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CANADIAN ELECTRICAL NEWS

JNO. HORN,

EDITOR.

VOL. 1.

MONTREAL, APRIL 15, 1884.

No. 2.

ELECTRIC

ROYAL

MANUFACTURERS OF

DYNAMOS, LAMPS,

AND

ELECTRICAL APPARATUS.

Contractors & Builders of

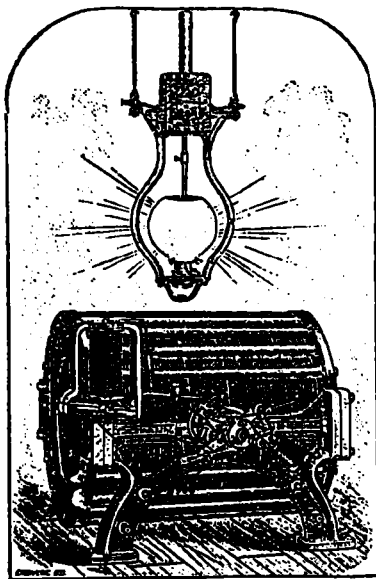
ELECTRIC ARC LIGHT STATIONS

THROUGHOUT THE DOMINION.

OFFICE

162 St. James Street, - - Barron Block, Montreal.

LIGHTING STATION,



LIGHTS!

ELECTRIC CO.

BEING ORGANIZED UNDER SPECIAL ACT.

Only Perfect Automatic Self-Regulating System of Electric Arc-Lighting in the World.

In all desirable qualities of ELECTRIC ARC LIGHTS the THOMSON-HOUSTON or AMERICAN ARC SYSTEM has no equal. The lights are Superior in Color and Steadiness, and the entire apparatus is more economical, efficient and safe, more easily managed, and less liable to derangement than any other. This system was awarded the FIRST PRIZE for the BEST SYSTEM of arc lighting, and the BEST ARC LAMP, at the Cincinnati Industrial Exposition of 1883.

This system has been awarded superiority in all the competitive tests to which it has been subjected. NEW ILLUSTRATED PAMPHLET will be sent on application.

ROSS & IRVINE, MANAGERS.

FACTORY

32 Dowd Street,

Montreal.

11, 12, 22 Inspector Street, Montreal.

SUCCESSOR TO M. A. BUELL,

WM. B. CLEVELAND,

MANUFACTURER AND DEALER IN

ELECTRICAL APPARATUS AND SUPPLIES.

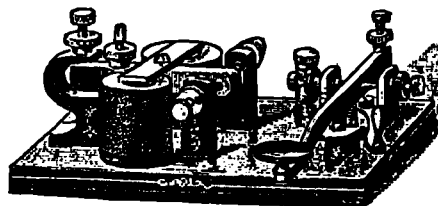
Telegraph, Annunciators, Motors, Batteries, Call Bells, Electro-Medical Apparatus, &c. Special and Experimental work to order. Correspondence solicited.

EUREKA No. 1.



Sounder,	-	-	-	-	\$1.75
Key,	-	-	-	-	1.50
Complete Outfit	-	-	-	-	4.75

IMPROVED STAR INSTRUMENT.



Price,	-	-	-	-	\$3.00.
Complete Outfit, includes Battery, 15 ft. wire,	-	-	-	-	
Book of Instructions, &c.	-	-	-	-	\$3.75

Incandescent Lamps at \$2.00.

Leader Building, - - 144 Superior Street,
CLEVELAND, OHIO.

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THE ELECTRIC LIGHT ON THE VICTORIA EMBANKMENT.

When, in 1878, the Jablochkoff Electric Light Company commenced lighting a portion of the Victoria Embankment, the charge for each lamp was 5d. per hour. At the end of three months the price was reduced to 3d. Six months later it was reduced to 2½d., and since June, 1881, 40 lights on the Embankment and 10 on Waterloo Bridge have continued to be lighted at the rate of 1½d. per light per hour. Each of the electric lamps on the Embankment gives an illuminating power of 265 candles, so that, at the charge of 1½d. per hour per lamp, the cost per 1,000-candle power is 5.66d. per hour; while gas at 3s. per 1,000 cubic feet, and consuming 5 cubic feet per hour, for every 16 candles costs per 1,000-candle power 11.25d. per hour. In other words, twice the illuminating power is at present obtained on the Embankment by electric lighting for the same money that would have to be expended on gas.

