

### CONTRACTS OPEN.

**CARBERRY, MAN.**—Mr. John Lyons will erect a brick business block in the spring.

**BRUCE MINES, ALGONA, ONT.**—Mr. A. McKinnon will rebuild his large hotel recently destroyed by fire.

**GUELPH, ONT.**—Pennsylvania capitalists have, during the present week, been prospecting for a site for a knitting machine factory.

**WOODSTOCK, ONT.**—The Engineers have arrived from Toronto for the purpose of making a survey of the proposed outthrust extension of the C. P. R.

**LONDON, ONT.**—Mr. Geo. Craddock, architect, will receive tenders until this Saturday evening, for alterations and additions to Olmstead's cigar factory.

**VICTORIA, B. C.**—The City Electric Committee will recommend the council to increase the lighting plant by the addition of two engines of 200 horse power or upwards.

**WINNIPEG, MAN.**—The architects of the city state that the coming building season here will be a busy one, and the number of residences likely to be erected, large.

**WINDSOR, N. S.**—Tenders are wanted until Saturday the 7th of February for heating King's College. Tenders should be addressed to the President, C. E. Willeis.

**BRANTFORD, ONT.**—Negotiations are in progress between the officers of the Duferin Rifles and the Minister of Militia with reference to the erection of a new drill shed.

**BROCKVILLE, ONT.**—Tenders will be received until the 30th inst. by the Chairman of the Street Committee for the delivery, not later than the 15th April, of 300 cords of stone for street purposes.

**CORNWALL, ONT.**—C. W. Yonge, Dr. Bergin, M. P., and others, interviewed Sir John Macdonald a few days ago, to ask for an appropriation for the construction of dams on the north side of the St. Lawrence, head and foot of Sheik's Island.

**PARRY SOUND, ONT.**—The Nipissing and James Bay Railway Co. has purchased the right of way from the northern terminus of the Nipissing Railway at a point in the vicinity of North Bay, and will shortly commence the work of construction.

**TRENTON, ONT.**—It is reported that the Rathbun Co., of Deseronto, are about to purchase the Gilmour property at this place and that extensive car works will be erected.—The Queen's Hotel is to be rebuilt in the spring. The new building will cost in the neighborhood of \$25,000.

**QUEBEC, QUE.**—Mr. J. R. N. White, 125 St. Peter street, will receive tenders until the 5th February, for the erection of the proposed Fortress Hotel building. Tenders should include everything except steam heating and plumbing. Plans and specifications at the above address.—It is the intention of the city to erect cattle sheds in the spring.

**KINGSTON, ONT.**—The Government Inspectors have strongly condemned the Collegiate Institute building, which is very much overcrowded, and something will have to be done shortly in the direction of erecting a new building or altering and enlarging the present one.

**VANCOUVER, B. C.**—At a largely attended meeting of the Board of Trade and citizens, the by-law authorizing the bonus of \$100,000 towards the construction of a dry dock in this city was warmly supported.—A member of the Council has given notice of motion that application be made the local Government for a grant in aid of the Public Art Gallery and Museum.

**HALIFAX, N. S.**—An English cable construction company is asking a subsidy towards the laying of a sub-marine cable between Nova Scotia and Sable Island. The cost of construction is estimated at \$100,000. The Superintendent of

Government Telegraphs is understood to favor the undertaking.—The Catholic Archbishop is calling for subscriptions for the erection of a glebe for the priests of the Cathedral.

**ANNAPOLIS, N. S.**—It is proposed to place a first class steel truss span and draw bridge over the Annapolis river at Granville Ferry. This bridge will be about 1,800 ft. from shore to shore at high water mark, or 800 ft. at low water. The main channel of the river is 45 feet deep at low water, which will be spanned by a steel truss of 400 feet. The stone piers on which this rests will be in 25 feet water at lowest tide. The draw will be the largest of any in the Dominion or in fact in America, two openings of 80 ft. width, each with 22 ft. water at lowest tide, with an extensive moving pier.

**HAMILTON, ONT.**—Mr. Mills, architect, has a block of stores to build on John st.—J. Powell has just completed plans for a residence to cost \$4,000 for Mr. Glover on Aberdeen ave.—W. A. Freeman's Fertilizer Works, recently destroyed by fire, are being rapidly rebuilt. Mr. Jos. Powell is the architect. The chimney, which will be finished in the spring, will be the highest in the city, and will require 200,000 bricks. The architect has drawn the chimney with inside lining wall, forming a complete vacuum space between the lining and outside wall, which is designed to secure perfect draught.—Mr. Wm. Stewart, architect, will receive tenders up to 6 o'clock on Wednesday the 28th inst., for the several trades required in the erection of a block of stone buildings on the cor. of James and Barton streets, to be used as a branch office by the Bank of Hamilton.—Messrs. Joseph Powell & Co. are preparing plans for a large residence for O. A. Horning, Gore street.—The congregation of Zion Tabernacle propose erecting a new Sunday school building.

