Technical and Bibliographic Notes / Notes techniques et bibliographiques

Coloured covers! Couverture de couleur Covers damaged! Cover tedommagée Covers testored and/or laminated/ Couverture restourée et/ou pelliculée Cover title missing/ Le titre de couverture manque Coloured maps/ Cartes géographiques en couleur Coloured plates and/or illustrations/ Encre de couleur (i.e. autre que bleue ou noire) Coloured plates and/or illustrations/ Planches et/ou pelliculées Showthrough/ Transparence Coloured plates and/or illustrations/ Pages décolorées, tachetées ou piquées Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire) Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur Bound with other material/ Reité avec d'autres documents Tight binding may cause shadows or distortion along interior margin/ La refluer serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure 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 apparaisent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées. Title on header taken from:/ Le titre de l'en-tête provient: Title page of issue/ Titre de départ de la livraison Matthead/ Générique (périodiques) de la livraison Matthead/ 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.	The Institute he copy available may be bibliog of the images it significantly checked below.	for filming. If raphically uning the reproduced the reproduced the usual section in the reproduced the usual section in the usual section in the reproduced the usual section in the reproduced the usual section in the reproduced the reproduced the usual section in the reproduced the reproduc	Features of ique, which or wi	this copy may alte hich may	which r any			lu éx bi re da	i a éte empl bliog produ	é possi aire qu raphiq uite, o méthe	ible de ui sont ue, qui u qui p	se pro peut peuv euve	ocurer. -être ui /ent mi nt exig	eur exen . Les dé niques d odifier u per une r nage sor	etails de lu point une ima modific	cet de vu ge ation	ıe
Couverture exdommagée Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée Cover title missing/ Le titre de couverture manque Coloured maps/ Cartes géographiques en couleur Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire) Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur Bound with other material/ Reliè avec d'autres documents 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 Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from liming/ 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. 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.	1 1		•														
Coverture restaurée et/ou pelliculée Covertitle missing/ Le titre de couverture manque Coloured maps/ Cartes géographiques en couleur Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire) Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur Bound with other material/ Relié avec d'autres documents 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 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. Pages detached/ Pages détachées Coulity of print varies/ Quality of print varies/ Qualité inègale de l'impression Continuous pagination/ Pagination continue Includes index(es)/ Comprend un (des) index Title on header taken from:/ Le titre de l'en-tête provient: Hank 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. 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.			gée							-	_		s				
Coloured maps/ Cartes géographiques en couleur Coloured link (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire) Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur Bound with other material/ Relië avec d'autres documents 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 intèrieure 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. Pages décolorées, tachetées ou piquées Coloured like, other than blue or black)/ Fransparence Qualité inégale de l'impression Continuous pagination/ Pagination continue Includes index(es)/ Comprend un (des) index Title on header taken from:/ Le titre de l'en-tête provient: Title page of issue/ Page de titre 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.	1 1									-							
Cartes géographiques en couleur Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire) Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur Bound with other material/ Relié avec d'autres documents 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 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. This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.	1 1	_	manque						<i>-</i> 1	•							
Encre de couleur (i.e. autre que bleue ou noire) Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur Bound with other material/ Relie avec d'autres documents 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 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 on header taken from:/ Le titre de l'en-tête provient: Title page of issue/ Page de titre 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.	1 1		en couleur							-							
Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Planches et/ou illustrations en couleur Continuous pagination/ Pagination continue Includes index(es)/ Comprend un (des) index Le titre de l'en-tête provient: Le titre de l'en-tête provient: Page of issue/ Page de titre de la livraison Pagination continue Includes index(es)/ Comprend un (des) index Le titre de l'en-tête provient: Title on header taken from:/ Le titre de l'en-tête provient: Page of issue/ Page de titre de la livraison 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.									1		_						
Reliè avec d'autres documents Pagination continue								V	<i>7</i>	•	•			ssion			
along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure 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. 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.																	
distorsion le long de la marge intérieure 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. Masthead/ Générique (périodiques) de la livraison Additional comments:/ Commentaires supplémentaires: Title on header taken from:/ Le titre de l'en-tête provient: 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 This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.	along int	erior margin/	,														
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. Additional comments:/ Commentaires supplémentaires: 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 This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.	distorsio	n le long de l	a marge inte	rieure										-			
lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées. 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.	within the been om	ne text. When	never possib ming/	le, these	have				1	-	-			n			
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.	lors d'un mais, lor	e restauration sque cela étai	n apparaisse	nt dans le	e texte,				1	•			la livrai	ison			
Commentaires supplémentaires: This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.	pas été f	ilmēes.									•	riodi	ques) c	de la livr	raison		
Ce document est filmé au taux de réduction indiqué ci-dessous.			-														
10X 14X 18X 22X 26X 30X																	
	10X	14X	; 	18	8X	1	2	2X				6×	т.	- 71	30×		
12X 16X 20X 24X 28X	12	×	164			20.8				24X				8x			32×

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.

Voi., 8.

JANUARY 13, 1898

No. 50.

THE CANADIAN CONTRACT RECORD.

PUBLISHED EVERY THURSDAY

As an Intermediate Edition of the "Canadian Architect

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, Montreat.
Bell Telephone 2299.

Information solletted 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 paper

CANADIAN CONTRACTOR'S HAND-BOOK

(SECOND EDITION)

Contains 150 pages of the most valuable information, substantially bound in cloth. 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.

MOUNT FOREST WATERWORKS

Scaled tenders will be received by the undersigned up to 8:30 p.m. of

Monday, the 17th January, 1898

Plans and specifications can be seen at Mount Forest, or at the office of the Consulting Chief Frigineer. John Galt, Esq., C.E. and M.E., Canada Life Building, Torento.

Tenders must be accompanied by bank marked cheque for 8 per cent. of tender, and made payable to the Corporation.

The Corporation reserves the right to reject any or all tenders.

I. P. NOONAN

J. P. NOONAN, Chairman Waterworks Committee, Mount Forest, Ont

Notice to Architects

Plans and specifications will be received by the Con ty Clerk until noon on WEDNESDAY, JANU-ARY 19711, 1898, for a House of Refuge for the County of Kent.

Information as to the size of the building, cost, etc., will be furnished by the County Clerk.

J. C. FLEMING, Clerk County Kent.

Chatham, January 3rd, 1893.

SEALED TENDERS

Addressed to John H. Teall, Tiltonburg, will be received up to noon of THURSDAY, THE 20TH JAN-UARY, for the work and material required in the erection of the

SUBSTRUCTURE OF A BRIDGE

for the Tilsonburg, Lake Erie & Pacific Railway, over Otter Creek, in Tilsonburg.

A marked cheque for \$220, payable to the railway company, must accompany each tender as a guarantee of good faith. All cheques will be returned as soon as the successful tenderer has executed a satisfactory agreement to complete the work.

Plans, specifications and form of tender may be obtained from either of the undersigned.

The lowest or any tender not necessarily accepted.

JAMES A. BELL, C.E., St. Thomas. JOHN H. TEALL, Tilsonburg.

CONTRACTS OPEN.

GOODERHAM, ONT .- Mr. Thornton has made a proposition to erect a stave fac-

EASTMAN, QUE.—Thos. Armstrong and E. Schilgon will erect a sash and door

CARBERRY, MAN. — A syndicate is being formed to erect a flour mill here next summer.

NANAIMO, B. C .- The Nanaimo Light, Heat & Power Co. are seeking an extension of their powers.

TAPLEYTOWN, ONT.—Charles DeWill has purchased property here, and will build thereon in the spring.

BRANTFORD, ONT .- It is believed the Verity Plow Works Company will erect new premises on the Wilkes property.

MAGOG, QUE—The council is enforcing a by-law which stipulates that all buildings must be covered with iron and brick.

PORT STANLEY, ONT.-Hingston & Woods, of Detroit, expect to complete a dredging contract here next summer.

THREE RIVERS, QUE. - The Three Rivers Iron Works Co. are building an iron foundry, brass foundry and machine shop.

SIMCOE, ONT.—The county has been authorized by the Legislature to issue 50,000 for the purpose of erecting a House of Refuge.

VICTORIA, B. C.—A reply has been received from the Minister of Agriculture refusing to assist in building the Darcey Island station for lepers.

GODERICH, ONT .- The Ontario Legis-

lature has authorized the town to issue \$50,000 of debentures for the purpose of aiding in the erection of a grain elevator.

TORONTO JUNCTION, ONT .- It is rumored that the Canadian Pacific Railway Company will extend their shops here for the purpose of repairing locomotives.

SHERBROOKE, QUE. - The permanent construction of the burned portions of St. Charles Seminary will not be commenced until spring. A temporary roof will be put on this winter.

CHATHAM, ONT.—The bill respecting the Chatham City & Suburban Electric Railway Co. has received its second reading in the Private Bills Committee of the Ontario Legislature.

BONFIELD, ONT .- Bishop Lorrain has accepted the plans of architect J. Alcide Chausse, of Montreal, for the R.C. church to be erected by Rev. H. Martel at Tete du Lac Nosbonsing.

KASLO, B. C.- J. W. H. Holmes, C. E., has been engage I by the municipal council to make an inspection of a creek below the town to ascertain its adaptability as a source of water supply.

