Technical and Bibliographic Notes / Notes techniques et bibliographiques

copy available may be bill of the ima	ute has attempable for filminute for filminu	ng. Feature y unique, w roduction, c	s of this o hich may or which i	opy wh alter an may	ich Y			lui a exem biblio repro dans	été poss iplaire q ographic oduite, c	microfilmé sible de so jui sont pe que, qui pe ou qui peu lode norma	procu ut-être euvent ivent e	rer. Les d e uniques modifier exiger une	létails de d du point d une image modificat	cet de vue e tion
1 1	oured covers/								ł	ed pages/				
Cou	verture de cou	uleur						Ĺ	Pages o	de couleur				
Cov	ers damaged/								Pages o	damaged/				
Cou	verture endon	nmagée							Pages e	endommag	jées			
Cov	ers restored ar	ad/or lamin	ated/						Panes r	estored an	nd/or i	aminated.	/	
1 1	verture restau		•						i	restaurées (
									/_					
	er title missing	_	••							discoloure décolorées				
Le t	itre de couver	rture manqu	16						rages o	aecolorees	, tacile	itees ou p	iquees	
Cold	oured maps/								Pages o	detached/				
Carr	tes géographiq	lues en coul	eur						Pages o	détachées				
Col	oured ink (i.e.	other than	blue or b	iack)/					Shows	hrough/				
1 1	re de couleur				e)			√	l .	arence				
									/					
i 1	oured plates a nches et/ou ille							V		y of print é inégale d				
Plar	icnes et/ou iii	ustrations e	n couleur					L	Quant	e megale u	e i iiii	pression		
Bou	ınd with othei	r material/							Contin	nuous pagi	nation	/		
Reli	ié avec d'autre	es documen	ts					L	Pagina	tion conti	nue			
Tig	nt binding ma	v cause sha	dows or d	istortion	1				Includ	es index(e	s)/			
	ng interior ma	•						Comprend un (des) index						
La reliure serrée peut causer de l'ombre ou de la						Title on header taken from:/								
distorsion le long de la marge intérieure						Le titre de l'en-tête provient:								
Blan	nk leaves adde	ed during re	storation	may apı	pear						•			
	hin the text. 1	-	ossible, th	nese have	e			Title page of issue/						
	n omitted from	_	: hianches	: aioutés) E			L	l Page d	le titre de l	la livra	iison		
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte,							Caption of issue/							
	s, lorsque cela	e était possi	ble, ces pa	iges n'oi	nt			Titre de départ de la livraison						
pas été filmées.							Masthead/							
							Générique (périodiques) de la livraison							
											-			
1 1	ditional comm	•												
L COI	nmentaires su		i Co.											
This item	is filmed at t	he reduction	n ratio ch	ecked b	elow/	ı								
Ce docun	nent est filmé	au taux de	réduction	indiqué	ci-de	ssous.								
10X		14X		18X		_	22	X		263	X	-	30X	
	12X		16X			20X		L_	24X			28X		32X
	147		107			LUA			444			407		J ∠∧

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. 6.

NOVEMBER 28, 1895

No. 43.

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 paper.

Notice to Contractors CANADIAN CONTRACTORS

HAND-BOOK

A new and thoroughly revised edition of the Canadian Contractor's Hand-Book, consisting of 150 pages of the most carefully selected material, is now ready, and will be sent post-paid to any address in Canada on receipt of price. This book should be in the hands of every architect, builder and contractor who desires to have readily accessible and properly authenticated information on a wide variety of subjects adapted to his daily requirements. daily requirements.

Price, \$1.50; to subscribers of the CANADIAN ARCHITECT AND BUILDER, \$1.00. Address

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



Sealed Tenders addressed to the undersigned, and endorsed "Tender for dredging, Collingwood Harbour," will be received at this office until Tuesday, the 7th day of January next, inclusively, for the deepening of the Harbour of Collingwood, to the depths mentioned in the combined specification and form of tender and within the area shown on the plan to be seen at the Harbour Master's Office, Collingwood, and at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on the form supplied, and signed with the actual signatures of tenderers.

An accepted bank cheque, payable to the order of the content of

tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, for the sum of five thousand dollars, (\$5,000), must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the logist or any tender.

The Department outlined by order,

By order,

E. F. E. ROY,

Secretary.

Department of Public Works, Ottawa, 12th Nov., 1895.

Tenders will be received by registered post only, addressed to the City Engineer, Toronto, up to 11 o'clock a m. on SATURDAY, DECEMBER 7th, 1895, for the supply of

100 TOISE FIELD STONE

to be delivered at the House of Industry, Elm street, in this city, in lots of ten toise and upwards.

in this city, in lots of ten toise and upwards.

Forms of tender may be obtained on and after Saturday, November 30th, 1893, at the office of the City Engineer, Toronto.

A deposit in the form of a marked cheque, payable to the order of the City Treasurer, for the sum of 5 per cent, on the value of the work tendered for must accompany each and every tender, otherwise it will not be entertained.

The tenders must bear the bona fide signatures of the contractor and his sureties, or they will be ruled out as informal.

DANIEL LAMB, Chairman Committee on Works.

Committee Room, Toronto, Nov. 26th, 1895.

NEW COMPANIES.

ST. JOHN, N. B .- Maritime Nail Co. incorporated; capital, \$50,000; to manufacture nails.

HAMPION, N. B.—G. & G. Flewelling Mfg. Co., incorporated; capital stock, \$150,000; to manufacture lumber, etc.

OTTAWA, ONI.—Ottawa Novelty Co., capital \$10,000; to manufacture lamps, lamp brackets, electroliers, etc.; promoters L. K. McLaurin, A. E. Schyer and others.

BELLEVILLE, ONT .- Belleville Traction Co., incorporated; capital, \$100,000; to construct an electric street railway. Promoters. S. A. Lazier, T. C. Lazier, R. C. Lazier and others.

MONTREAL, QUE-Northern Lumber Co., incorporated; capital \$20,000. The promoters are A. & J. de Lorimier, of Caughnawaga; S. A. de Lorimier, Albert E. de Lorimier and Eugene H. Godin, of Montreal.

ROSSLAND, B. C.—Rossland Electric Light & Power Co., incorporated; capital \$20,000. T. W. Stack and Angus J. Mc-Donald are among the promoters.—St. Mary Mining Co., incorporated; members, V. D. Williams, of Spokane, J. H. Burke, of Rossland, and others.

TORONTO, ONT.—The Patterson Dry Mineral Magnetic Separator and Gold Extraction Company of Ontario; incorporated; capital stock, \$125,000; to carry on the business of mining, etc.—Richmond Creamery Co., applying for incorporation; capital, \$50,000.—Wanderer Bicycle Co., seeking incorporation; capital stock, \$45,000.—Modern Office Systems Co., seeking incorporation; capital. \$10. Co., seeking incorporation; capital, \$10,to manufacture stationary, office supplies, etc.

CONTRACTS OPEN.

NEWDALE, ONT .- Wm. Irwin is about to build a residence.

CLAREMONT, QNT.—Another skating rink may be built here.

SARNIA, ONT.—The county has decided to erect a House of Refuge.

BETHANY, ON1.—The Methodists are talking of rebuilding their church.

GRAND FORKS, B. C .-- Manley & Averill are about to erect a large hotel.

DANVILLE, QUE. - Plans are being prepared for the new Anglician church here.

PICTON, ONT. - It is said that upwards of fifty houses will be built here next season.

ST. LIN, QUE.—The School Commissioners are calling for tenders for a new school house.

STE. MARIE DE LA BEAUCE, QUE.-The election of a waterworks system is talked of here.

BEDFORD, QUE - The new Edge Tool Co. will shouly commence work on their new buildings.

WELLINGTON, ONT.—Steps are being taken by the Lipscopal congregation to build a rectory.