THE PROPOSED ELECTRICAL SOCIETY.

The suggestion in our last with regard to forming an Electrical Society in this city has been warmly commended by various members of the profession. The society should be in working order before the advent of the British Association for the Advancement of Science, which will meet at Montreal in August, 1884. If a few influential gentlemen will call a meeting at such time and place as would be most convenient for those desiring to attend same, an organization would be sure to result. Who will make this first move? Remember Sir William Thomson and Mr. W. H. Preece are coming, and they should not find us unprepared to receive them. Some noted American members of the profession are also coming.

AN AMERICAN INSTITUTE OF ELECTRICAL ENGINEERING will, without doubt, be formed in the United States next month. We hope its plan of organization will be wide enough to admit such Canadian Electrical Engineers, Electricians, Inventors, or officers of our various Telegraph, Telephone or Electric Light Companies, as well as such others who are inclined to support the same, or as may be willing to share the honors with their co-labourers of the Great Republic.

EARLY CANADIAN TELEGRAPH HISTORY.

MONTREAL TELEGRAPH COMPANY.

Notice is hereby given that the Directors of the Montreal Telegraph Company are willing to receive proposals from young men of good education and character for gratuitous instruction in the art of operating on the Electro Magnetic Telegraph, with a view to their appointment as operators on the proposed line of telegraph between Toronto and Quebec.

Application concerning testimonials as to character and ability to give security for good conduct to be addressed to the Secretary of the Company, St. Joseph street.

By order,

FREDERICK A. WILLSON, Hon.-Secy.

Montreal, 25th March, 1847.

THE CANADIAN ELECTRICAL NEWS.

We are slightly mistaken when stating in our Prospectus that the *News* would only be eight pages. Appearances intimate it will soon be twelve for our readers shall not suffer from the demand of advertisers.

The article on the TELEGRAPH LINES OF CENTRAL AND SOUTH AMERICA, promised for this number, being over a column in length, has been crowded out and will appear in the next issue.

The Canadian Telegraphers' Mutual Insurance Association.

FINANCIAL STATEMENT

For the year ended December 31st, 1883.

CR.

By Balance from 1882.....	\$ 370 55
Assessments collected:	
No. 16, Twohey, in 1882.....	\$400
" " " 1883.....	376
	\$776
No. 17, McConnell.....	632
" 18, Kelly.....	708
" 19, Ross.....	638
	2754
By Annual Subscription, 1883.....	375
" New Members.....	45
" Fines.....	9
" Interest on Bank Account.....	22 80
	\$3570 35

DR.

To allowance to Secretary-Treasurer for 1882...	\$100
" Printing, Stationery, etc.....	61 70
" Postage, etc.....	84 91
" Travelling Expenses, etc.....	6
To Assessments:	
No. 16, Twohey paid.....	\$776

PAID ON ACCOUNT FORWARD

No. 17.. \$150	\$42
" 18.. 680	28
" 19.. 200	438

\$1030	\$954	\$776	\$2754	3006 61
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Balance to credit of Association..... \$ 569 74

ACCOUNTED FOR AS FOLLOWS:

To balance as above...	\$ 569 74	By advance Cummings' estate on account No. 20.....	\$ 50
" due on assessments 17, 18 and 19..	948	" Bank of Montreal...	1382 34
		" Cash in hands of Agents and Sec.-Treas	85 40
	\$1517 74		\$1517 74

H. P. DWIGHT, Esq
President,

C. T. M. I. Association,
Toronto,

TORONTO, 15th January, 1884.

SIR,—We beg leave to inform you that we have examined the books, vouchers and accounts of the Association for the year ending December 31st, 1883, and find them correct and in good order, and that the financial position of the Association is correctly set forth in the Statement signed by us.