ROSSLAND, B. C.—A petition will be presented to the Dominion and provincial governments asking that subsidies be given to F. A. Heinze to build a railway to the Boundary Creek.

WINDSOR, N. S.—Tenders are invited by W. K. Dimock until Saturday, the 15th inst., for the completion of the court-house here.—Chappele Bros. are erecting a wood-working factory here.

ST. JOHNS, QUE.—Bonuses for \$25,000 in favor of the Parent boot and shoe factory, of Terrebonne, and \$10,000 in favor of the Swain cigar factory, of Montreal, were carried here on Monday last.

SANDON, B. C.—Indications point to the extension of the Sandon branch of the C. P. R. at an early date. The ob-jective point is Whitewater, which will be reached by the construction of 14 miles of new road.

ST. HENRI, QUE.—A company has been formed, known as the Tonbyll Upholstering & Frame Manufacturing Co., with a capital stock of \$75,000. is the intention of the company to build in the spring.

KINGSTON, ONT .- Government engineers have been taking soundings in the harbor with a view to dredging it at various points. It is also proposed to build a breakwater in the interest of the Kingston Transit & Elevator Co.

HAWKESBURY, ONT.— A deputation from Prescott County has requested a supplemental subsidy from the Ontario government towards the construction of the Central Counties Railway, which propers to connect South Indian Rockland. poses to connect South Indian, Rockland, Hawkesbury and Glen Robertson.

Hamilton, Ont.—The promoters of he Hamilton, Chedoke & Ancaster Elec-

tric Railway recently collected \$6,000 towards the enterprise in three days.—The City Engineer in his annual report will recommend that the Board of Works construct a piece of brick pavement as an experiment.

QUEBEC, QUE.—The Quebec Exhibition Committee, of which R. T. Legare is secretary, offer two prizes, one of \$100 and another of \$50, for the best two plans of buildings to be erected on the Gowen farm for the holding of the Provincial Exhibition. The buildings to be erected this year are not to cost over \$30,000.

SUSSEX, N.B.—The Roman Catholic congregation will erect a new church.—Mr. Mills is preparing plans for a residence to be built for Mr. George D. Moore, manager of the Bank of Nova Scotia.—The Free Baptists are about to erect a parsonage, a committee having been appointed to arrange for the work.

HALIFAX, N. S.—Notification has been received from the War office to the effect that the construction of two quick firing can batteries is to be commenced in the coming spring, for the better defence of the harbor. One battery will be located at George's Island, and the other at a point half way between the two forts on McNab's Island.

NEW WESTMINSTER, B. C.—Improvements will be made to the Royal City mills, at a cost of \$20,000.—Mayor Ovens, in his inaugural address, referred to the necessity of constructing a bridge across the Fraser river, and of increasing the electric light plant. It was also apparent, he said, that a second reservoir in connection with the waterworks system was required.

BURK'S FALLS, ONT.—A deputation from this vicinity waited upon the Ontario government on Tuesday and asked for aid to construct a railway one nule long to connect the town with the Magnetawan river. It was suggested that the bonus of \$7,500 already granted should be increased to \$12,000. The deputation also asked for an appropriation to defray the cost of dredging Ahmic Lake, so as to extend navigation into Negheick Lake.

WINNIPEG, MAN.—Among the buildings to be erected this year will be an extension of the Grain Exchange block on Princess street. The building will include a warehouse for F. F. Fairchild.—During the present year the city council will be called upon to decide upon the following questions: The contruction of a civic waterworks plant, the erection of a new central fire-hall, and the purchase of an electric light plant for street lighting. The contract under which the city is now lighted expires in April next, and tenders have been invited for an electric plant.

GUELPH, ONT.—The Mayor, in his inaugural address, stated that the following questions would be considered during the year: The buying of a steam roller and stone crusher; the making of good roads; the improvement of the fire protection, including the building of an addition to the present fire-hall, as per plan of George Bruce, at a cost of \$1,800; and the construction of a sewerage system. Regarding the latter he said: "The most pressing question that is before our citizens today is that of sewerage. I would suggest that a special committee be appointed to consult with our city engineer, and prepare a plan or submit some scheme whereby some headway could be made in this very important matter."

ST. JOHN, N. B.—At a meeting of the city council held last week, it was decided to grant a site to the New Brunswick Cold Storage Co. on which to erect a warehouse. Regarding the proposition made by Messrs. Hilyard & Spire to erect a pulp mill at Navy Island, the matter was referred to a special committee.—Mr. H. H. Mott, architect, representing a syndicate of local capitalists, has purchased the Crookshank property on Chip-

man's Hill. It is the intention of the syndicate to erect a large brick block, to contain apartments for from seventeen to twenty families, the entire building to be heated from one central heating apparatus and to be ready for occupancy May 1, 1800.

MONTREAL, QUE. - Hon. Mr. Stephens has given notice in the Quebec Legislature that he will move that the item of \$75,000 for a main sewer on St. Denis street be struck out.—It is learned that an English syndicate, for whom Mr. R. G. McGibbon, of this city, is solicitor, purposes erecting a number of hotels at various points in Canada. The first buildings will be erected at Halifax, Montreal, Ottawa, Toronto and Niagara Falls. plans therefor have been prepared by Mr. Bruce Price, architect, of New York. garding the hotel to be erected in this city, Mr. McGibbon stated that a site for the building had been secured, and that it would contain a first-class café and restaurant.—W. E. Doran, architect, is calling for tenders for an extension to a store, corner of St. Catherine & Montcalm streets, for F. J. Hart.—The G. T. R. are still negotiating with the City Council for the erection of a central depot. As yet no decision as to a site has been made.

OTTAWA, ONT .- F. W. Slack, contracavenue.—Mr. T. G. Shaughnessy, vice-president of the C. P. R., states that the company expect to be running into Ottawa in the spring, and that the station will be erected near the Russell House.—Chief Provost, of the Fire Department, will request the Fire and Light Committee to purchase 1,000 feet of new fire hose.— Elgin street will be paved from Wellington to Albert street. Property owners on Wellington street will petition that the pavement be continued as far as the foundry.—The Ontario Elevator Co. is seeking incorporation, to build elevators, telegraph and telephone lines and steamboats; capital, \$100,000; applicants, J. R. Booth, A. W. Fleck and others.—The Tobique Gypsum Co. is seeking incorporato manufacture calcined plaster, lumber, etc. Hon. John Contigan and John Heney, of this city, are interested.— H. J. Wickham is asking incorporation of a company to construct a railway from Cowichan Harbor, Vancouver Island, B. C., to the mouth of the Franklin river. Mr. H. J. Beemer states that plans of the new interprovincial bridge will be brought to the city at once, arrangements having been made to commence work at an early date.-The company formed a short time ago to construct a bridge across the Ottawa from the end of Bank street has all preparations completed to commence the work as soon as the bill of incorporation passes Parliament. Tenders for the bridge have been decided on, and it will be rushed to completion next summer. It is said that Mr. William Gibson, M.P., will get the contract for the masonry, and the Hamilton Bridge Company for the superstructure.

TORONTO, ONT. — In his inaugural speech on Monday last, Mayor Shaw stated that the proposed remodelling of St. Lawrence market, the question of St. Lawrence market, the question of sewage disposal and water supply, and the scheme for the extension of the cribbing in front of Harbor square, would be considered during the year. The cost of the latter work is estimated at \$35,000. He unther alluded to the necessity of some better means of conveying the water from the intake in the lake across the harbor to the main pumping station.—The Georgian Bay Ship Canal and Power Aqueduct Co. have submitted a new proposition to the council for the supply of electric energy.—Mr. H. J. P. Good is agitating a scheme for the erection of a large building in which to hold public exhibitions. Mr. Good estimates that the building would cost a 1 S125 000.—1 to

Mayor has commenced negotiations which may result in the establishment of large smelting works in Toronto. Mr. R. J. Tough, who has extensive nickel interests in the vicinity of Sudbury, is the principal mover in the proposal. — Strickland, Symons & Rae, architects, have been chosen to prepare plans for the new House of Refuge for the County of Peel, to be erected in Brampton, and to have accom-modation for 40 inmates. This firm are This firm are modation for 40 inmates. This firm are architects of the new warehouse now being erected on Wellington street west for Park Bros. They are also engaged in making extensive repairs to the St. Charles restaurant on Yonge street.—Building permits have been granted as follows: J. McIvor, second story addition to store, 1,458 Queen street west, cost \$900; A. J. H. Eckhardt, two story brick \$900; A. J. H. Eckhardt, two-story brick dry kiln, north side of Esplanade, west of Bay street, cost \$2,000; Park Bros. & Company, brick warehouse, 83 to 87 Wellington street west, cost \$3,500; Bickell & Wickett, two-story galvanized iron addition to tannery, corner Front and Cypress streets, cost \$1,000.—St. Paul's Presbytation church has been removed to Presbyterian church has been removed to the corner of Bathurst street and Barton It is the intention of the trustees to build a new church on this site as soon as the necessary funds can be secured.—At the Council meeting on Monday last, notices of motion were given as follows: By Ald. Davies, that a foot-bridge be constructed over the river Don about midway between Queen and Gerrard streets, and that St. Lawrence market be enlarged and improved, with railway, wharfage and cold storage facilities. By Ald. Hubbard, that the City Engineer be requested to interview the managers of the Grand Trunk and Canadian Pacific tailways, with a view of having gates placed at the foot of Brock street. By Ald. Burns, that the Roard of Works he requested to confer Board of Works be requested to confer with the Harbor Commissioners with a view of discussing the question of the fill-ing in of the eastern portion of Toronto bay, caused by spring freshets down the river Don, and if possible devise some means of preventing the same; also that the City Engineer be requested to prepare estimates of the cost of the different classes of pavements. By Ald. Woods, that a special committee be appointed to consider and report on the cost of an electric plant for lighting the streets and public buildings of the city, and also for the purpose of supplying electric energy to manufac-turers.—The Canadian Pacific Railway Company have taken tenders for about forty steel bridges, to be built in different parts of Canada. Contracts are expected to be awarded in a couple of weeks.