FREDERICTON, N. B .-- It is understood that the University Senate will take steps to establish a college residence.

ST. JOHN, N. B.—The Board of Works is inviting tenders for the erection of a warehouse at Sand Point, 250 x 75 feet.
CORNWALL, ONT.-W. R. Hitchcock

has completed arrangements with English capitalists to construct a street railway.

ARTHUR, ONT .- The Council are prepared to grant a franchise for lighting the streets by electricity. For particulars address J. M. Roach.

SIMCOE, ONT.—The Lake Erie and Detroit River Railway Company are applying for power to extend their line from this town to Fort Eric.

CAPPLETON, QUE.—Mr. John Blue, C. M. E., of the Eustice Mining Co., is making an examination of mining property in Pontiac county.

HALIFAX, N.S.—The Exhibition Association is advertising for a suitable site for exhibition purposes, on which new buildings may be erected.

REVELSTOKE, B. C.—It is again stated that the C.P.R. will erect a large hotel here, and that President Van Horne, when here, selected a site for the building.

HUNTSVILLE, ONT.-V. M. Roberts, E., of St. Catharines, has been instructed by the Council to prepare plans and estimates for a waterworks system for this town.

ST. THOMAS, ONT. - Levels have been taken by Owen McKay, C.E., to construct the railway across the ravine south of St. Thomas, and if carried out, a new bridge will be necessary.

KEMPTVILLE, ONT.—The bridge at Clothier's mill is to be replaced by an iron

swing bridge, and wharves will also be built. Engineers have taken levels and plans will be prepared at once.

WHITM, ONI.—In response to a request by Mr. Justice Robertson, the Grand Jury, at the recent sittings of the High Court, presented a report in favor of establishing a House of Industry for the county.

KING, ONT.—A. Davis & Sons, tanners, next year contemplate installing an electric light plant for the tannery and the proprietor's residence.—A system of waterworks for fire protection is among the possibilities of the near future.

BROAD COVE, N. S.—Col. Hussey, president of the Broad Cove Mining Co., had an interview with the Dominion Government authorities last week in reference to necessary improvements to the harbour at this place.

NIAGARA FALLS, ONT. — The local electric light company have decided to put in an additional steam plant, to provide 550 horse-power more. A site has been secured, and tenders for building will shortly be invited.

SAULT STE. MARIE, ONT.—The Dominion Government has decided to construct a dam here, by means of which it will be possible to dry the basin above the lock and thus remove the guard and lock gates at any time nece sary.

SANDWICH, ONT.—On the ground of the invalidity of the county by-law, the court has granted an injunction prohibiting the repairs to the court-house and jail from being proceeded with, and declaring the contract for the work invalid.

VERSCHOYLE, ONT. — Tenders are asked by Alex. Ball, Township Clerk, until Monday, the 2nd of December, for the construction of the central branch of the Spitler Creek drain and of the Spitler Creek extension drain, both in the township of Dereham.

BRANTFORD, ONT. — The farmers binder twine factory is to be materially enlarged, the additions to be fitted with modern machinery. A .ope plant is also to be added.—The School Board is asking for \$25,000 with which to erect a new school in the north ward.

LONDON, ONT.—McBride & Farncombe, architects, have in hand an addition to the Duke of York hotel, East London.—John Weld wants tenders before the 30th inst. with sketch and specifications, for a foot suspension bridge 225 feet long, with four foot walk.

NEW WESTMINSTER, B. C.—A company of English capitalists propose erecting a large salmon cannery and freezer. Representatives recently inspected sites.—E. A. Jenns, representing a syndicate, is considering the establishment of a mill in this city for spinning twine and cord.

DARTMOUTH, N. S.—The plans of a new railway station here as prepared by superintendent Watt, have been approved of, and he has been instructed to prepare a plan for the conversion of the present office building into a modern ferry station house.

CHATHAM, ONT.—A deputation from this town has requested the Dominion Government to improve the navigation of the River Thames. Engineer Perley, late of the Department of Public Works, considers a new outlet for the river, by way of Stoney Point, the most desirable, and estimates the cost at \$40,000.

PETERBORO', ONT.—As already stated in the CONTRACT RECORD, the plans for the new Y.M.C.A. building will be prepared this winter, and operations commenced early in the spring. It is probable that about \$15,000 will be expended on site and building, which will contain gymnasium, baths, etc., and will be fitted up with the latest improvements.

LEVIS, QUE. - The Board of Trade

have under consideration the question of the proposed new system of waterworks, drainage and electric light. It is intended to pump the water supply for the town from the river into a reservoir on the Levis heights. The waterworks and drainage are estimated to cost \$180,000, and the electric light \$65 to \$70 per arc light.

VANCOUVER, B. C.—Messrs. Crean & Thomas propose to erect a large hotel. Wm. Blackmore is the architect.—An English syndicate has just purchased the interests of the Vancouver Electric Tram Co., the Vancouver Electric Light Co. and several other enterprises, and will expend upwards of half a million dollars in utilizing the power of the Seymour River to run the entire system.

WINDSOR, ONT.—J. G. McLean, architect, has prepared plans for remodelling the residence of H. W. F. Ellis. Cost, \$8,000. The mantels are to be of choice Canadian woods, the first floor finished in B. C. cedar and the ground floor in quartered oak.—The Sandwich, Windsor and Amherstburg Electric Railway Co. contemplate erecting next season an office building, to cost about \$20,000. The site has not yet been selected.

KINGSTON, ONT.—The Merchant's bank building, King street, recently purchased by Archbishop Cleary, will be converted into a classical college.—Mr. Jas. Adams, an architect connected with the pententiary, is inspecting the penal institutions in the United States for the purpose of securing information to be used in connection with the erection of the new reformatory at Alexandria.—The City Council have decided to invite new tenders for a return tube boiler for the waterworks pumping engine.

MONTREAL, QUE.—A syndicate is said to have been formed for the purpose of obtaining a charter for constructing a highway bridge from this city to St. Lambert. It is intended to connect Montreal, via the proposed bridge, with Longueuil and Laprairie, by means of electric railways. The bridge, as designed, will have ample roadways for wheeled vehicles, double tracks for electric cars, footpaths, and special accommodation for bicyclists. The cost of the bridge will be over one million dollars.—It is reported that the C. P. R. propose making extensive improvements next year, including the replacing of all temporary structures with permanent ones, and the double tracking of their line from Winnipeg to Port Arthur and from Sudbury to Carleton Junction, a distance of 295 miles. The report, however, is not confirmed.

Hamilton, Ont.—The final report of Mr. Kinchling, C. E., of Rochester, on the improvements necessary to the sewerage system of the city, will likely be presented to Council this week, and the work will probably be commenced at once, as the corporation have only one year in which to abate the nuisance in the east end.—The promoters of the Toronto, Hamilton and Buffalo railway are still endeavoring to secure a benus from the city. They state that the Toronto branch will not be built unless financial aid is received from the municipalities and the government. The shops will be established in this city if the bonus is granted.—The recommendation of the Waterworks Committee to submit a by-law to the electors to raise \$175,000 to build a new main and increase the size of the laterals, will be fully discussed at the next meeing of the City Council. It is probable the vote will be taken at the January elections.

QUEBEC, QUE.—The city will ask for a bill to amend its charter and to authorize a loan of \$30,000 for various improvements.—Plans are now being prepared for the extensive car sheds which the Great Northern Railway Co. contemplate erecting for the purpose of building their rolling

stock in this city, in the event of its terms being accepted by the City Council.—The City Council has considered favorably a request that the city guarantee the payment of interest on a loan of \$260,000 to be made for the purpose of carrying on the construction of a railway from Calumet to the Ancient Capital. It is the intention of the promoters to tap the Parry Sound system by erecting a bridge across the river from Calumet to Hawkesbury, thence to connect with the Central Counties, Canada Atlantic and Parry Sound lines. It will be known as the Northern Railway and will touch Montreal. In connection therewith it is the purpose of J. J. Hill, the railway magnate of St. Paul, to establish a water system from Duluth or Saginaw city to Parry Sound.

