The Dominion Government str. Tyrian recently returned to Halifax, N.S., after having repaired the break in the Belle Isle cable. The cable, when picked up, was found in parts to have been crushed flat.

The Western Union Telegraph Co., in its report for the year ended June 30, 1904, includes among its securities the following:— Anglo-American Telegraph Co., $\pounds_{I,308}$; Dominion Telegraph Co., 5,766 shares of the par value of \$288,300.

The contractors for the erection of the new Marconi wireless telegraph station at Port Morien, N.S., are Rhodes, Curry & Co., Amherst, N.S. The summit of the new towers will be 336 ft. above high water mark, the actual height of the building being 210 ft.

Arrangements are in progress for completing a series of wireless telegraph stations at U.S. points between Clayton, N.Y., and Chicago, on Lake Michigan, and Duluth, on Lake Superior. Eour stations are reported to be already completed, and six others in course of erection.

The Saskatchewan Herald, Battleford, Sask., recently republished the following from an issue of 25 years ago:—"Edmonton Notes: A subscription is being taken up for the purpose of extending the telegraph line into this place. It will not be brought in from Hay Lakes—the present station, 35 miles distant —but from the terminus of Mr Fuller's contract, about 18 miles due south from Edmonton,"

The Board of Arbitration, of which Justice Teetzel is chairman, dealing with the G.T.R. telegraph clerks' application for increased rates of pay, etc., has had several meetings, but was adjourned to Nov. 16, owing to the legal engagements of the chairman. A question to be decided is how far the arbitrators can hear evidence regarding points on which the telegraphers and the G.T.R. agreed before arbitration was resorted to. The telegraphers desire to reopen the whole question.

The alteration in the rate for telegraphic messages transmitted between the Anglo-American Telegraph Co.'s offices in Prince Edward Island and outside points, which came into effect recently, brings the rates to Manitoba and the Northwest Territories down from \$1.25 for 10 words and 8c. for each additional word, to \$1 and 7 cents, respectively; and the rate to Boston, Mass., from \$1 and 6c., to 75c. and 5c. The Charlottetown office is kept open until 2 a.m., and the Summerside office until 10 p.m., daily.

A correspondent of the London, Eng., Daily Telegraph, from Japan, handed a despatch of 20,000 words into the office of the C.P.R. telegraphs at Vancouver, B.C., to be telegraphed. It was sent across the continent to Canso, N.S., and transmitted therefrom to England by the Commercial Cable Co. The time occupied in sending the 20,000 word message from Vancouver to London was less than 12 hours, and the Daily Telegraph compliments the companies for the rapidity and accuracy with which the message was handled.

The arbitrators in the case of the Newfoundland Government and the Reid Newfoundland Co., in respect of the telegraph system which was taken over in 1902, began their sittings at St. Johns, Nfld., Oct. 27. The system extends over 2,000 miles and was taken over from the Government at the time the trans-insular railway was constructed. The arbitrators are Hon. E. Blake, M.P., of London, Eng., on behalf of the Government; D. MacMaster, K.C., Montreal, for the Reid Newfoundland Co., and P. S. Archibald, C.E., Moncton, N.B., third arbitrator, appointed by the court. Jas. Kent, manager; W. J. Camp, electrical engineer, and J. Townsley, Superintendent of Construction, C.P.R. Telegraph Department, Montreal, were among the witnesses to be examined.

General Telephone Matters.

The Bell Telephone Co. has completed the installation of a fire alarm system in London, Ont., for the city council.

At a recent sale of stocks of various companies at Halifax, N.S., to close an estate, 243 shares of the Nova Scotia Telephone Co. were sold at 116³.

The Bell Telephone Co. is arranging with residents of Copenhagen, Port Bruce, and other points in the vicinity of Aylmer, Ont., for the installation of a telephone line.

The Bell Telephone Co. is arranging to establish exchanges at Lacombe and Olds, Alta., with a view to making further extensions of its system between Calgary and Edmonton.

The Western Telephone Co. has built a power house at Red Deer, Alta., and will supply power for manufacturing and electric lighting, as well as for operating the telephone system.

The Ontario Independent Telephone Co., which has its head offices at Windsor, Ont., has passed a by-law increasing the number of its directors from five to nine. P. T. Chesley is president, and A. D. Prosser is attorney.

Notice of appeal has been given in the action to upset the by-law passed by the Hamilton, Ont., City Council granting a five years' exclusive franchise in the city to the Bell Telephone Co. The action of the council has been upheld by the Ontario courts.

The Bell Telephone Co. is pressing the Brantford, Ont., City Council for an answer relative to its offer for an extension of its franchise there. The company proposes to make a number of extensions and improvements in its lines at Brantford, but does not care to do anything until the question of the franchise is decided.

