

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

Coloured pages/
Pages de couleur

Covers damaged/
Couverture endommagée

Pages damaged/
Pages endommagées

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Cover title missing/
Le titre de couverture manque

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Coloured maps/
Cartes géographiques en couleur

Pages detached/
Pages détachées

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Showthrough/
Transparence

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Includes index(es)/
Comprend un (des) index

Title on header taken from: /
Le titre de l'en-tête provient:

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

Additional comments: /
Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF
PUBLIC WORKS • TENDERS • ADVANCE INFORMATION • AND MUNICIPAL PROGRESS

EVERY THURSDAY

This paper reaches every week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers Purchasers of Municipal Debentures and leading Contractors in all lines throughout Canada.

VOL. 8.

JANUARY 20, 1898

No. 51.

THE CANADIAN CONTRACT RECORD, PUBLISHED EVERY THURSDAY

As an Intermediate Edition of the "Canadian Architect and Builder."

Subscription price of "Canadian Architect and Builder" (including "Canadian Contract Record"), \$2 per annum, payable in advance.

C. H. MORTIMER, Publisher,

CONFEDERATION LIFE BUILDING, TORONTO.
Telephone 2362.

New York Life Insurance Building, Montreal.
Bell Telephone 2299.

Information solicited from any part of the Dominion regarding contracts open to tender.

Advertising Rates on application.

Subscribers who may change their address should give prompt notice of same. In doing so, give both old and new address. Notify the publisher of any irregularity in delivery of papers.

TO CONTRACTORS

Tenders will be received at the office of the undersigned up to THURSDAY, JANUARY 27th, at five o'clock, for the various trades required in the erection of a

WAREHOUSE

in Bay Street. The lowest or any tender not necessarily accepted.

STRICKLAND, SYMONS & RAE, Architects,
35 Adelaide Street East.

CONTRACTS OPEN.

QUYON, QUE.—An agitation is on foot for better fire protection.

STANBRIDGE EAST, QUE.—M. S. Cornell will install an electric light plant next spring.

BALDERSON, ONT.—The Anglican congregation will build a parsonage, to cost \$7,200.

BERLIN, ONT.—Mr. Otto Jung is negotiating for a site on which to erect a modern hotel.

PORTAGE LA PRAIRIE, MAN.—A movement is on foot to secure the erection of a public hospital.

WATERLOO, ONT.—The Waterloo Waterworks Co. will, it is said, construct a new system at an early date.

EAST TORONTO, ONT.—The School Board will probably take steps at once to erect a new school at Kew Beach.

VICTORIA, B.C.—James Rees, Sons & Co., of Pittsburg, Pa., will build two steamers here during the coming spring.

MILLTOWN, N. B.—The Presbyterians are calling for tenders for the enlargement of their church.

THAMESVILLE, ONT.—J. R. Hambly

will receive tenders until Monday 24th inst., for the erection of a Methodist church at this place.

HINTONBURG, ONT.—The council has decided to engage an expert to report on the propositions made for furnishing a water supply.

STRATHCLAIR, MAN.—A by-law will be submitted to the ratepayers to grant a bonus of \$5,000 for the erection of a flour and oatmeal mill.

COTEAU LANDING, QUE.—The Canada Atlantic Railway Co. have decided to build an elevator here, with a capacity of 500,000 bushels.

ANNAPOLIS, N. S.—A by-law will be submitted to the ratepayers to raise the sum of \$12,000 for the purchase of an electric light plant.

INDIANTOWN, N. B.—It is reported that Jules Spiro is considering the erection of a pulp mill at this place, on property owned by Stetson, Cutler & Co.

SYDNEY, N. S.—Members of the Nova Scotia Steel Co. visited this town recently with a view of selecting a site on which to erect large blast furnaces.

STRATFORD, ONT.—In connection with the erection of the new city hall, before deciding upon plans a committee will visit the city hall at Hamilton.

HALIFAX, N. S.—The County Council have appropriated the sum of \$1,000 for the construction of a road around the western shore of Halifax county.

BRANDON, MAN.—Plans are now being prepared for a two-story and basement brick block, 160 x 67 ft., for F. Nation, to be erected in the spring. W. H. Shillinglaw, architect.

BEETON, ONT.—The government have approved of the proposition to establish a poor-house for the county of Simcoe at this place. Work will therefore be proceeded with at once.

MANIWAKI, QUE.—A company has been formed for the purpose of supplying electric light. The directors are Charles Logue, J. P. Tremblay, Dr. Mulligan and Rev. Father Laporte.

BROCKVILLE, ONT.—A number of granolithic sidewalks will be built this year. Petitions are already in circulation for walks on several streets to be laid during the coming spring.

PARRY SOUND, ONT.—A deputation from this vicinity has requested from the Ontario government the usual subsidy for 90 miles of railway to be constructed between Parry Sound and Sudbury.

WOODSTOCK, ONT.—During the present year the questions of road improvements, better accommodation for the fire department, and an improved sewerage system, will be considered by the council.

ORILLIA, ONT.—Members of the town council were in Toronto recently inquiring as to the steps necessary to secure legislation for borrowing the necessary funds to install an electric light and power plant.

ST. JOHN, N. B.—H. H. Mott, architect, is completing plans for the new block of residences to be built on the Chipman Hill property. It is probable that from twelve to twenty residences will be erected.

RIDGETOWN, ONT.—A deputation recently waited upon members of the Ontario government asking their assistance in securing a bonus for the construction of the Lake Erie Railway from Ridgetown to St. Thomas.

TORONTO JUNCTION, ONT.—Since the relief bill in favor of the town has passed the Ontario legislature, it is said that arrangements are being made for loans for building purposes, and that a number of good residences will be built next summer.

NAVAN, ONT.—The Church of England congregation have made arrangements to erect a new church, from plans prepared by Mr. Watts, architect. The new building will be of stone, with seating capacity for 200 persons, and a bell tower and steeple 73 feet high.

CHILLIWACK, B. C.—The municipal council is formulating a scheme for the construction of a dam commencing at Cheam Hill, thence crossing the Hope and Camp sloughs, and extending along the south bank of the Fraser River to the mouth of the Camp Slough.

PEMBROKE, ONT.—The Pembroke Southern Railway Company have accepted the proposition made by W. Russell & Co., to build their road. It is anticipated that the line will be commenced early in the spring and pushed to completion. It will run from this town to Golden Lake, where it will connect with the O.A. & P.S. Ry.

KINGSTON, ONT.—The Board of Education have appointed a committee to report on the question of erecting a new building in Williamsville. The by-law to grant a bonus to Messrs. Abbott Bros. for the erection of rolling mills here was carried by the ratepayers. The firm state that plans for the buildings will be prepared at once, and that work will commence early in the spring.

HAMILTON, ONT.—The various women's organizations of this city propose to erect a building to cost \$50,000. A committee has been appointed to further the scheme, with Miss Nisbet as secretary. William & Walter Stewart, architects, have secured a permit for alterations to the old Spectator building, to cost \$7,600. Senator Sanford is said to have arranged for the erection of an imposing mausoleum in the cemetery in this city, to cost \$100,000.

