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CANADIAN TIECTRICAL NEWS

VOL. 1.

MONTREAL, MARCH 31, 1884.

No. 1.

WE BELIEVE THE TIME HAS ARRIVED FOR THE REGULAR PUBLICATION OF AN ORGAN DEVOTED EXCLUSIVELY TO THE LARGE AND GROWING INTERESTS OF THE

TELEGRAPH, TELEPHONE AND ELECTRIC LIGHT

ELECTRICAL PROGRESS:

THROUGHOUT THE LENGTH AND BREADTH OF THE DOMINION.

Having spent many years in the business as a practical operator and manager in this city and New York. I hope from the knowledge and observation thus acquired to make the JOURNAL instructive, interesting, and valuable to the practical telegrapher, the electrician, as well as to the man of science.

We believe there are not less than five thousand electrical stations of various kinds, such as the Telegraph, Telephone, Electric Light, Fire Alarm, District Telegraph and Railway Companies, who, with their ten thousand employees, from the Gulf of St. Lawrence to the Pacific Coast, have been so far unrepresented by any Journal of this kind.

The Canadian Electrical News

Will consist of eight pages royal quarto, and will be published on the 1st and 15th of every month.

We shall endeavour to make it, in every respect a first class

TELEGRAPHIC AND ELECTRICAL NEWSPAPER.

All matters relative to **Electrical Science** will be discussed in a progressive, independent and liberal spirit, and the efforts of the paper will be to aid the scientific, and contribute to the advancement of all those engaged in the profession.

Correspondence from all parts of the Dominion, or from the United States, or abroad, giving such Changes, Promotions, Incidents, and Items of electrical interest, Personals, Inventions and other matters that may bear on the science, and especially those relating to the

MELEGRAPH, MELEPHONE, OR ELEGMRIG LIGHM are earnestly solicited.

We hope, from time to time, to illustrate with original engravings, any new and interesting inventions and other subjects pertaining to Electric Science.

The Canadian Electrical News is the *only* paper in the Dominion devoted exclusively to the TELEGRAPH, TELEPHONE, AND ELECTRIC LIGHT INTERESTS.

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It will be issued at \$1.00 per annum, payable in advance.

A limited number of advertisements will be inserted.

Your subscription and cordial co-operation in furnishing us with all suitable items that may come under your personal observation, is particularly requested.

JNO. HORN, Editor.

All business communications, subscriptions or letters relating to advertising, should be addressed to the publishers,

HART BROTHERS & CO.,

32 Victoria Square, Montreal.

ELECTRICAL NEWS THE CANADIAN

Published Semi-monthly at No. 32 Victoria Sq., Montreal, Q.

JNO. HORN, Editor.

HART BROTHERS & CO., Publishers.

Correspondence on all Telegraphic, Telephonic or Electric Light subjects is solicited Readers are cordially invited to communicate their views and opinions on all

topics within the province of this Journal.

I ems relating to Telegraphy, Telephony, Electric Light, or Inventions, will be thankfully received.

Rejected manuscripts cannot be returned unless accompanied by the necessary postage when received.

Subscriptions \$1 per annum in advance : Single Copies 5c.

All husiness communications, subscriptions, or letters relating to advertisements should be addressed to the Publishers

HART BROTHERS & CO., 32 Victoria or P. O. Box 786, Montreal, Q.

MARCH 31. 1384

ADVERTISERS

Advertisers of Electrical Supplies should try to reach the enormous demand springing up in Canada for their goods. New Electric Light Companies are forming everywhere in the Dominion, and there are also a large number of companies in existence, such as Telegraph and Telephone Companies, Railways, District and Fire Alarm Telegraphs. All these estab lished concerns are large yearly buyers of supplies. Very few hotels have electric bells or satisfactory annunciators; at least a thousand hotels require them; very few factories have them. Companies requiring Cedar Poles will find it to their advantage to advertise for Tenders in the CANADIAN ELECTRICAL NEWS.

Manufacturers and dealers in all kinds of Telegraph. Telephone, Electric Light supplies, or other things connected with the interests we advocate, will receive a copy of this number of our paper, when it is hoped we may be favored with their advertisement for future issues. No better medium has ever presented itself for their patronage.

We would like to have correspondents in each of the following cities, or other large points of interest, such as Toronto, Hamilton, Kingston, Winnipeg, Quebec, St. John, N.B., and Halifax, N.S.

THE SECRET OF SUCCESS.

"The lives of great men all remind us We can make our lives sublime, And, departing, leave behind us Foot-prints on the sands of Time."

In presenting our initial number to those whom we wish will derive instruction from these pages, and for whose benefit the Canadian Electrical News appears, and for whose advancement in life, it will be always our earnest endeavour to promote, thos; who may be styled the rank and file of the army of workers of electricity in Canada, we desire to address a few lines, trusting that they will allow us that patient hearing generally accorded to a new teacher by his scholars.

Many of you have been for some years in places and positions where your view of life is circumscribed, where the unvarying routine of your duties wearies you day after day, and is natural for the human being to desire change, and if he is quarters.

denied the opportunity, his duties will seem irksome, and he has not that healthy train of thought, that pleasure in living, without which even well-paid official positions do not bring happiness.