The International Telephone Co. expected to complete the laying of its telephone cable between Victoria, B.C., and Marietta, Wash., and to have the whole line between Victoria and Vancouver in operation by the end of Nov. The land lines connecting Vancouver with Marietta were completed at the end of Oct. The toll for a minute's conversation between Vancouver and Victoria will be 50c.

The Rainy River International Telephone Co. (Ltd.) has been incorporated under the Ontario Companies' Act, with a capital of \$50,000, and offices at Fort Frances, Ont., to carry on a general telephone business in the Rainy River district south of latitude 49. D. Robertson, J. A. Mathieu, P. T. Roberts, of Rainy River, Ont.; P. A. Smith, H. Williams, J. Paul, T. Wilson, J. C. Scott, H. J. F. Sessions, of Fort Frances, Ont., are the provisional directors.

Press reports state that negotiations are in progress with a view to the amalgamation of the Union Telephone Co., Florenceville, N.B., and the Central Telephone Co., Belleisle, N.B. The Union Telephone Co.'s lines extend from Woodstock to Florenceville, to Andover and Grand Falls, with branch lines to Tobique and Hawkshaw. The Central Telephone Co. has a line connecting Bellisle and Sussex, and has been absorbing the small independent lines throughout Kings county.

The question of the amount of damages to be awarded the Bell Telephone Co. by the municipal telephone systems of Port Arthur and Fort William, Ont., for a right to connect their system with the C.P.R. stations there, was argued before the Railway Commissioners. The then chairman, Hon. A. G. Blair, intimated that some points of law would have to be submitted to the Supreme Court for decision. The court will be asked to decide whether the C.P.R. and the B.T. companies had power to enter into a contract by which no competing telephone exchange is admitted to C.P.R. stations throughout Canada, and

whether the contract, if a legitimate one, was monopolistic in its character.

Prof. G. Bell, inventor of the telephone, in rade, says:—"The telephone was invented in Brantford during my visit to my father and my mother, in 1874. Up to June, 1876, only laboratory experiments had been made with the instruments, and the transmission of speech was from one room to another in the same building. The first transmission of speech over a real telegraph line was effected in Brantford in the autumn of 1876, on the lines of the Dominion Telegraph Co., by means of instruments which I had taken from Boston. In one experiment speech was trans-mitted from Brantford to Mt. Pleasant, in another from Brantford to Paris, and in a third from Brantford to my father's house on Tutela Heights, where the results were witnessed by a large company of Brantford peo-These experiments were made Aug. 10, ple. 11 and 12, 1876. In these experiments the transmission was effected only in one direction, the instruments employed not being well adapted for reciprocal communication. As to citizenship, I was born in Edinburgh. Scotland, and was, therefore, a British sub-ject by birth. I landed in Canada from Great Britain on Aug. 1, 1870, and after a few days spent in Paris, Ont., I removed to Brant-ford, where I resided with my parents at Tutela Heights, until March, 1871. The tele-phone was invented in Brantford in the summer of 1874. During the whole period of the development of the telephone, therefore, my political status was that of a British subject, who had taken out his first papers of naturalization in the U.S., and who, although not a full citizen, was entitled to the rights and privileges of citizenship. The telephone went into commercial use in 1877. We now have more than three million miles in use in the U.S."

PURCHASING AGENTS' GUIDE.

(Continued from third page of Cover.)

Contractors' Plant
F. H. Hopkins & Co Montreal.
T. A. Morrison & Co
W. H. C. Mussen & Co Montreal.
Conveyor Belts, Rubber
The Gutta Percha & Rubber Mfg. Co. of Toronto.
Cross Arms, Top Pins & Side Blocks
Canadian General Electric CoToronto. The Firstbrook Box CoToronto.
Cross Arm Braces
Canadian General Electric Co
Toronto Bolt and Forging Co
Urossing Gates
General Railway Signal Co Buffalo, N.Y. The N. L. Piper Railway Supply Co Toronto.
Crowbars
Toronto Bolt and Forging Co Toronto.
Cuivert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co Hamilton,
Curtains
The Hudson's Bay Company
Cuts
Acton Burrows Co
Derrick Ropes
The B. Greening Co Hamilton, Ont. Derricks
F. H. Hopkins & Co Montreal. Door Signs
Acton Burrows Co
Drawing Materials
Eugene Dietzgen CoNew York.
Dredges
The Bertram Engine Works Co
Drilling Machines
The John Bertram & Sons Co Dundas, Ont,
Drills
W. Abbott
Dry Goods
The Hudson's Bay Company
Dynamo and Electric Castings
American Brake Shoe & F'dry Co., Mahwah, N.J.
Economizers .
Babcock & Wilcox (Ltd.)
Electric Car Route Signs
Acton Burrows Co

(Continued on page 463.)