FIRES.

The residence of William Daly, contractor, of Farren's Point, Ont., was totally destroyed by fire recently.—W. E. Hall's furniture factory at Galt, Ont., was last week damaged by fire to the extent of \$2,500; partially covered by insurance.—The east wing of the Ottawa College was badly damaged by fire on the 5th inst. The entire roof was destroyed and part of the centre building injured. The damage is estimated at \$50,000, fully covered by insurance.

CONTRACTS AWARDED.

HAMILTON, ONT.—Hoodless & Son, of this city, have been awarded the contract for interior fittings of the Koyal Hotel. The work is now in progress.

PETERBORO', ONT.—The Dominion Bridge Co., of Montreal, have been given the contract for the erection of a bridge over the Ouse river, in the township of Asphodel, at the price of \$650. Other tenderers were: Central Bridge Co., Peterboro', \$765; Weddell Bridge Co., Trenton, \$760; Hamilton Bridge Co., \$740.

TORONTO, ONT.-Messrs. John Hillock

the Standard Insurance Company's building in Montreal.—The Brockville Navigation Company have awarded a contract to the Polson Iron Works Company to build a large passenger steamer, to cost \$10,000.

QUEBEC, QUE - Cote & Lamonde will build a beer vat, 83 × 32 feet, for the Anyot & Gauvin brewery. The masonry will be of stone, and the building will cost \$4,000. -The woodwork contract of the Frontenac annex has been awarded to J. H. Gignac.—Harry Staveley has prepared plans for a mill to be built at Etchemin for Mr. Edson Fitch, to be two stories and 63×33 feet. Contracts have been let as follows: Masonry, Joseph Conture; carpenter and joiner's work, Olivier Michand; estimated cost, \$12,400.

MONTREAL, QUE.—Robert Findlay, architect, has let contracts as follows for seven semi-detached residences, corner of Prince Arthur avenue and Chesterfield street. Masonry, W. Owan; bricklaying, P. Wand; other trades not let.—Gamelin & Huot, architects, have accepted the following tenders for two three story houses on Park avenue. St. Henri, for Jos. Lemoine. Masonry, Alp. Charest; carpenter and joiner's work, E. H. Marsan; plumbing and heating, Jos. Deslauriers; bricklaying, Jos. Lantet; plastering. S. Gosselin; painting and glazing not

SHERBROOKE, QUE.—Tenders for the construction of a new iron bridge over the St. François river to replace the Aylmer bridge were received as follows: Pittsburg Bridge Co., \$12,174, weight 268,000 pounds; Edge Moore Bridge Co., \$12,746, weight 310,000 pounds; King Bridge Co., \$14,400, weight 340,000 pounds; Vermont Construction Co., \$12,000; weight 290,000 pounds; Dominion Bridge Co., \$8,386, weight 284,000 pounds. The contract will likely be given to the Dominion Bridge Company.

BUSINESS NOTES.

George E. Welsh, painter, has commenced business at Kamloops, B. C.

R. Donaldson & Son, iron works, Monreal, have been succeeded by the Phoenix Bridge & Iton Works.

David King & Co., plumbers and sanitary engineers, Halifax, N. S., have changed the firm name to Crump &

The assets of the estate of Kline, Mayor & Keith, granite and marble works, Hamilton, Ont., are being offered for sale by the assignee, Mr. W. F. McGivetin. Tenders close January 17th.

PILE TRESTLE BUILDING.

A rapid method of building a pile trestle on the Iowa and Dakota division of the Chicago, Milwaukee & St. Paul Railroad was thus described by Mr. A. J. Hart at the late convention of employees of the bridge and building departments of that road:

The floor was laid in four lines of 32foot stringers, breaking joints at each of the pile bents, 16 feet apait. Thus two of the stringers projected over the last bent 16 feet, and we would run the driver over the cap on these stringers far enough to reach ahead 16 feet. We handled all of the material with the pile-driver. From two to four men were kept on the ground all the time to shift the staging and raft, when we had to use one. Our arrangements for staging were very convenient, consisting of four large staples or dogs 16 inches long, which were driven into the outside pile, and a 3 x 12-inch plank, which we would slide from one bent to the other

as required. By the time the last pile was driven in the bent the others had been sawed off to the proper grade, and while the driver was gone for the cap the pile was sawed ready for it, and the driver would drop the cap in place and go back for the stringers. We would then make a hitch a little past the centre of a stringer, letting it hang perpendicular in the leaders, and when in place one man would take hold of the lower end and carry it back to the next bent as it was being lowered to its place. When the stringers were in place the driver would go back for the ties, taking 10 or 12 at a time. In 11 days of 24 hours each, or 264 hours, with two pile-drivers, four foremen and 64 men, there were driven 196 pile bents, 92 bents blocked, 32 bents framed, and floor put on 298 spans, making 4,768 lineal feet of bridge constructed.

PAINTS AND THEIR VAGARIES.

Every paint user knows that for a painted surface to be successfully accomplished, great care and attention have to be exercised in the selection of one of the materials used. It is pretty generally acknowledged that when a man has failed at any other trade he can wield the brush as a painter. This wielding of the brush is a very simple matter of manual labor only-one which requires but little skill, and capable of being performed by any one of average ability. But it is not everybody who wields a brush that can or does understand the nature or vagaries of the paint he is using. The conditions of use are so diverse that it is only the skilled craftsman-the man who has been a painter by trade all his life - who can give a rational explanation of any defects in a painted surface. What causes blisters in paint? What causes the colors to sink in? What causes paint to remain soft underneath while the exterior surface is bone dry and fairly hard? What, in fact, causes any and all of the "deviltree" a painted surface exhibits six months after the paint has been laid on? The jobbing hand, the nondescript sort of fellow, who has tried every trade and failed at all, cannot tell his employer why the paint he has laid on exhibits the above mentioned, or any other defect. It is only the "old hand," the skilled workman, who can offer an explanation. But even with him the explanation offered is not always the correct one. It requires the aid of the chemist as well as the craftsman to interpret all the reactive changes that a coat of paint undergoes. It is the writer's purpose, therefore, to explain the nature, qualities, reactive changes that occur in the paint-pot and the coat of paint laid on the surface of any material. In the present paper the question of the sinking in of colors will be considered. Before doing so, however, it will be best to explain the actual composition of this complaint called "paint."

Essentially, a paint is composed of linseed oil, pigment, driers, and turps. The oil used is generally boiled oil-that is, the raw linseed oil has been subjected to

(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 Go.

100 William Street

NEW YORK

SOLE PROPRIETORS OF "ASBESTIC" for United States and Canada.



MICA BOILER AND STEAM PIPE GOVERINGS

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

Full Particulars from

The Mica Boiler Covering Co. MONTREAL

9 Jordan St., Toronto WINNIPEG

a particular treatment whereby it loses its raw or native qualities, and becomes converted into a different body in many of its characteristics. The boiling process consists in heating the taw oil to a temperature of over 500' Fahr, whereby a lot of water that is inherently present in the oil is expelled. The oil is then either oxidized by passing steam or air through it, or it is boiled with some sort of a mineral such as litharge (an oxide of lead), borate of manganese, calcium sulphate of zinc, or some other body which will react on the fatty acids of the oil to oxidize them and thereby change the fluid from a limpid oil to a viscous varnish. (To illustrate the difference between an oil and varnish, drop a drop of each fluid on a piece of glass or porcelain, and note the difference in the drying power; the oil, if in the raw state, will remain fluid a very long time before it shows any signs of drying or hardening, and then it is only on its exterior surface that the drying occurs, forming a skin thereon; whereas, with the spot of varnish, that begins to dry and harden immediately it is exposed to the air.) Now, the object of boiling the oil has been to render it of a more drying nature-raw oil takes three months to dry when exposed to the air, but boiled oil does not take as many weeks. The pigment of a paint consists of a dry powder color which imparts the tint to the paint; this is ground up in the oil vehicle, whereby each dry particle of paint becomes coated with a layer of drying oil, whence such mixtures, when spread out thinly on a surface, will dry to form a thin layer or coat of paint. If the mixture of pigment and oil is not suffi-ciently siccative, the painter mixes in some "driers," which enables the com-pound to dry at a quicker rate. The addition of turpentine to a paint is made so as to render the paint of a thinner or more fluid consistence, whereby the paint can be easily spread by means of a brush. These details are of necessity known to most painters; but this explanation is needed here, so as to render perfectly comprehensible what is to follow.