In perusing our pages you will have opportunities given you to advance yourself, but this is not solely our mission.

New inventions and discoveries in electrical science occur from time to time; it may be that there is some particular branch with which you are conversant, and when these new inventions and discoveries are recorded in our pages, you may have some valuable suggestions to offer, some ideas of practical application, by which your services may be of great use. Again, you may see an opening exists in your own or some other locality with whose needs you are acquainted, for the develop. ment of a new branch of the business, and you wish to start this or to help it forward.

There are numberless ways and means to achieve success in the various walks of life. It is almost an impossibility to ascertain these ways or channels unless you read one or more journals, whose special business it is to indicate these channels; and whether the assistance you will receive be given you directly or indirectly, unless you are regularly in receipt of the ournal, you cannot expect to elevate yourself in the scale of life, or obtain the position you desire, without its help.

You also will require besides our teaching a stock of perseverance, the one quality which alone helped the genius of Franklin, of Morse, of Elison, of Bell; which has placed electrical science to-day in the stage of development it is; which aided Cyrus W. Field to secure the boon of instantaneous communication between two worlds. In whatever position you are in, if you are not satisfied with it, you can never get a better, you will not deserve a better, unless you persevere in attending to your present duties, as well as in striving to secure an advancement.

Should our venture meet with that success we anticipate new features of interest will be introduced in succeeding numbers.

WE shall be pleased to receive any suggestions or ideas from our readers as to how we may make the News more interesting.

In our next issue we will give an interesting original article on the Telegraphs of Peru, Chili, Venezuela and Central America, prepared expressly for the Canadian Electrical News by a distinguished Canadian Telegraph Engineer, now a resident of Central America.

We think it hardly necessary to say to our readers-the success of this new venture, in the publication of the "News" -whether we shall stand or fall, will depend entirely on the support accorded us by the fraternity at large and the liberal patronage of our advertising columns. As our paper is the only one devoted exclusively to advancing in every way the you have reached that point when there seemingly is no more interests of all those engaged in Electrical science, it is to be hope in life, when all contentment is lost. Is this right ? It hoped that we shall receive that aid promised from many

THE TELEGRAPH.

The Western Union Telegraph Co. operate about 340,000 miles of wire, which is constantly being increased.

The Great North-Western connect with over 2,000 various telegraph offices, and new stations are being constantly opened.

The Great North-Western Telegraph Company operate nearly 35,000 miles of wire, and are constantly adding thereto.

George H. Wilkinson, who is Manager of the G. N. W. at St. Johns, Q., has been long in the Company's service, and in his other capacity also as express agent is exceedingly popular with the St. Johns people.

We hope at the next annual reunion of the "Old Timers" some Montreal delegate may be present and offer the hospitalities of this city for the next meeting. Here we not an army of the best of veterans, and can we not offer a tempting programme, with our venerable ex-secretary to make the welcome address. We do not like the present name. We should much prefer that of the "Veteran Telegraphers Association."

Mr. F. N. Gisborne, F.R.C.S., the able and energetic Superintendent of Government Telegraphs and Signal Service of the Dominion, delivered a very interesting lecture on the "Origin and Development of Electrical Science" at Ottawa, under the auspices of the Literary and Scientific Society on the 21st of last month. The chief feature of the lecture consisted of original colored drawings expressly prepared by him for explanation to those uninitiated in elect. ical science, thus enabling all present to understand the general principles upon which dynamos, cable testing and duplex working, &c., &c., are based. The lecture was delivered without notes in a clear and pleasant off hand manner. Not the least interesting part was that describing the introduction of the electric telegraph into Canada in 1846, when Mr. Gisborne was an employee of the Montreal Telegraph Company, and who opened the first office in Quebec. The discourse drew forth frequent applause and was a most comprehensive survey of the whole field of modern electrical application.

CANADA'S FIRST TELEGRAPH.

MONTREAL TELEGRAPH COMPANY.

Capital £15,000, in shares of £10 each. Bankers—City Bank of Montreal.

Notice is hereby given that an Instalment of Two Pounds per share of the capital stock of this Company is required to be paid in to its credit at the CITY BANK, of this city, on or before Monday, the Sth day of March.

By order, FREDERICK A WILLSON,

Montreal, Fub. 27, 1847.

Hon. Secretary.

The above is a copy of the original notice calling for the capital to erect the first telegraph line in Canada. Will some of our readers tell us who the Secretary, Mr. Willson, was, and his present address?—ED.

ELECTRO-MAGNETIC TELEGRAPH COMPANY.

NOTICE TO CONTRACTORS.

TENDERS will be received at the office of the above Company, St. St. Joseph Street, until the Twentieth instant, for the Construction of a Line of Telegraph between this City and Toronto.