QUEBEC, QUE.—It is said that Mr. J. D. Cameron, of this city, will shortly commence the construction of the Couburg & Tweed Railway, which has recently been subsidized by the Ontario government. The Lake Bouchette Pulp Co. is applying for incorporation. The promoters desire to erect pulp, paper and saw mills, and to supply electricity for light and power purposes. Among the petitioners are J. I.

Labery, of this city, and Damase Jalbert, of Lake Bouchette.

CORNWALL, ONT.—A deputation from Ottawa and this town recently waited upon the Ontario government asking for a bonus of \$2,000 per mile towards the construction of the Ottawa and New York Railway, also for \$50,000 towards the construction of a bridge across the St. Lawrence at this place.—The Town Council is negotiating with the Toronto Rubber & Shoe Company, of Port Dalhousie, with a view to the removal of their factories to this town. The company desire to secure a site where they can enlarge their present business, and at the same time obtain a water power of 300 or 400 horse-power.

LISTOWEL, ONT.—W. E. Binning, architect, is preparing plans for a pressed brick residence for McKinnon & Co., of Blyth, having tower and slate roof, tiled gables, mantles, plumbing, and a combination system of heating. Contracts will be let about 1st February. Same architect is preparing plans for brick and stone farm residences for Jas. Dickson and Geo. Maybury, of the township of Helmo. Both will be substantial farm houses, supplied with all modern comforts.—It is probable that a by-law will be submitted to the ratepayers this summer to acquire and control the waterworks and electric light systems, now in the hands of a company.

WINNIPEG, MAN.—At the last meeting of the Board of Works the question of a site for the proposed central fire hall was considered. A communication was received from the Secretary of the municipality of Rosser offering to join with the city in improving the roads leading into Winnipeg. It was stated that 273,000 feet of lumber would be required for overhead bridges.—It is reported that Toronto and New York capitalists have formed a syndicate to build a line of railway from Winnipeg to Duluth. The names of Senator Cox and William McKenzie, of Toronto, are mentioned in connection with the project.—The Fire, Water and Light Committee have decided to ask for tenders for a new boiler for the "Alex. Brown" steamer.

MONTREAL, QUE.—Mr. A. J. Corriveau states that the Montreal and South Shore Railway will be proceeded with early in the spring.—Plans submitted by Perreault & Gordon, architects, for improving the sanitary condition of the city hall, have been accepted by the City Hall Committee.—The City bill has passed the council of the Quebec Legislature.—Tenders have been opened for a site for the proposed new morgue, but no selection has as yet been made.—The Chambre de Commerce has forwarded to the Dominion Government and the Harbor Commissioners the report of the committee on navigation concerning improvements to the ship channel and pilotage system.—Roy & Contant, architects, are calling for tenders for the finishing and decorations of the St. Alphonse de Liguori Church at Chapeau Iles aux Allumettes.—Jos. Venne, architect, is taking tenders for the interior decorations of St. John Baptist church.—W. E. Doran, architect, has invited tenders for an extension to a house on Alexander street, for P. Wright.

LONDON, ONT.—Building permits have been granted as follows: John Perdom, residence for the Dominion Savings Society; two brick houses on Talbot street, near the High School.—The City Engineer is said to be opposed to the erection of a new city hall. He advocates the remodelling of the present building.—In his inaugural address to the city council, Mayor Wilson stated that a committee should be appointed to procure all possible information regarding the question of electric light. He thought it might be advisable to submit a by-law to the ratepayers at an early date to provide for the

corporation installing its own electric light plant. The present contract for lighting the streets will expire next year.—The Ontario government have appropriated the sum of \$25,000 to commence the building of the new Normal School in this city. The building will cost \$60,000, and will probably be ready for occupancy next year.

OTTAWA, ONT.—Alfred St. Laurent has secured the premises at 52 Rideau street, and will remodel the same, at a cost of \$3,000. A new front will be put in the building.—Dr. Robillard is of the opinion that steps should be taken at once to erect the necessary hospital buildings on Porter's Island.—Mr. G. C. Dunn, chief engineer of the Ottawa & Gatineau Valley and Pontiac & Pacific Junction railways, states that work on the interprovincial bridge will be commenced in the course of a few days, and that \$50,000 will be spent on the work by the middle of March.—In view of the legislation passed by the Dominion government prohibiting mill men from dumping sawdust into the Ottawa river, preparations are being made at several of the mills to erect burners to consume the refuse.—It is probable that during the coming summer an addition will be built to the First Baptist church.—A rumor has been current that the property at the corner of Elgin and Sparks streets had been purchased by the Imperial Life Insurance Co., and that a new building would be erected on the site next summer. The report, however, lacks confirmation.—L. K. Jones, secretary Department of Railways and Canals, will receive tenders until the 31st inst., for the masonry, etc., in substructure of swing and stationary bridges, the erection, maintenance and removal of a temporary timber bridge, and the removal of the present swing and fixed bridge in St. Gabriel Locks, at the intersection of Seigneur street, Montreal, Quebec. Plans may be seen at the office of the Chief Engineer of the Department of Railways and Canals, this city, and at the office of the Superintending Engineer, Lachine Canal, Montreal.—The Church of England will erect a new church in the parish lying south of Patterson's Creek and north of the Rideau Canal.—The C.P.R. has decided to build a large saw-mill at the Crows Nest Pass, at a cost of \$50,000.

TORONTO, ONT.—The Ontario government has made a grant towards dredging at the mouth of the river in the Temiscamingue district.—Tenders will be received by Mr. F. H. Herbert, architect, until noon Friday, the 21st inst., for the erection of a new detached residence on South Drive, Rosedale. Plans may be seen at the office of the architect.—Messrs. Jessop & Sons, the well known steel manufacturers of Sheffield, England, through their Toronto agent, Mr. C. M. Bayley, have arranged to erect a building at No. 80 Bay street, suited to the requirements of their business, and to cost about \$20,000. It will be 27 x 110 feet in size, and consist of two stories and basement, so designed as to permit of additional stories being imposed in the future.—In his fortnightly report to the Board of Works, presented on Monday last, the City Engineer recommends the construction of an asphalt pavement on Carlton street, from Yonge street to Jarvis street, at a cost of \$15,450, and a brick pavement on gravel foundation on Huron street, between College street and Grange ave., at a cost of \$12,700. Brick sidewalks are also recommended on the following streets: King street, south side, between Strachan ave. and Walnut street, cost \$508; Carr street, north side, between Esther and west end of street, cost \$595; Elm street, south side, Chestnut to Elizabeth streets, cost \$142; Stewart street, north side, Portland to Bathurst, cost \$510; Carlyle, east side, St. Patrick street to Bellevue place, cost \$200.—Property owners on