OTTAWA, ONT.—Among the applications to Parliament is one to incorporate the Calgary and Lethbridge Railway and Irrigation Company, to build a railway from Calgary to Lethbridge.—Messrs. Belly & Turcotte, members for Chicoutimi, Saguenay, and Montmorency, have requested aid from the Dominion Government to open the mouth of the Saguenay river at Chicoutimi and repair the wharf.—It is understood that the Salvation Barracks here is to be sold, the building being too large, in which case it is probable that a smaller barracks will be built.—A deputation, headed by W. A. Geddes, president of the Canadian Marine Association, has memorialized the Dominion Government to carry out as early as possible certain canal improvements in the navigation of the St. Lawrence river.—The subsidy asked for by the promoters of the projected air line from Collingwood to Toronto will amount to about \$250,000.

The plans for the proposed additions to the Protestant general hospital, as prepared by Mr. Arnoldi, architect, provide for two new wings, an operating room and a pathological department. The cost would be about \$50,000, but it is probable some changes will be made which will reduce the cost.

WINNIPEG, MAN.—Mr. Howe, one of the inspectors of the Canadian Fire Underwriters' Association has reported on the city's system of fire protection. recommends the increase of the main running along Mulligan and Main streets, which is of 12, 10 and 8 inches diameter at different points of its course, to 12 inches, with cross mains of proportionately increased capacity. The mains should be laid under the C. P. R. through the district north thereof, and provided with sufficient standard hydrants having two 2½ inch connections and large branch for steamer.—The Canadian Pacific Railway will make further extensions in the Kootenay district. The probabilities are that the extension from Lethbridge west, through the Crow's Nest pass, will be commenced next year, and the road from Robson to Rossland will also be constructed.—Capt. Robinson expresses the opinion that the St. Andrew's Rapids could be made navigable for light draught boats by the removal of boulders, at a cost of about \$12,000.—D. H. McDowall, M. P., for Saskatchewan, hopes next year to secure from the Dominion Government a grant towards the extension to that district of the Manitoba and North Western railway. Assistance to the amount of \$2,000,000 is desired.

TORONTO, ONT.—The City Engineer has recommended that the sum of \$1,500 be expended on improvements to the roadway on Dundas st.—The plant and appliances of the Dominion Cold Storage Co., which propose using the sugar refinery at the foot of Princess street, will cost about \$29,000.—J. D. Ronald, of Brussels, proposes moving his fire engine works to this city, and has requested the Council to grant a free site and exemption from taxation. He offers to spend \$6,000 in new buildings.—The Toronto Granite

Co., of which A. W. Anderson is president, also propose establishing works in this city and erecting a building on Yonge street, near Czar, to cost \$5,000.—A building permit has been granted to Alex. Orr, 123 Lippincott st., pr. s. d. bk. dwellings, w. side Shaw st., n. of Harrison st., cost

FIRES.

Sevigny's block at Barrie, Ont., was destroyed by fire on Thursday last. Loss, about \$8,000.—The public school recently erected at Birtle, Man., was destroyed by fire on the 21st inst. Loss \$3,000.—The Walpole Island club house at Chatham, Ont., was burned last week. It was a large frame structure, and was owned by a company of Toronto and Chatham sportsmen.—Hill & French's lumber mill at Ship Harbor, Halifax county, N. S., was consumed by fire on the 20th inst. Loss \$7,000; insurance \$7,000.—Byron Bennett's dwelling on Welland street, Thorold, Ont., was recently damaged by fire to the extent of \$2,500.—The cattle market at Toronto was damaged by fire on Tuesday last to the extent of \$12,000.

The residence of J. S. Telfer at Portage la Prairie, Man., was burned on the 26th

CONTRACTS AWARDED.

RENFREW, ONT. — The new High School building will be heated with two Gurney furnaces, at a cost of \$4,441.

WINDSOR, ONT. — The Bennett & Wright Co., of Toronto, have secured the contract of the plumbing and heating of H. W. F. Ellis' residence.

HAMILTON, ONT.—Ald. Hancock has been awarded the contract for building the Toronto, Hamilton and Buffalo freight sheds. They will be of brick, 40x345 ft.

WOODSTOCK, ONT .-- Clark & Donaldson have the contract of constructing the Reynold's ditch from Putnamville to the town line of Norwich, a distance of 18 miles. The price is about \$10,000.

AMHERST, N. S .- Rhodes, Curry & Co., of this place, have been awarded the contract to build a summer residence at Tracadie, P. E. I., for Alex. Macdonald, oil merchant. Contract price, about \$11,-

CORNWALL, ONT. - The Mountain Township Council has let to Isaac Johnston, of Ogdensburg, N. Y., the contract for a new iron bridge to be built two miles east of South Mountain. Contract price,

VICTORIA, B. C.—Elford & Smith, contractors for the new post office and custom house here, have sub-let the contract for supplying stone for the super-structure to the Vancouver Quarry Co. The contractors had the privilege of using Saturna, Newcastle or Gabriola stone.

MONTREAL, QUE.—J. A. Chaussé, architect, has awarded contracts for archiect, has awarded contracts for alterations to premises 137 and 139 Cascades, St. Hyacinthe, as follows: masonry, brickwork and plastering, J. Arbour; carpenter and joiners' work, roofing, plumbing and painting, Paquet & Godbout; fire-proof vaults, T. S. Kimball.

WINNIPEG, MAN. - The Canadian Pacific Railway has let contracts for about 350,000 ties. Among the successful contractors are: J. W. Buchanan, A. C. Smith, Captain Robinson, West Selkirk; Ontario Western Lumber Co., Sinnott, Brokenhead; A. Stevenson, Carpenter & Co., and Thomas Traynor, Fort William.

KINGSTON, ONT. — The following tenders have been received by the Waterworks Committee for a new pumping engine for the waterworks: No. 1, Canadian Locomotive & Engine Co., Kingston, \$14,000; No. 2, Inglis & Son, Toronto, (no jackets), \$9,400; No. 3, Inglis & Son, Toronto, (with jackets), \$10,300; No. 4, Rangy, Reid & Selby, Kingston, \$12,800; No. 5, Worthington Engine Co., New York, \$12,000. The tender of the Kingston Jocomotive & Engine Co. has been accepted.

TORON10, ON1.—The following tenders of the March Inc.

ders for annual supplies have been accepted by the Board of Works, hardware, Aikenhead Hardware Company, \$1,111. 98; other tenders were \$1,342 and \$1,711. Coarse sand, east of Yonge street, Edward Ashton & Son, Queen street and Lang street, 67 cents per cubic yard; west of Yonge street, Joseph Gaby, Yorkville ronge street, Joseph Gaby, Yorkville avenue, 67½ cents per cubic yard. Castiron castings, Tomlinson & Son, \$1.35 per 100 pounds; wrought iron castings, Toronto Furnace and Crematory Co., \$1.90 per 100 pounds. Pit gravel, east of Yonge street, clean, J. Bownie, 64½ c. per cubic yard; screened, E. Ashton & Son, 90c.; yard; screened, E. Ashton & Son, 90c.; west of Yonge street, clean, 70c.; screened 95c., Construction and Paving Company. Cedar paving posts—W. F. Grant & Co., good, \$4.95 per cord; culls, \$4.10 per cord. Lumber, G. W. T. Bryce, plank, \$12.29 per M; scantling, \$12.24 per M.; sewer pipe, Ontario Sewer Pipe Co., \$2,085.

BUSINESS NOTES.