Now, apart from the chemical nature of the pigment used—whether it be a sulphide, oxide, chromate, silicate, carbonate, etc., of a metal—it will be noted from the above that the nature of the "driers" mixed with the paint has also to be reckond with, and, lastly, the mixture of the turpentine. Consequently a "pot of paint," or "coat" of ditto, is not a simple compound. Quite the opposite, in fact; for, although the oil of turpentine used is always of the same nature, putting out of consideration for the moment the idea of adulteration or substitutes, the chemical composition of the pigment is not always the same; neither is the drier always the same. We shall have occasion to consider these points in other articles. At present we will confine attention to the loss of brightness, or "sinking in," as it is called, of colors.

Let us consider the nature of a coat of paint. It consists of pigment, an oilvarnish (i.e., the beiled oil), drier and turps. When this layer is exposed to the air (that is, when the painter has ceased spreading at with his brush, the oil vehicle begins to become decomposed, whereby it is separated with its

components, oleic, palmate, etc., acids, and at the same time the base of glycerine, to which these components are attached in the undecomposed oil, is eliminated. As these chemical changes occur, the atmospheric oxygen seazes on the olein and converts it into lindein, which is a solid, tough, elastic transparent body. The other fatty parts of the oil are more or less absorbed by the pigments, or else they are pushed to the surface of the coat of paint (as will be explained infra). The glycerine, however, does not become absorbed.

As the exterior surface of the coat of paint becomes oxidised as above explained, the particles of solid linoleia sink to the undermost parts of the coat of paint, and thus a fresh layer of the oil vehicle is pushed up to the exterior surface of the coat of paint, to be similarly converted by the atmospheric oxygen into solid linolein. When all the oil has become thus converted, we can conceive that as each particle of solid linolein sank down, the particle of pigment was left denuded of a pellicle, or covering of oil. Also, we can conceive that the interstices between the particles of solid linolein and those of the pigment become filled with air, and also with the glycerine that has been eliminated from the oil by the decomposition it has undergone.

Now, glycerine is a greedy absorber of moisture, and, as a consequence, side by side with the transparent shining particles of solid linolein there are particles of water or moisture. We can now conceive the coat of paint to be in this condition. First, there is most of the oil next to the surface on which the paint is laid; above this we can conceive its pigmentary particles almost uncovered with oil, and side by side, or permeating the mass, is a quantity of aqueous particles. Now, the color of the pigment is, of course, dull, or bereft of sparkling brilliancy, and it is the object, or should be, of the oil vehicles to clothe each particle of pigment with a layer of shining oil. This, however, is not the case for the conception above foreshadowed. Now, when all the oil has become converted into solid transparent linolein, this linolein will rise to the surface if it has not become too hard and solid (that is, if it has been quickly formed); but as it rises above the pigment particles

they sink down, and becoming mixed with the glyceri e and the water it has imbibed, we have a layer of transparent linolein above a layer of pigment, glycerine and water. Now, the oxidation of this linolein still proceeds, and will proceed until it is of a uniform tough skin. To enable it to do so its absorption of oxygen proceeds, and as this oxygen unites the layer of glyceine and water that is imprisoned by the superimposed skin of linolein, the glyceine becomes oxidised to a glyceride, and which more or less permeates the skin of linolein, and thereby causes the latter to love its transparency and become opaque; consequently the surface of the coat of paint, s bereft of brilliance, and exhibits a dull appearance.

It will naturally occur to the thoughtful reader that what is wanted to prevent this sinking in of the pigment is either the incorporation of some solid transparent body that will not allow the solid pigment to sink through the oil, or else some pro-cess or material that will quickly convert the oil vehicle into solid transparent linolein, for if the oil be converted into this substance before the pigment has had time to settle away from it, the linolein as it dries will inclose the particles of pigment in it, and slowly form a trans-parent layer of linolein around each particle of pigment (the glycerine that has been eliminated would in this case be driven to beneath the pigment and linelein, with what effect we shall see m a future arricle). Now, if a resin be incorporated with the oil, or a varnish be used as the binding vehicle for grinding up the pigment in, then the colors will not sink in, because side by side with each particle of solid opaque pigment there would be a particle of solid transparent resin which would reflect the light, and consequently cause the coat of paint to exhibit a brilliant appearance. Paint grinders, therefore, should grind up their pigment in an oleo-resinous vehicle. There is an addioleo-resinous venice. There is an additional reason why such a vehicle should be used, because a resin will absorb glycerine, and thus, instead of fluid glycerine and water being beneath a coat of paint, which is often the cause of bistering and peeling off of paint, the coat of paint would be one solid homogeneous mass from exterior to the undermost surface.-H. Standage, in the Building News.

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 Navier St., Montreal
Sole Agents for the Compagnie Generale des Asphaltes do France (Rock Asphalt).

PORTLAND NORTH'S CONDOR

Paving and Fire Brick a Specialty

SITTING LION and WHITE CROSS Brands

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

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

100 24 Tampe Grand MONT

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 : : : :

ÆMILIUS JARVIS & CO. Stock and Bond Brokers. Investment Agents. 23 King St. West, TORONTO

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

SIDEWALKS A SPECIALTY

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

The Silica Barutic Stone Gompany 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 ARCHI-TECT 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. LAWRENGE 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

O SEWER PIPE CO.

- FOR -

CULVERTS

AND

WATER PIPES.

For Brick Sewers

Write for Discounts

HEAD OFFICE AND FACTURY: HAMILTON, CANADA

PIPE

SEWER

Manufacturers o

Vitrified

Salt-Glazed

Double Strength Railway Culvert Pipes, nverts, Vents,

ALL KINDS OF FIRE CLAY

GOODS

STEAM AND POWER & HYDRAULIC

FOR ALL DUTIES

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 Genera Manager.

LIMITED.

Manufacturers of::::

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



3 inches to 60 inches diameter.

For Water, Gas, Culvert and Sewer

HAMILTON, ONT.

EPARTMENT

HAMILTON SEWAGE DISPOSAL works.

These works, which have just been completed, are situated at the outlet of the Ferguson avenue trunk sewer, and are the second constructed in the city, the first ones being built at the east end, and already described in the CONTRACT RECORD. The tanks in these new works are made longer and narrower, and there are six in place of three at the east end works, on account of there being so much more sewage to be treated.

The sewage, passing through a screen in the receiving well, is pumped into the channel by centrifugal pumps, and is mixed with lime and alum in the proper proportions in passing through the building the ing. At the outside of the building the channel is enlarged and deepened six inches to collect any sand which may have been pumped up, and which was found in the east end works to collect under the well in the first tank. Passing along the channel, the sewage is conducted through the tanks, where precipitation takes place, and the effluent then flows by a second channel at the other end of the tanks either to filter beds, should any necessity for such ever occur, or to Burlington Bay, as is at present intended. The works at the east end have been so successful that it is thought the effluent can be discharged into the bay with perfect safety without further treatment. The sludge is drawn off by pipes into the sludge well, and from there is pumped either into the sludge presses, or else into an elevated wooden tank, to be drawn off later into waggons and carted away.

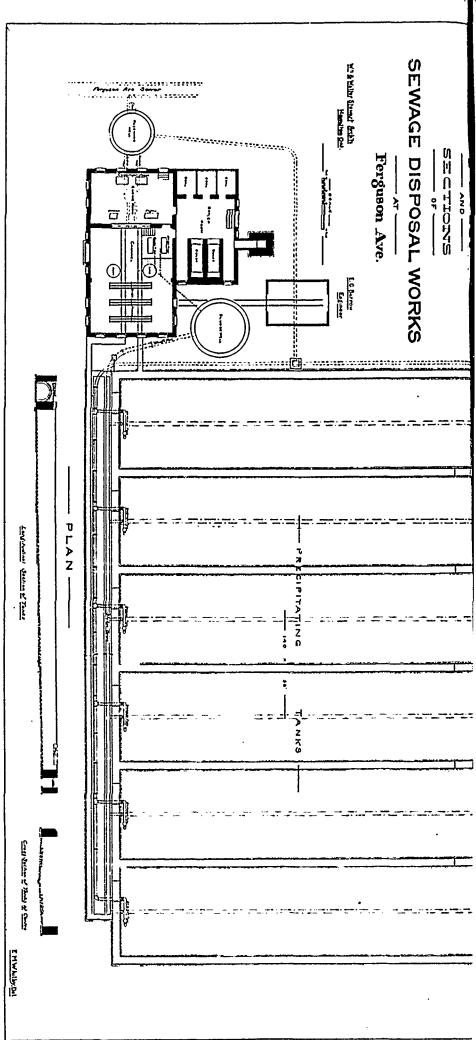
The works have been constructed from the plans and under the supervision of the City Engineer, Ernest G. Barrow, M. Can. Soc. C.E., M. San. Inst. (Eng.), and are perfected with all the latest improve-

From experience gained in the building of the east end works, the architects, Messrs. Wm. & Walter Stewart, have been able to introduce many improvements into the buildings connected with these works, the whole making a most complete plant.

AN ACT RESPECTING TOWN COUNCILS.

Mr. Caven has introduced in the Ontario Legislature an act respecting town councils, which reads as follows:

- 1. The council of every town having a population of not more than 5,000 by the last Canadian census shall consist of a mayor, who shall be the head thereof, and of six councillors to be elected by a general vote of the municipal electors in the town.
- 2. The council of every incorporated village shall consist of a reeve, who shall be the head thereof, and four councillors to be elected by the general very of the to be elected by the general vote of the municipal electors of the village.
- 3. The council of every township shall consist of a reeve, who shall be the head thereof, and four councillors, who shall, where the township is not divided into wards, be elected by general vote, and where the township is divided into wards, the reeve shall be elected by general vote, and one councillor shall be elected for each ward.