Shaw street have petitioned for the construction of a brick pavement with concrete foundation and stone curbs.—The Ontario government has decided to erect a new Boy's Reformatory in North Oxford.—Ald. Hanlan will move in council for the construction of a sidewalk and bicycle path to extend around the entire Island shore.—At the next meeting of the Public School Board the proposition to erect a new school on the Winchester street site will be considered.—The City Clerk has received a petition for the construction of an asphalt pavement on McCaul street, instead of brick, as recommended by the City Engineer. Residents on Elgin ave. and Davenport road have petitioned against an asphalt pavement and macadam roadway respectively.—A deputation, consisting of Rev. Mr. Pady and others, have requested the co-operation of the Baptist Home Mission Board in securing the erection of a new church in East Toronto.—In all probability new tenders will be invited by the City Council for elevators for the municipal buildings. Tenderers will also be required to state the cost of a plant to generate power for the electric elevators, and the additional cost of so enlarging this plant as to supply light for the building also.—Ald. Leslie will move at the next meeting of the Council that a special committee be appointed to arrange for the fitting up of the new municipal buildings. The cost of the fittings will be about \$30,000.—The supplementary estimates of the Ontario government contain the following appropriations: James Bay Railway, \$270,000; Ontario and Rainy River Railway, \$120,000; Pembroke Southern Railway, for a line between Pembroke and Golden Lake, a distance of 3½ miles, \$10,500; Irondale, Bancroft and Ottawa Railway, for 10 miles of road, \$30,000; Bay of Quinte Railway, \$90,000; deepening the Canard river in Essex County, \$5,000; site for Boy's Reformatory in Oxford County, between Woodstock and Ingersoll, \$7,500; to improve, by dredging, etc., the Moose, Payne and Maitland rivers, \$9,500.—Building permits have been granted as follows: W. Davies Co., Beachell street, brick smoke stack 130 ft. high, also 2-story brick addition to factory, east side Beachell street, cost \$30,000; Mr. Harwood, 2-story and attic brick dwelling, north side Marion street, cost \$2,000; Givens Bros., 69 Queen st. ave., 3 attached, 2-story rough-cast brick front, dwellings, east side Givens street, south of Bloor, cost \$1,500; Geo. Bertram & Co., 2-story machine shop and 1-story shed, south side Esplanade, east of Queen's wharf, cost \$3,000; People's Coal Co., coal shed and hoppers, 120 x 120 ft., on Esplanade st., foot of Bathurst st., cost \$4,000.

FIRES.

The Napierville woollen mills, at Napierville, Que., owned by A. Merizzi, were destroyed by fire on Tuesday. The loss will be about \$10,000.—The Commercial Hotel at New Hamburg, Ont., has been burned. The building was owned by Benjamin Spahr, of Clifford, and was valued at \$10,000.—The Turner block at Gananoque, Ont., was damaged by fire on the 16th inst.—The Loyola College, on St. Catherines st., Montreal, was recently damaged by fire to the extent of \$5,000. The loss is fully covered by insurance.—The saw-mill and cheese box factory of W. J. Moses, at Vernon, Ont., in Osgoode township, was burned to the ground last week. The loss is estimated at \$8,000. The residence of James A. Tufts, of Upper Corner, Sussex, N.B., was burned last week. The building originally cost over \$25,000, and was insured for \$8,000.—A building on Adelaide street west, Toronto, owned by C. A. Hubbard, was gutted by fire recently. The stock and machinery of the Dominion Paper Box Company and the Toronto Electrical Works, tenants of the building,

were damaged to the extent of \$30,000 and \$10,000 respectively. The loss on the building is placed at \$8,000, covered by insurance.

CONTRACTS AWARDED:

CALGARY, N.W.T.—The contract for rebuilding the C.P.R. bridge east of this place has been given to J. W. Munro, of Pembroke, Ont.

SHERBROOKE, QUE.—The tender of the Dominion Bridge Co., of Montreal, for the erection of a new bridge over the St. Francis river, has been accepted by the town.

QUEBEC, QUE.—The interior finishing of the cathedral at Alexandria, from the plans of Messrs. Tanguay & Vallee, architects, of this city, is being executed by J. R. Chisholm, of Alexandria.

CHATHAM, ONT.—J. Piggott & Sons have awarded contracts as follows for a brick addition, 54 by 60 feet, to their mill. Brick work, Geo. Fielder; gravel roof, Geo. Morgan, of Blenheim.

HAMILTON, ONT.—Contracts have been let as follows for alterations to the Royal Hotel: carpenter work, R. Ross; masonry, George F. Webb; interior wood work, John Hoodless & Son; plastering, J. Chapman & Son.

OTTAWA, ONT.—The Department of Railways and Canals has awarded to Mr. Laporte, of Montreal, the contract for the construction of a collecting drain on the Chambly canal. Charles Raynor has been awarded the contract for extra work upon a section of the Soulanges canal.—Hon. Mr. Tarte, Minister of Public Works, has awarded the contract for four Worthington pumps and four 40 horse power Westinghouse motors for the Parliament buildings, to Ahearn & Soper, of this city.

BIDS.

PORTAGE LA PRAIRIE, MAN.—Tenders were opened last week for the erection of the new Cowan block. On Mr. Griffith's plan Spencer Bros., of Winnipeg, put in the lowest tender, at \$16,500, and on Mr. Silverthorn's plan the lowest tender was made by Mr. Neuart, viz., \$16,537. The contract will probably not be awarded for several weeks, as work will not be commenced before the spring.

WINNIPEG, MAN.—Tenders were opened last week for electric street lighting for a period of years, also for furnishing an electric light plant. The following companies submitted tenders: Goldie & McCulloch Co., Galt, steam plant, \$10,310; Western Electric Company, Chicago, \$20,850, \$21,950 and \$21,800; Robb Engineering Company, Amherst, N.S., \$19,330, \$20,480 and \$21,200; McDonald Bros., Winnipeg, poles, wiring, etc., \$22,500, steam plant, \$9,068; Manitoba Electric Light and Gas Company, Winnipeg, from 47c. to 45c. per light per night for 121 lights for one year, for a period of from two to five years, and for 200 lights, 39c. per light per night; Northwest Electric Light Company, Winnipeg, 121 to 200 lights, 40c. per light per night; W. A. Johnson Electric Company, Toronto, 200 lights, \$19,265, including everything for supplying 250 lights, \$33,366; Fort Wayne Electric Corporation, Fort Wayne, Ind., electric plant, \$9,285; Royal Electric Company, Montreal, electric plant, \$10,000; installing and bricking in, \$9,500 extra. This company submitted a supplemental tender of \$12,050; Canadian General Electric Company, Toronto, electric plant, \$13,540. The tenders were referred to a committee for a report.

BUSINESS NOTES.

E. Doidge, contractor, Winnipeg, Man., is reported to have assigned.

Robert Etienne & Frere, builders, Montreal, have dissolved partnership.

Spencer & Ball, tinsmiths, Nelson, B. C., have dissolved, Mr. Spencer continuing.

Soucisse & Brouillet, contractors, Montreal, have assigned. A meeting of creditors was held yesterday.

CANADIAN SOCIETY OF CIVIL ENGINEERS.

TWELFTH ANNUAL MEETING.

The twelfth annual meeting of the Canadian Society of Civil Engineers convened, as per circular, on Tuesday, Jan. 11th, at 9.30 a.m., in the rooms of the Society, 112 Mansfield street, Montreal. In the absence, through ill health, of Mr. T. C. Keefer, president, Mr. G. H. Duggan, vice-president, occupied his chair.