The Sellers Furnace Company, Toronto, have assigned to C. F. Moore.

Cookson & Plows, plumbers, Victoria, have dissolved, Hunter Plows retiring.

Briggs & Edwards have registered partnership as contractors in Montreal.

N. Paugé & Son have registered partnership as contracting painters in Mon-

Harlbut & Co., lumber, Seguin Falls, Ont., are announced to have assigned to S. Armstrong.

A demand of assignment has been made on Blouin, Girard & Collard, plumbers, St. Louis du Mile End, Que.

J. W. Baker, lumber merchant, of Lake Edward, Que., is reported to have assigned, with liabilities of \$40,000 and assets of \$20,000.

An order has been asked for to wind up the business of the Canada Pipe and Iron Foundry Co., of Montreal, and the assets will be offered for sale.

EUREKA AMERICAN DE L'ANDRES DE L'ANDR

MINERAL WOOL

SECTIONAL

STEAM PIPE and BOILER COVERING

Gives Dry Steam at long distances without loss of power.

ASBESTOS GOODS ENGINE PACKINGS

EUREKA MINERAL WOOL & ASBESTOS CO., -124 Bay St., TORONTO

ARTIFICIAL **STONE** PAVEMENTS.



SIDEWALKS SPECIALTY.



CORPORATIONS

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

THE SILICA BARYTIC STONE COMPANY OF ONTARIO,

Head Office: Ingersoll, Ont.

WALTER MILLS, General Manager

GEO. WHITE-FRASER C.E., D.T.S., A. AM. INST. ELEC. ENG. CONSULTING

ELECTRICAL ENGINEER

Blectric Railways and Electric Light. SPECIALTY: Specification and Superintendence of

MUNICIPAL PLANTS.
TORONTO 18 Imperial Loan Building

E. GARL BREITHAUPT CONSULGING Electrical Engineer

ASSOC. MEM. AM. INST. E. E. Electric Lighting BERLIN, ONT.

JOHN GALT, C.E.&M.E.

(Member Can. Soc. C. E.)

Consulting Engineer and Expert

Specialties:

Water Supply and Sewerage, etc. Blectric Power, Lighting, Railways, etc.

Canada Life Building - TORONTO

WILLIS CHIPMAN, B. A. Sc.,

M. Can. Soc. C.E.; M. Am. Soc. C. E.; M. Am. W. W. As'n.

CIVIL AND SANITARY ENGINEER

Water Works - Sewerage Sewage Disposal 103 BAY STREET - TORONTO.

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.
Specialities: Bridges, Foundations, Electric Railways,
and Roads, Surveys made, Plans, Specifications and
Agreements prepared, and work superintended.

COURT HOUSE, - TORONTO.

CHANGE OF ADDRESS

ALAN MACDOUGALL M. CAN. Soc. C. E. M. INST. C. E.

CIVIL AND SANITARY ENGINEER

ABERDEEN GHAMBERS. 35 East Adelaide St. TORONTO

New Telephone Number, 1252,

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

POINTS ON HEATING.

It has been ascertained by experiment that the relative heat-transmitting power of iron is 120; glass, 100; granite wall, twelve inches thick, 27; brick wall, 18; frame building, plastered, 7 to 12. In this table glass is 100 and the others transmit heat in the given relation to 100. A square foot of brick wall will transmit 18-100 as much heat as a square foct of glass, in a certain time. A square foot of a frame building, 7-100 to 12-100 as much as a square foot of glass, according to whether it is well built in not. The proper way to figure heating surface for a room is to reduce the wall to its equivalent in glass and tilen figure the heating surface for that amount of glass. If a room has ten square feet of brick wall exposed, this would be equivalent to 18-100 of 10=1.8 square feet of glass. To obtain this the following rule is given:

To find glass equivalent of wall: Multiply exposed area of wall in square feet by its relative transmitting power, and divide by 100. Add this to the actual area of glass in the room.

Example. What is the glass equivalent of granite wall of room 18×16 and 10 feet high, exposed on two sides, having two windows in each side, $3\frac{1}{2} \times 7$ feet?

 $19 \times 10 = 190$

340 sq. ft. minus four windows, $3\frac{1}{2} \times 7 \times 4 = 98$

242 sq. ft. granite wall, \times 27 = 6534 ÷ 100 = 65.34 + 98 = 163.34 square ft. of glass, or equivalent. Having found this, find the heating surface by the following rule:

To find heating surface for room: From desired temperature of room subtract the coldest outside temperature. Divide this difference by difference in temperature between steam in pipes and the room, and multiply quotient by glass equivalent in square feet.

SOME POINTS IN MASONRY OF SPECIAL INTEREST.

What is known as the Sweetwater dam, California, presents some special points in masonry of more than passing interest. It is about 85 ft. high, 8 ft. wide on top, and less than 40 ft. at the bottom. Although built of good rubble laid in Portland cement mortar, the tremendous pressure of water against its back was regarded as not without peril, and that it has stood this pressure for years is attributed to the fact that the dam is curved in plan, and its length of 396 feet laid out somewhat like the quadrant of a circle, convex toward the reservoir. The masonry of the dam is firmly bedded in the solid rocky sides and bettom of the ravine, the structure thus acting as an arch; to this arch action is believed to be due the resistance of the dam to the water pressure, though many engineers are of the opinion that if water were ever to rise above the crest and overflow the structure, it would be utterly destroyed in a short time. When the dam was built the wasteway was designed to carry off more flood water than there were any indications of having flowed through the ravine, but in time a week's enormous rainfall filled the reservoir to the brim and overflowed the tep nine inches. The tremendous energy of this volume of water scoured out the rocky bottom of the ravine below the dam to a depth of several feet, badly eroding the sides of the canon; the conduit leading from the dam was twisted out of place, though imbedded in the concrete, but the dam suffered no injury.

DEBENTURES PURCHASED

Municipalities issuing debentures, no matter for wha purpose, will find a ready purchaser by applying to G. A. STIMSON, 9 Toronto Street, Toronto.

Any assistance required in computing calculations in connection with sinking fund, etc., will be gladly given.

N.B.—Money to loan at lowest rates on first mortgage.

Imperial Trusts Company of Canada

32 CHURCH STRIET, TORONTO
Capital, \$400,000.

The Company is ready at all times to purchase
MUNICIPAL DEBENTURES, and has always
such Securities on hand for sale. Allows 4% interest
per annum on money, and takes charge of Sinking
Funds on special terms. J. S. LOCKIB, Manager.

The London and Canadian Loan and Agency Co., Ltd. Capital, \$5,00,00.00.

MUNICIPAL DEBENTURES PURCHASED.
MORTGAGES PURCHASED.
MONEY TO LOAN AT CURRENT RATES.
103 Bay St., Toronto. - J. F. KIRK, Manager.

DEBENTURES PURCHASED.

WE will pay the highest price for MUNICIPAL DEBENTURES. We tender our services to those not having books to make for them the calculations necessary when issuing debentures payable in annual instalments. ÆMILIUS JARVIS & CO. (Member Toronto Stock Exchange), 23 King St. W., Toronto.

FOR SIDEWALKS,
STABLE FLOORS,
CELLAR FLOORS,
BREWERY FLOORS, ETC

A. CARDNER & CO.

17 Yonge St. Arcade - TORONTO Telephone 2147

W. McNALLY & CO.

Building and Gontractors' Supplies

SEWER PIPES + PORTLAND GEMENTS

PATENT WALL PLASTER - The hardest, quickest drying and cheapest material made.

Corner McGill and Wellington Streets, MONTREAL

★ THE THREE RIVERS IRONWORKS CO.

TAREE RIVERS, P. Q.

Gast Iron Water and Gas Pipes

of best quality, from 2 inches in diameter.

HYDRANTS, VALVES and GENERAL CASTINGS.

