

STRATFORD, ONT.—Mr. Andrew Jeffrey, hardware merchant, intends to erect a two-story red brick residence in this city, to cost about \$2,500. Mr. H. J. Powell will have charge of the work. The contract will be awarded at an early date.

SMITH'S FALLS, ONT.—Mr. L. G. Martin will receive tenders until the 28th inst. for the erection of a stone residence at Merrickville, including hot water heating. He also wants tenders until the 4th of April for the erection of a brick market building here.

GURFILL, ONT.—Tenders are wanted for the erection of a brick house for Mr. C. W. Kelly. The City Council has decided to issue debentures to the amount of \$30,000, to provide for the erection of a new bridge, extension of water mains and new boilers for the waterworks.

LACHINE, QUE.—H. Robert, Sec.-Treas., will receive tenders until the first day of April for one 50 light dynamo of 1,200 c. p., one 650 mean descent dynamo of 12 c. p., one 100 h. p. Corliss condensing engine, one 100 h. p. high speed engine, and one 100 h. p. steel boiler.

FLESHERTON, ONT.—Plans have been prepared by Mr. Clarke, architect, for a residence to be erected at the corner of Peter and Elizabeth streets for Mr. G. Mitchell, banker, of this place. Mr. Clarke is also preparing plans for a residence to be erected for Mr. Clayton Timble. A new school is to be erected at Hopeville by the rate-payers.

CALGARY, N. W. T.—The Dominion Government has passed an order authorizing the erection of a public building to cost \$45,000. The building will be erected on the Hull site, opposite the present post office. The Board of Directors of the General Hospital are inviting plans for a new stone hospital, two stories and basement, cost not to exceed \$50,000.

LONDON, ONT.—Plans have been prepared for the remodelling of the drill shed, and will be submitted to the authorities for approval at an early date. Messrs. Moore & Henry, architects, want tenders for the erection of a brick dwelling on Clarence street for Messrs. E. W. Saunders & Co. The Board of Education have decided to immediately commence the reconstruction of the Talbot street school which was recently destroyed by fire.

MONTREAL, QUE.—The city council are discussing the construction of a subway on Berri street. A deputation of citizens will interview the Minister of Public Works for the Dominion to endeavor to secure the granting of a subsidy to complete the wharf at Longueuil. Mr. W. H. Davis, of Ottawa, has written to the city council offering to build a steel observatory 200 feet high, with electric elevators and outlooks every fifty feet. He was requested to submit plans and specifications. Dr. Brisson, Mayor of Laprairie, has written to the Harbor Commissioners, urging the construction of a wharf at Point St. Charles.

HAMILTON, ONT.—The Water Works Committee has decided to build a six-inch main on Burlington street, between King and Barton streets, at an estimated cost of \$3,230. It is stated that the promoters of the Toronto, Hamilton and Buffalo railway will award the contract for the construction of the line at an early date. W. A. Edwards, architect, will receive tenders until Monday, the 28th inst., for the erection of a brick residence on John street south. Charles Mills, architect, will receive tenders until Saturday the 2nd of April, for the various works required in making alterations and additions to the Grand Opera House. Plans have been completed for the new Maternity hospital and will be presented to the hospital committee for approval at an early date.

VANCOUVER, B. C.—The congregation of Zion church are considering the erection of a new edifice. Application will be made to the Dominion Parliament for an act to incorporate a company to construct, operate and maintain a tunnel under the First Narrows of Burrard Inlet, and a bridge over the Second Narrows of Burrard Inlet, and to construct and operate railways on the north and south shores of Burrard Inlet to connect the tunnel and bridge and with the Canadian Pacific Railway; with power also to lay water mains or pipes through the tunnel and across the bridge. The estimated height of the arches of the bridge will be eight feet above wa-

ter, and the estimated interval between the centre piers will be 100 feet. A draw will be provided in the bridge of 100 feet clear water-way.

TORONTO JUNCTION, ONT.—Plans have been prepared by Mr. A. B. Pipher for two brick houses on Murray avenue. The Town Engineer has been instructed to prepare new plans for a system of sewerage for the town, in accordance with the arrangements made with the City of Toronto, also to prepare an estimate of the cost of constructing sewers on the streets recommended by the Board of Health. Mr. A. B. Pipher, architect, is preparing plans for a new hotel to be erected by Messrs. Millar & Fenn opposite the Campbell block. It is to be a solid brick, three stories high, with about thirty rooms, including bath. At the west side will be erected a store. Large driving sheds and barn will be erected in the rear. Mr. Pipher is also preparing plans for a residence to be erected at Weston.

