

H. Jacobs, 203 Great St. James street, this city.—The Montreal Electric Railway Company have purchased 57,000 feet of land in St. Ann's ward and will erect a power house capable of furnishing 6,000 horse power. The same company have also bought 5,900 feet on Craig street, and will erect a seven story building thereon, the same to be used as offices, waiting rooms, etc. The company expect to lay 70 miles of track during the summer.

HAMILTON, ONT.—Building permits have been granted as follows: Ontario Box Company rebuilding of the factory on Main street, cost cost, \$1,800; to Thomas Allen, three two-story brick houses on Bay street, between George and Main streets, and one two-story brick house on York street between Locke and Pearl streets, cost \$5,700.

KINGSTON, ONT.—Tenders are now being invited by W. Newlands, architect, until Monday, the 6th inst., for the erection of a residence in the town of Napanee, for Mr. C. S. Warner, barrister.—The promoters of the new hotel to be erected on Bostwick Island, near Gananoque, are expected to arrive in this city from New York in a day or two to make final arrangements for its construction.—Messrs. Power & Son, architects, will receive tenders until noon to-morrow (Friday) for the enlargement of the laundry and the furnishing of laundry plant in connection with the Kingston General Hospital.—The Mason & Risch Piano Company, have leased the building at 123 Princess street, and will make necessary alterations and improvements to meet their requirements.

TORONTO, ONT.—The Building Committee of the Public Library Board has been authorized to carry out the proposed alterations to the reference library, at a cost of \$3,800.—At a conference held last week between President Withrow, of the Industrial Exhibition Association, and others interested, Architect Hall, Surveyor Sankey and Commissioner Chambers were deputed to prepare a plan of a proposed new arrangement of the cattle, sheep and pig pens, and the estimates for drainage, roadway and new stables, for submission to the city council.—At the annual meeting of Marine Association held in this city recently, it was resolved that in view of the keen competition for the carrying trade to the seaboard via New York and the St. Lawrence routes, it was deemed necessary to build an elevator at Kingston with a capacity of 500,000 bushels, and that the Government should grant a site for it.—The City Engineer will be asked to report on the practicability and advisability of constructing a swing bridge between the city and the island at Queen's wharf, with a view of establishing an electric street railway service on the island.—M. Sheard, architect, Yonge street, will receive tenders until the 4th inst. for the erection of a building on McGill street.—A building permit has been issued to the Toronto Land and Investment corporation for additions to dwellings 884 98 College st., cost \$2,700.

OTTAWA, ONT.—We learn that the C. P. R. will open a grand hotel in the new ten story building to be erected by Senator Clemon at the corner of Rideau and Sussex streets.—Deputations from Southampton and Midland recently waited on the Minister of Public Works urging a grant towards the improvement of the harbors at the above named places.—The directors of the Montcalm Railway Company recently waited on the Government asking for the usual subsidy of \$3,200 per mile towards the construction of their road. It will run from St. Lin, in the County of L'Assomption, Que., through the county of Montcalm to Joliette.—E. F. E. Roy, Secretary Department of Public Works, will receive tenders until Monday, the 20th inst. for the erection of a court house, etc., at Regina, N. W. T. Plans may be seen at the above department, this city, and at the office of the Dominion Public Works, Regina.—A circular descriptive of the St. Clair and Erie canal for the construction of which an act of incorporation is sought by the Tilbury Canal Company, was distributed recently to the members of Parliament. The proposal is to cut through the south-western Peninsula of the Province of Ontario from Lake St. Clair to Lake Erie, a distance of thirteen miles. The estimated cost of the work is \$800,000.—The

sum of \$7,500 has been subscribed towards the building fund of the Y. M. C. A. A meeting will be held on Saturday next to select a site after which preparations for the erection of the building will be commenced.

WINNIPEG, MAN.—The question of a new court house will not be definitely settled until after the estimates have been passed. A decision on the plans has not yet been reached.—The Directors of the Industrial Exhibition Association have decided to expend the sum of \$12,000 on the erection of new buildings. A large addition will be built to the horse stable and cattle sheds, an addition to the west of the grand stand, and to the dairy building. A large platform will be built in front of the grand stand near the judge's building.—The Paper Mill Company, of Portage la Prairie, whose works were destroyed by fire recently, will probably not rebuild in that town, but are said to be looking for a suitable location in this city.—Premier Greenway having been refused assistance from the Dominion Government towards the erection of a normal school, in this city, has decided to ask the local House to vote the necessary amount for the purpose, probably \$5,000.—Mr. Browne, architect has prepared plans for a new building to be erected by the Bank of British North America. Mr. Bredin, the manager, states that the directors have approved of everything except the bank's office arrangement. The building would be erected this year, as it was impossible for the institution to remain much longer in their present place. The directors have approved of Selkirk stone with brown stone front and red pressed brick. It will be three stories high with a good basement. The location will be just south of Portage avenue on the east side of Main street and will have a frontage of fifty-four feet.