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. Asi'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.

VAUCHAN M. ROBERTS Civil and Sanitary Engineer

Waterworks, Sewers, Blectric Light, Blectric Railways.

Plans and Specifica-tions 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 f Canada. CIVIL ENGINEERS

SPECIALTY: Municipal Engineering, including Drainage, Sewerage, Sewage Dispetal, 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

Paying Granite

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

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

Address all communications to

JOS. BRUNET - COTE DES NEIGES. MONTREA!

MONTREAL PIPE FOUNDRY CO., Limited

DRUMMOND McCALL PIPE FOUNDRY CO., LGD.
Manufacturers of

GAST IRON WATER & GAS PIPES

and General Water and Gas Special Castings.

Prices on Application.

Offices, Canada Life Building, MONTREAL.

THE JENGKES MÆGHINE GO.

80 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

THREE RIVERS IRONWORKS CO. 🖎 TAREE RIVERS, P.Q.

Iron Water and Gas Pipes of best quality, from 2 inches in diameter.

HYDRANTS, VALVES and GENERAL CASTINGS.

IATER PIPES

From 4 in. to 42 in. Diameter.

BELL AND SPIGOT • FLANGED, TURNED AND BORED. AND BYRRYTHING 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.

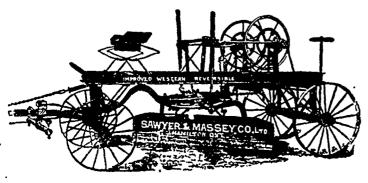
ALL PIPES CAST VERTICALLY

PIG IRON . WATER PIPES BAR IRON . PUDDLED BAR HYDRANTS, VALVES PIPE SPECIALS . **HEAVY CASTINGS.** IRON RAILS STRUCTURAL WORK. MACHINE WORK . CORPORATION SEVICE

and VALVE BOXES

WE MAKE

ROAD MAKING MACHINERY



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

ROAD MAKING MACHINERY

Catalogues on Application.

Correspondence Solirited.

Sawyer & Massey Go., Limited HAMILTON, ONT.

Prices of Building Materials.

LUMBER.
YALD QUOTATIONS.

YARD QUOTATIO		
Toro	nto.	Montreal.
S	S	s s
Mill cull box de and scantling o co	10 00	10 00 12 00
Shipping cull boards, pro- miscuous widths 1200	13 00	13 00
miscuous widths	16 ∞	19 ∞
un to 16 ft 10 00	12 00	10 00
up to 16 ft		
up to 18 ft	200	12 00 3 00
up to 20 ft12 ∞	13 00	13 00 14 00
up to 20 ft	\$ 00	5 00
Scantling and jo st, up to 16 ft	14 00	14 00
Scantling and jo st, up to 10 it	14 ∞	14 00 16 00
" " 20 ft	16 ∞	16 00
Scantling and joist, up to 22 ft	17 00	17 00 19 00
24 ft	20 00	21 00
" " 26 ft	22 00 24 00	
	27 00	27 00
" " 34 It	20 50 31 00	29 50 31 00
38 17	33 00	33 00
Cutting up planks, 1% and	31 00	36 co
thicker, dry	28 00	25 00 30 00
R. M.		
1 1/2 in flooring, dressed, F M. 14 00 11/2 inch flooring, to 2h, B M. 12 00 11/2 in dressed, F M. 25 00 11/2 in dressed, B M. 18 00 1 in dressed	36 00 22 00	
18 " dressed, F M.25 00	78 00	27 00 30 0)
undressed, B M.18 30	19 00 20 00	1800 1900
u undressed 12 00	15 00	12 00 15 00
Beaded sheeting, dressed20 00	35 00	22 00 35 00 8 00 12 00
Beaded sheeting, dressed20 00 Clapboarding, dressed XXX sawn shingles, per M	14 00	300 12.0
76 in	2 35 1 50	3 ∞
Sawn lath, No. 1 209	2 0 3	250 260
Cadan	3 90	2 90
White	40 00 45 00	30 00 40 00 35 00 55 00
Basswood, No. 1 and 2 28 00	30 00	1800 2000
Cherry, No. 1 and 270 00	90 00 35 00	70 ∞ 80 ∞ 30 ∞ 35 ∞
Red oak. 30 00 White. 37 00 Basswood, No. 1 and 2 28 00 Cherry, No. 1 and 2 20 White ash. No. 1 and 2 20 Black Ash, No. 1 and 2 20 Deciriostock. 50 00	30 00	1800 3000
Dressing stocks	3C CO	16 00 22 00 40 00
Three uppers, Am. inspection	50 00	50 00
BRICK-TO N		
Common Walling	6 50 8 00	7 50 8 00 8 50
Good Facing	8 00	8 50 9 00
	13 00	19 00
11 11 2	11.00	17 ∞
Buff No. 1, f.o.b. Milton	8 50 3 (0	15 (O 9 (O
64 46 2	11 00	17 0€
4 4 2	8 50 4 50	15 CO
SewerHard Building	4 50	
SAND.		
Per Load of 11/2 Cubic Yards	1 25	75
STONE.		
Common Rubble, per toise,	10 00	11 00
Large flat Rubble, per toise,	1000	
delivered	14 00	18 00
Foundation Blocks, per c. ft. Ballochmyle	90	50 65 75
New York Blue Stone	•	1 05
Granite (Stanstead) Ashlar, 6 in. to 12 in., rise 91n., per st.		25
Most Freestone		60 70
St. O'dhelm, Bath Freestone Black Pasture, Freestone		50 60 70
Thomson's Gatelawbridge, cu. ft.		75 80
Clark's N. B. Brown Stone,	1 15	1 00
per cubic foot, f.o.b Brown Free Stone, Wood-		
point Sackville, N.B., per	1 15	gu
cub ft. Elgin Town Quarries, Olive Freestone, cu. ft. Andro Public delivered, per		
Freestone, cu. ft		85
	14 50	14 00 14 50
toise	32	
"Scorize" Paving Blocks,	_	
8"×3½"×5"	5,∞	
0 / 3/2 / 4 *******	45 ∞	
OHIO PREESTONE, PROM THE GRA	FTON S	TONE CO.'S
QUARRIES.	90	1 + 0
No. 1 Buff Promiscuous No. 1 Buff Dimension	95	1 05
No. 1 Blue Promiscuous	60 65	70 75
No. 1 Blue Dimension Sawed Ashlar, No. 1 Buff		
any thickness, per cub. ft Sawed Ashlar, No. 1 Blue,	1 10	1 20
any thickness, per cub. ft	80	90
any thickness, per cub. ft bawed Flagging, per sq. ft.,	0634	. m.v.
for each inch in thickness. Above prices cover cost freight no	nd duty	paid. For
small lots add 5 to 10 cents per cut	ic foot.	
CREDIT VALLEY STO		
R 17ble, per car of 15 tons, at quart Beswn Coursing, up to 10 inch, pers	y up. var	7∞ d,
at quarry Brown Dimension, per cub. ft., at		150 175
Grey Dimension per cub. ft	• • • • • • •	45
LONGFORD STON	E.	
Rubble, per 30M car. f.o.b. quarrie		. 500

Rubble, per 50M car, f.o.b. quarries... . Ashlar, per cub. yd. f.o.b quarries......

