

reservoir be built at a high level.—The construction of the following sewers during the present year are recommended by the City Engineer: on Robinson street, between Hess and James streets, cost \$13,800; Sanford avenue, between Cannon and Main streets, cost \$11,275; Sanford avenue, between Main street and Mountain avenue, cost \$3,150; John street, between Ferrie street and the bay, cost \$13,750; Burlington street, between James and John streets, cost \$4,015; Wentworth street, between Cannon and King William streets, cost \$2,310; King William street, between Ashley and Wentworth streets, cost \$350.

OTTAWA, ONT.—The promoters of the proposed sanatorium held a meeting recently at which the plans for the new building were discussed and it was decided to proceed at once to secure a site.—The Fire and Light Committee at a recent meeting decided to make application to the Ontario Legislature for an act empowering the corporation to issue debentures for the purchase of an electric light plant.—At a recent meeting of the Ottawa Canoe Club, it was decided to enlarge the club house and have it removed to Rockcliffe. Mr. A. Pinard is secretary-treasurer of the club.—Authority will be asked from the Provincial Government to empower the Council to issue debentures to the amount of \$50,000 for the purpose of constructing a sewer to drain Dalhousie ward.—Steel baths will be purchased for the contagious diseases hospital; thirteen will be required.

MONTREAL, QUE.—The Catholic School Commissioners are having plans prepared for the new St. Bridget's school to be built on Maissoneuve street. The cost will be about \$60,000.—J. A. Chausse, architect, is preparing plans for the following work: Four stores to be erected on St. James street, near Chatham street, for Mr. P. Vanier; six dwellings on Visitation street; two residences on St. Denis street for Turner, St. Pierre & Co.; four dwellings on Papineau avenue for Joseph Lauzon; two stores and dwellings on St. Lawrence street for Mr. Drouin.—Messrs. Robin & Sadler are having plans prepared for a new four-story belting factory on the corner of William and Seigneurs streets.—Dunlop & Heriot, architects, have prepared plans for two houses, corner Sherbrooke and Crescent streets, for Dr. F. W. Campbell, to be built of sandstone. Same architects are also preparing plans for a residence on Mountain street for Mr. S. Carsley and for a new tower and the remodelling of the heating apparatus for St. George's church.—David Ogilvy, architect, is preparing plans for a new store, corner St. Catharine and Mountain streets, for J. A. Ogilvy & Sons. Tenders will be called in a few days.

TORONTO, ONT.—Mr. F. H. Herbert, architect, is preparing plans for remodelling the stores No. 118 and 120 King st. east lately occupied by the St. Lawrence Coffee House. Tenders will be called for shortly.—The estimates of the Parks and Gardens Committee have been prepared. The principal work to be carried out is the improvement of Queen's park, for which the sum of \$11,350 is asked. The sum of \$5,500 is also asked for permanent improvements in High Park, \$5,400 for Island Park, \$1,350 for the Horticultural Gardens, and \$4,140 for Exhibition Park.—The Toronto Street Railway Company will expend about \$1,000,000 during the present year in improving their plant. A new power house will be built, adjoining the present one, and tenders have already been called for from local manufacturers for engines to the amount of 6,000 horsepower.—The construction of a sewer for the new Court-house building, at a cost of \$1,350 is recommended.—The York County Council has granted permission to the Metropolitan Street Railway Company to extend their line to Richmond Hill.—At the last meeting of the Public School Board, the Management Committee recommended that school accommodation be provided as follows: Eight rooms to relieve Queen Victoria and

Parkdale schools, estimated cost, \$14,000; four rooms to relieve Dewson street school, cost \$9,000; six rooms to relieve Givens street school, cost \$14,000; four rooms to relieve Palmerston avenue, Borden and Huron street schools, cost \$14,000; six rooms to relieve Bolton avenue school, cost \$10,000; four rooms to relieve Ryerson school, cost \$9,000.—The City Engineer's estimate of \$10,000 for relief sewers on Beverley street and McKenzie avenue has been approved of by the City Council, also the proposal to build stables in the west end, at a cost of \$5,000.—The sewer at the foot of Church street will be extended into deep water, at a cost of \$8,000.—In the City Engineer's last fortnightly report a granolithic sidewalk is recommended on the east side of Sherbourne street, from Queen to Shuter street, at a cost of \$955.—The City Engineer's estimate of the cost of a high level bridge over the Don River at Queen street is \$250,000.—The Separate School Board has decided to enlarge McDonnell Square and St. Francis schools.—The following building permits have been granted: Thos. B. Mishaw, pair s. d. 2 story and attic bk. and stone dwellings, 15 and 17 St. Vincent st., cost \$4,000; Robert Barron, 3 story bk. addition to store, cor. Czar and Yonge streets, cost \$6,000.

