

which electro-chemical & electro-metallurgical industries might arise, as well as those connected with the products of the forest & the mine.

### Electricity for Main Line Railways.

At the recent convention of the American Society of Civil Engineers a prominent place was taken by the discussion upon the applicability of electricity to main line railways, & it is rather interesting to notice how the views of the various speakers indicated their present affiliations. It is very difficult for any railway man to see anything good in electric propulsion for anything but local and suburban traffic, & the possibility of railway traffic ever becoming modified because of the use of electricity is something which the orthodox railway engineer does not want to think about. Col. Haines showed that electricity was more suitable for light, frequent trains than for heavier ones running less often, but no one seemed to see in that an argument for running light, frequent trains altogether, obvious as the suggestion might appear. The fact that the fuel-saving of power houses over locomotives is not great, was brought out strongly in opposition to the use of electricity, but the absence of reciprocating parts, & the advantages of independent motor cars were features altogether too radical for the average railroad man to accept. It must not be forgotten that the traffic conditions which are assumed to control the subject, are themselves the creation of the present railroad system, & that a new system may create new traffic conditions adapted to its capabilities, & none the less effective because they happen to be different from those which now exist. No one doubts that if aerial navigation should become a practicability, an entirely new set of traffic conditions would instantly be created, & the old conditions would be altogether powerless under such circumstances. When the mechanical conditions which are necessary to adapt electric traction to main line surface are fulfilled, the traffic conditions may be found equally powerless.—*Engineering Magazine*.

Fair Warning.—Visitor—Does the trolley line lead to the cemetery? Citizen—Yes, if one isn't careful.

F. A. Huntress, Manager of the Halifax Electric Tramway Co. has been visiting Barbadoes, Port au Prince, & Georgetown, in the West Indies, where it is said there are favorable openings for electric railways, which are likely to be taken advantage of by Canadian capitalists.

At the recent Trades & Labor Congress in Montreal, it was decided to petition the Dominion Government for the passage of an Act to provide that employees of electric railways shall be compelled to serve an apprenticeship of 30 days, & to pass an examination as to competency before entering upon active duties.

### General Telegraph Matters.

The Commercial Cable Co. has declared its usual quarterly dividend of  $1\frac{3}{4}\%$  payable Oct. 1.

The C.P.R. Co.'s telegraph is extending its service along the Columbia & Western Ry., between West Robson & Midway as fast as track is laid, offices being opened at the principal stations.

J. H. Helmcken, of Victoria, B.C., is advocating the establishment of telegraph communication between Vancouver Island & the smaller islands adjacent to it, particularly a cable from Comox to Texada.

The Spokane & Northern Telegraph Co.'s lines have been extended to Midway, B.C., via Republic, Wash. It is the intention to ex-

tend through the Boundary Creek country, including Cascade City, Grand Forks, Columbia, Curlew & Greenwood.

The Dominion Government telegraph line, connecting the Cape Beale & Alberni lines, thus circling the southern end of Vancouver Island, has been completed. The wire follows the coast line, but is strung on trees, cleared of branches, & a good trail has been cut, so there is not likely to be much trouble from falling timber. The line is 60 miles long.

The C.P.R. Co.'s telegraph office in Vancouver has been removed to the General Passenger Agent's office on Granville Street where the work of the office will be carried on pending the completion of the building being erected on Hastings St. When the new station is completed a branch office will be opened in it, which, with the Carrall St. branch, will give the Co. three telegraph offices in the city.

At the annual meeting of the G.N.W. Telegraph Co. in Toronto, Sep. 27, the directors & officers were re-elected, viz.:—President, H. P. Dwight, Toronto; Vice-President, A. Brown, Hamilton; Directors, H. N. Baird, J. Hedley, A. S. Irving, W. C. Matthews, Toronto; R. Fuller, Hamilton; Hon. W. McDougall, Ottawa, & C. A. Tinker, New York; Secretary & Auditor, G. D. Perry; Treasurer, A. Cox. The Co. does not make its report public, but it is said the financial statements presented showed a marked improvement in the revenue of the Co. over the previous year, & it was stated that the outlook for the coming year was still more hopeful.

The establishment of the Marconi system of wireless telegraphy in the northern part of Newfoundland, & along the Labrador coast, seems to be seriously contemplated by the Newfoundland Government, whose Minister of Marine & Fisheries, in a recent interview, stated that the plan at present thought of, if arrangements can be made with M. Marconi for instruments, fitting up, etc., is to connect the whole Labrador coast with the nearest telegraph station on the island, probably Tilt Cove. The distance between Tilt Cove & Rama, Northern Labrador, in a line along the coast, is something over 850 miles. This means that about 18 stations at a distance of about 50 miles apart will be placed. The system will probably be worked only during the fishing season of some four months in the year.