**TORONTO, ONT.**—Extensive alterations, including new plate glass front, are to be made to the building on the north-west cor. of Spadina ave. and Queen street.—The Edison General Electric Co. are considering the advisability of erecting a building to be known as the business headquarters of the company in Canada.—Tenders for alterations are wanted at 56 Fenning st. until Feb. 1st.—Wm. Hammond, cor. Clare and Robinson sts., wants tenders for excavating, stone and brick work.—A committee of the Senate of the Toronto University has been appointed to consider and report upon a site for a library, geological museum, chemical laboratory, gymnasium, convocation hall and other buildings, the erection of which will shortly be commenced.—The Management of the Young Women's Christian Guild have approved of plans prepared by Mr. D. B. Dick, architect, for a new building to be erected on McGill street, at an estimated cost of \$22,000.—The Canadian Pacific Railway Co. has filed with the Railway Department at Ottawa, the final plan and profile, establishing the location of the Don branch of the Ontario & Quebec Railway.—Plans for the enlargement of the House of Industry will be presented for the approval of the Board of Management at its next meeting.

**MONTREAL, QUE.**—The approval of the Dominion Government has been given to what is known as "plan No. 6" for the improvement of the harbor. The scheme thus approved contemplates the widening of Commissioners and Common streets, east of St. Peter street, to a minimum width of 75 feet, and to the same width west of McGill street, giving an average width of nearly 90 feet throughout. For the protection of the city from inundation a parapet wall along the whole length of the street is to be constructed, through which openings or gates will afford access to the wharves during the season of navigation, these being closed at other periods. To increase accommodation within the harbor it is proposed to create a still-water basin by the construction of a guard-wall from the western abut-

ment of Victoria Bridge extending down the river a distance of 7,000 feet, inside of which wall four wharves will jut out, having each a length from 900 to 1,500 feet, with a breadth of 230 feet, giving a total increase of 10,000 lineal feet of frontage in the wharfage accommodation. It is proposed that all the wharves in the upper, or still-water harbor, shall be raised to the level of Commissioners street. The work of enlargement and improvement will be begun the coming spring. The cost of the plan to be followed is estimated at \$2,827,894, including the guard-wall.—The promoters of the St. Lawrence and North Western Railway, which is intended to start from Three Rivers and run into the interior, a distance of about 70 miles, are negotiating in England for the money necessary for the construction of the road and expect to commence operations in the spring.—Plans are being prepared for a new hotel to be erected in the spring by Mr. Geo. Carslake near the Bonaventure Depot; it will be six stories high, with a frontage of 85 feet on Windsor street and 60 feet on St. James street, and will contain 100 rooms.—The Protestant School Committee decided at a meeting on Saturday to at once begin work on the new High School.—Mr. H. Saxon Snell has arrived from London, Eng., to give his personal attention to the ventilation and sanitary arrangements for the Victoria Hospital.—Plans will be completed in about two weeks for the proposed widening on Bleury and Notre Dame street east.—The Montreal Water & Power Co. is seeking incorporation for the purpose of constructing and operating systems of water works, electric light, heating and power throughout Canada.—Mr. J. Alcide Chausse is now preparing plans for three cottages to be built next spring at Back River for Miss. C. Desjardins; also for a house on Mignonne St., for Mr. Bourdon.—A Committee has been appointed by the Bar to press upon Mr. Mercie in a personal interview the necessity for the erection of a new Court House. Mr. Bergin, the contractor for the alterations proposed to be made in the existing building, has been called to Quebec to give his opinion to the members of the Provincial Cabinet regarding the expediency of proceeding with the alterations or erecting a new structure.—There is a rumor to the effect that the Dominion Government is contemplating the construction of a graving dock here, capable of accommodating ocean and lake steamers.

### CONTRACTS AWARDED.

**HALIFAX, N. S.**—The Council has awarded to Mr. John Cline the contract for the supply of granite gutter stones, at 46 cents per lineal foot.

A method of measuring bridge strains is described in *Engineering*, as devised by M. L. Le Chatelier and described at length in the *Annales des Ponts et Chaussées*. For this purpose a bracket carrying a lathe center is attached by small screws to the member, the strain in which is to be measured. At another point of this bar a second bracket is fixed, in which slides a short steel rod pointed at both ends like a lathe center. Attached to the same bracket is a water chamber closed by a flexible diaphragm of German silver, and connected to a fine open tube, which, as the water on being expelled from the chamber flows up, serves to measure on a highly magnified scale any motion of the diaphragm. One end of the double-centered rod presses against this diaphragm, and a bar is supported on the other center point of this rod, and on that of the fixed bracket aforementioned. Any extension of the bridge member, therefore, causes a motion of the diaphragm and a fall of the water in the fine tube. Successful measurements have been made on this system when the fixed points between which the extension was taken were only 8 inches apart.