FIRES.

Four unfurnished houses on Simcoe street, Hamilton, owned by C. A. Whitwam, were destroyed by fire last week. Insurance, \$2,400.—Thos. McMicken's residence near Brampton, Ont., was burned on the 2nd inst. No insurance.—The residence of Philippe Bouffard, at Riviere du Loup, Que., was burned on the 2nd inst. Loss, \$1,000; insurance, \$400.—The store and warehouse of H. W. Freeman, Jordan River, N. S., were destroyed by fire recently. Insurance, \$2,000.—Hugh Mustard's roller flour mill and W. B. Colling & Co.'s grain warehouse at Wyoming, Ont., were burned a few days ago. Loss on flour mill, \$12,000; insurance, \$3,000; insurance on warehouse, \$3,500.—Messrs. Lawrence & Co.'s sash and heading factory and planing mill at Wainford, Ont., were burned recently. Insurance, \$1,600.—Vaughan's saw mill at Port Arthur, Ont., was burned last week. Loss, \$3,000; no insurance.—Mr. S. S. Edsall's large hardware store at Bowmanville, Ont., was destroyed by fire on the 1st inst. The building was owned by Mrs. Geo. Haines. Several plate glass windows in the adjoining shops were also destroyed.—J. W. Phillip's general store and J. Brown's hotel at Hepworth, Ont., were burned to the ground a few days ago. There was no insurance on the buildings.—The Kamloop stables at Virden, Man., have been destroyed by fire. Loss, \$1,500.—The residence of R. Ogilvie, architect, situated on Davenport Road, Toronto Junction, was destroyed by fire on Tuesday last. Loss, \$2,000; insurance small.

A store building at Flesherton, Ont., owned by Mrs. R. Lever was burned recently. No insurance.—Timmins Bros' store at Mattawa, Ont., was entirely consumed by fire a few days ago. Loss, \$17,000; insurance, \$7,500.—A two-story building on Main street, Kingsville, Ont., owned by Mr. Gregory, was burned recently. Loss, \$7,000; insurance \$2,000.

CONTRACTS AWARDED.

PORT STANLEY, ONT.—Messrs. Usher & Sangster, of Dutton, have been given the contract for constructing a new iron bridge at this place, to cost \$11,000.

BELLEVILLE, ONT.—Mr. James Gates, of this place, has received the contract for constructing a lighthouse at Nigger Island in the Bay of Quinte. Work will be commenced at once.

MONTREAL, QUE.—A. C. Hutchison, architect, has let contracts as follows for extensive alterations and additions to A. A. Ayer & Co.'s cold storage warehouse on Guy street: masonry, Peter Lyall & Son; brickwork, J. Brunet & Son. Laprairie pressed brick will be used.

STANSTEAD, QUE.—D. Ouellet, architect, of Quebec, has awarded the contract for the masonry of the new Convent of Ursulines to Mr. P. Valade, and for the woodwork to Messrs. J. Jasmin and O. Blain. Contract for heating apparatus not yet let. The building is to be 66 x 48 feet, four stories high; cost, \$11,500.

NEW GLASGOW, N. S.—Mr. John Stewart, of this place, has been given the contract to build four bridges in this province, located as follows: Chimney's bridge in Digby County, to be one span of 81 feet; Meisner's bridge, in Lunenburg County, one span of 80 feet; one at Lockport, two spans of 85 feet each, and Ball's bridge, near Sydney, C. B., one span of 80 feet.

BUSINESS NOTES.

Mr. J. N. Fulton, brass founder and manufacturer, will in future carry on the business of E. Chanteloup & Co., Montreal.

The assets of the Erie Glass Company, of Toronto and Port Colborne which went into liquidation a short time ago, have been sold to Mr. D. Williamson.

The Legal and Commercial Exchange report the following: Labelle & Co. will carry on business in Montreal as roofers.—Merrill & Co., planing mill proprietors, Norwich, Ont., have assigned to D. Blackley.—Francis Mailhoit and Marie Louise Giroux have formed a partnership to carry on business as plasterers in Montreal, under the style of J. B. Mailhoit & Frere. Boyd & Co., iron founders and machinists, Huntingdon, Que., have gone into liquidation. Liabilities, \$103,763.

HOW MAGNESIAN BRICKS ARE MADE.