Drummond McCall Pipe Foundry Company,

MANUFACTURERS OF

CAST IRON WATER AND CAS PIPES

WORKS: LACHINE, QUE.

PRICES ON APPLICATION.

FOR ARTIFICIAL STONE PAVEMENTS, ROOFING GRAVEL, CONCRETE, ETC.

USE CRUSHED QUARTZITE

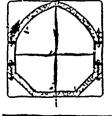
SILICA SAND & GRAVEL CO.

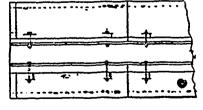
Telephone 2444

MONTREAL
..... Write for prices delivered in your 'own.

15 Mill Street.

HERCULES INDESTRUCTIBLE CULVERT 20 per cent. more waterway than circular form.





Unrivalled for Strength . Durability Cheapness.

Made in sizes of 20 in., 24 in, 30 in., 3 ft. 4 in. and 5 ft.

Write for prices to
EDWIN W. SMITH
344 Garth St., Hamilton, Ont.

THE G. & J. BROWN MFG. CO.

Railway and Contractors' Plant.

BRIDGE BUILDERS

BELLEVILLE, ONT.

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

Paving Granite

Granite Sets for Street Paving.

CURBING cut to any shape ordered.

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

Address all communications to

JOS. BRUNET - COTE DES NEIGES, MONTREAL

ENGINEERS and CONTRACTORS

- FOR -

269 Front Street Bast TORONTO.

TORONTO SEWER PIPE CO. HAMILTON AND



CULVERTS

AND

WATER PIPES.

INVERTS

Fire Brick Sewers

Write for Discounts.

HEAD OFFICE AND FACTORY: HAMILTON, CANADA.

LAW BROS. & Co.

FOUNDERS AND MACHINISTS



OTTAWA, ONT.

Hydrants Valves

Waterworks Supplies

Specials_

·Also CASTINGS of every description

OF ST. JOHNS, P, Q.,

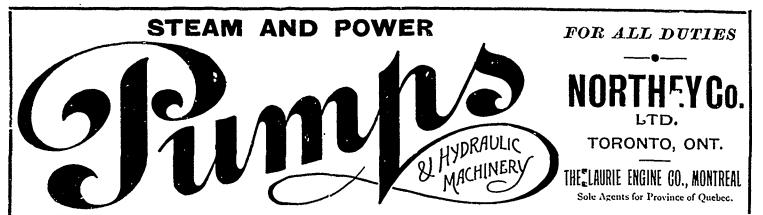


Manufacturers of

Salt-Glazed

Vitrified

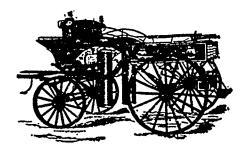
Double Strength Railway Culvert Pipes, Inverts, Vents, GOODS.



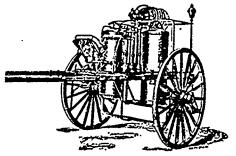
Kingston Ghemical Fire Engine Go. KINGSTON, ONT.

MANUFACTURERS OF THE

GHEMIGAL FIRE ENGINE







This machine is the most powerful fire fighter. It has two cylinders, 40 gallons capacity each. The combination of chemicals will not freeze, renders material with which it comes in contact non-inflammable, and will not corrode when not in use. For full particulars, write to the Head Office of the Company at Kingston.

D. D. WILSON, Managing Salesman.

JOHN BREDEN, Sec.-Treas., KINGSTON, ONT. EF For reference address H. YOULDEN, Chief Fire Department, Kingston,



AMENDMENTS TO THE WASHINGTON, D. C., PLUMBING REGULATIONS.

The commissioners of the District have ordered the following amendments to the plumbing regulations.

SECTION 3. It shall be the duty of the inspector of plumbing under the direction of the commissioners, to inspect or cause to be inspected by his assistants all houses when in the course of erection in said district, to see that the plumbing, drainage and ventilation of sewers thereof conform to these regulations.

It shall be his duty at any time during reasonable hours, under like directions, on application of the owner or occupant, or the complaint under oath of any reputable citizen, to inspect or cause to be inspected any house in said district, and to examine the plumbing, drainage and ventilation of sewers thereof.

And he shall, after inspection and upon approval by his immediate superior, serve a notice on the owner, or agent, of the premises, directing such changes as are necessary to make the plumbing conform to the plumbing regulations, to be commenced within ten days from date of the service of notice, and completed within a reasonable time thereafter, provided, that if the owner, agent or tenant shall within five days from date of said notice protest in writing against any of the required changes, and shall deposit with the collector of taxes of the District of Columbia \$20 to cover the expense of re-examination, it shall be the duty of the engineer commissioner to designate three inspectors to make a re-examination, and if the en gineer commissioner approve a decision against the exceptant the commissioner shall cause said exceptant to be notified of the decision, and the work ordered by the inspector to be begun within five days after service of notice, and be completed within a reasonable time.

Should the owner or agent of the premises ordered to be repaired neglect or refuse to comply with the order within a reasonable time after ten days' notice, it shall be the duty of the inspector of plumbing to report the same to his superior, who shall, if in his judgment the circumstances so require, consult with the attorney for the District, who shall draw up an information and prosecute the offending party.

SEC. 56. When an old service pipe is repaired the stopcock and box, if located in the traveled portior of the footway, shall be moved so as to conform to those regulations.

Whenever and wherever a public footway is paved or repaired, stopcocks and boxes, fresh-air inlets and pavement washers shall, if located otherwise than in conformity with these regulations, be moved to the respective positions herein prescribed.

The removal of a running trap and the clean-out thereon to a new position shall be required only in cases where, in the opinion of the assistant in charge of the division of sewers and plumbing, the expense of such removal would be justified.

SEC. 59. No person shall place, or cause to be placed, any pavement washer or hose attachment for the service of a new building in any footway or portion thereof. All such fixtures for new buildings must be connected to the service pipe inside of the front wall of the building, and may project therefrom above the surface of the ground, suitable precautions being taken against freezing. In repairing or replacing that portion of a service pipe to which the pavement washer or hose attachment is connected, or such fixture itself, if the building served is provided with a cellar or unfurnished basement, the fixture may be placed in the front wall. In case the basement is occupied for living purposes, or the building has no cellar, the fixture may be placed in the area wall or in the parking, at least two feet from the sidewalk; if no parking or suitable area exists, the fixture may be placed in the sidewalk inside the line of projections and as close to the building line as practicable.

SEC. 75. If the public sewer be a pipe sewer, having a diameter of twelve inches or more, and the house sewer to be connected be of iron, the connection may be made by the plumber, who shall carefully cut a hole of the least practicable size in the public sewer and insert a connecting thimble of cast iron of the same size as the house sewer and of such length that the hub shoulder thereof shall rest against the outer surface of the sewer and no portion extend within it.

Any connection thus made, and the house sewer to the building line shall, before being covered, be inspected by the inspector of plumbing or his assistant, who shall inspect and make a record of the condition of the public sewer, and shall make a prompt return of such inspection to the permit clerk, as in case of inspection by the sewer tapper.

No house sewer, either of iron or vitrified pipe, greater than six inches in diameter, shall be connected to a twelveinch public sewer, except at a manhole.

SEC. 87. All soil, drain, waste and vent pipes shall be located inside of the building. Every soil and vent pipe shall be of iron or lead, with screwed, leaded or wiped joints, and shall be located so as to be accessible for inspection. Pipes of this kind shall be kept above the ground, if practicable. When wrought iron pipes are used they shall be of galvanized iron provided with galvanized fittings.

The inspector of plumbing may, with the approval of the assistant in charge of the division of sewers and plumbing, authorize the placing of small vent pipes outside of old buildings in cases where it is considered inadvisable to locate the same within the building.

