## CONTRACTS OPEN.

LONDON, ONT. - The C. P. R. Co. will shortly creet machine shops and a new station here. MACOG. QUE: The Roman Catholic authori-

ties ask tenders for the erecilon of a parsonage. COLLINGWOOD, ONT. - The Methodists are

considering the question of creecting a new church. LANARK, ONT.—The Royal Templars of Temperance propose erecting a Hall next summer.

RICHMOND, QUR.—The new Rockland Slate Co. will erect twelve new houses this coming spring.

MEAFORD, ONT.—A motion is before the council to raise \$12,000 for the purpose of constructing water works.

WINDSOR, ONT.—Plans are expected to arrive from Ottawa shortly for the repair and enlargement of the post office.

QUEBEC, QUE .- The time for receiving tenders for the construction of the new Fortress Hotel has been extended to the 18th inst.

CLINTON, ONT. — The Roman Catholics of this town are negotiating for the purchase of property upon which they will erect a new church.

LACHINE, QUE.--Mr. J. Alcide Chausse, architect, Montreal, is now preparing plans for a stone cottage for Mr. B. Leduc, to be erected here next pring.

LENNOXVILLE, QUE.—It is the intention to proceed immediately with arrangements for the re-building of the portions of Bishop's College recently destroyed by fire.

DUNNVILLE, ONT.—The Dunnville Natural Gas Co. has been organized with a capital of \$10,000 for the purpose of sinking wells. Mr. F. G. Ramsay is the President.

HAMILTON, ONT.—The County Council on the 7th inst, appointed Warden Dickinson and Counsellors Baur, Briggs and Lewis a committee to choose a suitable site and obtain plans for a county poor house.

ST. MARY'S, ONT.—The tenders received for the new Town Hall are in excess of the estimated cost, consequently none have been accepted. The Building Committee have not yet decided what course they will adopt.

ALMONTE: ONT.—The county council of Carleton have decided to erect a new iron bridge to cost \$9,000, at Burnit's Rapids.—The Presbyterians are asking tenders for the erection of a new stone church, estimated to cost \$4,000.

PETERBORO', ONT.—Arrangements are being made to erect a new school building to take the place of what is known as No. 17 Otonabce School, immediately east of the town.—A new school is also to be built in school section No. 8, Douro Township, and in school section No. 12, Asphodel.

KINGSTON, ONT.—An active cinvas has been entered upon to raise the amount necessary for the erection of the proposed Y.M.C.A., building, Construction is expected to begin in the spring, —The Collegiate Institute Board are having new plans prepared for a new building, and will again ask the coincil for a grant to enable them to erect the same.

PORTAGE LA PRAIRIE, MAN.—The Methodist congregation, at a meeting held a few days ago, decided to proceed at once with the erection of a new church to take the place of the one recently destroyed by fire, provided satisfactory arrangements are made with the insurance company. The new church will probably cost about \$12,000, and have a seating capacity of about 1200.

VICTORIA, B. C.—The owners of the Colonist Hotel are having plans prepared for a new building, to occupy the site of the present structure. The estimated cost is \$30,000. The new building is to be of brick and will be equipped with electric light and all modern improvements. —A company has been formed composed partly of American and partly of local capitalists for the purpose of erecting, a large brewery. OWBN SOUND, ONT.—At a recent meeting of the county council, a Committee was appointed to select a site and ascertain the cost of creeting a building for the purpose of a House of Refuge. A by-law, was also adopted granting the sum of \$1,000 to aid in the erection of a marine and general hospital in this town.—A movement is stated to be on foot among local capitalists for the construction of an electric street tailway.

OTTAWA, ONT.—The Government will shortly invite tenders for a new light, house to take the place of the Gaspe Light House recently destroyed by fire.—It is understood to be the intention of the Government to construct a new canal on the north shore of the St. Lawrence at Coieau. The canal will be 14 miles long with 6 locks, with 14 feet depth of water, and 100 feet wide at the bottom.—The consent of the Ontario Government has been obtained for the construction of the proposed new electric street railway.

VANCOUVER, B. C.—The Vancouver Candy Co. will enlarge their factory and purchase additional machinery.—It is the intention of the Board of Directors of the Temperance Hall Association to commence the erection of their proposed new building this year.—Mr. V. Kratz, of Seattle, W. T., was in the city recently, looking for a suitable site on which to erect a large flour mill. —The Chief Engineer of the Esquimault and Nanaimo Railway will shortly commence a locatory survey of the proposed line from Wellington to Comox, in order that the work of construction may be commenced in the spring.