Among those present at the meeting were: W. McLea Walbank, Montreal; G. H. Mountain, Ottawa; Thomas Breen, Quebec; Willis Chipman, Toronto; T. G. B. Allan, Napanee Mills; F. Mills, Napanee; C. H. Rust, Toronto; T. S. Somerville, Stuart Howard, George Holland, J. R. Barlow, Jas. W. Heckman, C. B. Smith, H. Irwin, W. McNab, Duncan K. W. Blackwell, Percival W. St. George, Herbert Wallis, L. G. Papineau, Thomas Pringle, H. B. Stuart, Prof. McLeod, James Ewing, E. P. Hannaford, John MacCann, R. Forsythe, J. McCarthy, John Kennedy, F. W. Lesage, L. O. Amos and C. de B. Leprohon, all of Montreal; R. B. Rogers, Peterboro; Prof. Butler, Military College, Kingston; Henry A. Gray, Toronto; Armitage Rhodes, Quebec; R. W. Leonard, Brantford; L. Panseu, St. Johns, P.Q.; C. E. W. Dodwell, Halifax, N.S.; Henry Wickstead, Cobourg; H. S. Greenwood, Peterboro; E. C. Amos, Montreal; Dean Bovey, Montreal; C. H. Keefer, Ottawa; Prof. Durlay, Prof. Nicholson and R. S. Lea, of Montreal, and others.

After the minutes of the last meeting had been read by the secretary, and con-

ferred, the following were elected scrutineers of the several ballots:

1. For officers and members of council—Messrs. J. W. Heckman, T. W. Lesage, and James Ewing.

2. For Nominating Committee—Messrs. H. B. Stuart and E. G. Matheson.

3. For amendment to by-laws proposed by council—Messrs. J. M. McCarthy, T. J. Marieu and L. O. Amos.

4. For amendment to by-laws proposed by members—Messrs. F. S. Somerville, J. S. Vindin and L. G. Papineau.

The meeting was then adjourned until the following day, in order that the members might avail themselves of the invitation of the Royal Electric Company to visit the electric power works now being completed at Chambly, Que. The Grand Trunk and Central Vermont railways provided special trains for transportation, and upwards of 130 members took part in the excursion and were sumptuously entertained at luncheon. The superstructure of the enlarged Victoria Bridge, now in progress of erection, was visited and inspected en route.

THE CHAMBLY POWER PLANT.

The dam is one homogeneous mass of concrete, forming practically a monolith or a structure made of but one stone. This dam has been designed and is being built under contract by the foremost hydraulic engineering company on this continent, according to the plans and under the direct supervision of its chief engineer, who is recognized as the most competent authority in this character of construction. The wheels are also to be provided by, and are under contract with, the same engineering company.

The entire hydraulic work has been contracted with the Stillwell-Bierce and Smith-Vaile Company, of Dayton, Ohio, under guaranteed results, among which

(Continued on page 4.)

“ASBESTIC”

—The King of Wall Plasters

FIREPROOF, being purely Asbestos, which is incombustible.
NON-CONDUCTOR OF HEAT - NO CRUMBLING OR CRACKING
WEIGHS LESS and is **INTRINSICALLY CHEAPER**
than any other Plaster.

A few of the principal Buildings **PLASTERED WITH ASBESTIC**—

THE McDONALD BUILDING, Victoria Square, Montreal.

THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION BUILDING, Montreal.

THE ROYAL VICTORIA COLLEGE, Montreal.

THE PROTESTANT INSANE ASYLUM, Verdun, near Montreal.

THE GRAND HOTEL, St. Hyacinthe, Que.

THE NEW CUSTOMS-APPRAISERS STORES, NEW YORK, now building, which will consume 5,000 tons.

THE PARLIAMENT BUILDINGS, OTTAWA, portion of which was recently destroyed by fire and rebuilt.

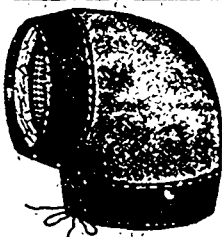
Write for
Pamphlet and
full information.

The American Asbestic Co.

100 William Street

NEW YORK

SOLE PROPRIETORS OF “ASBESTIC” for United States and Canada.



ELBOW

MICA BOILER AND STEAM PIPE COVERINGS

The Highest Non-Conductor and the Cheapest Covering on the Market.

Full Particulars from

The Mica Boiler Covering Co. - 9 Jordan St., Toronto

MONTREAL

WINNIPEG

are the maintenance at all times of a working head of 28 feet, and the delivery to the shafts of the electrical generators of not less than 20,000 horse power. There were eight units or sets of wheels, each of a capacity of 2,650 horse power. Each of these units or sets of wheels are connected directly, without intervention of any gearing or appliances to cause loss of energy, to the shaft of one electrical generator; in fact, the shaft of each set of water-wheels, and of each generator, is practically one continuous shaft, thereby reducing to a minimum the loss of energy and the occasion for the expense of repair.

Besides these eight sets of wheels and generators, there are two sets of water wheels, each operating an exciting generator of capacity sufficient to supply the excitation current required by all generators.

The dam gives a head of water 28 feet in height, and utilizes the entire power of the Richelieu river. The reservoir or head race thus created extends up the river from the dam to a point where the level of the water at the head race of the dam merges with the natural level of the river, such point being more than a mile and a half above, thereby securing a very long deep mill pond, which, with the high working head of 28 feet, effectually remove all possibility of that bugbear of water powers in cold climates, frazil.

The location of the dam has been selected at a point where the highest known rise of water in the Chambly Basin below the dam will not affect the level of the tail race, consequently all possibility of interruption due either to frazil or back water is removed, this being further provided for by a further drop of 7 feet at the end of the tail race.

The character of the construction of dam, power house, wheels, dynamos, switchboard, is all of the highest order. There are no gears to wear or break, there are no wire-wound armatures liable to destruction, there are no commutators, brushes or wearing parts in the dynamos, the only wearing parts in the water wheels and electrical machinery being the shaft and its bearings, consequently every source of danger has been anticipated and guarded against.

The current is conveyed from the power house at Chambly to the city of Montreal by two separate lines of poles and wires. Should an accident happen to any part of either line of poles or wires necessitating repairs, the current from such line will be cut off, and all the power required will be transmitted by the other line during the time such repairs are being made. This will prevent interruption to the service or danger to the employees, as there will be no current passing over the line being repaired, the other line carrying all that is required.

The wires for the crossing of the St. Lawrence will be carried on the new Victoria Bridge and they will be so placed that a duplicate system corresponding to the duplicate pole line will be provided. The same duplicate system will be employed within the city from the bridge terminus to the distributing station. No danger of interruption from injuries to pole lines can, therefore, reasonably be apprehended.

After a thorough inspection of the above works had been made, which elicited expressions of approval from all sides, luncheon was served in the switchboard chamber. Brief speeches were made by Mr. Willet, mayor of Chambly, Mr. W. McLea Walbank, Mr. W. H.

Browne, manager of the Royal Electric Company, and others. Mr. Browne told how past success of the company had been due to the ardent work of the board of directors, while to a layman one of the grandest pieces of engineering in the world might pass without comment. It was a magnificent specimen of human ingenuity and science, the like of which had never been seen before, and then it was only a forerunner of greater things which were to be accomplished.