The magnesian brick is coming very greatly to the front as a refractory material for use in furnaces when the heat is very great; its great infusibility is the quality which specially recommends it for this purpose. Large quantities of magnesian bricks are made at Brieg in Silesia from magnesite, which is found near Frankenstein. A portion of the magnesite is burned at a low temperature, and is used as a binding material, whilst the residue that can be attained. The burnt remainder is "sintered" at the highest temperature now passed through rollers; when it is crushed, it is then sifted, and the fine powder is worked up with a little magnesium chloride. A hydraulic press is used, working under a pressure equivalent to 110 atmospheres, for pressing the mass into bricks, and the pressure developed upon each brick amounts to 50 tons. The bricks are then very slowly dried. After about a week they are burnt in a Mendeshheim circular or ring-shaped chamber oven.

As binding materials for converting the magnesite into bricks, various substances have been employed; in some instances 15 per cent. or more clay has been used, and especially anhydrous tar, soda, silica, vinegar, phenolates, etc. The clay influences the infusibility of the magnesia, and those other materials which contain volatile components influence the firmness of the burnt material. In some parts of Silesia these bricks are burned in a reverberatory furnace. The remarkable property possessed by these bricks is that they possess the power of "sintering" or clotting together at a very high temperature without actually fusing.

One of the novel business trades of Boston is that of a dealer in second hand plate glass. Nearly all of this glass, says an exchange, is bought by the dealer from insurance companies. The large plates of this kind of glass are insured when put in a window, and when any of them is broken the owner of the injured glass usually prefers that the insurance company should replace the broken piece rather than he should be paid its price. The dealer in the second hand glass contrives to utilize what remains of the unbroken part of the glass

MUNICIPAL DEPARTMENT.

HOW TO TEAR UP A STREET.

One of the most marked things in European cities to the American traveller is the frequent evidences of the employment of highly skilled labor upon work which would be done by unskilled labor in this country. A city official of New York said a short time ago it would be impossible to keep the streets of New York in a state of cleanliness and repair similar to the boulevards of Paris because of the expense, which the taxpayers would not stand. And he went on to say that, granting the taxpayers were willing to stand the expense, the needed number of skilled laborers could not be found.

But in Paris such things can be done quickly and skilfully, because a large force, an indefinitely large force, of highly skilled laborers may be hired for a small sum. The result is that even the humblest work is done with an exercise of skill and intelligence which amazes an American. When a street or building is to be repaired, a great force of trained laborers is gathered, the materials for labor come with them, and the work goes forward swiftly, quietly, in an orderly manner, with so little muss and fuss that passers by are hardly conscious that anything is doing.

An American drying a small bottle at a little table in front of the Café de la Paix one day last summer saw an illustration of this. As he discovered later on, a gas pipe four or five feet below the level of the asphalt, not far from the curbing, was in need of repair. Toward ten o'clock a man with a spade, a hammer and a chisel appeared with an assistant, who carried two great baskets. The two laid down their tools, and one of them took from one of the baskets a rope and a number of iron standards sharp at the lower end. Quickly the men drove these standards into the asphalt and stretched the rope around them so that a square space eight feet by four was enclosed. The assistant took from the basket a big placard and leaned it against one of the standards and went away. The placard was an announcement that the laborers had permission to take up the asphalt and repair a gas pipe.

The other laborer climbed over the rope and marked out upon the asphalt a square six feet by two and a half. Following this mark he chiselled through the asphalt and when he had separated the piece inside the mark, he carefully lifted it out and laid it to one side. Then he took his spade and dug up the gravel and other stuff that formed the immediate foundation of the asphalt. This material he put into one of the baskets. Then he attacked the earth underneath and soon had his hole dug to the required depth with the gas pipe exposed. All the dirt he had taken from the hole was in the other basket. If there had been a fine carpet up to the edge of the hole on all sides, it would have been only slightly sprinkled with soil and not at all injured.

When he had done he gathered up his tools and looked impatiently up the street. His face cleared at once and broke into a smile of greeting as two laborers, armed with tools and a basket, appeared. He left them and went away. They were evidently plumbers and understood their business; for in almost no time at all the pipe was fixed and the plumbers were standing outside the rope looking about them. They did not have long to wait. The laborer who had dug the hole reappeared, and they went away. He proceeded with the greatest care, but very swiftly, to put back the earth and to ram it down with a rammer he had brought with him.

Just about the time he began to put back the gravel, a roller and engine appeared. Another laborer climbed over the rope and helped him with this last work in which hot tar was used. They laid back the piece of asphalt which had been cut out and put aside, and filled in the crack. Then they pulled up the