FIRES.

The Public school building at Sussex, N. B., has been destroyed by fire. Loss, \$8,000; insurance \$5,800.—The Rathbun Company's saw mill at Campbellford, Ont., was burned on the 23rd ultimo. Loss on machinery and building, \$6,000, which is said to be covered by insurance.—N. Wenger & Bros. flour mill and one storehouse at Ayton, Ont., was entirely consumed by fire last week. The loss is heavy, being in the neighborhood of \$40,000, on which there is an insurance of \$18,000.—A two-story rough-cast house at Owen Sound, Ont., owned by Mrs. James Lemon and occupied by Mr. Chas. Johnson, was burned recently. Loss, \$1,200; no insurance.—The residence of Mr. C. W. Grogan, on the London Road, St. Thomas, was burned last week. Loss on building \$2,000; insurance, \$1,500.—A disastrous fire occurred in the village of Watford, Ont., on the 23rd ultimo, destroying fourteen business places. The fire started in the centre one of seven brick stores owned by Dr. Dank, of London, the following places being destroyed: office of Dr. Alexander, veterinary surgeon; Drs. McLeay and Auld's offices; W. E. Fitzgerald's law office; Cook's cabinet warehouse; Alexander Saunder's law office; Fortune's block, consisting of four stores; residence of Mr. Mathew; Fortune & Wood's confectionery and bakery; Neff's feed, flour and seed store; Annet's block, consisting of two stores, one occupied by Mr. Annet for groceries, boots and shoes, the other by Mr. McKernacher for machinery and implements, Canadian Order of Foresters hall.—The Queen's Hotel at Millbrook, Ont., was badly damaged by fire on Tuesday. The building was insured for \$2,400, and the loss placed at \$1,500.—Mr. A. T. Bulmer's residence, near the corner of St. George and Lutz streets, Moncton, N. B., has been consumed by fire. Loss, \$1,000; partly covered by insurance.—The residence of Mr. G. Stevens, of Enniskillen, Ont., was totally destroyed by fire on Monday last. The loss is partly covered by insurance.

CONTRACTS AWARDED.

MONTREAL, QUE.—The Drummond McCall Pipe Foundry Company, of this city, have been awarded the contract for supplying the pipes and special castings for the new waterworks system at Pembroke, and Buckingham, Que.

BELLEVILLE, ONT.—The contract for erecting the new hotel has been awarded to Mr. George Wilson, of Kingston, whose tender was \$29,000.

The architects are Messrs. Gillen & Gillen of the same city.

KINGSTON, ONT.—Mr. Sinnott will build two brick houses on Johnson street this summer. The contractors for the work are: Mason work, T. Harrison; carpenter work, G. Cuch

HARRISTON, ONT.—Geo. Gray, architect, has awarded contracts for the erection of the following buildings: Implement warehouse, for Messrs. Frost & Wood; brick residence for John Scarff, cost \$2,000; residence for Rev. J. P. Doherty, cost \$3,500; brick school house at school section No. 11, Howick, cost \$1,900.

BRIGHT, ONT.—Messrs Whitehead & Fairfax, of Woodstock, have secured the contract for erecting the new cheese factory at this place.

GODERICH, ONT.—The contract for the proposed extension of the piers in the harbor, has been awarded to Messrs. Broder & McNaughton, of Ottawa, at the price of \$35,000.

DRUMHO, ONT.—The contract for the brick work of Mr. David Patton's new residence has been let to Mr. Charles Buck.

HOLLOW WALLS.

The subject of hollow brick walls is attracting considerable attention at present and is becoming more and more important. During the last ten years at least 80 per cent. of the external walls in Southampton were erected in this manner:

The method adopted is this:—Two 4½-inch walls are built, with an intervening space of 2 inches, and connected by means of light cast-iron clamps, shaped somewhat like the letter H, the two parallel bars being about 3 inches by 1 inch by ¼ inch, and connecting bar from ¾ inch to ½ inch diameter, and of such length as to allow the parallel bars to rest in the frog of the brick. There is a boss or moulding cast on the connecting bar in the centre of its length, which prevents the passing of moisture along the clamps. These clamps are usually built in every fourth course in height, and about 3 feet apart in length of the wall, care being taken to place them in each alternate tier in such a manner that the clamp in one tier comes over the centre of the space between the clamps in the next lower tier, or, as it may be termed, breaking joint.