Before returning to Montreal a photograph of the group was taken.

THE BANQUET.

In the evening the annual dinner was held at the Windsor Hotel. It was very largely attended and proved a great success. Mr. C. E. W. Dodwell, of Halifax, acted as toast master, with a genial originality which contributed greatly to the enjoyment of all present.

On the right and left of the chairman sat the officers of the society. The toast list was limited to the usual patriotic sentiments, the officers of the society, and its welfare, and the responses were brief and of a practical character. During the course of the evening an excellent string orchestra discoursed some delightful morceaux.

SECOND DAY.

The adjourned meeting was held on Wednesday morning in the society's rooms, to which new apartments, in the shape of a smoking room, writing room and store room, have recently been added. Mr. G. H. Duggan, Vice-President, occupied the chair. The Secretary read the annual report of Council, including the report of the Library Committee and Treasurer's statement. The adoption of the report was moved by Mr. Peters, seconded by Mr. St. George, and carried.

The report of the Council stated that the membership now included the names of 628 civil engineers as against 591 for the preceding year. Of these former number eight were honorary members, 284 were members in full standing, 161 were associate members, 41 were associates, and 134 were students.

The receipts of the year were given as \$14,657.34, and the expenditure \$3,660.66, leaving a balance on hand of \$10,996.68.

A short discussion followed concerning the disposition of certain funds recently bequeathed to the Society, and on motion by Mr. Wallis, it was decided to place the bequest in the building fund.

Mr. Wallis reported, on behalf of the Committee on Incorporation, that the bill had just been passed in the Province of Quebec Legislature. Mr. Wallis pointed out that this measure was one of great importance.

The report of the Gzowski Medal Committee, signed by J. Galbraith, Chairman, was then read.

The medal was awarded to Prof. S. L. Fortier, B.A.Sc., of Logan, Utah, for his paper on "The Storage of Water in Earthen Reservoirs."

Mr. W. J. Sproule then proposed the following motion, which was

seconded by Mr. F. F. Miller, and lost on division, but ordered to be recorded in the minutes of the Society:

"That it is in the interests of the engineering profession that the method of doing professional work or giving advice for remuneration, estimated by a percentage of the cost of the works to be constructed, is not in the best interests of the profession nor of the clients of engineers, that its tendency is immoral, that this method should be discountenanced and discontinued as soon as possible, and that the attention of all members of the profession is directed in a special measure to this resolution."

The reports were then received from the scrutineers, and the following were declared elected as officers and members of Council for 1898:

COUNCIL.

President—W. G. M. Thompson.
Vice-Presidents—K. W. Blackwell, P. W. St. George.
Treasurer—H. Irwin.
Secretary—Clement H. McLeod.
Members—St. George Boswell, J. M. Shanly, C. B. Smith, Charles E. W. Dodwell, George Herick Duggan, W. McLea Walbank, Edward Henry Keating, F. C. Gamble, David Herbert Keeley, Dnnan MacPherson, J. Galbraith, Ernest Marcceau, J. L. Coste, Hurd Peters, Henry Librarian—William McNab.
Norlande Ruttan.

The past-presidents of the Society are as follows, of whom the last three are honorary members of the Council.

Past-Presidents—Col. Sir Casimir S. Gzowski, A.D.C. K.C.M.G., John Kennedy, Edmund P. Hannaford, P. Alex Peterson, Thomas Munro, Herbert Wallis, T. C. Keefer, C.M.G.

Regret was expressed on all sides at the indisposition of the President, and in his absence Mr. C. E. W. Dodwell read his very interesting address on "The Progress of Engineering Works in Canada during the last Ten Years, and of Water Works in Particular."

At the conclusion of the paper Mr. John Kennedy spoke as follows:

"I have much pleasure in proposing a vote of thanks to our President, Mr. Keefer, whose absence we all regret very much. We owe him a great deal. The Society honored itself as well as Mr. Keefer in electing him as President for the second time, and much of the success of the Society to-day is due to his kind interest in it during the past ten years. Mr. Keefer has been honored by our Queen as well as by his profession, and I am sure I am speaking for every individual member, not only of the Society but of the profession at large, when I say that all the honor and more is due to him. I say again therefore that it gives me great pleasure to propose a vote of thanks to Mr. Keefer for his very interesting address just read, and for his services as our President."

The motion was seconded by Mr. Peters and carried unanimously by a standing vote.

Adjournment was then announced.

JOSSON CEMENT .. Manufactured at.. NIEL ON RUPELL

Is the Highest Grade Artificial Portland Cement and the Best for High Class Work. Has been used largely for Government and Municipal Works.

TO BE HAD FROM ALL CANADIAN DEALERS

C. I. de Sola, Manager in Canada .. 180 St. James Street, MONTREAL

MUNICIPAL DEBENTURES

wanted for foreign clients. We can place Debentures direct with foreign clients without charge to municipalities
: : : Commission allowed to persons introducing new business : : :

EMILIUS JARVIS & CO. (Member Toronto Stock Exchange) — Stock and Bond Brokers. Investment Agents. 23 King St. West, TORONTO
ELECTRIC RAILWAY BONDS PURCHASED. STOCK EXCHANGE ORDERS PROMPTLY EXECUTE!

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

DEBENTURES BOUGHT

Municipalities saved all possible trouble.

G. A. STIMSON & CO.

Investment Dealers

24 and 26 King St. W. TORONTO

ARTIFICIAL STONE PAVEMENTS

SIDEWALKS A SPECIALTY

CORPORATIONS Will do well to consider our work and prices before letting contracts

The Silica Barutic Stone Company of Ontario, Limited.

WALTER MILLS, General Manager. Head office: INGERSOLL, ONT.

EVERY ENGINEER AND CONTRACTOR

Should possess a copy of the Second Edition of the Canadian Contractors' Hand-Book, a compendium of useful information for persons engaged on works of construction, containing upwards of 150 pages. Price \$1.50; to subscribers of the CANADIAN ARCHITECT AND BUILDER, \$1.00.

C. H. MORTIMER, Publisher, Confederation Life Building, TORONTO.

Branch Office: New York Life Building, MONTREAL.

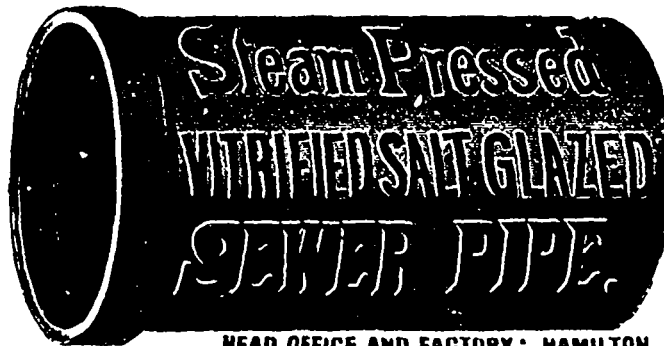
SEE THAT Your Specifications Call For

ST. LAWRENCE VALVES, HYDRANTS, STOP COCK BOXES, VALVE BOXES AND PIPE

Valves from 2" Upwards. Pipe from 3" Upwards. Manholes, Covers, etc. Architectural Iron and Steel Work.