Yours respectfully,

C. E. NURSE,
CHAS. BROWN.

ACKNOWLEDGEMENT.

Mr. R. S. TYLEE, Agent in this city for the Phoenix Fire Insurance Co., a well prepared and useful pamphlet of eight pages, entitled, "The Phoenix Fire Office rules for Electric Light installation."

ALFRED F. MOORE, of 200, 202 and 204 N. 3rd street, Philadelphia, a handsomely gotten up price list catalogue of insulated wire conductors, with some useful tables for general reference.

THE ELECTRO-DYNAMIC COMPANY of Philadelphia, a nicely prepared 12-page price list, descriptive of their small double induction motors, useful for the dwelling, country house, laboratory, etc.

THE WOODWARD UNDERGROUND TELEGRAPH AND TELEPHONE COMPANY.

The first regular meeting of the incorporators of the above Company was held at the Company's office, St. James street, Montreal, on Monday afternoon, the 6th instant, when the secretary read the charter incorporating the Company for the purpose of constructing and operating telegraphs, telephones and electric lights, etc., throughout the Dominion of Canada, as well over as underground. The total capital stock of the Company was fixed at \$200,000, divided into 40,000 shares of \$50 each. The following gentlemen were elected directors for the ensuing year:—Messrs. Duncan Macdonald, A. T. Woodward, John S. Hall, jr., James O'Brien and Richard McKeown. The company was then fully organized and it was resolved to begin operations as soon as the weather permits.

This is a strong board and would indicate the gentlemen mean business.

Mr. A. T. Woodward, the general manager, left on the 8th for New York, for plant and machinery necessary for the company. A factory is to be started shortly in the west end of the city, and on the return of Mr. Woodward a public exhibition of the new system is proposed to be given.

This company propose to do away with the maze of wires that encircle this and other cities, and the disfigurement of fine public thoroughfares by the erection of enormous poles to support them. We hope to say more of this company and its proposed work in a future number.

THE ROYAL ELECTRIC COMPANY.

The local Lighting Station for the City of Montreal, is situated at Nos. 12 to 22 Inspector street, and is fitted up in a most complete manner with dynamos, lamps, &c.

There is already run in connection with this station, 10 miles of circuit furnished with the best Lake Superior insulated copper wire, with most completely fitted structures, fixtures, &c., for a 125 light electric service. Negotiations are now pending for the sale of this station to a local organization.

A 100 light station plant is in progress for the City of Kingston, Ont.

This company has orders for several machines for saw mills throughout Ontario, and factories and mills in Nova Scotia and New Brunswick, also for illuminating several churches in the City of Montreal.

Negotiations are now in progress to light the cities of Toronto, Belleville, and Guelph, Ont., Halifax, N.S., St. John, N.B., and the town of Galt, Ont.; also the Harbor of Montreal, the Government Canals, the boats of the Richelieu and Ontario Navigation Company, and the Church of Notre Dame, Montreal.

CORRESPONDENCE.

A well known prominent member of St. Andrew's congregation sends the following for insertion:—

"The Electric Light in St. Andrew's Church is a marked improvement on the dim, dull light furnished by the Gas Company. Under the latter light it was impossible for the bulk of the congregation to read the hymns, but with the electric light every one in the building can read as well as in day time, and it gives a bright and cheerful appearance to the services generally. The noise caused by the lights is very trifling, and of course can be obviated as the machines get into proper working order. The change is a very beneficial one, and meets with the approval of many, if not the whole, of the congregation. Possibly there may be a few stockholders of the Gas Company who are willing to sit in the dark providing the dividends keep up."

THE TELEGRAPH.

Mr. GARVEY is operator and manager for the G. N. W. at London, Ont.

MANAGER W. Y. SOPER, for the Canada Mutual at Ottawa, is one of the best men that company has in its service.

SUPERINTENDENT ELWOOD, of the Canada Mutual, is on a pleasure trip in Europe, and at last accounts was in Spain.