The said line will be about 400 miles in length, and is to consist of one iron wire, to be thoroughly tinned in the most approved manner, and of a weight not less than 230 lbs, to the mile. The posts to be not fewer than 20 to the mile, each 26 feet long by 5 inches in diameter at the smallest end; to be of such durable kind of timber as the neighboring districts may afford, and to be inserted not less than six feet in the ground, excepting where rock exists, and then the posts are to be steadied by substantial frames at the lowest possible depth, such posts to be suitably dressed within the boundaries of the several farms through which the telegraph shall pass; the wires attached to each post to be insulated by a strong glass cup, and the whole work to be completed in the most efficient and substantial manner, and out in working order.

and substantial manner, and put in working order.

The terms of the proposal to be at so much per mile, which sum must comprehend the supply of all batteries and the necessary apparatus for six stations. The line of telegraph to be completed and ready for operation by the First day of Araver next at latest.

Satisfactory security will be required for the due performance of the work. Payment by periodical instalments, as the work advances.

Further particulars may be obtained on application to Mr. F. A. Willson, Honorary Secretary.

Montreal, January 7th, 1847.

The above is a copy of the original notice issued at the time, and must prove quite interesting to our readers of today. What were the first stations opened? En.

WESTERN UNION QUARTERLY REPORT.

This Company's financial statement for the quarter ending March 31st shows a surplus on the 1st January last of \$3,970,931.78. The net revenues of the current quarter are estimated to reach \$1.650,000, making available or distribution the sum of \$5,620,931.78, or deducting \$126.420.90 for interest on bonded debt and sinking fund \$5,494.510.88. Out of this the Executive Committee have ordered to be paid April 15th to stockholders of record a quarterly dividend of 1½ per cent., requiring \$1,399.800, and leaving a surplus of \$4,094,710.88- This is certainly a healthy balance sheet.

BRITISH COLUMBIA.

OPENING OF THE FIRST OFFICE.

We publish for the first time part of a letter addressed to us in 1865 from the ganial, bluff and whole-souled El. Conway, now alas! dead many years. Many of the present "old boys" will recollect him well. We believe he commenced his career in this city on the Grand Trunk Line, where a younger brother much esteemed is to-day serving under that Corporation:

NEW WESTMINSTER, B.C., March 7th, 1865.

DEAR JOHN,—I have to thank you for two brief notes and one copy of the Telegrapher. How much subscription do I owe? Will forward as soon as I am notified. I am well pleased with the Telegrapher, and think it is a credit to the fraternity and those connected with it.

I have just returned from San Francisco, where I have been to confer with Col. Bulkley. Since my return I have built a short line from this city to the Governor's residence. It being the first telegraph in the colony, the largest portion of the population have imbibed rather freely, and the electric sparks seems to have set every-

thing on fire. Ere you receive this we will have the California State Line in this town, and it will be a glorious time for the people here. Everyone seems to hant us up to show their feeling for the first Telegraph men in the country. Pittleld is with me, and will be agent for the Company here. We have large quarters, and have already made

humble servant.

Regards to all the boys too numerous to mention.
Yours ever,
E. CONWAY,

Assistant Engineer U. O. Tel.

GREAT NORTH WESTERN TELEGRAPH COMPANY.

EXTENSIVE IMPROVEMENTS AND ENLARG-MENT OF THE OPERATING ROOM, HEAD OFFICE, TORONTO

During the middle of March the Great North-Western Telegraph Company completed certain extensive and important alterations and improvements in the internal arrangements of the Toronto Office. The result, while beneficial from every point of view, either with regard to the readier transaction of business or to the convenience and comfort of the employes, places the office on an equal footing with any telegraph office on the continent.

In 1870 the Montreal Telegraph Company erected and moved into the handsome building now occupied by them on the corner of Scott and Wellington streets. At that time the operating room was fitted up with a switch and tables for only fifty lines, and these supplied all the accommodation required. The possibility that the business of the company would develop beyond the limits which these provisions defined seemed so far distant that it was given little or no thought. But well managed institutions generally thrive beyond the sanguine hopes of those most deeply interested in them, and in the course of ten years or so it was seen that further improvements and extensions were necessary if the rapidly increasing volume of business was to be transacted in a thoroughly satisfactory manner. Accordingly the matter was discussed by the officers of the company in this city, but it was not until quite recently that action was taken. The difficulties which beset the path of those who were to undertake the proposed alterations, and the extremely delicate nature of the work which it was necessary to perform, would excuse delay until the moment when ircreased accommodation had resolved itself from a question of choice into a matter of necessity. It would be impossible to give a clear idea of the extent of the work involved in the proposed changes, or of the care which it was necessary to exercise while the work was in progress. Only a personal inspection of the offices could furnish that. But an idea may be formed, however, when it is stated that the large number of lines and wires had to be kept clear and in order while the superior arrangements were being made, and the better quarters for their reception The transfer of the wires from one position to prepared. another had to be accomplished under the same anxious conditions, and the extension of battery power had to be provided without disturbing the lines which were continually in use. However, the great work was neatly accomplished, and the ordinary business of the company was conducted beneath without the slightest interruption. All the changes were made under the supervision of Mr. J. T Townsend, inspector storms.

for the Great North Western Telegraph Company, and, of course, to him is due a great part of the credit for the success which has attended the work. The operating room has been enlarged to about double its former size, the increase in the the Company here. We have large quarters, and have already made preparations to commence operations on a large scale.