ST. LAWRENCE FOUNDRY CO. of TORONTO, Limited TORONTO, CANADA

THE HAMILTON AND TORONTO SEWER PIPE CO. (LIMITED.)



FOR SEWERS, CULVERTS AND WATER PIPES. INVERTS For Brick Sewers

Write for Discounts

HEAD OFFICE AND FACTORY: HAMILTON, CANADA

THE STANDARD DRAIN PIPE CO. OF ST. JOHNS, P. Q., (LIMITED)



Manufacturers of Salt-Glazed Vitrified SEWER PIPES

Double Strength Railway Culvert Pipes, Inverts, Vents,

AND ALL KINDS OF FIRE CLAY GOODS

STEAM AND POWER

FOR ALL DUTIES



NORTHEY Co. LIMITED

TORONTO, ONT.

THE LAURIE ENGINE Co., MONTREAL Sole Agents for Province of Quebec.

ALEX. GARTSHORE, President. J. G. ALLAN, Secretary and Treasurer. JAS. THOMSON, Vice-President and General Manager.

THE GARTSHORE-THOMSON PIPE & FOUNDRY CO. LIMITED.

Manufacturers of:::

Flexible and Flange Pipe, Special Castings and all kinds of Waterworks Supplies.



CAST IRON PIPE

3 inches to 60 inches diameter.

For Water, Gas, Culvert and Sewer

HAMILTON, ONT.

MUNICIPAL DEPARTMENT

SEWAGE DISPOSAL.

Dr. John C. Thresh has prepared a report on his visit to the Sanitary Institute Congress, at Leeds, England, on September 14th to 18th last. The Surveyor gives the following summary of his remarks on sewage disposal :

With reference to the disposal of sewage, Dr. Thresh states that he is so constantly consulted with regard to the disposal of sewage that this subject received his chief attention. The questions most usually asked are : 1. What standard of purity should be adopted for sewage effluents, or, in other words, what is a satisfactory effluent? 2. Can any system of treatment be recommended whereby the use of land for irrigation purposes can be dispensed with? 3. Is it possible to adopt any system of treatment whereby no sludge will be produced? With respect to the first question, Dr. Thresh says he has obtained a large amount of information with regard to this subject, and that he is probably acquainted with all the provisional standards adopted throughout the country. Much of this information is of a private character, but it is generally held that at present it would be unwise to fix any definite standard. When this subject came up, incidentally, at the congress, this opinion was endorsed by all those who were conversant with the subject. The second question, he states, received a stereotyped answer. Many systems have been recommended by their discoverers as capable of so purifying ordinary sewage as to dispense with land filtration. So far, however, all the processes which have had a long and continuous trial have proved more or less unsatisfactory, and the Local Government Board will not give their sanction to a loan for any system of treatment which does not include land irrigation. Within the last year or so other systems have been advocated, which, it is claimed, will not only efficiently purify sewage without being supplemented by land filtration, but will also so affect the suspended matters that no sludge is produced. How far these claims will be justified by experience remains to be seen. This, at present, is practically the only answer which can be given to the third question. The papers read at the congress bearing on these points were, Dr. Thresh considers, of a very interesting character. They were contributed by Mr. Donald Cameron, Mr. Dibdin, Dr. Barwise and others.

Modern research has established beyond a doubt that the processes of purification of the future will be "bacteriological" rather than purely chemical. By the agency of bacteria the organic matter in the sewage can be broken up and most of it converted into two innocuous inorganic

bodies—nitric and carbonic acid. The problem, therefore, is—can artificial means be devised whereby this change can be brought about with sufficient rapidity and with sufficient economy to render irrigation unnecessary; and at the same time can the insoluble, as well as the soluble, organic matter be acted upon, or will it still be necessary to separate the former and have the trouble and expense of dealing with the sludge? Mr. Donald Cameron, the city surveyor of Exeter, claims that he has devised a process—the "septic" tank system—which prevents the formation of sludge, and so efficiently purifies sewage that the land irrigation is unnecessary. This system, however, can only be regarded as still on trial. Mr. Dibdin, who until recently was a chemist to the London County Council, has also conducted a series of experiments with the London sewage at Barking, and is decidedly of opinion that sewage can be efficiently purified by passing it through one or more coke- breeze filters, properly constructed and duly charged with proper organisms. At Lichfield and Wolverhampton filters have been constructed of fine coal, and Prof. Bostock Hill, who read a paper on the subject, regards the results as very satisfactory.

The conclusion which Dr. Thresh has arrived at is that we are within a measurable distance of the time when the purification of sewage by means of microbes will become an accomplished fact. Coarse straining to remove masses of solid matter will probably, he considers, always be necessary, or at least desirable, but the sludge nuisance will cease to exist. The sewage will be purified without the production of sludge, and land irrigation will no longer be required. At the present time, however, the experimental works have not been conducted on a sufficiently large scale or for a sufficiently long period of time to enable him to recommend any one process in preference to another, or to say with confidence that any process yet devised is certain to be satisfactory.

NEW COMPOSITION FOR SIDEWALKS.

W. Scott Robinson, formerly of Hartford, Me., conceived the idea of making a new sidewalk material of iron and concrete, but before he brought his plan to a complete success he was called to England, says the Cement and Engineering News. During his absence his daughter, Winnie, took the matter up and studied it carefully, with the result that she success-

fully completed the formula. She has had the material patented in Canada, and has also applied for a patent in the United States. Miss Robinson lost no time in putting the new paving material to a practical test, and herself superintended the laying of the new sidewalk at the corner of Church and South streets, in her own town. She had this done to demonstrate the durability of the article, which, she says, will wear for ages, that nothing can destroy it, and that the action of rain and sun only tend to harden rather than injure it. She is confident that when its merits are known it will become popular. Those in Toronto, New Glasgow, Windsor and other places who know of the material believe in its success. Miss Robinson says its composition consists chiefly of sand and gravel, such as can be found everywhere. She does not intend to take contracts for paving, but will sell the formula if what she considers a fair price is offered for it.

AMENDMENT TO THE MUNICIPAL ACT.

Mr. Crawford, M. P., introduced a bill in the Ontario Legislature to amend the Municipal Act. It provides as follows :

Notwithstanding anything contained in the preceding fourteen sections of this Act, or in any by-law of the municipality, the corporation of any city or town, by a two-thirds vote of the council thereof, may on the recommendation of the city or town engineer, authorize to be constructed or reconstructed a suitable pavement or sidewalk of a uniform character on any street or section of a street in the city or town, as a local improvement, where the said construction or reconstruction shall be accompanied by a statutory declaration made by the city or town engineer that in his opinion the work is necessary in the public interest, and by a statement from the engineer based upon the value of the property on which the assessment is proposed to be made showing why in his opinion he thinks a pavement of the character recommended is suitable for the locality; but the ratepayers interested therein shall be entitled, by a fully signed petition presented within thirty days from the adoption by the council of the recommendation of the engineer, to change the character of the pavement or sidewalk, and the cost of such pavement or sidewalk shall be assessed against the properties benefitted thereby according to the frontage of the said properties under the terms and conditions of the foregoing provisions of this Act.