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

		chitect and Builder	
Architecta.	Cemonts.	nterior Decoration Eastle & Son vi	Roofing Materials
Ontario Directory 111 Quebec Directory vi	Currie & Co., V&FP. 1iv Owen Sound Portland	lliott, W. H viii	Ormsby & Co., AB. 1 Metallic Roofing Co x
Architectural Sculp- tors and Carvers.	Cement Co 1V	Lime. Curric & Co, W& FP xiv	Ruofers
C. nnell, L. M viii Holbrook & Molling-	The Ratibus Co IV Drain Pipo	Ontario Lume Associa- tionIII	Campbell & Gildayxiii Douglas Brosxii
ton i Lamar & MetgeIII	Bremner, Alex i Currie & Co. W&F.P. xiv	Legal. Denton & Dods 111	Duthie & Sons, Gxiii Forbes, Dxiii Hutson & Sons, W. D.xiii
Architectural Iron	Hamilton and Toronto	Quinn & Morrison III	Nicholson & Co., D xi i
Work. Dominion Bridge Co. 1	Sewer Pipe Co xiv Electrical Engineer	Luxfer Prisms. Luxfer Prism Co xii	Ormsby & Co., A B., I Rennie & Son, Robtxiii
Art Woodwork	White-Frasir, George ii	Machinory Phelps Machine Co vi	Reggin, Johnxiii Stewart & Co., W. T.xiii
Southampton Mfg.Co. xiv Boller Covering	Klevators Fensom, John I	Mantles, Grates,	Reggin, Johnxiii Stewart & Co., W. T.xiii Warren Chemical & Mfg. Coxiii Williams & Co., Hxiii
Mica Boiler Covering	Fensom, John I Jack & Robertson IV Leitch & Turnbull I	and Tiles. Holbrook&Mollington	
Builders' Supplies.	Miller Bros & Pomsviii	Rice Lewis & SonIV	Sanilary Appli.
Bremner, Alex i Currie & Co., W&FP xiv	Engravers. Can. Photo-Eng Bu-	Mail Chates. Tie Cutler Mfg. Co., xiv	Garth & Co viii Toronto Steel Clad Bath
Ontario Lime Associa-	reauII	Mortar Colors and Shingle Stains,	& Metal Co ix The James Robertson
tionIII Rice Lewis & Son IV	Fire Brick and Clay Bremner, Alexi	Cabot, Samuel IV Muirhead, Andrew i	Co xii
Toronto Directoryxiii	Currie & Co, W&FP. xiv	Mosale Works.	Shingle Stains Cabot, Samuel IV
Building Stone Dealers.	Folding Partitions. Springer, O. Txiv	Mosaic Marble and Enamel Co xi	Stained and Decora-
Brodie, James víi Credit Forks Mining	Galvanized Iron	Ornamental Iron	Castle & Son vi
& Mig. Co vii McPherson & Co., A vii	Workers. Ormsby & Co., A. B., I	D.nnisW re & IronCo.viii	Horwood & Sons, H. ix Hobbs Gl ss Works vi Lyon, N. T ix
Moir, D. W vii Samuel, Thomas, &	Grilles and Rallings.	Toronto Fince & Or a- me nal Iron Worzs, vai	Mackey Stained Glass
The Longford Quarry	Dennis Wire & Iron	Painters. Montreal Directory xiii	McKenzie's Strined
Co vii The Toro to & Orillia	Co	Toronto Directory xiii Plasterers	The Robe t M.C u.
Stone Quarry Covii	mertal Iroa Worce, v.ii Southampton Mig. Coxiv	Gander, J. M vi Hynes, W. J xiii	and Stailed Gats
Builders' Hard- tears. Rice Lewis & Son IV	Granste Romet fot	Paints & Varnishes	Co ix Wood & C ix
Creosote Stains	Brunct, Jos vii Brodie. Ja nes vii	Muirhead, Andrew i	Me.chant & Co vii
Cabot, Samuel IV Church and School	Moir, D.W vii Heating,	Parquetry Floors Elliott, W H viii	Metallic Roofing Co x Ormsby & Co., A B I
Furniture. Can. Office & School	Boston B'ower C xi Gurney Foundry Co iv	Plate Glass	Soil Pipe. Toronto Foundry Co i
Furniture Coxiv G obe Furniture Co xi	Gurney, Tilden Co v	Hubbs Glass Works vs Lyo, N. T ix The Consolidated Plate	Typewriters, Etc.
Chimney Topping.	Ives H. R. & Co v King & Son, Warden III McClary Mfg. Co II	Glass Co vi	Williams Mfg. o III
Bremner, Alex i Currie & Co., W&FP. xiv	Ormshy & Co., A. B., I	Plumbers Montreal Directory xiii	Ventilators . Boston Blower Co ix
Contractors' Plant	Toronto Rudiator Mfg Co	Toronto Directory, xiii Reflectors	Wall Plaster
and Machinery Rice Lewis & Son IV	Coviii	Friak, I. P	Albert Mfg. Co vi Alabastine Co i
D: 1			m
Dimension, per cub. ft. "			Toronto. Montreal.
Kent Free stone Quarries A	ioneton, M.D.,	11l	TOTOLION MOULTOUR
per cu. ft., f.o.b River John, N. S., brown	Freestone, per	Hydraulic Cements.— Thorold, per bbl	. 175 125 150
per cu. ft., f.o.b	Freestone, per 95 95 95 95 95 95 95	Thorold, per bbl Queenston, " Napanee, "	. 175 125 150 . 175 150 160 . 175 150
per cu. ft., f.o.b	Freestone, per 95 95 95 gh granite for it. f.o.b. quarry. 40 1 00	Thorold, per bbl	. 175 125 150 . 175 150 160 . 175 150 . 175 150
per cu. ft., f.o.b	Freestone, per 95 95 gh granite for ft. f.o.b. quarry. 40 1 00 to 12 in. x6 in.	Thorold, per bbl	175 125 150 175 150 160 175 150 150 175 150 175 150
per cu. ft., f.o.b	1 00 95 Freestone, per 95 95 gh granite for 95 95 ft. f.o.b. quarry, 40 1 00 100	Thorold, per bbl	175 125 150 175 150 160 175 150 160 175 150 175 150 175 150 175 150 175 150 170 3500 1500 2100 2700 3500 1500 2100
per cu. ft., f.o.b River John, N. S., brown cu. ft., f.o.b Quebec and Vermont rou building purposes, per c. For ornamental work, cu. ft Granite paving blocks, 8 it x4½ in. per M Gran te curbing stone, 6 i lineal foot	1 00 95 Freestone, per 95 95 gh granite for fit, fo.b. quarry, 40 1 00 1.10 12 in.x6 in. 50 co 1.x20 in. per 70	Thorold, per bbl	175 125 130 177 150 160 177 150 160 177 150 160 177 150 160 175 150 170 475 500 550 140 475 500 2100 2700 3500 1500 2100 2700 3500 1900 2100 50 8
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont ro building purposes, per cl. For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA	Freestone, per 95 95 95 95 95 95 95 95 95 95 95 95 95	Thorold, per bbl	175 125 130 177 150 160 177 150 160 177 150 160 177 150 160 175 150 170 475 500 550 140 475 500 2100 2700 3500 1500 2100 2700 3500 1900 2100 50 8
per cu. ft., f.o.b River John, N. S., brown cu. ft., f.o.b Quebec and Vermont rou building purposes, per c. For ornamental work, cu. ft Granite paving blocks, 8 it x4½ in. per M Gran te curbing stone, 6 i lineal foot	Freestone, per sh granite for fit, fo.b. quarry, 40 1 00 1. to 12 in.x6 in. 50 co n. x 20 in. per 70 TOPONTO. MONTPERI.	Thorold, per bbl	175 125 150 175 150 160 175 150 160 175 150 175 175 175 175 175 175 175 175 175 175
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per c. For ornamental work, cu. ft Granite paving blocks, 8 in x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA Rocfing (\$\pi\$ square). " red " purple " unlading gree	Freestone, per 1 00 95 Freestone, per 95 95 gh granite for fit. fo.b. quarry. 40 1 00 1.10 12 in. x6 in. 50 co n. x 20 in. per 70 ITE. TOTONIO. MONITORI. 7 50 20 00 8 50 10 00 8 50 7 00 8 00	Thorold, per bbl	175 125 150 175 150 160 175 150 160 175 150 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per c. For ornamental work, cu. ft Granite paving blocks, 8 in x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA Rocfing (** square*). " red. " purple. " unlading gree " black.	Freestone, per 1 00 95 Freestone, per 95 95 gh granite for it. fo.b. quarry. 40 1 00 1. to 12 in.x6 in. 1. to 12 in.x6 in. 70 1. TEE. TOTONIO. MONTRAL. 750 20 00 8 57 700 8 00 750 6 50	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per M. Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " "	175 125 150 175 150 160 175 150 150 175 175 175 175 175 175 175 175 175 175
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b Quebec and Vermont rou building purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 in x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Rocfing (\$\mathbf{y}\$ square). " red " purple " unlading gree black Terra Cotta Tile, per sq Ornamental Black Slate Roc	Freestone, per 1 00 95 Freestone, per 95 95 gh granite for fit, fo.b. quarry, 40 1 00 1. to 12 in.x6 in. 50 co 1. x 20 in. per 70 LTE. TOPONTO. MONTPORI. 7 50 20 00 8 57 10 00 8 57 7 00 6 00 7 50 6 50 1 20 00 25 00 6 6 6 6	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per M. Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " "	175 125 150 175 150 160 175 150 150 175 175 175 175 175 175 175 175 175 175