There will be no serious trouble in our constructing a line for the first 500 miles, and all I ask to run a line through British Columbia is eight or ten working months. Of course, while I am working, others will be hard at work on the other end. The weather here is pretty cold, and river full of floating ice.

I am very anxious to get to work. Have already done a good deal in way of exploring, and I can flatter myself that there are but few who know as much about the geography of this country as your humble servant. service of the company, 6 loops, 5 duplex, and 2 quadruplex. These lines extend from Toronto to Hamilton, to London, to Ottawa, to Bullalo, and to Detroit. The quadruplex lines provide communication between Toronto and Montreal and Toronto and Chicago.

> A new switch, handsome in appearance and interesting in construction, has been placed in position. It is ten feet wide by four feet in height, and is set in an elegant black walnut case. The case stands 9 feet in height, and 12 feet wide, being made to afford accommodation for 100 wires if the number should be increased from the 66 now in use. The switch possesses all the latest improvements, and is fitted up with double spring jacks, lightning arresters, testing instruments, and galvanemeters of both the tangent and Wheatstone bridge principles, &c. The wires, which descend to the switch from the battery-room above, and from the switch to the different tables in the operating room, run in grooved boards, each having its separate compartment, and being covered up securely to prevent it from injury or from interference with other wires. In one corner of the operating room is the "ticker," an instrument which supplies stock and market quotations to the brokers in the city. It is situated close to the New York stock wire, so that on receipt of quotations from the markets they are repeated over the ticker lines.

> The battery-room is situated on the floor immediately above the operating room. In this department are fourteen main batteries for working the ordinary lines, and they range from 40 to 200 cells each. Then there are two batteries, each of 300 cells, for working the quadruplex lines; one of 200 cells, for working the ticker lines, and one of 160 cells, for working the locals. Altogether the cells number 2,900, and are arranged on twelve stands of eight shelves each. A good idea of the extent of the battery may be formed from the statement that about 500 pounds of sulphate of copper is used every week, or thirteen tons in the course of a year. Around the room run the grooved boards holding the different wires, almost hiding the original walls.

> A complete system of electric bells connects the different departments in the building, so that the attendance of any one required may be instantly, and without trouble, summoned from one room to another.

> Three months were occupied in making the alterations and effecting the improvements just completed, but the time was put to good use, and the offices of the Great North Western Telegraph Company in Toronto will now compare favourably with any telegraph offices in America.

> Underground Wires in France.—It appears that the French Government have determined to lay 4,530 miles of underground telegraph wires at a cost of \$10,800,000. This is in addition to the extensive system of wires recently laid beneath the surface of the earth, which places them beyond the destructive and dangerous reach of hurricanes and snow-

COMPETITION IN TELEGRAPHY.

When the Great North Western Telegraph Company had obtained the fusion of the Dominion and Montreal companies, ending the telegraph war in Canada, and giving a fair, and as was thought, permanent value to the investment of Canadian capital in the concerns, the daily newspapers endeavoured to show that the country would suffer by the want of competition, and that the G. N. W. being an offshoot of the Western Union not only would we suffer all the evils of a monopoly in telegraphy, but also all our messages would become known to foreigners, whenever they should so desire.

We are not aware that complaints exist against the practical working of telegraphy as directed by the G. N. W.'s officials in Canada. We do not pay more for our telegraphs than we did before the amalgamation, and yet the shares of the two companies have increased in value, so that the practical effect has been beneficial in preventing Canadian investors from losing any more money to please the outside public. Competition, as it existed before the combination, was of little benefit to the public, who are as well served now as they were then, and Telephone Company, has increased a small fortune to some at the same price. The grand destinies of Canada have not been endangered, to our knowledge, since a very prominent New York stock operator obtained the right to read our messages, which it was said would follow the fusion.

After the consolidation a new company was organized in Canada, taking advantage of the prevailing dislike to the amalgamation, to solicit capital for the promotion of a healthy competition in telegraphy. This new concern was directed by the energetic, able, Charles R. Hosmer, and should have achieved success. It was found that our Canada investors had taken a dislike to investing their capital for the purpose of giving the outside public, or perhaps we should say the daily press, cheap telegraphy. They wanted to see a chance for permanent dividends, and this could not be shown them. The capital to complete the lines of the Canada Mutual not being forthcoming in Canada, resort was had to New York, and the same prominent gentleman there who is said to control the G. N. W., became the largest owner of Canada Mutual stock.

