

be 325 feet long.—The city clerk has received a petition against the cedar block pavement on Manning avenue from College to Bloor street.—The Provincial Secretary will shortly visit Oxford county to inspect the site selected for the proposed reform school for boys.—The city engineer has reported that it will require two years for the street commissioner to do the necessary filling to make an embankment to take the place of the present Crawford street bridge, and three years more for filling in the Shaw street bridge.—The following local improvements have been recommended: Asphalt pavement, Brunswick avenue, Bloor to Wells, cost \$15,440; brick pavement, Front street, from York to Simcoe, cost \$8,820; macadam roadways, John street, from Queen to Grange, cost \$2,185; Grange road, from Beverley to McCaul, cost \$1,280; concrete walks, Bay street, east side, from Temperance to Queen, cost \$715; Yonge street, east side, Alexander to Maitland, cost \$642; Beverley street, east side, Queen to College, cost \$2,504; Huron street, east side, College to Russell, cost \$451.

WINNIPEG, MAN.—The by-law authorizing the council to establish a crematory was carried by the ratepayers last week.—The district superintendent of the Bell Telephone Co. in this city invites tenders up to January 1st for the supply of 7,000 cedar poles, 25 feet long, to be delivered at points between Winnipeg, Brandon, Portage la Prairie and Neepawa not later than May 31st, 1900.—The question of building a bridge over the Red river in the north end of the city is again being discussed.—A large delegation last week interviewed Hon. Clifford Sifton, Minister of the Interior, regarding the proposed improvements to St. Andrew's Rapids. Mr. Sifton stated that Parliament had appropriated only \$150,000 towards the work, which would cost \$700,000. He expected, however, that plans would be prepared and tenders invited at an early date for a portion of the work, and that at next session a grant necessary to cover the cost would be made.

FIRES.

Peter Campbell's elevator at Glenboro, Man., totally destroyed; insurance, \$5,000.—Brick residence in Deer Park, near Toronto, owned by Col. Sweny; loss, \$10,000.—Residence of D. D. Campbell, at Listowel, Ont., damaged to the extent of \$5,000.—Owen Sound Iron Works, Owen Sound, Ont., partially destroyed.—Brick residence at Welland, Ont., owned by Thos. Gordon, badly damaged.—Boarding house at Norman, Ont., owned by Hugh Cameron.—Residence of A. G. McDonald, at Bloomfield, Ont., entirely destroyed.—Victoria Granite Works, at St. George, N.B., damaged to the extent of \$10,000.—Dry kilns of the Shearer & Brown Co., at Seigneurs street, Montreal; loss about \$20,000.

CONTRACTS AWARDED.

GREENWOOD, B.C.—Dam for Granby Smelting Co.: Porter Bros., contractors.
HINTONBURG, ONT.—\$60,000 of waterworks debentures have been disposed of, at \$61,006.75.
LONDON, ONT.—The contract for painting and decorating the interior of the Talbot street Baptist church has been let to H. & C. Colerick.
NEW WESTMINSTER, B.C.—Brick and stone hotel: John Coughlan & Co., contractors; cost \$19,000. J. G. Trarks, of Victoria, is architect.
TORONTO, ONT.—W. J. Maguire & Co. have secured contracts for heating and plumbing of Lever & Co.'s soap factory; Sprout & Rolph, architects.
VICTORIA, B. C.—The directors of the Lenora mine at Mount Sicker have let a contract to John Haggarty, of this city,

for the construction of a horse tramway from the mine to the railway, a distance of four miles.

JOINTS FOR IRON PIPE.

To make petroleum joints for common iron pipe a writer in Cassier's Magazine says a very good system is to heat both the male and female threads sufficiently to dissipate every trace of oil. Then make the joint up with thick shellac varnish, which may be combined with ordinary dry vermilion or even Venetian red. A joint of this kind I have found to stand well. A very good joint can also be made with ordinary yellow bar soap rubbed into the threads of the pipe; the grease first being removed. Turpentine, honey, glue, mucilage, or glycerine are quite petroleum proof. For a stuffing box, ordinary wicking saturated with common yellow bar soap may be safely employed. Canvas, saturated with shellac varnish, makes a good washer, but soft metallic washers are better. A very good flexible diaphragm for a regulator may be made of closely woven cotton fabric, varnished on both sides with a compound of gelatine and glycerine. About equal parts by weight make a very tough and elastic compound. Wooden vessels, bags, etc., may also be made petroleum tight by saturating or varnishing with this compound. As a rule, all substances which are soluble in water are quite insoluble in petroleum. For stuffing boxes for standing both water and petroleum, castor oil may be employed, as this peculiar oil seems quite insoluble in either."

GLASS AS BUILDING MATERIAL.

Consul Warner (U.S.A.) writes from Leipzig:—"Under the name of 'keramo, a new building material, composed principally of glass, and manufactured at Penzig, Silesia, has been placed on the market. As far as known, this material is made from powdered glass waste, which is hardened by a special devitrifying process, and combined by means of strong pressure.

"In this way the transparency, brittleness and fragility of the glass are destroyed, but other prominent properties—extraordinary hardness, stability against exposure to the weather, non-conduction of heat, non-inflammability, insensibility to oil, grease, acids, etc.—are retained in this new material.

"Keramo can be used for wainscotings in the interior of buildings, for covering floors in houses, kitchens, washing-rooms, verandahs, balconies, etc., for rough-casting of walls exposed to the weather, as well as for staircases which are to be fireproof. The color depends upon the color of the glass used in the manufacture. The price of keramo is about 6s 6d per square yard, and so far the trials which have been made with this product have been most successful."

DATE OF PUBLICATION.

Architects, Engineers, Municipal Authorities and others are reminded that the CONTRACT RECORD is printed every Tuesday afternoon, and that advertisements should reach the office of publication not later than 2 o'clock p.m. on that day to ensure insertion in the issue of the current week. Advertisements are frequently received too late for insertion, to avoid which special attention is directed to this announcement.

The Silica Barytic Stone Co., of Ingersoll, Ont., have constructed over \$11,000 worth of walks this year in the town of Ingersoll, Ont.

To make a good durable red stain for brick, mix Indian red, or Venetian red, with a solution of good Portland cement, regulating the color by adding a little Spanish brown if necessary. Mix with this fine sand, washed clean and dried, before being added to the solution. Cement and sand may be used in equal proportions. The mixture is to be a little thinner than ordinary paint. It must be stirred while being used, and applied with a brush.

The Hamilton Bridge Works Company has just completed for the South Grimsby council a magnificent steel bridge. It is an 88 foot span, with a 16 foot driveway, and has a sidewalk on one side four feet wide in the clear. It is of the Warren truss riveted type, and is pronounced by experts and others to be the best bridge in the county. The contract was taken by R. Maitland Roy, the company's engineer, and is a credit to his ability as a designer of highway bridges.

Hydraulic engineers often experience considerable difficulty in obtaining a cement capable of resisting the action of salt water. Dr. Michaelis, an Austrian authority on cements, has announced that his investigations have led him to the opinion that a mixture of Portland cement, puzzolana (volcanic tufa), and granulated blast furnace slag is better than Portland cement alone where structures are to be exposed to salt water. The puzzolana beds in the province of Syria, Greece, might profitably be developed in this direction.

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