HALIFAX, N. S.—The Board of Works has recommended the construction of a sewer on South Robie street, at a cost of \$900. The City Council are looking for a suitable site for the erection of a market building. G. E. Harris, General Manager Nova Scotia Telephone Co., will receive tenders until the 28th inst. for heating their new building. Tenders will be received at the office of the Public Works Department until noon on Wednesday, the 6th of April, for the erection at Truro of a building for the Provincial School of Agriculture. Plans may be seen at the office of Edward Elliot, Architect, Bedford Row, and at office of Prof. Smith, Agricultural Farm, Truro. The City Council will apply to the Local Legislature at its present session for power to borrow the sum of \$15,000 for the purchase of a steam fire engine and apparatus.

OTTAWA, ONT.—Tenders have been asked by the Public Works Department for the construction of two registry offices at Prince Albert and Edmonton. The trustees of the Ottawa Separate School have decided to build a new school house on Sherwood St. A deputation from Golden recently waited on the Minister of Public Works to urge the necessity of placing a sum in the supplementary estimates for the purpose of improving the harbor at that place. The Alberta Railway and Coal Company will apply to Parliament for power to construct and operate an irrigation ditch or canal from the crossing of the Milk river by the railway in a north-westerly direction to Lethbridge. E. F. E. Roy, Secretary Department of Public Works, will receive tenders until Friday, 22nd of April, for the erection of a drill hall at Victoria, B. C. Plans may be seen at the Department of Public Works, this city, and at the office of F. C. Gamble, engineer, Victoria.

TORONTO, ONT.—Mr. Berkeley G. Turner, corner of Christie and Garnet streets, has had plans prepared for a residence to be erected on the east side of Crawford street. Mr. H. B. Houston is making arrangements to erect two cottages on the Island. The plans for the proposed University gymnasium to be erected in the Queen's Park have been completed. The building will be 180 feet long and 60 feet wide, with two stories and a basement, and will cost about \$25,000. The City Engineer has been instructed to report as to the practicability and cost of constructing a bridge across the Grand Trunk railway in rear of the toll gate at the intersection of King and Queen streets, for the purpose of enabling the street railway company to enter High Park at the Indian road. The Board of Works has decided to construct sewers on Tyndal avenue, from Huxley street to the G.T.R. tracks, and on Glen Road, at a cost of \$310 and \$530 respectively. An American syndicate has obtained from the University authorities a 30 days option for the purchase of the old Upper Canada college and grounds for the sum of \$250,000. M. Sheard, architect, 120 Yonge street, will receive tenders until the 2nd of April for the erection of six attached brick houses on Ann street. The ice-dealers of this city have formed themselves into a joint stock company, with a capital stock of \$100,000. They will erect immense icehouses at Frenchman's Bay. A block of stores is to be erected on Bathurst st., north of Bloor street, on the property of Mr. D. Moore, of 544 Bloor street east. The following building permits have been granted: E. McMartin, det.

2-storey and attic bk. dwelling, 208 Soranren ave., cost \$2,000; Wm. Brand, pr. s. d., 2-storey bk. dwellings, n. side Argyle st., between Givens and Dundas st., cost \$3,500; Samuel Van Avery, three att. 2-storey and attic bk. dwellings, e. side Bathurst st., n. of Bloor st., cost \$2,000. Ashfield & Wilton, seven att. 2-storey and attic bk. dwellings, w. side Bolton ave., s. of Cummings st., cost \$21,000. Wm. Belshaw, five att. 2-storey b. f. dwellings, w. side Sackville st., between Sydenham and St. David st., cost \$10,000, and ten 2-storey b. f. dwellings, on each side of new street opened between Sydenham and St. David st., cost \$20,000; John Sloan, additions to residence 143 Adelaide st., cost \$2,000. W. Kidd, additions to factory, 130 Richmond st. west.

#### FIRES.

The premises of Thibault Bros., St. Paul street, Montreal, was damaged by fire to the extent of \$20,000 on Tuesday last. Mr. Frank McLaughlin's residence at Kingston, Ont., was burned on Saturday last. The Kingston hotel at Kingston, N. S., was destroyed by fire on the 21st inst.; no insurance. On Monday last fire at Bradford, Ont., destroyed the Stoddart building; loss \$20,000; insurance \$10,000; and the Bingham block, owned by Robert Bingham; loss \$15,000; insurance \$1,000. The Argyle hotel at St. Andrews, N. B., was totally destroyed by fire on the 20th inst. The residence of Mr. George Warder at Tiverton, Ont., was burned on Saturday last; loss \$1,000. The custom house at St. John, N. B., including the local custom offices, together with the Inland Revenue, Public Works, Marine and Fisheries, Immigration and Signal Service departments, was destroyed by fire on the 20th inst. The building was built of freestone, and cost in the neighborhood of \$320,000. Fire at Point Edward, Ont., on Thursday last destroyed the building owned by Mr. Hitchcock, Lawrence Knapp's meat market, F. O'Neil's grocery store, containing the post-office and the Spetz hotel. The total loss is between \$15,000 and \$20,000.