The Canadian Pacific Rulway Company are endeavouring to give us competition in telegraphy. We cannot see that they will be able to use any considerable portion of the Canadian Loan of \$22,500,000, since it will be all wanted to construct the railway. Lines they must have along their roads, and they may take commercial messages until they will find it more profitable to sell out to the telegraph company, following the history of the American railroads. We do not believe this great railway company can give the same satisfaction to its telegraph patrons as a purely telegraph company will, yet we shall be pleased to see it make the trial. ! hey will want very large quantities of telegraph supplies, they will give better wages to secure good operators than what the operators can get when there is only one company, and it is for the good of the business that we should have competition. This company intends to make immediate use of the privileges granted them by the Act of 1881, which reads as follows :-

"The Company may construct, maintain and work a continuous

line of the Canadian Pacific Railway, or any part thereof, and may also construct or acquire by purchase, lease or otherwise, any other line or lines of telegraph connecting with the line so to be constructed along the line of the said Railway, and may undertake the transmission of messages for the public by any such line or lines of teletraph or telephone, and collect tolls for so doing; or may lease such line or lines of telegraph or telephone, or any portion thereof; and, if they think proper, to undertake the transmission of messages for hire, they shall be subject to the provisions of the fourteenth, lifteenth and sixteenth sections of chapter sixty-seven of the Consolidated Statutes of Canada. And they may use any improvement that may hereafter be invented (subject to the rights of patentees) for tele-graphing or telephoning, and any other means of communication that may be deemed expedient by the Company at any time hereafter.'

THE TELEPHONE.

The Toronto Branch of the Bell Telephone Co. of Canada is under the able management of Mr. Hugh Neilson.

A. Graham Bell, the originator of the telephone, is now worth in the neighbourhood of \$5,000,000.

Wm. H. Forbes, who put a small capital in telephone stocks, is now worth perhaps \$8,000,000.

Theo. N. Vail, General Manager of the American Bell \$4,000,000.

The use of the telephone has rapidly increased in London. January 1, 1881, there were 811 subscribers to the London Exchange; in 1882, 1,338; the next year, 2,386; and this year, 3,195. In the last quarter of last year there were 1,697,-447 messages sent through the London wires. The proportion of telephonic to telegraphic messages is as thirteen to twelve.

C. F. Sise, the General Manager of the Bell Telephone Company, is an excellent executive business officer, and has brought the extension of this organization to a very high state of efficiency. The general use of the telephone at Montreal compares very favourably with the other large cities of the universe. On the 1st of this month 1,090 Bell instruments were in use in this city, and by the 1st of May it is expected the number of subscribers will have increased to 1,200. The Company have a large and excellent staff of employees.

In the building in which are the main offices of the Postal Telegraph Company, in New York, a number of gentlemen were experimenting recently with a telephone with which the inventor says he expects to talk across the ocean as soon as the Bennett-Mackey cable is laid. It is the invention of Webster Gillett, Ypsilanti, Mich., who claims to have solved the problem of adding battery to line almost without limit. This he does by utilizing a number of independent local batteries, induction coils and deviating points simultaneously. experiments made Saturday were in speaking through the 10point multiple telephone over about 320 miles of wire between New York and Washington. Conversation was quite easily carried on between these two points.

The Ilion Citizen, of Ilion, N.Y., on the evening of the 13th instant, printed its entire edition—3,000 copies—by electricity deriving the current from a ten light dynamo, fifteen rods away. This is the first newspaper thus printed.

Lord Rupert Cecil, the youngest brother of Lord Salisbury. who is a skilled electrician, has been making experiments on overhead wires, in consequence of the death of an employee through touching a live current at Hatfield. All electric light wires in the mansion and village are to be put under "The Company may construct, maintain and work a continuous ground, the Callondar system, used by the British post office, telegraph line and telephone lines throughout and along the whole being adopted.

THE ELECTRIC LIGHT.

The American Electric and Illuminating Company have established their factory at 32 Dowd street, this city, for the manufacture of dynamo machines and lamps.

The Ball Electric Light Company have removed their head office from London to Toronto, and have also reduced their District of the Canadian Telegraphers Insurance Association. number of directors to three.

Thos. Swinyard, the Vice-President of the Dominion Telegraph Company, now residing in Hamilton, is prominently engaged in the electric light business.

In October last, a warrant was issued by the Government at Otlawa for the payment of \$7,400 for electric lighting purposes connected with the Parliament Buildings.

The electric light movement is rapidly advancing in Ontario. Most of the towns there, of any considerable size, will shortly be illuminated by electricity.

St. Andrew's Church, Montreal, was illuminated with the electric light on the 20th, and the experiment being emineutly successful, this means of illumination will be probably adopted by the trustees of the church. Several other churches are preparing to follow suit.

The Roman Catholic French Church Cathedral of Montreal, capable of seating 15,000 persons, it is said will shortly be illuminated by the electric light. The City Hall chamber should also be lit up in this manner. The present gas arrangements giving very poor satisfaction, as we have often been present when additional wax tapers have been brought in and placed on each side of the Mayor.

The great drawback to the general use of electricity consists in the high cost of its production as compared with other sources of light, power, &c. It would appear, however, that in respect to the lighting of milway cars by electricitywhich is in every way more desirable for the purpose than any other kind of light-very thorough successful experiments have been made in England.

The Toronto World says :- One would think that a postoffice, especially the leading and best post-office in the Dominion, was just the place for the application of the benefits resulting from the use of the electric light. Yet the manager of the Company was yesterday notified by an M.P. that the Government declined to take advantage of the alterations now being made at the post office to introduce the electric light. What holder of gas stock has had influence enough, we wonder, to bulldoze the post-office authorities.

