the right of way had been cleared. (Sept., pg. 425).

Fort Erle to Crystal Beach.—The project to construct an electric railway from Fort Erie to Crystal Beach, or Point Albino, Ont., has been revived, and District Attorney Coatsworth of Buffalo recently stated that he had been told by those interested that the capital had been subscribed, and that it was also hoped to secure the franchise of the Fort Erie Ferry.

Grand Valley Ry.—The Galt, Ont., Town Council has reached an agreement with the G.V.R.Co., under which the company will pay the corporation \$1,100 in lieu of building the roadway along which its tracks extend into the town to join those of the Galt, Preston and Hespeler Electric Ry. The franchise question has now been satisfactorily settled. (June, pg. 261).

Hamilton, Ancaster and Brantford Ry.—See Brantford and Hamilton Ry.

Hamilton Radial Ry.—All the bridges and culverts on the extension from Burlington to Oakville, Ont., have been completed as far as Bronte, and the grading finished. A good deal of the grading between Bronte and Oakville is completed, but it will be some time before the bridge at Bronte will be built. (Aug., pg. 369.)

Hamilton, Grimsby and Beamsville Electric Ry.—Representatives of the Lincoln County Council recently discussed with the directors the question of the abandonment of the Vineland extension. The directors said the decision to tear up the tracks was irrevocable, but the extension would be operated until the end of the fruit season. (Aug., pg. 369).

Lake Achigan Electric Tramway.—A. B. Crachet, St. Hyppolite, Que.; J. W. Molson, Montreal; J. Boisseau, St. Jerome, Que., were incorporated at the last session of the Quebec Legislature, with this title, for the purpose of constructing an electric railway from Lake Achigan in St. Hyppolite, to St. Jerome, Que., either by Shawbridge, or by New Glasgow. The company is authorized to develop power, to construct telephone and telegraph lines, etc. Bonds to the extent of \$15,000 a mile may be issued, and municipalities are authorized to subscribe for shares in the company.

London Street Ry.—The company has decided not to re-construct the High St. extension, but to construct either the Wortley St. stub, or the Edward St. line as the city desires. The mayor expressed an opinion that a census should be taken in 1906, when he thought the population would show a sufficient increase to demand two additional miles of line. The corporation has decided in favor of the construction of the Edward St. line. (Aug., pg. 369).

Longueull Tramways Co.—An act incorporating a company with this title was passed last session of the Quebec Legislature, the incorporators being—Hon. J. Girouard, J. Riendeau, V. Pigeon, O. Dufresne, H. St. Mars, P. Z. Ste. Marie, L. Trudeau, S. Labonte,

E. Pigeon, J. I. Lamarre, of Longueuil, Que. The company was given power to construct a tramway to be operated by electricity or any other power than steam, from Longueuil to some point in Montreal or Maisonneuve, Que., by way of Victoria Bridge, (with the consent of the G.T.R.) or by any other bridge that may be built, or by laying rails on the ice during the winter. The company may only lay tracks in Montreal or Maisonneuve to the nearest point where a suitable junction may be made with the Montreal Street Ry. The capital is fixed at \$100,000, and \$25,000 of unassessable stock may be issued to creditors in payment of services, rolling stock, etc. Power to run stage lines is also given, and the company may amalgamate with any other railway, tramway or transportation company.

The company has made an application to the Longueuil Council for a franchise. (Sept., pg. 427).

The Montreal Street Ry. has completed its new line on St. Lawrence St., giving a double-track between Mount Royal Ave. and Sherbrooke St. The line was opened for traffic, Sept. 12. The old tracks on St Dominique St. are to be abandoned. (Sept., pg. 427.)

Ottawa Electric Ry.—The Board of Railway Commissioners has granted the company leave to appeal to the Supreme Court, against the order directing it to pay a proportion of the cost of the Bank St. subway. The ground of the appeal is that the company is entitled by its franchise to the unimpeded use of the street, and cannot be compelled to pay for its improvement in the way suggested.

The St. Catharines, Pelham and Welland Electric Ry. Co. was incorporated by the Ontario Legislature in 1904, to construct an electric railway from St. Catharines to Welland, Ont., with a branch from near Fonthill to Fenwick Station, on the Toronto, Hamilton and Buffalo Ry., and was given power last session of the Ontario Legislature to extend its projected line from Fenwick to Dunnville, Ont. The company's charter had been sold to the interests which now own the Niagara, St. Catharines and Toronto Ry., and the power transmission line now under construction from Niagara to Toronto.

(See Niagara, St. Catharines and Toronto Ry., Sept., pg. 427).

Southwestern Traction Co.—Application was made to the Railway Committee of the Ontario Government asking for an order to expropriate certain lands for its right of way without the consent of the municipalities interested, and without an order from the county judges. The Committee decided recently not to give the order, but further consideration will be given to the question upon the company submitting a draft form of the expropriation order desired. The company has secured its right of way, and almost completed its line between London and St. Thomas, but one or two owners will not enter into negotiations for the sale of their land. (Aug., pg. 373).

Toronto and Hamilton Ry.—A meeting of the Electrical Development Co. has been called to be held in Toronto, Oct. 2, for the purpose of considering a proposal of the T. and H. Ry., for the use of a portion of the right of way of the Toronto and Niagara Power Co., between Toronto and Niagara Falls, Ont. The proposed agreement is to run for 99 years, and the rental to be paid is 5 % upon one-half of the total cost of the right of way, the T. and H. Power Co. to have the right to patrol the line with its cars, and to have free transportation for its operating staff. (June, pg. 261.)

Toronto and York Radial Ry.—At a meeting of the Railway Committee of the Ontario Government recently, the plans for the extension of the Mimico division from Long

(Continued on page 489.)