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Rocfing (** iquart). " red " purple " purple " purple " plack Terra Cotta Tile, per sq Ornamental Black Slate Ro PAINTS.	Freestone, per Freestone, per gh granite for tit f.o.b. quarry. 100 100 100 100 100 100 100 1	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Notario, " Keene's Coarse "Whites". Fire Bricks, Newscattle, per Merica, Per Barrel, Grey. " " Plaster, Calcined, N. B " " N. S Hair, Plasterrs', per bag. HARD) The following are the quo at Toronto and Montreal: Cut nails, 5cd & 6od, per ke Steel " " CUT NAILS, FERCE 40d, hot cut, per 103 lbs to to 16d, hot cut,	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per cl. For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA Rocfing (\$\frac{3}{2}\$ square). " red " purple " unlading gree " unlading gree " unlading gree " Terra Cotta Tile, per sq Ornamental Black Slate Roc PAINTS. White lead, Can., per 100 if " zinc, Can., ii " Red lead, Eng	1 00 95	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Notario, " Keene's Coarse "Whites". Fire Bricks, Newscattle, per Merica, Per Barrel, Grey. " " Plaster, Calcined, N. B " " N. S Hair, Plasterrs', per bag. HARD) The following are the quo at Toronto and Montreal: Cut nails, 5cd & 6od, per ke Steel " " CUT NAILS, FERCE 40d, hot cut, per 103 lbs to to 16d, hot cut,	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b	Freestone, per 95 95 95 95 95 95 95 95 95 95 95 95 95	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Notario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per Merica, Per Barrel, Grey. " " White. Plaster, Calcined, N. B " N. S Hair, Plasterers', per bag. HARD The following are the quo at Toronto and Montreal: Cut nails, 5cd & 6od, per ke Steel " CUT NAILS, FERCE 40d, hot cut, per 10-1 bs 10 to 16d, hot cut, per 10-1 bs 10 to 16d, hot cut, ger 10-1 ds 10 dd, 7d, 4d to 5d, " 11 dd, 4d 12 dd, " 13 dd, " 14 dd, " 15 de, " 16 de, " 17 dd, " 18 dd,	175 125 130 177 125 130 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont ro building purposes, per c. For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA Rocfing (\$\mathbf{s}\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Freestone, per 95 95 gh granite for it. fo.b. quarry. 40 1 00 1. to 12 in. x6 in. 50 co 1. x 20 in. per 70 ITE. TOTONTO. MONTRAL. 750 20 00 1. 8 50 7 00 8 00 1. 20 00 25 00 1. 50 1 750 6 50 1. 6 50 7 50 7 25 6 50 7 50 7 50 1. 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 25 6 50 7 50 7 50 1 60 175 160 175 1 90 100 75 90 1 10 12 8 10	Thorold, per bbl. Queenston, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per M. Lime, Per Barrel, Grey " " " White. " " " N. S Hair, Plasterers', per bag. HARD! The following are the quo at Toronto and Montreal: Cut nails, 50d & 60d, per ke Steel " " " CUT NAILS, FERCE 40d, hot cut, per no. lbs. 10 to 16d, hot cut. 8d, 9d, " 4d to 5d, " 3d, " 2d. Cut soikes, 10 cents per ke Steel Nails, 11 c. per key Steel Nails, 11 c. per key	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 177 177 177 177 177 177 177 177 177
River John, N. S., brown cu. fr., f.o.b. Quebec and Vermont rou building purposes, per clifor ornamental work, cu. fr. Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA Rocfing (** square). " red " purple " unlading gree Terra Cotta Tile, per sq Ornamental Black Slate Roc PAINTS. White lead, Can., per 100 ii zinc, Can., ii wermillion. " veretian, per 100 ibs " veretian, per 100 ibs " veretian, per 100 ibs " verelilion " Vellow ochre	Treestone, per 95 95 95 95 95 95 95 95 95 95 95 95 95	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per M. Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 177 150 177 177 177 177 177 177 177 177 177 177
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont ro building purposes, per cl. For ornamental work, cu. ft. Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA Rocfing (\$\varphi\$ square). " red. " purple. " untading gree " black. Terra Cotta Tile, per sq. Ornamental Black State Roc PAINTS. White lead, Can., per 100 li " zinc, Can., " " Red lead, Eng. " venetian, per 100 lbs. " vermillion. " Indian, Eng. Vellow ochrome. Green, chrome. " Paris.	Freestone, per The granite for the following state fo	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per M. Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 177 150 177 177 177 177 177 177 177 177 177 177
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Rocfing (\$\frac{9}{2} square\$). " red " purple " red " purple " PAINTS. White lead, Can, per 100 ib " rinc, Can, " " Red lead, Eng " venetian, per 100 ibs " venetian, per 100 ibs " Vellow ochre Yellow chrome. Green, chrome Green, chrome " Paris Black lamp. Blue, ultramarine	Freestone, per Schemanite for the factor of	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle.per M. Lime, Per Barrel, Grey " " " " " N. S. Hair, Plasterers', per bag HARDI The following are the quo at Toronto and Montreal: Cut nasils, 5cd & 6od, per ke Steel " " " OUT NAILS, FENCE 4od, hot cut, per 10 Jbs. 10 to 16d, hot cut. 8d, 9d, " 4d to 5d, " " Cut soikes, 10 cents per ke Steel Nails, 11 c. per keg	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 177 150 177 177 177 177 177 177 177 177 177 177
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci- For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roefing (\$\mathbf{y}\$ iquave). " red. " purple. " unlading gree " black Terra Cotta Tile, per sq. Ornamental Black Slate Roe PAINTS. White lead, Can., per 100 lbs. " venetian, per 100 lbs. " venetian, per 100 lbs. " vermillion. " Indian, Eng. Yellow cohre. Yellow chrome. Green, chrome. Green, chrome. " Paris. Black lamp. Black lamp. Blue, ultramarine. Oil, linseed, raw, by bbl. /mp., Add.	Freestone, per gh granite for ti. f.o.b. quarry. 10 0 95 gh granite for ti. f.o.b. quarry. 10 10 0 10 10 10 10 10 10 10 10 10 10 10	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per M. Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 178 150 178 178 178 178 178 178 178 178 178 178
River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per c. For ornamental work, cu. ft Granite paving blocks, 8 is x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roofing (\$\mathbf{y}\$ iquart). " red " purple " unlading gre black Terra Cotta Tile, per sq. Ornamental Black Slate Roo PAINTS. White lead, Can., per 100 il " inc, Can., i ii Red lead, Eng " vermillion " vermillion " lindian, Eng Yellow ochre Yellow chrome Green, chrome " Paris Black lamp Blue, ultramarine Oil, linseed, b'id, by bbl., Imp. gal Oil, linseed, b'id, by bbl., Imp. gal	Freestone, per 1 00 95 Freestone, per 95 95 gh granite for 1 00 the flob quarry 40 1 00 1.0 12 in. per 70 LTE. TOPONTO. MONTPORI. 1.0 20 00 25 00 1.0 10 12 8 10 1.0 12 8 1	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per M. " Scotch Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 175 150 177 170 170 177 170 170 177 177 177 171 171 171 171 171 171 171 171 171
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per cl. For ornamental work, cu. ft. Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA Rocfing (\$\varphi\$ square). " red. " purple. " unlading gree " black. " red. " purple. " unlading gree " black. " Terra Cotta Tile, per sq. Ornamental Black State Roc PAINTS. White lead, Can., per 100 il " zinc, Can., " " Red lead, Eng. " venetian, per 100 lbs. " vernetian, per 100 lbs. " vernetian, per 100 lbs. " Verllow ochre. " Yellow ochre. " Paris. Black lamp. Blue, ultramarine. Oil, linsced, raw, by bbl. Imp. zal. Oil, linsced, raw, by bbl. Imp. gal. Oil, linsced, rame, by low, Imp. gal. Oil, linsced, refined, \$\varphi\$ imp. (Less than bbl., 50)	Freestone, per 95 95 gh granite for it. fo.b. quarry. 40 1 00 1. to 122 in. yo in. 1. to 20 in. 20 i	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Notario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per Merice " White. " White. " White. " N. S. Hair, Plasterers', per bag. HARDI The following are the quo at Toronto and Montreal: Cut nasils, 5cd & 6od, per ke Steel " Cut Natls, FENCE 4od, hot cut, per 100 lbs. 10 to 16d, hot cut. 3d, d. " Cut Anlas, FENCE 4dt 5d, " Cut Anlas, recents per ke Steel Nails, 11 c. per keg Fron. Iron pipe, % inch, per foot. " " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 177 177 177 1834 125 177 1
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot. SLA Rocfing (\$\varphi\$ square). " red. " purple. " untading gree " black. Terra Cotta Tile, per sq. Ornamental Black State Roc PAINTS. White lead, Can., per 100 li " zinc, Can., " " Red lead, Eng. " venetian, per 100 lbs. " vernetian, per 100 lbs. " vernetian, per 100 lbs. " Vellow ochrome. Green, chrome. " Paris. Black lamp. Blue, ultramarine. Oil, linseed, raw, by bbl. Imp. gal. Oil, linseed, rame, by low, land, gal. Oil, linseed, rame, land, gal. Oil, linseed, rame, low, gal. Oil, linseed, rame, low, land, gal. Oil, linseed, rame, low, land, gal. Oil, linseed, rame, land, gal.	Freestone, per 1 00 95 Freestone, per 95 95 Grantie for 100 In granite for 100 In 10 121 100 In 10 12 100 In 10 100 In 100	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per M. Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roefing (\$\perp \text{square}\$). " red " purple " purple " purple " red " purple " purple " purple " red " purple " red " purple " llack slate Roe PAINTS. White lead, Can, per 100 ii " zinc, Can, " " Red lead, Eng " venetian, per 100 ibs " venetian, per 100 ibs " Vellow ochre Yellow chrome. Green, chrome " Paris Black lamp Blue, ultramarine Oil, linseed, raw, by bbl., Imp. gal Oil, linseed, refined, \$\psi Imp. (Less than bbl., 50 Putty Whiting, dry, per 100 lbs. Paris white, Eng., dry. Litharge Eng	Freestone, per School	Thorold, per bbl. Queenstoo, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Notario, " Keene's Coarse "Whites". Fire Bricks, Newcastle, per be. " White. " White. " " White. " " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roefing (\$\frac{3}{2}\$ iguare). " red. " purple. " unlading gree " black Terra Cotta Tile, per sq. Ornamental Black Slate Roe PAINTS. White lead, Can., per 100 lb. " zinc, Can., " " Red lead, Eng. " venetian, per 100 lbs. " vernillion. " Indian, Eng. Yellow chrome. Green, chrome. " Paris. Black lamp. Blue, ultramarine. Oil, linseed, refined, \$\frac{3}{2} Imp. (Less than bbl., \$c. Paris white, Eng., dry. Litharge Eng. Sienna, barnt. Umber. "	Freestone, per School of the first state of the fi	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Neene's Coarse "Whites". Fire Bricks, Newcastle, per Merica N. B. " " Notation, " White. Plaster, Calcined, N. B. " " N. S. " Hair, Plasterers', per bag. HARD) The following are the quo at Toronto and Montreal: Cut nails, 5cd & 6od, per ke Steel " " CUT NAILS, FERCE 40d, hot cut, per 100 lbs 10 to 16d, hot cut, per 100 lbs 10 to 16d, hot cut. 3d, 9d, " Cut soikes, 10 cents per ke Steel Nails, 11 c. per keg Iron pipe, % inch, per foot. " " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 170 3500 1500 2100 2700 3500 1500 2100 200 150 200