Leonard Henkle, inventor and electrician of Rochester, N.Y., says that he has negotiated for the purchase of land on the Canada side of the river and for power from the great Horseshoe Fall for the lighting of sixty-five American and Canadian cities, connected by means of underground cables with electric lights generated at Niagara. The plans are all drawn for ten hydraulic engines of 200,000 horse-power each, and gigantic machinery. That Henkle himself means business is attested by the fact that he will soon open an office on the Canadian side of the river, and endeavour to complete arrangements with capitalists, whom he expects will furnish \$22,000,000 for the undertaking.

CITY LOCALS.

W. H. Fraser is chief of the Delivery Department of the G. N. W. Co., and has a small army of messengers to watch.

M. Macdonald, is the night receiver of the G. N. W. Co.'s Main Office.

Paul Preville, G. N. W. Co., is Secretary of the Montreal

John Barnes, late of Burlington, Vt., is the chief operator in the Canada Mutual Co.'s Main Office.

We shall always be happy to receive a call from visiting telegraphers, or any of those engaged in electrical engineer-

Miss Elliott, of the City District Telegraph Company's main office, 174 St. James Street, is an attentive and careful transmitter.

Mrs. Stuart is the Manager of the Canadian District branch office at 45 University street, a branch almost as useful to the community as the main office.

- A. Walsh, the Chief Receiver of the G. N. W., is an active, affable and painstaking gentleman, and is very popular with the general public.
- J. S. Mackenzie, the Assistant Manager of the G. N. W. main operating room, has an easy off-hand way, is an excellent operator and rapid penman.
- John R. McPhie, the Manager of the G. N. W. main operating rooms, is not in the best of health. A lengthened vacation would do him good.
- J. J. Costigan, the Assistant Receiver of the G. N. W. Tel. Co.'s main office, is Secretary of the St. Patrick's Total Abstinence Society.
- W. I. Mathews, the assistant to Manager Graham, of the G. N. W. Telgraph Co., is the popular Secretary of the St. George's Snow-Shoe Club.
- Mr. E. H. Goff, formerly of this city, is the President and General Manager of the Merchants' Electric Light and Power Company of Boston, Mass.

The Woodward Underground Telegraph and Telephone Company placed a very large and handsome sign over their general office on St. James street, Montreal, on the 221 inst.

What is the difference between a plug operator and a gladiator? One bulls a despatch and the other despatches a

Harry Thompson, draughtsman in the Construction Department of the G. N. W., we understand leaves the Company's service shortly. He has produced some excellent work.

Laurie Longmore is, we believe, the oldest operator in the present G. N. W. main office, having entered the office in 1852. He is at present principally employed on night duty.

The American Electric and Illuminating Company have secured very commodious business offices at 169 St. James street. Mr. M. Lee Ross is the General Manager.

We are indebted to the courtesy of Mr. R. E. Tait, of the G. N. W., for a beautifully engraved portrait of Mr. James Dakers, ex secretary of the Montreal Telegraph Company.

The Mechanical Department of the G. N. W. Co., 18 under the management of Mr. Stavely; it is situated on the top flat of the building.

The Royal Electric Company is about to be incorporated by the following gentlemen: Richard W. Elmenhorst, Presi-dent of the St. Lawrence Sugar Refinery; Thomas Davidson, Manager North British Mercantile Insurance Company; E S. Clouston, Manager of the Bank of Montreal; Gilbert Scott, of Wm. Dow & Co; James Crathern, of Crathern & Caverhill; M. Lee Ross, H. E. Irvine, George R. Robertson, and J. Cassie, Hatton, Q. C.

Our City Corporation will pay the Bell Telephone Com-. pany \$300 for the use of instruments the coming civic year.

We are pleased to notice the return of Mr. W. B. Powell, the cashier of the G. N. W. to his post after nearly a month's absence, caused by a severe attack of diphtheria.

- Mr. Erasius Wiman was proposed by Mr. Augus Grant at the last meeting of the Montreal Snow Shoe Club and elected an honorary member.
- E. C. Pease is the Secretary of the Canada Mutual Co., filling the position in a very acceptable manner. He is a practical telegrapher, and, if we mistake not, an elece of President C. R. Hosmer.
- J. Flynn, Head Chainman of the Road Department, is engaged preparing a statement showing girth, distance apart, situation, crossings, &c., of all the Telegraph and Telephone poles in this city, to be laid before the Council.
- Mr. James Dakers, the veteran ex-Secretary of the Montreal Telegraph Company, is a very frequent visitor to the G. N. W. head office, discussing as of yore the general telegraphic horizon. He seems as hale and hearty as ever.
- Mr. Angus Grant, when leading the Tuque Bleu snowshoers over the mountain or across the country, is not excelled by any one of the other members of that old club-as the beau ideal of un bel homme. Vive la raquette !

Alfred Nurse, Assistant Manager of the Main Operating Room of the G. N. W., is one of the most energetic employers in the Company's service. He is also an excellent man at the Switch Board.

