

see that the matter is to be dealt with at once. We believe it could be readily demonstrated that a very large percentage of cases of infectious disease are due to the impurity of the milk supply in this and other cities.

Five patents have been issued to Elias E. Ries, a Baltimore electrician, for methods and apparatus for heating by electricity. By this system, which is said to be absolutely safe, dwellings can be supplied with heat from central generating stations, by the same conductors that supply the current for the incandescent electric lights. The patents include inventions for private heating from central stations and special methods for heating and lighting railway cars. Patents covering applications for domestic and industrial operations are still pending.

Alum is said to have power to purify water, and even to deprive it of most of the bacteria that it sometimes contains. That muddy water can be cleared by alum has long been known; but it is a comparatively recent discovery that a very small quantity of alum, so small that it is not injurious to drink the water that contains it, will rid the water of nearly all its bacteria. A Pennsylvania physician found that the water that was drawn by the people of a village where typhoid fever was epidemic was swarming with bacteria. Fifteen drops of it, when spread upon a suitable surface, were capable of forming 8,000 colonies of these microscopic vegetable germs. He added alum, in the proportion of half a grain to a gallon, and found that not only were the earthy and vegetable matters precipitated, that the colonies of bacteria were reduced from 8,100 to eighty, and these were of large size.

The National Association of Master Plumbers of the United States, which will shortly meet in annual convention, has compiled the following list of subjects for papers to be read on that occasion: "Does the plumber have the same confidence reposed in him as the family physician; if not, why not?" "How to promote the unity of the Associations?" "The disposal of drainage in inland cities?" "The Holly water system and its advantage for interior towns?" "The artesian well?" "Competition?" "Salt-glazed sewer pipe vs. cast iron pipe for interior drainage?" "The comparative advantages of lead or galvanized iron pipe for waste-pipes?" "Flushing of water-closets and urinals?" "The lighting of a country residence?" "Surface water drainage?" "Ventilating pipes?" "The drainage of a country house?" "American vs. imported earthenware?" "Hot-water and steam heating?" "The prevention of water-wages?" "Out-door closets in cold climates?" "The disposal of garbage?" "The lead-worker?" "History of the pump?" "Electricity and plumbing?" "Automatic flushing?" "The plumber as an inventor?" "Natariums?" "Air currents in buildings?" "The plumbing fraternity."

It has been well remarked that in the earlier tracery the form of the lights was most studied, while in the latter the outline of the tracery bar has been the most attended to. While the last merits its share of attention, it seems clear that, as a window is essentially an opening or a combination of openings, the forms of its lights, rather than of the lines which separate them, have the first claim upon consideration. The decorated variety seems to be the latest in which the claim was fully admitted, and it unites, perhaps, more than any other the beauty both of openings and of the lines.—*Sir G. G. Scott.*

Painters' cream is a preparation used by painters to cover up work they are obliged to leave unfinished for a length of time. They cover with it the parts already painted, and it preserves the colors, and can easily be removed when the work is again taken up. It may be made as follows: Take half an ounce, of the best mastic, finely powdered, and dissolve over a gentle fire in three ounces of nut oil. Pour the mixture into a marble mortar, with four drachms of powdered sugar-of-lead at the bottom of it. Stir this with a wooden pestle, and keep adding water in small quantities till the whole appears like cream and refuses to admit more water so as to mix freely.



Architects, Engineers, Builders, Owners and others are invited to send particulars of all kinds of construction work for consideration, for publication in this department. Please state location, character and cost, and names of person or persons controlling the work.

PARKHILL, ONT.—A water works project is on foot.

DORMANVILLE, ONT.—The town will put in waterworks.

FOREST, ONT.—A new English church is to be built this summer.

INGERSOLL, ONT.—The C. P. R. will build a new brick station.

WOODSTOCK, ONT.—A new post office building is to be erected here.

QUEBEC.—A new City Hall is proposed, and a site for the same has been offered.

PORT HOPE.—The Grand Trunk viaduct will be rebuilt to accommodate a double track.

GREENFELD, ONT.—A new Methodist church and an Agricultural Hall are to be built here.

CHICOUTIMI, QUE.—There is a probability that water works will be established here shortly.

WINDSOR, ONT.—The Town Council has accepted the offer of J. C. Patterson, M. P., of a free site for a new high school.

HAMILTON, ONT.—The \$30,000 necessary for the erection of the new Y. M. C. A. building has been secured, and work will be commenced at once.

The contract for the stone work of the G. T. R. shops at Stratford has been awarded to Mr. Wm. Gibson, proprietor of the Beamsville quarries.

OSHAWA, ONT.—Plans for the R. S. Williams & Son's new piano factory in this town have been prepared by architects King & Gosselink, of Toronto.

WINNIPEG, MAN.—The Salvationists will probably erect a barracks this summer. A company is seeking incorporation for the purpose of erecting a large brewery here.

ST. JOHN'S, N. B.—A syndicate of Americans have acquired 300 acres of land, near this city, and intend erecting large pulp works and cottages for their workmen, at a cost of \$300,000.

WARTON, ONT.—Architect J. C. Foster, Owen Sound, has prepared plans for a new Opera House to be erected here. The building will be furnished with all modern stage attachments and fittings.