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roefing (\$\forall \text{square}\$). " red. " purple. " untading gree " indian gree " rine, Can., " " red. " venetian, per 100 lbs. " vermillion " Indian, Eng. " venetian, per 100 lbs. " vermillion " Indian, Eng. " vellow chrome Green, chrome Green, chrome " Paris. Black lamp Blue, ultramarine Oil, linseed, refined, \$\forall \text{imp}, gal. Oil, linseed, refined, \$\forall \text{imp}, gal. Oil, linseed, refined, \$\forall \text{imp}, gal. Whiting, dry, per 100 lbs. Paris white, Eng., dry Litharge Eng. Sienna, barnt Umber. " Turpentine	Freestone, per Freestone, per Sh granite for the following per series of the followi	Thorold, per bbl. Queenston, " Napanee, " N	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 175 150 177 170 180 180 180 1900 2100 180 180 180 1900 150 180
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per cl. For ornamental work, cu. ft. Granite paving blocks, 8 is x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roofing (\$\mathbf{y}\$ iquare). " red " purple " lineal foot " red " purple " unlading gree " black Terra Cotta Tile, per sq. Ornamental Black Slate Roo PAINTS. White lead, Can., per 100 lbs " venetian, per 100 lbs " venetian, per 100 lbs " vermillion " Indian, Eng Yellow chrome Green, chrome " Paris Black lamp Blue, ultramarine Oil, linseed, raw, by bbl /mp, zd Oil, linseed, refined, \$\mathbf{y}\$ /mp. (Less than bbl., sc Putty Venium, dry, per 100 lbs. " Venium, dry, per 100 lbs " Paris white, Eng., dry Litharge Eng. Sienna, barnt. " Turpentine OENENT, Portland Cements —	Freestone, per 1 00 95 Freestone, per 95 95 gh granite for 1 100 the flob quarry 40 1 00 the	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Neene's Coarse "Whites". Fire Bricks, Newcastle, per Mere Scotch Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 177 170 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci- For ornamental work, cu. ft Granite paving blocks, 8 is x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roofing (\$\frac{9}{2}\$ iquare). " red. " purple. " unlading gree black. Terra Cotta Tile, per sq. Ornamental Black Slate Roo PAINTS. White lead, Can., per 100 li " zinc, Can., " Red lead, Eng. " venetian, per 100 lbs. " vermillion. " Indian, Eng. " Vellow chree. Green, chrome. " Paris. Black lamp. Blue, ultramarine. Oil, linseed, raw, by bbl., Imp., 2d. Oil, linseed, raw, by bbl., Imp., 2d. Oil, linseed, refined, \$\frac{3}{2} Imp. (Less than bbl., 50 Putty Whiting, dry, per 100 lbs. Paris white, Eng., dry. Litharge Eng. Sienna, barnt. Ilmber. " Turpentine OENENT, Portland Cements — German, per thl.	Freestone, per gh granite for ti. f.o.b. quarry. to 100 101 101 101 101 101 101 101 101 10	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Neene's Coarse "Whites". Fire Bricks, Newcastle, per Mere Scotch Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 177 170 17
Rocfing (\$\varphi\$ square). Rocfing (\$\varph	Treestone, per 95 95 95 95 95 95 95 95 95 95 95 95 95	Thorold, per bbl. Queenston, " Napanee, " Na	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont ro Duilding purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Rocfing (\$\frac{y}\$ square). " red. " purple. " untading gree " black Terra Cotta Tile, per sq. Ornamental Black State Roc PAINTS. White lead, Can., per 100 li " zinc, Can., " " Red lead, Eng. " venetian, per 100 lbs. " vernetian, per 100 lbs. " vernetian, per 100 lbs. " Vellow ochre. " Paris. Black lamp. Black lamp. Blue, ultramarine. Oil, linseed, raw, by bbl. /mp. gal. Oil, linseed, bi'd, by bbl., /mp. gal. Oil, linseed, raw, by bbl., /mp. g	Treestone, per 95 95 95 95 95 95 95 95 95 95 95 95 95	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Neene's Coarse "Whites". Fire Bricks, Newcastle, per Merican Plaster, Calcined, N. B " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 177 170 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per cl. For ornamental work, cu. ft. Granite paving blocks, 8 is x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roofing (\$\mathbf{y}\$ iquare). " red. " purple. " unlading gree black." Terra Cotta Tile, per sq. Ornamental Black Slate Roo PAINTS. White lead, Can., per 100 lbs. " venetian, per 100 lbs. " venetian, per 100 lbs. " vernillion. " Indian, Eng. " venetian, per 100 lbs. " vernillion. " Paris. Black lamp. Blue, ultramarine Oil, linseed, raw, by bll. Imp. gal. Oil, linseed, refined, \$\mathrew{y}\$ Imp. (Less than bbl., \$\mathrew{y}\$ color Paris white, Eng., dry. Litharge Eng., dry. Litharge Eng. Sienna, barnt Ilmber. " Turpentine. OENENT, Portland Cements — Germar, per thl. London " Newcastle " " Jossen " Brad Portla North's "Condor" English, artificial, per ble Belgian, nstural, per 1	Treestone, per 95 95 95 95 95 95 95 95 95 95 95 95 95	Thorold, per bbl. Queenston, "" Napanee, "" Napanee, "" Napanee, "" Napanee, "" Neene's Coarse "Whites". Fire Bricks, Newcastle, per Merican Coarse "White. Plaster, Calcined, N. B "" N. S Hair, Plasterers', per bag. HARD) The following are the quo at Toronto and Montreal: Cut nails, 5cd & 6od, per ke Steel "" CUT NAILS, FERCE 40d, hot cut, per 100 lbs 10 to 16d, hot cut, per 100 lbs 2d. Cut soikes, 10 cents per ke Steel Nails, 11 c. per keg Iron pipe, % inch, per foot. "" "" "" "" "" "" "" "" "" "" "" "" ""	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 150 177 170 17
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont ro Duilding purposes, per ci For ornamental work, cu. ft Granite paving block, 8 is x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roefing (\$\forall \text{square}\$). " red. " purple. " untading gree " ing. Can., per sool " zinc, Can., per sool " zinc, Can., per sool " venetian, per sool bs. " vermillion " Indian, Eng. Vellow ochre. Vellow chrome " Paris. Black lamp Blue, ultramarine Oil, linseed, refined, \$\forall \text{square}\$, Oil, linseed, refined, \$\forall \text{square}\$, Whiting, dry, per sool bs. Paris white, Eng., dry. Litharge Eng. Sienna, barnt. Umber, " Turpentine OENENT, Portland Cements OENENT, Portland Cements German, per 'bl. London " Newcastle." " Jossen" Bra-d Portla North's "Condor" English, artificial, per bl Belgian, natural, per bl	1 00 95	Thorold, per bbl. Queenston, " Napanee, " Hull, " Ontario, " Keene's Coarse "Whites" Fire Bricks, Newcastle, per M. Lime, Per Barrel, Grey " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 180 180 1900 2100 270 3500 1500 2100 200 150 180 200 150 1
per cu. ft., f.o.b. River John, N. S., brown cu. ft., f.o.b. Quebec and Vermont rou building purposes, per ci For ornamental work, cu. ft Granite paving blocks, 8 ir x4½ in. per M. Gran te curbing stone, 6 i lineal foot SLA Roofing (\$\foralle{y}\$ iquare). " red. " purple. " unlading gree black Terra Cotta Tile, per sq. Ornamental Black Slate Roo PAINTS. White lead, Can., per 100 lb. " zinc, Can., " " Red lead, Eng. " venetian, per 100 lbs. " vermillion. " Indian, Eng. Yellow chrome. Green, chrome. Green, chrome. Green, chrome. Green, chrome. Oil, linseed, refined, \$\foralle{y}\$ Imp. (Less than bbl., 50 Paris white, Eng., dry. Litharge Eng. Sienna, barnt. Umber. Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements. German, per 191. London " Turpentine OENENT, Portland Cements.	Freestone, per 95 95 95 95 95 95 95 95 95 95 95 95 95	Thorold, per bbl. Queenston, " Napanee, " Napanee, " Napanee, " Napanee, " Napanee, " Neene's Coarse "Whites". Fire Bricks, Newcastle, per Merican Plaster, Calcined, N. B " " " " " " " " " " " " " " " " " "	175 125 150 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 150 160 177 170 180 180 1900 2100 270 3500 1500 2100 200 150 180 200 150 1