General Superintendent McGuigan, of the G.T.R., has issued a circular in which he points out that numerous complaints have recently been made that public telegraph business at several stations is not handled in a prompt or satisfactory manner. "It is our desire," he says, "that this service be made as satisfactory to the public as possible. Therefore, agents & operators will be expected to expedite the handling of this class of business, & will, hereafter, be held strictly to account for unnecessary delays or failures. Passengers & others offering messages at our stations for transmission are to be given prompt & courteous attention, & their messages transmitted with the least possible delay consistent with the proper performance of railway duties. The delivery of such messages must also be made without unnecessary loss of time."

The Plant S. S. Co.'s str. La Grande Duchesse is to carry an excursion to the International yacht race between the Shamrock & Columbia, & will have Marconi on board to transmit a report by wireless telegraphy. A cable ship will be stationed at some convenient point & connected with the cable, the land end of which is at Coney Island. The cable ship will at times be 20 miles or more from La Grande Duchesse, but it is claimed that it will be possible to receive messages on the latter & transmit them to England in one

minute's time. The Duchesse is particularly adapted to the work from the fact that a long spar is necessary in order to convey the sound successfully. The fore truck of La Grande Duchesse is 135 ft. from the water line, upon the extreme top of which will be placed at right angles a short gaff, or arm, about 3 ft. long. From this arm will be suspended an insulated wire, the lower end of which will connect with the operating instruments in a room immediately below the arm or gaff.

The extension of the Dominion's Gulf of St. Lawrence telegraph system to the Strait of Belle Isle will shortly be effected. The line on the north shore of the Gulf extends from Murray Bay to Big Romaine, 500 miles. The stretch between Big Romaine & Chateau Bay on the Strait of Belle Isle is 315 miles, & the contract for the construction of the line between these points has been let to X. Gendreau, of Quebec. The poles are being laid along the route. Chateau Bay is the nearest point on the Labrador coast to Belle Isle, the light station at the "front door of the St. Lawrence," which station it is intended to connect with the government signal system. But the experts are as yet undecided how the connection shall be made. A cable could easily be laid from Chateau Bay to Belle Isle, but the grinding of the immense masses of ice which pass through the straits in early spring would make short work of a cable. The only alternative, therefore, seems to be the adoption of a scheme of wireless telegraphy, & the experts of the Public Works Department are eagerly following the experiments being made in Europe, with a view to adopting wireless telegraphy as a means of connecting Belle Isle with the coast signal system.

At the hearing of the North Waterloo, Ont., election protest recently, subpoenas were served upon the G.N.W. Telegraph agents at Berlin, Waterloo, Elmira, & the C.P.R. Co.'s telegraph agent at Berlin, requiring them to produce all telegrams relative to the election which had passed through their respective offices. Large batches of messages were produced. The G.N.W. T. Co.'s Berlin agent, on the advice of his superior officers, submitted to the court that the subpoena served upon him was not sufficiently definite, as it referred to certain telegrams passing through his office during a period of 5 or 6 months, & did not give names or dates. He was instructed by Judge Osler to obey his subpoena. The Elmira agent, when called, said that his instructions from the Co. were not to produce telegrams without an order from the judge, who declared emphatically that he would not give an order; that telegraph people must understand that they must obey a subpoena. President Dwight, of the G. N. W. T., & Superintendent Pingle, of the C.P.R. Co.'s telegraph, were called upon to produce all telegrams sent in & out of Toronto & the different stations in North Waterloo by the Ministers of the Province & various others interested in the election. These gentlemen, however, did not respond, & it is now stated that application will be made to set aside the subpoenas served upon them. The effect of this subpoena, it is argued, would be to place in the hands of the petitioner & solicitors all the public & private despatches of the Ministers for months together, whether relating to the case or not, & also to destroy confidence in the telegraph companies & thus injure their business. The local manager of the Bell Telephone Co. at Berlin, & the telephone agent at Elmira, were also subpoenaed & testified as to conversations in reference to the election having taken place over their wires.

### The Yukon Telegraph Line.

The Dominion Government's line was completed in Aug. to Fort Selkirk, 417 miles from its starting point at Lake Bennett, and the 176