- Mr. Wm. Cassils is President of the Canadian District Telegraph Company, with Major James H. Oakes as Superin tendent and General Manager. The Company's business is constantly increasing.
- Mr. W. J. Graham, Manager of the G. N. W. Co., is a popular and excellent executive officer. His consideration for the humblest employee and frankly expressed opinions to the millionaire Director command the esteem of one and the respect of the other.

Wm. Mackenzie, one of Montreal's leading stock brokers and financiers, is noted as a keen, shrewd, and cautious business man. He is also Secretary of the Stock Exchange. Many years ago he was an expert operator in the old Montreal Confpany's service.

D. R. Ross, Secretary of the Montreal Telegraph Company, announces they will pay the 79th quarterly dividend of 2 per cent. at the Company's Head Office, on and after the 2nd of April. This is the guaranteed dividend from the G. N. W. Telegraph Company.

Alec Macnaughton, in the main office of the G. N. W. Co., we believe has for a great many years worked the New York wire. Any stranger could easily find his operating deskamong the many in the room-by simply looking for that on which may be found a bouquet of flowers.

"The Montreal Electrical Signal Company" is a new organisation, which is prepared to do a general district telegraph business. They have opened a very nice office in the basement of the Exchange Bank Building, on St. Francois Xavier Street. Mr. John Murray is the Manager.

Is it too late for an annual ball or dinner of the electrical phoner, Electric Light employee and others.

The Royal Electric Company, of Cauada, composed of a number of Canadian capitalists, have secured the control of the American Electric and Illuminating Company's plant and good-will for \$250,000. They will work in close relations, and mutually participate in all future inventions secured by either Company in Canada or the United States.

Mr. James Poustic, the Superintendent of Construction of the G. N. W., is preparing for his spring work. The subject of underground wires will receive much of his attentionespecially in all our large Canadian cities. This question is still far from a settlement. We have noticed many acrial cables coming into general use, thus reducing the number of overhead wires.

Next month, April, will be the 37th anniversary of Mr. O. S. Wood's arrival in this city, from New York, to assume the Superintendency of the Montreal Telegraph Co.'s lines, then building. He was one of Professor Morse's first students. Today we find him the resident Managing Director of the same Company under a new name. Should the occasion be allowed to pass without some recognition of his long services?

We should like to see an Electrical Society formed in this City from amongst the employees of the various companies. We feel quite satisfied much good would result from the monthly lectures on, and discussion of subjects affecting the general interest of all. New York, Chicago, Cincinnati, and other cities, have such associations, and there is no reason why we should not organize. We shall be g'ad to receive any suggestions.

Jos. J. McCouniff, Manager of the G. N. W. Co.'s office, as well as ticket agent at the Windsor Hotel, recently returned from an extended honeymoon trip, visiting among other places Boston, New York, Chicago, St. Louis, Lincoln, Nebraska, and Denver, Colorado. He was very favorably impressed with the active life and bustle of American cities, and especially Boston, but were he to reside from this city he would prefer New York. "Joe" is an expert operator, and very well liked by those doing business with him.

MONTREAL FIRE ALARM.

Mr. Badger, in his last annual report, just out, says that three new signal boxes for private companies had been placed during the year, and a signal line had been extended to Hochelaga. In concluding his report Mr. Badger declared that the present meagre facilities of the department for the use of the telephone service, have shown it to be an important auxiliary to the fire alarm He therefore asks that an appropriation be made in order to connect all the stations with the central fire alarm office.

Last year the Montreal Fire Alarm Department appropriation was \$6.700 and the expenditure \$6,396 47, leaving an unexpended balance of \$353.53: The system, under the superintendence of Mr. F. H. Bulger, has reached perfection. Some of the wires are now being worked in a satisfactory manner, through the underground Woodward system of insulation—between the City Hall and the Central Fire Station distant nearly half a mile.

It is also the intention of the Chief of the Fire Brigade and Mr. Badger to agitate strongly during the present year the advisability of having each one of the fire stations pro-vided with a telephone. By this means during the progress of a fire, should the chief desire to have another line of hose, he could easily go to the neighboring fire station and by telephoning to the fire alarm office have an extra reel out fraternity at large of this city? A regular reunion of some from one of the other stations without necessarily sounding a such nature should occur every year, on a broad and liberal second alarm. It is also intended, as soon as the necessary basis, in which all may take part, such as the Telegrapher, Tele- funds are received, to provide the new word (Hochelage) with a complete fire alarm s rvice.

THE CANADIAN TELEGRAPHERS' MUTUAL INSURANCE ASSOCIATION.

Toronto, January 15th, 1884.

The ninth annual meeting of the Canadian Telegraphers Mutual Insurance Association was held in the Board Room of the Canada Mutual office at Toronto. the Great North Western Telegraph Company, on Tuesday, the 15th day of January, 1884.

The meeting was called to order at 8 p.m., the President, II. P. Dwight, Esq., in the chair.

On motion, it was resolved that the minutes of the last meeting be accepted as read and confirmed, they having been printed and circulated.

