

when these powers now wasted shall have been harnessed in the service of man. To bring about such results, more than a slight expenditure of capital and labor would be justifiable; and, undoubtedly, there can be no one public work undertaken which would be so largely conducive to that end as the opening to navigation of the noble waterway which is the subject of this paper, and which Nature herself has plainly indicated as Canada's great national highway for the traffic between the lakes and the Atlantic.

THE TELEGRAPH IN CANADA.*

BY CHAS. P. DWIGHT.

The telegraph in Canada has so often been made a subject of history and retrospect that one can hardly hope, in a paper of this nature, to do more than briefly outline much of what has already been written concerning its rise and development. The various stages in its practical operation, from the simplicity of the old paper register to the present day, are too well known to require any elaboration at my hands, and I have, therefore, simply put together something which may be considered as a record for this association concerning the more important telegraph organizations which have existed in Canada from the start.

The first commercial telegraph line erected in this country was in the year 1847, between Toronto, Hamilton, St. Catharines and Niagara Falls, connecting at the latter point with a line through to Buffalo, owned by one David Kissock. The organization under which this line was built was known as the Toronto, Hamilton, Niagara Falls & St. Catharines Electro-Magnetic Telegraph Company—a somewhat lengthy title for a concern of this nature, but one which was thoroughly expressive in regard to the scope and nature of its business. As a matter of curiosity there is laid on the table for your inspection one of the original stock scripts of this company which an antiquarian friend has loaned me for the occasion, and which you will note bears the signature of Thos. D. Harris, president, and P. B. Marling, secretary. The capital stock of this company was \$16,000, and the line was built under contract by Samuel Porter, a man long known afterwards in connection with various telegraph enterprises in the United States, and of whom it was said that "he built for this first Canadian telegraph company an honest and well appointed line."

In the same year, 1847, was organized the Montreal Telegraph Company, with a capital of \$60,000. This company immediately proceeded to construct a line from Quebec to Toronto, and soon afterwards purchased the line erected by the Toronto, Hamilton, St. Catharines and Niagara Falls Company. The line from Quebec, when finished, was looked upon at the time as the best piece of telegraph construction on the continent. The poles were of cedar, thoroughly tamped and well set. Wooden brackets of white oak were used, with glass insulators. The wire was a No. 9 gauge, English galvanized, and was the first of this kind employed for such a purpose on the continent.

At the close of the year 1847 the Montreal Company had in operation 540 miles of wire, with 9 offices, 35 employés, and had sent in all 33,000 messages.

An organization known as the British North American Electrical Association was also formed in 1847, with F. N. Gisborne as the moving spirit. This company, or association, proposed connecting Quebec with

the Lower Provinces, and finally with the Atlantic coast, but for some years the line was extended no further than Riviere du Loup. It was finally extended to Woodstock, N.B., however, where connection was formed with the American Telegraph Company, an organization which had already connected a few of the principal points in New Brunswick at that time, and which had a capital of \$25,000. A second organization, known as the American Telegraph Company, constructed a line about this time from Quebec to Montreal, but was afterwards absorbed by the Eastern Company. All of these lines east of Quebec, however, proved a dismal failure from a financial point of view, and were soon turned over to the Montreal Company without charge, and the line between Quebec and Montreal was also taken over by them at a nominal charge.

In the Eastern Provinces there is on record a project set on foot by Mr. Lawson R. Darrow in 1847, for the purpose of connecting the lines then in Nova Scotia with those of Maine, and an act of incorporation was granted for this purpose in 1848. In the same year a line was built from Calais, Maine, to St. John, N.B., under the organization just mentioned, and which has now been incorporated into a company known as the New Brunswick Electric Telegraph Company, with a capital of \$40,000. A line to St. John *via* St. Stephen's, St. George and St. Andrews, was completed January 1st, 1849, and during the ensuing summer the line was completed from St. John to Hampton, Sussex, Salisbury, Dorchester and Sackville to Amherst, where connection was made with the Government line then in Nova Scotia, which was built from Amherst to Halifax in November, 1849, and which for the first time gave Halifax connection with New York.

In 1856 the lines of the New Brunswick Telegraph Company were leased to the American Union Telegraph Company, and some ten or twelve years later came under the direction of the Western Union Telegraph Company.

The Government line between Halifax and Amherst was built by F. N. Gisborne, for the purpose of forming a connection with the American and New Brunswick lines at the former place, in order to meet the demand for communication with New York, consequent upon the arrival of steamers at Halifax with European news. In 1851 this line was sold to the Nova Scotia Electric Telegraph Company, an organization chartered in March of that year, and which afterwards extended the line from Pictou to Sydney, C.B., and from Halifax to Yarmouth. Upon completion of arrangements for the landing of Atlantic cables in Newfoundland, the lines of the Nova Scotia Company were leased to the American Union Telegraph Company in 1860. In 1866 this lease was taken over by the Western Union Company, who purchased the lines outright in 1872.

Returning to the Province of Quebec again, we find that in 1849 there was organized what was known as the Montreal and Troy Telegraph Company which built a line the same year from Montreal to the frontier, and thence *via* Whitehall to Troy. This company was organized by Ezra and Alonzo Cornell, who also constructed the line, and which worked for several years afterwards in connection with the Montreal Company. A. B. Cornell, whom it will be remembered was afterwards Governor of New York State, acted as manager of the company at Montreal for two years after the construction of the line. Some few years afterwards the section of the line from Whitehall north became the

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