The mayor of the city or town shall be, and he is, at the request of the council of such city or town by a two-thirds vote thereof, authorized to sign for or against the construction of any such local improvement work, which signature shall be counted as equal to one-fourth of the number entitled to sign the said petition and as representing one-fourth of the value of the land to be benefitted by the said improvement or work.

CHARLES HUGHES - Milton West, Ont.

All Kinds of Municipal Work

CURBING, CROSSING, CHANNELLING, FLAGGING, ETC.

Rough Heavy Lime-stone for Breakwater Cribbing, Etc.)

Credit Valley Grey Dimension, any size, Sills, Steps, Coursing, Bridge Blocks, Engine Beds.

— Estimates Given for All Kinds of Cut Work —

BELLHOUSE, DILLON & CO., 30 St. Francois Xavier St., Montreal

Sole Agents for the Compagnie Generale des Asphaltes de France (Rock Asphalt).

PORTLAND CEMENT NORTH'S CONDOR

Paving and Fire Brick a Specialty

SITTING LION and WHITE CROSS Brands

NORTH'S "CONDOR" BRAND AWARDED FIRST PRIZE AND GOLD MEDAL AT THE ANTWERP EXHIBITION

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

ENGINEERS

WILLIS CHIPMAN

B. A. Sc. (McGill).
Mem. Can. Soc. C. E.

Mem. Am. Soc. C. E.; M. Am. W. W. Ass'n.

Civil and Sanitary Engineer
TORONTO

WM. NEWMAN, C. E.

A. M. Can. Soc. C. E., M. Am. W. Wks. Assn.

CITY ENGINEER OF WINDSOR.

Civil and Sanitary Engineer

Waterworks, Sewerage, Drainage, Pavements, &c.
Fleming Block - WINDSOR, ONT.

VAUGHAN M. ROBERTS

Civil and Sanitary Engineer

Waterworks, Sewers, Electric Light,
Electric Railways.

Plans and Specifications prepared.—Work
Superintended. 18 Ontario Street,
ST. CATHARINES

Municipal Officers, Town Clerks, and
others, are requested to mention the
CANADIAN CONTRACT RECORD when
corresponding with advertisers.

SCORIA PAVING BLOCKS are the Best
Paving Material yet discovered.

W. H. KNOWLTON & CO.,

Dealers in Contractors' Supplies, 36 King St. E., Toronto

E. A. WALLBERG, C.E.

BRIDGE ENGINEER

Bell Telephone Building, MONTREAL

Bridges, Buildings, Foundations Plans,
Specifications, Superintendence and Expert
Reports on existing structures . . .

J. McDOUGALL, C. E.,

ENGINEER OF THE COUNTY OF YORK

GENERAL MUNICIPAL ENGINEER

Consulting Engineer for Municipalities in regard to
Electric Railway and other Franchises.
Specialties: Bridges, Foundations, Electric Railways,
and Roads. Surveys made; Plans, Specifications and
Agreements prepared, and work superintended.

COURT HOUSE, - TORONTO.

DAVIS & VAN BUSKIRK

Graduates Royal Military College of Canada.

CIVIL ENGINEERS

SPECIALTY: Municipal Engineering, including
Drainage, Sewerage, Sewage Disposal, Water
works, Roadways and Bridges.

W. F. Van Buskirk, A. M. Can. Soc. C. E., Stratford
Wm. Mahlon Davis, M. Can. Soc. C. E., Woodstock

Paving Granite

Granite Sets for Street Paving. — CURBING cut
to any shape ordered. — Fine Rich Colors for
Building and Monumental Purposes.

Quarries, St. Phillippe d'Argenteuil, P. Q.

Address all communications to

JOS. BRUNET - COTE DES NEIGES, MONTREAL

MONTREAL PIPE FOUNDRY CO., Limited

Successors to

DRUMMOND McCALL PIPE FOUNDRY CO., LTD.

Manufacturers of

CAST IRON WATER and GAS PIPES

and General Water and Gas Special Castings.

Prices on Application.

Offices, Canada Life Building, MONTREAL.

THE JENCKES MACHINE CO.

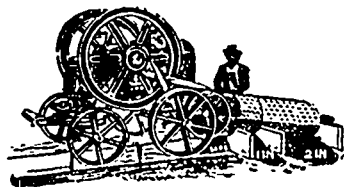
30 Lansdowne Street, SHERBROOKE, QUE.

Builders of

STONE AND ORE CRUSHERS
and Macadamizing Machinery.

Complete Plants Planned and Erected.

Write us for Catalogue No. 5, relating to Crushing Machinery



THE THREE RIVERS IRONWORKS CO.

Montreal Office: IMPERIAL BUILDING.

THREE RIVERS, P. Q.

MANUFACTURERS OF

Cast Iron Water and Gas Pipes

of best quality, from 2 inches in diameter.

HYDRANTS, VALVES and GENERAL CASTINGS.

CAST IRON WATER PIPES

From 4 in. to 42 in. Diameter.

BELL AND SPIGOT • FLANGED, TURNED AND BORED

AND EVERYTHING NECESSARY FOR

A Complete Water or Gas System

SUPPLIED BY

The LONDONDERRY IRON CO., Limited

LONDONDERRY, NOVA SCOTIA

THE MOST COMPLETE IRON WORKS IN CANADA (ESTABLISHED 1852.)

Send for Drawings and Estimates of our work.

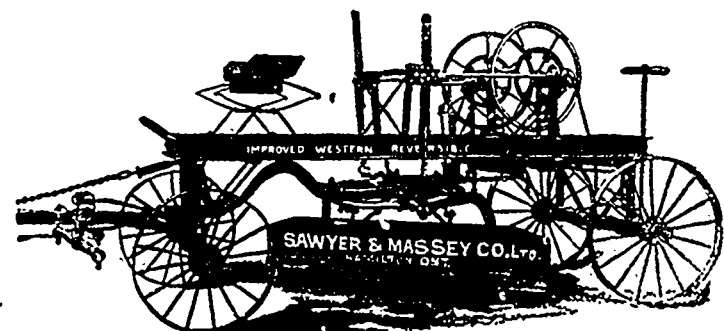
ALL PIPES CAST VERTICALLY

SIEMENS BRAND

WE MAKE

- PIG IRON
- WATER PIPES
- BAR IRON
- PUDDLLED BAR
- HYDRANTS, VALVES
- PIPE SPECIALS
- HEAVY CASTINGS
- IRON RAILS
- STRUCTURAL WORK
- MACHINE WORK
- CORPORATION SERVICE
- and VALVE BOXES

ROAD MAKING MACHINERY



We are prepared to supply Municipalities, Contract-
ors, etc., with the Latest Improved

ROAD MAKING MACHINERY

Catalogues on Application.

Correspondence Solicited.

Sawyer & Massey Co., Limited

HAMILTON, ONT.

Prices of Building Materials.

INDEX TO ADVERTISEMENTS
In the "Canadian Architect and Builder."