The President then read the following:

Report of the Officers and Executive Committee of the Canadian Telegraphers' Mutual Insurance Association, to the members at the annual meeting, held at the Head Office of the Great North Western Telegraph Company, Toronto, on Tuesday econing, January 15th, 1884.

The officers of the Canadian Telegraphers' Mutual Insurance Association have much pleasure in presenting the following annual report of the operations of the Association for the

year ending December 31st, 1883.

During the past year we regret having had to chronicle the loss of three of our members by death, viz.: John Kelly, John Ross, and W. H. Cummings. Four assessments in all have been made, three in the cases of death referred to, and one on account of total disability.

This unusually large number of calls, together with the strike of operators, has had the effect of somewhat depleting the membership. At the beginning of the year we had 425 members. During the year 45 new members joined, and 75 dropped out, making the present total active membership 375. A number have signified their intention of rejoining under the provisions laid down in art. 15 of the by-laws when circumatances permit them to do so.

The financial statement prepared by the Secretary-Treasurer is on the table for the inspection of members. The accounts have been duly audited by Messrs. Nurse and Brown.

The total number of deaths since the organization of the Association has been twenty. The total amount collected and paid out for assessments since the inception of the Association is \$12,708, or an average of about \$635 at an annual cost of about \$5.45.

The balance on hand to the credit of the Association is \$569.74, and the incoming annual assessments, less expenses, will increase this total to at least \$900. Out of this it is proposed to meet the liability of the Association to the heirs of the late John Murphy, of Bowmanville, Ont, who died Decr. 2nd, 1883:

It is also recommended that \$100 be paid to the Secretary. Treasurer for his service during the past year, and that in

future he be allowed a salary of \$100 per annum.

In view of the small cost of insurance, the sound financial condition shown in the report, and the steady and reliable character of the members, the Association is deserving of the heartiest support and encouragement of Telegraphers, and it is hoved that both the District Secretaries and individual mombers will continue to use their best endeavours to increase its membership.

H. P. DWIGHT,

President.

It is said that at the Court Opera at Vienna tiny incandescent lamps, suspended by fine swinging wires, give the effect of swarms of fireflies flushing and flitting about in a tropical forest. By switches the current is turned off and on at the pleasure of the operator, and the effect is electrical in other than a literal sense.

FLASHES HERE AND THERE.

Erastus Wiman, President of the G. N. W. Co., resides out of New York on Staten Island, where he has a delightful home. 11. Pringle is Manager and A. W. Barber chief operator of

II. McDougall is Superintendent at Winnipeg for the

G. N. W. Co. Mr. Arthur Cox is Treasurer and Superintendent of Sup-

plies for the G. N. W. at Toronto.

Messrs. Meloche and Urquhart, of Toronto, are promised positions by the W. U. Co., New York.

Mr. T. C. Ellwood is General Superintendent of the Canada Mutual Telegraph Company, Toronto.

R. F. Eisson is Superintendent of Reports at Toronto for the G. N. W. Co.

Mr. T. Ahearn, of Ottawa, visited the Western Union Co.'s Main Office, New York, recently. He was formerly in the service there.

W. S. Battin is the able assistant to General Manager Dwight. The extensive ramifications of the G. N. W. Co.'s lines calls for the best executive ability.

Messrs. J. T. Townshend and A. B. Smith are the Western Inspectors of the G. N. W. Co.'s lines, with headquarters at Toronto.

The expense of the Canadian High Commissioner and Secretary attending the Cable Convention at Paris last year was \$316.33.

Mr. B. B. Toye, who is Superintendent of the Toronto District of the G. N. W. Co., was noted in his time for producing a handsomely written copy. The Toye repeater, an invention of his, is in general use all over Canada.

Hou. P. Fortin, the member for Gaspe, is one of the few gentlemen who, from his position in Parliament, has done much towards increased Telegraph Cable connections among the various islands in the Lower Provinces.

Statistics from the Continent show that there are 29 per cent. of series of fires where a town is unprotected, as against 17 per cent. when there is a telegraph line to the fire station, and 4 per cent. when there is a complete street system.

J. B. Page, the Manager of the Western Union Co.'s branch office at 852 Broadway, New York, ic a most popular whole souled Canadian. He has always been held in very high esteem by the general officers of the Company. "Ben" has held his present position some 20 years, and by no man in the service is he excelled for punctuality, politeness, care, and an obliging disposition.

Silas Wm. Payette, late c'iief train despatcher on the N. S. Ruilway lines at Hocheligi, died Saturday afternoon, the 22nd inst., of consumption, at his late residence on Richmond street, Point St. Charles. The funeral took place on the 25th, and was attended by a large number of telegraphers from Quebec, Ottawa and this city. The deceased gentleman, we regret to say, was not insured in our Canadian Telegraphers Insurance Association.

HART BROTHERS & CO.,

♥GENERAL MERCHANTS≫ 32 Victoria Square,

MONTREAL.

We beg to offer our services to all Companies or Firms desiring a Montreal correspondent. Established eleven years ago, our stability cannot be questioned, while a varied mercantile experience during that length of time, enables us to assure our patrons that their interests, if confided to us, will be watched with care and at-