The first submarine cable laid in Europe was in 1851 between Dover and Calais, and the distance 33 miles.

The Government of Venezuela has contracted for telegraphic communication by cable with the United States.

M. DUPELOW, formerly of Toronto, is the wire chief of the Postal Telegraph and Cable Co. at Washington, D.C.

The proposition for the establishment of a United States Government Telegraph system may be regarded as defeated so far as the present Congress is concerned.

The Western Union Telegraph has reduced the rates on business between Philadelphia and New York Exchanges to 10 cents for each 20 words.

ALEXANDER E. HOYT, for many years the popular manager of the Western Union Telegraph Co.'s office, at Halifax, has resigned.

Mr. H. P. DWIGHT, the General Manager of the G.N.W., Toronto, positively refused to produce the telegrams passing between the politicians in the bribery case now going on in that city.

The New York Senate recently passed the Bill that all Telegraph, Telephone and Electric light wires must be put underground by 1st June, 1885, in all cities of over 500,000 inhabitants.

The average cost of a well built telegraph or telephone line say of No. 8 galvanized wire, with 35 poles to the mile, including the cost of setting the poles, stringing the wire and transportation, is about \$165 per mile.

A. G. MACDONALD has just been made Superintendent of the Halifax City Fire Alarm Telegraph—an excellent appointment. He was for many years in the service of the Western Union Company's general office in that city.

The first submarine Telegraph cable laid in North America was between Prince Edward Island and New Brunswick in 1852, 10 knots. The second was between Newfoundland and Cape Breton, Nova Scotia in 1856, 85 knots.

ARRANGEMENTS have been effected between the Manitoba South-Eastern Railway Co. and the Great North-Western Telegraph Co., by which the latter will extend its line along the company's road the entire length, to Laroche Percee.

THERE appears to be a strong probability that we shall at an early day witness a return to the use of copper conductors for ordinary aerial telegraphic construction. It is well known, however, that copper possessing fully seven times the conductivity of iron can now be purchased at about five times its cost, consequently other thing being equal, it will be found by far the cheaper metal to use.

A RECENT Montreal paper said the management of the Grand Trunk has reduced the staff of operators by dismissing a number of the employes of this branch. The company offered to procure other employment for those whose services were dispensed with, but they are unwilling to accept the offer. The wages of the remaining operators will probably suffer in the projected general "cut."

THE Canadian Telegraphers' Mutual Insurance Association officers are H. P. Dwight, General Manager Great North Western Telegraph Co, Toronto. President, James Stephenson, G.T.R., Montreal. Vice-President, James S. McConnell, Chief Clerk Great North Western Telegraph Co., Toronto;

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titled to rights of pensions and homestead entry, and to an honorable discharge. We know many of the best men in that valuable and dangerous branch of the service were Canadians. Frank Drummond, of this city, is well remembered as one of these, and who at one time was captured and held as a prisoner of war at Richmond, Va. We should like some of these veterans to give us details of their experience while on this duty.

EUROPEAN FLASHES.

Prof. Sir W. Thomson, in a recent lecture, stated that the magnetic pole is now near Boothia Felix, more than 1,000 miles west of the geographical pole.

During the six months previous to the battle of Tel-el-Kebir the receipts of the telegraph company which forwarded press despatches to London was \$290,000 more than in the half year that followed.

The lighting of the English House of Commons with Edison lamps has been so satisfactory that additional plant is required, and the Edison-Swan Company have now increased the number of lamps to 478, arranged in a considerable number of separate circuits.

Mr. L. HEDGES, C.E., read a paper before the Royal Institute of British Architects, London, recently, in which he recommended the introduction of the electric light on account of the ultimate saving in the renewal of decorations and preservation of works of art.

An installation has been made in the Bank of England of 150 high tension Swan lamps, fed from 55 Faure-Sellon Molekmar cells, which in turn are charged by a dynamo of the Victoria type constructed by the Anglo-American Brush Electric Light Corporation.