LUMBER.

VAID QUOTATIONS.

Toronto. Montreal.

Table listing lumber prices for various types of wood, including Mill cull boards, Shipping cull boards, Hemlock scantling, and various sizes of planks and shingles.

BRICK—9 M

Table listing brick prices for Common Walling, Good Facing, and Sewer.

SAND.

Table listing sand prices for Per Load of 1 1/2 Cubic Yards.

STONE.

Table listing stone prices for Common Rubble, Large flat Rubble, Foundation Blocks, Granite, and various types of rubble and paving blocks.

OHIO FREESTONE, FROM THE GRAPTON STONE CO.'S QUARRIES.

Table listing Ohio freestone prices for various types of Buff Promiscuous, Buff Dimension, Blue Promiscuous, and Blue Dimension.

CREDIT VALLEY STONE.

Table listing Credit Valley stone prices for Rubble, Brown Coursing, and Grey Coursing.

LONGFORD STONE.

Table listing Longford stone prices for Rubble and Ashlar.

Architects.

Ontario Directory... III
Quebec Directory... II

Architectural Sculptors and Carvers.

Cunnell, L. M.,... VIII
Holbrook & Molling-
ton... I
Lamar & Meigs... III

Architectural Iron Work.

Dominal Bridge Co. I
Art Woodwork
Southampton Mfg. Co. II

Boiler Covering

Mica Boiler Covering
Co..... 23

Builders' Supplies.

Bremner, Alex.,... I
Currie & Co., W&F.P., xvi
Montreal Directory... xv
Ontario Lime Associa-
tion... III
Rice Lewis & Son... IV
Toronto Directory... xv

Building Stone Dealers.

Brodie, James... VII
Credit Forks Mining
& Mfg. Co.,... VII
McPherson & Co., A., vii
Moir, D. W.,... VII
Samuel, Thomas, &
Son... VII
The Longford Quarry
Co.,... VII
The Toronto & O'Neill
Stone Quarry Co., VII

Builders' Hardware.

Rice Lewis & Son... IV

Crossed Stains

Cabot, Samuel... IV

Church and School Furniture.

Can. Office & School
Furniture Co.,... II
Globe Furniture Co., xvi
Chimney Topping.
Bremner, Alex.,... I
Currie & Co., W&F.P., xvi

Contractors' Plant and Machinery

Rice Lewis & Son... IV

Cements.

Bremner, Alex.,... I
Currie & Co., W&F.P., xvi
Owen Sound Portland
Cement Co.,... IV
The Rathbu, Co.,... IV

Drain Pipe

Bremner, Alex.,... I
Currie & Co., W&F.P., xvi
Hamilton and Toronto
Sewer Pipe Co.,... xiv

Elevators

Fenson, John... I
Jack & Robertson... IV
Leitch & Turnbull... I
Miller Bros & Poms... VIII

Electrical Apparatus.

Barrie & Co., Alex.,... I
Johnson Elec. Co.,... 23

Engravers.

Can. Photo-Eng. Bu-
reau... II

Fire Brick and Clay

Bremner, Alex.,... I
Currie & Co., W&F.P., xvi

Folding Partitions.

Springer, O. T.,... II

Galvanized Iron Workers.

Ormsby & Co., A. B., I

Grilles and Railings.

Dennis Wire & Iron
Co.,... VIII
Toronto Fence & Orna-
mental Iron Works, 24
Southampton. Mfg. Co. II

Granite

Brunet, Jos.,... VII
Brodie, James... VII
Moir, D. W.,... VII

Heating.

Boston Power C.,... XII
Gurney Foundry Co., vi
Gurney, Tilden Co.,... IV
Ives H. R. & Co.,... V
Kings & Son, Warden
Ormsby & Co., A. B., I
Star Iron Co.,... VI
Toronto Radiator Mfg
Co.,... III

Interior Decoration

Elliott, W. H.,... VIII

Lime.

Currie & Co., W&F.P., xvi
Ontario Lime Associa-
tion... III

Legal.

Denton & Dods... III
Quinn & Morrison... III

Luxfer Prisms.

Luxfer Prism Co.,... xv

Machinery

Phelps Machine Co., II

Maniles, Grates, and Tiles.

Holbrook & Mollington
Rice Lewis & Son... IV

Mail Chutes.

Tae Cutler Mfg. Co., xvi

Mortar Colors and Single Stains.

Cabot, Samuel... IV
Muirhead, Andrew... I

Mosaic Works.

Mosaic Marble and
Enamel Co.,... VIII

Ornamental Iron Work.

Dennis Wire & Iron Co., VIII
Toronto Fence & Orna-
mental Iron Works, 24

Painters.

Montreal Directory... xv
Toronto Directory... xv

Plasterers.

Gander, J. M.,... II
Hynes, W. J.,... xv

Paints and Varnishes

Muirhead, Andrew... I

Parquet Floors

Elliott, W. H.,... VIII

Plate Glass

Hobbs Glass Works... II
Lyon, N. T.,... I
The Consolidated Plate
Glass Co.,... II

Plumbers

Montreal Directory... xv
Toronto Directory... xv

Reflectors

Friak, I. P.,... XVI

Roofing Materials

Ormsby & Co., A. B., I
Metallic Roofing Co., IX

Roofers

Campbell & Gilday... XV
Douglas Bros.,... XV
Duthie & Sons, G.,... XV
Forbes, D.,... XV
Hutson & Sons, W. D., XV
Nicholson & Co., D., XV
Ormsby & Co., A. B., I
Rennie & Son, Robt., XV
Reggin, John... XV
Stewart & Co., W. T., XV
Warren Chemical &
Mfg. Co.,... XV
Williams & Co., H.,... XV

Sanitary Appliances

Garth & Co.,... VIII
Keith & Fitzsimons, I
Toronto Steel Clad Bath
& Metal Co.,... IX
The James Robertson
Co.,... XIII

Shingle Stains

Cabot, Samuel... IV

Stained and Decorative Glass

Horwood & Sons, H., I
Hobbs Glass Works... II
Lyon, N. T.,... I
Mackey Stained Glass
Co.,... I
McKenzie's Stained
Glass Works... I
The Robert McCaus-
land Stained Glass
Co.,... I
Wood & Co.,... I

Shingles and Siding

Metallic & Co.,... VII
Metallic Roofing Co., xi
Ormsby & Co., A. B., I
Toronto Foundry Co., xvi

Storm Doors.

Hillock & Co., John, IX

Typewriters, Etc.

Williams Mfg. Co., III

Ventilators

Boston Blower Co., XII

Wall Plaster

Albert Mfg. Co.,... II

Toronto. Montreal.

Table listing various building materials and their prices in Toronto and Montreal, including Hydraulic Cements, Lime, and Hair.

HARDWARE.

Table listing hardware prices for Cut nails, Steel, and various types of spikes and nails.

Iron Pipe.

Table listing iron pipe prices for various diameters and lengths.

Lead Pipe.

Table listing lead pipe prices for various diameters and lengths.

Galvanized Iron.

Table listing galvanized iron prices for various gauges and lengths.

Structural Iron.

Table listing structural iron prices for various types of beams and plates.