SEC. 98. Every water closet, urinal, sink, basin, wash tray, bath tub, set of tubs, or fixtures of any kind connected with the drainage system of a building, shall be separately and effectually trapped, if located within the building, and vented, excepting that in the case of the upper or only water closet on a soil pipe and having its center within two feet of the center of the stack, a vent will not be required.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

PAYNE V. COUGHELL.- Judgment on appeal before Meredith, C. J., at Toronto, by the Corporation of the County of Elgin, from an order of Master in Chambers dismissing application by appellants to set aside third party notice and order authorizing it, served upon appellants. Action by plaintiff, on behalf of himself and all other subjects of the Queen who use or are entitled to use a road called the London and Port Stanley road, to have it declared that the defendants have no right to exact tolls on the road or to obstruct it by placing toll bars on it, for an order directing defendants to remove these obstructions, for an injunction to restrain defendants from hereafter demanding or exacting tolls for the use of the road, for damages, and for a return of tolls paid by plaintiff on October 12th, 1895. The defendants are the assignees of a lease of the road and tolls from the county corporation to one Hepburn, and the defendants claim to be indemnified upon the ground that the corporation warranted their title to the road by that lease. Held, that this was not a claim to indemnity within the meaning of rule 1,313, which applies only to claims to indemnity as such, either at law or in equity, and does not apply to a right to damages arising from breach of contract, the latter being a right given by law in consequence of the breach of the contract between the parties, while the former is given by the contract itself. Birmingham District Land Co. v. London & Northwestern R.R. Co., 34 Chy. D. 261; the Jacob Christensen (1895), p. 281; Baxter v. France (1895), 1 Q.B 591, followed. Page v. Midland R.W. Co. (1894), I Chy. 11, distinguished. Appeal followed with costs and orders below and notice set aside with costs.

SUGGESTIONS ON JAIL CONSTRUCTION.

In a recent circular issued by the Board of Charities of Minnesota the following

suggestions are made:

The poard objects to the use of flat bars in the cells unless the edges are turned to the light. The ende front should be an open lattice we'k, and as a bed the board advocates a board 21/2 feet wide, which can also be used as a seat. solid cement floors are objected to, but stone flagging, Portland cement, blocked or tile, are advocated. There should be a ventilating pipe from each cell, though from four to eight cells may be ventilated through one pipe in the roof connected with the individual pipes.

The cells are not to be less than $6\frac{1}{2} \times 6\frac{1}{2}$, and the front cell wall be not less than four feet from the window. Separate locks should be provided for each cell, and the windows should be so situated that the sun may shine into the cells, at least part of the day. Bath tubs are objected to and shower baths are advocated instead.

An open iron fence is also advocated in place of present close high fences,

CENTRAL BRIDGE AND - --- ENGINEERING COMPANY,

(LIMITED)

Peterborough, Ont.

WM. H. LAW - Manager and Engineer. MANUFACTURERS OF

RAILWAY AND HIGHWAY

Viaducts, Piers, Roofs Turntables, Girders and Architectural Work.

CAPACITY: 5,000 TONS PER ANNUM. G. N. REYNOLDS, Toronto Agency, North of Scotland Chambers, 20 King St. W. Telephone 111.

Water Works Fire Hydrants $Stop_{s''} Valves$

BOILERS, TOWERS &C, ENGINES AND GENERAL WORK

JNO. PERKINS CO'Y Toronto Engine Works TORONTO

DRAIN PIPES CEMENT... FIRE BRICKS

AND ALL KINDS OF

Builders' Supplies

F. HYDE & CO.

31 Wellington Street, -

MONTREAL

INDEX TO ADVERTISEMENTS

he "Canadian Architect and Builder."

11/17/17	Z 3
ln	tr
Architects. Ontario DirectoryIII	,7
Quebec Directory it	B
Architectural Sculp-	- 20
tors and Carvers.	0
Holbrook & Molling.	R
Lamar & Metge ii drehtteeturul Iron	•
Architectural Iron	
Work.	I:
Dominion Bridge Co. 1 Changeloup Mfg. Co. 1	ö
Chanteloup Mfg. Co. 1 Art Woodwork	
Southampton Mfg. Co iv	D
Bricks (Pressed)	B
Beamsville Pressed	_
Brick Co Burlington Pres'd Brick	L
& Terra Cotta Co. VI	
Don Valley Pressed	
Brick Works ×	B
Brick & Letta Colta	C
Co., Limited ×	
Builders' Supplies.	V
Bremner, Alex IV Currie & Co., W & FP xii	
Clatworthy, Geo vi	K
Clatworthy, Geo v i Maguire Bros	
Ontario Lime Associa-	F
tion	L
Building Stone	•
Thorders.	C
Carroll, Vick & Co vii Clark, Wm vii	
Fish, C. E vii Turner & Brown IV	Į
Turner & Brown IV	F
Boiler Covering	Ç
Mica Boiler Cov. Co., vili	y
Builders' Hard-	_
noure. Rice Lewis & Son IV	1
Creosote Stains	
Cabot, Samuel IV	

Church and School
Furniture.
Can. Office & School
Furniture Co.... v
Snider, J. B v Ountractors' Plant and Machinery Rice Lewis & Son.... IV

Bremner, Alex.... IV Currie&Co, W.&F.P... xii Maguie Br. s. ... i Owen Sound Portland Cement Co..... v Rathbun Co., The II Gut Stone Gon-tractors. Chimney Topping. Breinner, Alex..... IV Curric&Co.,W &F.P. xii Drawing Tables... aughlin-Hough Draw-ing Table Co.... Petrie, H. W..... in Drain Pipe Dumb Waiters King & Son, Warden ix Elevators Fensom, John IV Leitch & Turnbull.... Miller Bros & Toms.. vi Engravers.
Can. Photo-Eng Bureau.....x Fire Er ck and Clay Brenner, Alex...... IV Currie& Co, W & F P.. xii Maguire Bros..... i

Floor Deafener .azier & Sons, S. A.. ii Galvanized Iron Workers.
Tucker & Dillon.... iv
Douglas Bros.... iv
Ormsby & Co., A. B.. I Grates and Tiles. Holbrook&Mollington i Rice Lewis & Son....IV

Granite
Brunet, Jos..... IV

Reating.

Lime.

Legal. Denton & Dods..... x Machinery

Mortar Colors and Shingle Stains. Cabot Samuel, IV Maguire Bros..... i Muirhead, Andrew... i

Ornamental Plas. torors.
Baker, J. D..... vi
Hynes, W J...... viii

Paints & Varnishes. Muirhead, Andrew.... i Pc 'nters.
Gilmor & Casey.....111

Plasterers Hynes, W. J.....viii Plumbing Supplies Campbell & Purvis... 11

Plate Glass McCausland & Son... Sanderson, Pearcy & Co.....vi
The Consolidated Plate
Glass Co.....ii

Parquetry Floors Elliott, W H..... vi

Plumbers Ballantyne, James... ii Dourville, E..... ii Roofing Materials
Ormsby & Co., A B. 1
Metallic Koofing Co.. x
Pedlar Roofing Co... ii

Reflectors Relate L. P.