SOME extensive gunpowder works in England are now lighted by the electric light, they being the first works of the kind where this safe mode of illumination has been adopted. The works are very extensive, at least two miles in length. The dynamo is placed near the centre of the works. Very long mains were thus necessary, as each dangerous building is about two hundred yards from its neighbor.

Sir Wm. Thomson, who is so widely known through his electrical discoveries and inventions, will be the President of the Mathematical and Physical Science sections, at the meeting of the British Science Association in Montreal the coming summer. This will be his second tour, having visited this city in 1876, after the Centennial Exhibition at Philadelphia, at which time he was one of the judges.

Mr. C. H. DEVEY, of Lucan Lodge, Queen's Road, Clapham Park, London, gave two dances the early part of last month, when the rooms were illuminated both nights by incandescent lamps. The current was supplied from 30 accumulators, which lasted for the two nights without requiring rectorizing. Miss Devey attracted much attention by wearing a small fairy lamp set in a star and fixed in her hair by a comb. The electric light allowed the complexions and dresses of the ladies and the decorations of the rooms to appear to the best advantage.

W. H. PREECE, F.R.S., M.I.C.E., the well-known electrician of the Government Postal Telegraphs of Great Britain, is to visit Montreal this year on the occasion of the British Association's annual meeting. Mr. Preece has been in Canada before, and writes to Mr. Angus Grant, Superintendent of the Great North-Western Telegraph Company here, that he looks forward to the visit with the hope of much enjoyment from it. Mr. Preece tells the following stories of the awkward blunders sometimes caused by the similarity of signals. Some friends announcing the arrival of a party of ladies "all tight," instead of "all right." In another case a lady telegraphed to her

husband concerning her sick child that "the rash is all gone," but delivering the message to read "the cash is all gone."

BOTH SIDES.

The Montreal Herald of the 24th March published the following paragraph:—

THE GREAT NORTHWESTERN.—There appears to be a great deal of dissatisfaction among the employes of the old Montreal and Dominion Telegraph Companies who remained to serve the Great Northwestern. Notwithstanding the fusion of the two companies, which reduced the working expenses, and the advance of the tariff to twenty-five cents which increased the revenue, besides other changes favorable to economical and profitable management, the Great Northwestern commenced last fall to dispense with a large body of employes, and reduced all salaries over \$50 per month ten per cent., and all under \$50 five per cent. And the cry is now for more reduction, apparently regardless of the efficiency of the service. In consequence of these changes many of the best operators have gone to the United States. As the Montreal Telegraph Company were never driven to this extremity, it is evident that opposition would improve matters for those employed in the business and give the public a better service. It will be a strange state of things if the monopoly now existing cannot afford to employ and pay as good operators as those whom it is driving out of Canada to find employment in the same line of business in the United States.

It may be noticed in this connexion that the Great Northwestern Company has not published a statement of receipts and expenses since it went into the business. How is this?

The Montreal Witness of the following day said:—"With reference to the rumored cut of wages of the Great Northwestern Company's employes, Mr. Angus Grant, superintendent, says that none of the operators have left the employ of the Company to go to New York or anywhere else, and that the staff was the same as it had been since the strike. No reduction in the salaries of either the operators or the clerks had taken place since the cut in the wages of the latter some time ago, and he hoped that none would be necessary, but if business became any worse some of them would have to be discharged."

THE Electric Light is being placed in Messrs. Booth & Perley's saw mills at Ottawa.

Mr. FRANKLIN H. SMITH, President of the Phoenix Electrical Co, is stopping at the Windsor Hotel, Montreal.

ELINT, Mich., has just been lit up by the Vandepoele system, giving great satisfaction to the storekeepers and the public.

THE CANADA Electric Light Company of Toronto, have had their tender of 62c. per light, for 50 lights, recommended to the City Council for acceptance.

THE VANDEPOELE Electric Light system now lights up Muscatine, Iowa, in a very satisfactory manner.

HART BROTHERS & CO.,
 GENERAL MERCHANTS
 32 Victoria Square,
MONTRÉAL.

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 attention.