WINNIPEG, MAN, —The Masonic Fraternity is looking for a suitable site on which to erect a Masonic Temple. There is a possibility of an opera house being built in connection.—It is said to be the intention of Messrs: Archibald & Howell to erect an extensive business block on their property adjoining the Post Office.—The extension of the sewerage system of the city is under the consideration of the council. It is estimated that to complete the system satisfactorily for the present population, it will be necessary to experid from \$250,000 to \$300,000. Petitions have been received for new sewers estimated to ccut \$40,000, the construction of which will, probably be comimenced about the first of March.

MONTREAL, QUE .- Mr. Robert Findlay, architect, is preparing plans for a large private residence for Mr. A. H. Hyndman, of Sherbrooke, P. Q.-The governors of the Montreal General Hospital have under consideration plans, for the erection of two new wings to the present building. The estimated expenditure is \$100,000.-Mr. R. M. Hunt of New York, the expert appointed to judge the competitive designs for the new Board of Trade building, has completed his examination of the designs, and his report is expected to be made known in the course of a week -Mr. P. H. Chabot and other local capitalisis are socking to be incorporated as a company to crect a central railway station on the south side of the proposed interprovincial bridge.

TORONTO, ONT .- Mr. Robert Milligan has commenced excavation for a pair of semi-detached brick houses on the east side Robert street near Bloor street, to cost between \$4,000 and \$5,000. Contracts for brickworl: and carpentry only are let .- New water mains will shortly be laid on King, Queen and Yonge streets.-The city solicitor has been instructed to prepare a by-law for the building of new bridges crossing the railway at Dundas street.-Mr. R. F. Clarke is intending to erect a new building on his property on the Island -The Dominion Government having refused to sanction the crection of a high level bridge over the Don River at Queen street, the city engineer has been asked to report on the cost of crecting a swing bridge. -The following building permits have been granted : F. F. Pickering, pr. det. 2-storey bk. dwellings, corner Huron and Prince Arthur ave., cost \$24,000; Henry C. Stevens, pr. 2-storey dwellings, Cowan ave., cost \$3,600.

## CONTRACTS AWARDED.

W. TORONTO JINCTION, ONT.-Messrs. Mc-Quillan & Co., of Toronto, have been given the contract for cib work around the water pipes in the Bay.

ST. JOHN, N. B.-Messis: McNeal & Connor have been given the contract of erecting a memorial to the memory of J. Fred. Young, their price being \$23500.

FORONTO, ONT.—The Board of Works has recommended acceptance of the following tenders for construction of sewers: Essex avenue, from Christle street to west terminus, Burns & McCormack, price \$909; Ruskin avenue, from Edwin avenue to Peith avenue, price \$1,703; Yarmouth road, from Christie street to Manning avenue, J. J. Booth, price, \$1,133.

## CAUSE OF UNRELIABLE ESTIMATES.

The cause for unreliable estimates are plain to those who understand the facts, and they resolve themselves into three simple conditions: The first, inexperience from a lack of education; the second, a lack of mature judgment, based upon practical and mechanical operation; third, the methods practiced by the fraternity of procuring work by competition.

There is no doubt in my mind but that a remedy may be applied for all phases of a difficult question; and yet we are aware that until the building trades, as a unit, combine in a general movement looking towards a more advanced condition of scientific education, we may not hope for vany marked improvement.

Let us, for a moment, discuss the first cause and its remedy-inexperience from a lack of education. However, a mechanic may understand the principles of his trade in a practical way, and be enabled to construct any piece of work given him, he may be lacking in that one great requisite which will enable him to make an accurate estimate. Education which treats of the science of mathematics as applied to building affairs-a knowledge of the many rules of measurement adopted throughout the country by architects and estimators-these are absolutely necessary to the mechanic who attempts to carry on business, and the lack of them by many who, by their push and energy, find themselves master-builders, soon brings failure and disastrous results from uncertain and mistaken estimates of cost upon which contracts have been awarded.

The second cause, a lack of mature judgment based upon practical operations, applies to every young mechanic who attempts to carry on his business on his own resources. He may be an expert, practical mechanic, and enabled to lay out and perform any branch of his trade; in addition he may be thoroughly competent in all that relates to figures and mathematics, and yet he fails from a want of proper and mature judgment applied at the proper time.

He may be capable of estimating correctly the quantities necessary to complete the building, in drawing off the bill of materials from a plan, and yet, when he is called upon to estimate the cost of labor, he is an utter failure. How many contractors can properly estimate the labor necessary to perform a given piece of work? Not one in five; for it is a matter of judgment, based upon a practical experience in the management of men, and the faculty for pushing work; for, while one may consume half a day on a