#### CONTRACTS AWARDED.

NIAGARA FALLS, ONT.—Mr. Geo. Fuller has been awarded the contract for the erection of the new separate school building.

CHELTONHAM, ONT.—The contract for the building of the Baptist church has been awarded to Graham & Son, of Inglewood, for \$3,385.

BELLS CORNERS, ONT.—The contract for the erection of a new Presbyterian church has been awarded to Mr. Wm. Davidson, of Mount Forest.

COLLINGWOOD, ONT.—The Waterworks Committee has awarded the contract for the lowering and extension of the intake pipe to James Stone, at \$1,234.

GLENCOE, ONT.—The contract has been let for the rebuilding of the McKellar House. It is to be a red brick structure, and will cost about \$10,000.

VANCOUVER, B. C.—Mr. George Powell has been awarded the contract for cutting a trail from the dam at the waterworks to the proposed Capilano Park, a distance of 14 miles.

OTTAWA, ONT.—The Board of Works have accepted the following tenders for supplies: pipe, McKee & Co.; cedars, F. H. Cluff; hardware, Thomas Birkett; plank, P. Burns.

LEEDERTON, ONT.—Messrs. Bayden Bros. and Wm. Howard, of Exeter, have received the contract for the erection of an English church in this village. The foundation will be built of stone and the upper walls of brick.

HAMILTON, ONT.—Contracts for the erection of a Methodist church at Plains East have been awarded as follows: masonry, A. W. Buscombe; carpenter, F. Slater; Waterdown; lathing and plastering, Chapman & Sons; painting, S. W. Rickman; Waterdown; galvanized iron work John E. Riddell.

A peculiar method of building a wall, which would apparently lead to a great uniformity of style, is practiced by the Romans. They erect two parallel partitions of boards between which they pour a plaster of mud; the partitions are afterward removed, when the material solidifies.

#### PLUMBING PRACTICE.

Great care is taken by many plumbers in the adjustment of plumbing apparatus in that the work shall look symmetrical and mechanical in finish, says *Fire and Water*. This is proper and desirable, and should be insisted upon. It is often the case, however, that an excellent piece of work in appearance is not as complete in utility as it might have been had a little more pains been taken with a feature of the work often neglected. Why it is that a plumber will run a certain supply pipe to a point of delivery and then throttle it by a flat waterway bibb cock and a flat waterway stop cock is to some minds inconceivable. If it be intended, then there is no further use in writing about it. Still it would be quite as reasonable to have the cross section of the diameter of the pipe equal in area to the area of the stop cock or bibb cock, and the additional cost of the increased size of the pipe could then be avoided. This condition of things is frequently found in plumbing practice; it does not interfere so seriously in the matter of the size of discharge faucet, the excuse being, the larger the pipe the greater the velocity than in a small pipe. Yet losing sight of the fact that such be the case, why not continue the same "to the end" of the faucet and get the benefit of the velocity entire? The serious part, however, in the plan is the stop cock controlling the supply to the delivery pipe and discharge cock. Very few plumbers consider what detriment is effected in using a flat waterway stop cock supposed to equal in cross section of area the cross section of the area of the delivery pipe with which it is connected. A few minutes' consideration will convince the most obtuse plumber that the 1/2-inch and 3/4-inch stop cock with a flat waterway in but few instances possesses the area in cross section equal to 1/2-inch or 3/4-inch pipe, circular in form. Even if it did, it will be found that diverting a circular stream to a rectangular stream through the waterway of a stop cock and back again to a circular stream is at the expense of the energy of the velocity of the current of water occasioned by the diversion.

It is but trifling to maintain the relations necessary to reduce friction in moving water through service pipes. To break the current generated by velocity is the thing to avoid, and if it is recognized in plumbing practice, a good step in progressive plumbing will be inaugurated.

Therefore if you would obtain the best results from circular discharge pipes, be they lead, iron or brass, see to it that stop cocks are round waterway, and also the same regarding bibb cocks. It will be found upon close examination of the merits of this feature of plumbing that a great saving will be effected in the matter of frictional resistances, which absorb so much of the energy of the flow of water through distributing pipes in the dwelling and warehouse.

We have frequently seen three coats of oil paint applied to the weather board of a building in as many days, when to obtain the best results it should have taken as many weeks. Is it just and proper, then, to find fault with pigment, oil or workmanship, if in a comparatively short time unsightly and unsatisfactory blemishes begin to appear?