CAPACITY OF PORTLAND CEMENT.

One barrel of Portland cement of 400 pounds has the capacity to cover, when used with one barrel of sand, 67 square feet, 1 inch thick; 90 square feet, ¾ inch thick; 134 square feet ½ inch thick. Two barrels of sand, 104 square feet, 1 inch thick; 130 square feet ¾ inch thick; 208 square feet ½ inch thick. Three barrels sand, 140 square feet, 1 inch thick; 187 square feet, ¾ inch thick; 280 square feet ½ inch thick. For cheapest good brick and stone mortar use, Portland cement, 1 part clean coarse sand, 6 parts; fresh slacked lime, ½ part. One barrel of Portland cement is sufficient to make enough mortar to lay 2,000 bricks with ¼ inch joint. This will set slowly. A very large batch can be made up at one time without fear of injury from setting.

TESTING WROUGHT IRON.

The best system of testing is that which is applied to the actual materials to be used in construction. Thus, for instance, if a certain number of rolled joists are required an additional number should be ordered, and specimens for testing, should be taken promiscuously from the entire quantity supplied. A certain number of rolled joists should be broken across to

see whether they conform to the calculated transverse strength, after which portions may be cut from the flanges or webs to be tested by simple tension and compression, the elastic limit being ascertained when possible. The same system should be pursued with plates and angles for built girders, and ties, struts, and rivets should be tested to the several breaking strains for which they have been calculated.

MUNICIPAL DEPARTMENT.

DECISION ON THE LETTING OF MUNICIPAL CONTRACTS.

(Continued from last week.)

Speaking of the powers of such corporations in Spaulding vs. Lowell, 23 Pick, 74, Shaw, C. J., says: "They can exercise no powers but those which are conferred upon them by the act by which they are constituted, or such as are necessary to the exercise of their corporate powers or duties, and the accomplishment of the purposes of their association. French vs. Quincy, 3 Allen, 12. This rule has often been affirmed in this State with the just qualification that such corporations may resort to the usual and convenient means of executing the powers granted; that is to say, as applied to this case, that the village in order to prevent or abate nuisances, might resort to such means as were usual and convenient. Mills vs. Gleason, 11 Wis. 510; Gilman vs. City of Milwaukee, 61 Wis. 592. 21 N. W. Rep. 640; Bell vs. City of Plattville, 71 Wis. 142, 36 N. W. Rep. 831; Meinzer vs. City of Racine, 68 Wis. 241, 245, 32 N. W. Rep. 139. The power to prevent and abate nuisances is an expressing grant of power, and not implied one; and "it has long been an established principle in the law of corporations that they may exercise all the powers within the fair intent and purpose of their creation, which are reasonably proper to give effect to powers expressly granted. In doing so, unless restricted in this respect, they must have a choice of means adapted to ends, and are not confined to any one mode of operation," and their discretion in this respect cannot be revised or interfered with by the courts, except where the substantive power is exceeded, or fraud is shown, or there is a manifest invasion of private rights. 1 Dill. Mun. Corp. §§ 91, 94, and cases cited; Benson vs. President, etc., 74 Wis. 32, 39, 41, N. W. Rep. 1017, Kelly vs. Milwaukee, 18, Wis. 83, 85; Schank vs. Mayor, 69 N. Y. 444; Spaulding vs. Lowell, 23 Pick. 71, 80. It was not necessary, therefore, that there should have been express power conferred on the village to build, or contract for building, the crematory. The village Board might contract for it as a means adapted to the end of preventing or abating nuisances, and as a health measure, and so within the general purpose for which the village was organized.

2. Upon the authority of Dean vs. Charlton, 23 Wis. 590, it is contended that, as the mode of building the crematory was a patented one, the contract was void, on the ground that there could not be fair competition in bidding for the work, which by the charter was required to be let to the lowest bidder. Rev. St. § 921. The case of Dean vs. Charlton was decided by a divided court, and there was a vigorous and able dissenting opinion by Chief Justice Dixon. The Legislature subsequently validated the assessments so held void in that case. Mills vs. Charlton, 29 Wis. 400; Dean vs. Borchsenius, 30 Wis. 236—in which cases the validity of this legislation was sustained. Since that time the direct question involved in that case, which was in respect to assessments against abutting lots for paving streets, has not been before the court; but in Dean vs. Charlton the majority of the court, after commenting upon the case of Harlem Caslight Company vs. Mayor, etc., 33 N. Y. 309, expressly disclaimed deciding whether the city might not have contracted for laying such pavement at its own ex-