Ruofers Orn. Co., AP. 1
Nouglas Bis. iv
Duthie & Sons, G. iv
Hutson, W. D. iv
Rennie & Son, R. iv
Stewart, W. T. iv
Iucker & Dillon iv
Williams & Co., H. iv

Sanitary Appli-ances

ampbell & Purvis... 1) oronto Steel Clad Bath & Metal Co..... viii

Shingle Stains
Cabot, Samuel...... IV

Stained and Decora-tive Glass

Castle & Son.
Castle & Castle
Castle & Castle
Castle & Castle
Cas Shingles and Siding Metallic Roofing Co.. Pedlar Roofing Co. . Ormsby & Co., A B

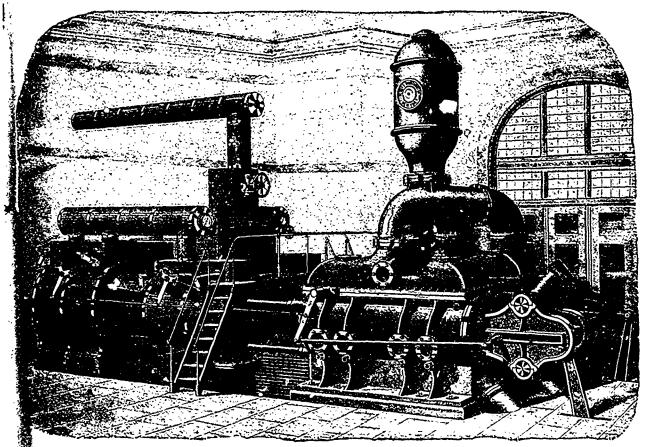
Terra Cotta Rathbun Co., The II

Wall Paper and Ceiling Decorations Elliott, W. H.... vi Ormsby & Co, A B... I

Wall Plaster A abastine Co., The... iv Albert Mfg. Co... ix Hannaford Bros. Mfg. Co... ix Nowell & Co. B. I... IV Rathbun Co., The ... II

Window Blinds Clatworthy, Geo iv Seaman, Kent & Co.. vii

Caledonian Iron Works



AGENTS IN CANADA FOR THE

OFFICE: Corner William and Seigneurs Streets. MONTREAL

HYDRAULIC MACHINERY

CONDENSERS

..AND..

WATERWORKS SUPPLIES

WATER METERS

METERS for all services

MANUPACTURERS OF

Machinery for Electrical Work, etc., etc. Boilers, Engines . . . borgings, Girders, Castings, Shaftings, Pulleys, Gearings Bearings, etc. . . .

Famous Worthington Pumps

Prices of Building Materials.

CONDITION OF THE MARKET.

TORONTO: The plumbing trade is brisk, and supplies are consequently moving freely. The demand for heating apparatus is also good. The metal trade is fair, with unchanged quotations. Plate glass is scarce, European manufacturers having withdrawn quotations, and an advance in price is among the probabilities.

MONTREAL: A fair volume of trade is reported in general hardware and plumbers' supplies, but the heavy iron and metal market has ruled very quiet for the past week. Some fots of iron pipe are moving on the basis of 67½%. The arrivals of cement last week were 3,100 barrels English and 1,800 Belgian, and the de-

The arrivals of cement last barrels English and 1,800 Be	lgian,	and th	e de-	Carthaginia Ornamental Common ins
mand is limited. Firebricks: \$15 to \$21 per thousand.		ing ire	ery at	Hard sewers Vitrified pay
LOMBER.				Per Load of
	onto.	Mont	rasi	rer Load of
\$	опто. \$	MOUL \$	1 vui•	Common Ru
14 to 2 clear picks. Am ins33 ∞	@36 00	40 000	945 ∞	delivered. Large flat R
to 2 three uppers, Am ins.	37 00 26 00	40 00 27 00	45 00	Large flat R delivered. Foun .tion
inch clear		40 00	45 00	Kent Free:
I hetter 20 00	22 00	18 00	20 00	Moncton, ft., f.o.b.
1 x 10 and 12 mill run16 00 1 x 10 and 12 dressing20 00	22 00		18 00 19 00	River John Freestone,
Spruce culls		8 ∞ 8 ∞	10 00	Ballochmyle
t v to and taculis	1000	25.00	9 00	New York I Granite (Sta
t inch clear and picks 28 oc t inch dressing and better20 oc	22 00	35 00 18 00	20 00	in. to 12 in Moat Freest
t inch siding, mill run 14 00	1300	10 00	15 OC	Thomson's C Credit Valle
t inch siding, ship culls 11 00 t inch siding, mill culls 9 00	12 00	10 00 8 00	ıî oc g∞	of 15 tons, Credit Valle
Cull scantling 8 ∞	.,0∞	8 00	900	Credit Valle
t¥ and thicker cutting up plank24 ∞	2600	22 00	25 00	yard, at o Credit Valle
t inch strips, 4 in to 8 in. mill	1500	14 00	15 ∞	sion, per c Credit Valley
inch strips, commoc 11 00	12 00	1000	13 CO	per superi
1% inch flooring	17 CO 17 OO	12 00	15 00	per superi Credit Valle
XXX shingles, sawn, per M	2 50	2 60	2 60	clark's N. I
16 in 2 40 XX shingles, sawn 40	1 50	1 60	1 70	per cubic i Brown Free
Lath 200 YAI D QUOTATIO	NS.		1 50	point, Sac
Mill cull boards and scantling	10 00	20 00	12 00	MadocRubb
Shipping cull boards, pro- miscuous widths	13 00		13 00	toise Madoc dime
Shipping cull boards, stocks	16 ∞		16 ∞	o. b. Toro
Hemlock scantling and joist up to 16 ft	12 00		10 00	OHIO FREE
up to 16 ft	13 00	12 00	13 00	No. 1 Buff I
Hemlock scantling and joist			_	No. 1 Buff I No. 1 Blue I
up to 20 ft	14 00	13 00	14 00	No. 1 Blue I Sawed Ashl
Cedar for kerbing, 4 × 14,	5 00		5 00	any thickr
per M.	74 00		14 00	Sawed Ash! any thickr
per M	14 ∞ 15 ∞		14 00 16 co	Sawed Flag for each in
Scantling and joist, up to 22 ft	16 co		16 00	Above pric
24 lt	19 00		19.0	small lots a Quebec and
" " 26 ft	22 OO		53 CO 51 00	granite fo poses, per
" " 30 ft " 32 ft	24 00 27 00		25 00 27 00	For ornamer
" 34 " 36 t	29 50		31 00	Granite pavi 12 in. x 6 in
" 38 it	31 00 33 00		33 00	Granite curb
Cutting up planks, 11/4 and	34 00		36 00	
thicker, dry25 00	28 00	25 00	30 00	Rocfing (≹)
1 1/4 in. flooring, dressed, F. M. 26 oo	30 00	28 00	31 00	;; ;;
11/2 inch flooring, rough, B M.18 00	22 00	18 00 27 00	22 00	_ 11
132 11 undressed, B M.18 00	co pr	18 ∞	19 ∞	Terra Cotta Ornamental
1½ " dressed13 00	1500	18 00	22 00 15 00	ing
Beaded sheeting, dressed20 00 Clapboarding, dressed	35 00 12 00	22 00 8 00	35 ∞ 12 ∞	
XXX sawn shingles, per M				White lead, zinc,
18 in 2 60 Sawn lath 2 50	270	2 50	3 00 2 60	Red lead, E
Cedar	2 90	30 00	2 90 40 00	venetiai vermilli
White	45 00	35 ∞	55 00	" Indian, Yellow ochre
White	90 00	70 00	80 00	Yellow chro
White ash, No. 1 and 224 00	35 OC	30 00	35 00 30 00	Green, chron
Black Ash, No. 1 and 220 00 Dressing stocks	22 00	16∞	22 00	Black lamp Blue, ultran
Picks, American inspection Three uppers, Am. inspection	30 00		40 00 50 00	Oil, linseed,
BRICK—9 1				£1 16
Common Walling	6 50 8 00		5 00 8 50	Putty Whiting, dr
Sewer 8 5	0 8 00	8 50	000	Paris white, Litharge, E
Prensed Brick, Per M: Red, No. 1, f.o.b. Beamsville	16 00			Sienna, burr
" " 2 " " 3	14 00 9 00			Umber, "
Ban	21 00			De-11 3 C
Brown	24 00 30 00			Portland Ce German,
u Buff	35 ∞			London Newcastle
Sewer	7 50			Belgian, J
Hard Building	6 0			English,

		Montreal.	Toronto.	Montreai.
Roof Tiles(each)	22 00 20	l .	Portland Cements.— Belgian, natural, per bbl 230 240	170 185
Ridge Tile	60 t 14∞		Roman 230 250	180 185
ist quality, f.o.b. at Port Credi	12 00 8 00	15 00 12 00	Parinn " 4 50 4 75 Superfine " 6 50 7 00	5 40 5 75 8 00 9 00
Hard building brick Ornamental, per 100	6 50 3 00 10 00 5		Hydraulic Cements	
Red A	'ALLEY. 18 co	24 00	Queenston, " 150	125 150
Red BRed C	16 00	20 00	Napance, 11 2 50 Hull, 11 rec	1 50
Trojan and Corinthian.	13 00	17 00 28 00	Ontario, "	450 475
Athenian and Egyptian	22 00 25 0	29 00 31 00	Fire Bricks, Newcastle, per M 27 00 35 00	15 00 21 00
TyrianSicilian	35 00 40 02	41 00 45 00	Lime, Per Barrel, Grey 40	•
Roman	35 ∞ 40 ∞	45 00	Plaster, Calcined, N. B 200	
Ornamental	00 000 00 6 00	30 00 100 00	Hair, Plasterers', per bag 80 100	
Hard sewers Vitrified pavers	7 50 16 00	22 00	HAXDIYARE.	
SAND			Cut nuils, 5cd & 6od, per keg 2 50 Steel 11 11 11 2 60	2 10 2 35
Per Load of 11/2 Cubic Yards	1 25	1 25	CUT NAILS, FRNCE AND CUT SPII	
STONE Common Rubble, per toise,	7.		40d, hot cut, per 10 ; lbs 2 55 30d, 11 11 11 2 62	2 IS 2 20
delivered Large flat Rubble, per toise,	14 CO	14 00	20d, 16d and 12d, hot cut, per 100 lbs 2 65	2 25
delivered	18 00 50	18 00 02	10d, ho: cut, per 100 lbs 2 70 8d, 9d, 11 11 2 75 6d, 7d, " " 2 90	2 30 2 35
Kent Freestone Quarries Moncton, N. B., per cu	,,,	J*	4d to 5d, " " 310	
ft., f.o.b	τ 00		ad, " " " 40)	
Freestone, per cu. ft., f.o.b.	80 95	6	4d to 5d cold cut, not polished or blued, per 100 lbs 3 00	2 60
Ballochmyle	80 90	65 75 1 05	3d to 5d cold cut, not polished or blued, per 1co lbs 340	3 (0
Granite (Stanstead) Ashlar, 6 in. to 12 in., rise 91n., per ft.		25	FINE BLUED NAILS.	3
Moat Freestone	ì.	70 80 75 80	3d, per 200 lbs	
Credit Valley Rubble, per car of 15 tons, at quarry	8 00		CASING AND BOX, FLOORING, SHOOK AND	
Credit Valley Brown Cours- ing, up to 10 inch, per sup.			12d to 30d, per 100 lbs 2 50	2 60
yard, at quarry Credit Valley Brown Dimen-	1 75	3 25	rod, "" 2 80 8d and 9d, " " 2 95	2 70
sion, per cu. ft. at quarry Credit Valley Grey Coursing,	60	75	6d and 7d, " " 3 10 4d to 5d, " " 3 30	3 05
	50 200	2 15	3d, " " 370	
sion, per cubic foot Clark's N. B. Brown Stone,	60	75	FINISHING NAILS.	
per cubic foot, f.o.b Brown Free Stone, Wood-	1 15	1 00	3 inch, per 100 lbs 3 10 2½ 10 2¾ " " " 3 25	
point, Sackville, N.B., per		• ••	2 to 2 ½ " " " 3 40 1½ to 1½ " " " 3 60	
cub. ft	1 15	1 00	1) 4 00 1 " " 4 450	3 85
Madoc dimension floating, f.		14 00 14 50	SLATING NAILS.	
o. b. Toronto, per cubic ft. OHIO FREESTONE, FROM THE	30 32 Grafton S	TONE CO.'S	5d, per 100 lbs	2 95 2 95
No. 1 Buff Promiscuous		85	3d, " " 375 2d, " " 425	
No. 1 Buff Dimension No. 1 Blue Promiscuous	75 55	90 • 70	COMMON BARREL NAILS.	
No. 1 Blue Dimension Sawed Ashlar, No. 1 Buff,	60	75	1 inch, per 10c lbs	
any thickness, per cub. ft Sawed Ash'ar, No. 1 Blue,	90	1 05	% " " 475	4 35
any thickness, per cub. ft Sawed Flagging, per sq. ft.,	75	90	3 inch, per 100 lbs. 3 35	2 95
for each inch in thickness. Above prices cover cost freigh	66%		2 and 2½ " " 3 65	
small lots and 5 to 10 cents per Quebec and Vermont rough			132 410 134 44 44 450	
granite for building pur- poses, per c.ft. f.o.b. quarry			1 " 500	•
For ornamental work, cu. ft.	33 150 35 20		SHARP AND FLAT PRESSED NAI inch, per 100 lbs. 3 75	
Granite paving blocks, 8 in. to 12 in. x6 in. x4½ in., per M	50 ∞		2½ and 2½ " " 400 2 and 2½ " " 420	3 60
Granite curbing stone, 6 in.x 20 in., per lineal foot	70		1½ and 1½ " " 440	3 95
Rocting (# square).	: .		ž " " 5 5c	
11 red 11 purple	18 vo	20 00 10 00	Steel Wire Nails, 75 % discount from	n print d list
unfading green	9 00 8 ∞	6 oo 5 50	Iron Pips:	
Terra Cotta Tile, per sq Ornamental Black Slate Roof-	25 00		Iron pipe, ¼ inch, per foot 66	7
ing	8 50		u u ¾ u u 12	
PAINTS. (In White lead, Can., per 100 lbs. 6		5 50 6 00	11 11 11 11 11 11 11 11 11 11 11 11 11	17 24
	50 750	650 750 450 500	11 11 15 11 11 30 11 1 2 11 11 43	30 43
venetian, per 100 lbs i	60 175	100 175	Toronto, 65 per cent. discount. Montreal, 60 to 65 per cent. discount.	
" Indian, Eng	10 13	10 12	Lead Pipe:	,
Yellow chrome	15 20	•	Lead pipe, per lb	34
" Paris	20 25	14 20	Discount, 30 % off in small lots; 30 ar	id to % off in
Blue, ultramarine	15 25 15 20	13 18	Galvanized Iron:	·
Oil, linseed, raw, & Imp. gal.	54 59 57 63	62 63	Adam's—Mar's Best and Queen's Head: 16 to 24 guage, per lb 41/2c. 41/2	
Putty	78 85	6 2½ 2½	26 guage, 4¾ 5 28 5 5¾	•
Whiting, dry, per 100 lbs Paris white, Eng., dry	75 1 00 90 1 25	90 100	Gordon Crown—	
Litharge, Eng	4 5 10 15 81/ 10	12 15	16 to 24 guage, per lb 4½ 4½ 26 guage, 4½ 4½ 4½ 28 4½ 5% Note.—Cheaper grades about ½c. per lb.	•
Ontoer,	8½ to MF: etc.	12 15		icsu .
Portland Cements.—			Structural Iron: Steel Beams, per 100 lbs 37.	
German, per bbl		255 265 192 205	" channels, " 2 85	5 6c 2 30
Newcastle Belgian, Josson, artificial a		185 195 225 230	" tees, " 280	. 265
English, artifical, per bbl 2	65 290	255 265	Sheared stee bridge plate	2 35