The handsome dressed limestone building almost completed for the British American Bank Note Company, Ottawa, collapsed last week. The building cost \$46,000 and can only be restored at loss of \$10,000 or \$15,000.

LONDON, ONT.—The Chemical Manufacturing Company will erect a fireproof brick and iron building in place of that recently destroyed by fire. The new structure will cost about \$5,000. A 60 feet addition to the Michigan Central freight sheds is to be erected.

OWEN SOUND, ONT.—A new ward school to cost about \$5,000 is to be erected on West street. There will also be additions made to the Market street school.—The Disciples congregation will erect a larger building than the one they now occupy; the architect is Mr. J. C. Foster.

OTTAWA, ONT.—The Railway Committee of the Canadian Senate have adopted the bill authorizing the construction of the International bridge over the Detroit river.—A by-law to expend \$20,000 in public works has been nullified by the ratepayers.—The Department of Railways and Canals has received plans for the new railway bridge over the St. Lawrence at Montreal to be built by a joint stock company at a cost of \$200,000.

MONTREAL.—The Local Government will expend \$1,000,000 on a new courthouse to be erected on the DeBarny property facing the City Hall.—The Protestant School Commissioners, of Montreal, are preparing to build two new schools, one in Hochelaga Ward and one in St. Jean Baptiste Ward.—A large and handsome cut stone building five stories high with a mansard roof will be erected on the site of the building which was recently burned on the corner of St. Paul street and Jacques Cartier street.—Mr. L. O. David, president of the St. Jean Baptiste Society and M. P. for Montreal East, proposes the erection by the Society of a grand French-Canadian National Hall at Montreal, which will be the meeting place for important gatherings.

TORONTO, ONT.—The Canadian Bank of Commerce will erect a new building at the corner of Spadina Avenue and College street.—A public school is to be erected on the Island.—The St. George's Society have selected a site and will erect a building on the north

side of Elm street. Estimated cost, \$5,000.—Tenders are wanted by the Ontario Commissioner of Public Works for the necessary iron work for the new Parliament buildings. Particulars in advertisement in this paper.—Chief Engineer Parley, of the Public Works Department, recommends the dredging of the eastern entrance to Toronto harbor to a depth of 18 feet, and the protection of the sides of the channel to prevent it from again filling up. The estimated cost of the work is as follows:—Crib work, \$324,000; dredging foundations, \$50,000; dredging channels, \$15,000; stone in tanks, etc., \$25,000; contingencies, etc., \$50,000; total, \$464,000.—The plans for the new drill shed are being prepared at Ottawa, and tenders for the erection of the building will be called for shortly.—The Congregationalists of West Toronto Junction will ask for tenders for the erection of a new brick church to cost \$15,000.—The City Engineer has asked the Council for the site of \$205,513 to be expended on the maintenance, repairs and reconstruction of sewers, culverts, manholes and roadways.

The following building permits were issued from the City Commissioner's office during last month:—Thos. McDougall, a storey brick add., and one storey brick building, Sherbourne st., cost \$1,000; Robt. Sargent, addition to No. 774, 370, 238 Sherbourne st., cost \$400; Mr. O'Grady, 4 storey r. c. dwelling, Mississauga Ave., cost \$1,500; R. L. Fraser, mansard roof on 2 dwellings, Church st., cost \$4,500; F. G. Stewart, 3 storey brick dwelling, Queen's Park, cost \$12,000; brick Presbyterian church, cor. Dundas st. and Dovercourt Rd., cost \$4,000; brick Methodist church, Bathurst st., cost \$15,000; C. R. S. Dinnick, two pairs bk. houses, east side Borden st., near College st., cost \$16,000; T. M. Blythe, 6 detached 2 storey bk. dwellings, cost \$7,400; S. B. Freeland, a storey and attic bk. dwelling, Park Rd., cost \$3,500; Mr. Lawack, pair 2 storey bk. stores and stables, Grange Ave., and Huron st., cost \$5,500; E. E. Pike, 2 storey and attic bk. dwelling, Harbord st., cost \$3,700; Muirhead Bros., pair s. d. 2 storey and attic bk. dwellings, Lowther Ave., cost \$10,000; John Douglas, pair s. d. 2 storey and attic bk. dwellings, Harbord st., cost \$7,500; S. Mercer Adams, three 3 storey bk. stores and hall, McCaul & Queen sts., cost \$10,000; Vernal Transfer Co., bk. stables, York and Piper sts., cost \$5,000; Goodenough & Werts, galvanized iron elevator, Esplanade st., foot of Parliament st., cost \$25,000; trustees Western Congregational Church, bk. church, Spadina Ave., cost \$20,000; Brady & Bell, pair att. r. c. houses, Welton st., cost \$1,400; J. Wardell, pair att. r. c. storey and attic bk. dwell., Spadina Ave., cost \$5,500; trustees Spadina Ave. Methodist Church, stone and bk. church, cor. Spadina and College sts., cost \$65,000; Bertram & Co., bk. add., 114 Yonge st., \$4,000; trustees Dutch Reformed Church, bk. add., cost \$16,000; Dr. J. E. Graham, a storey and attic bk. dwelling, Church st., cost \$7,000; C. C. Witchell, 3 storey bk. store, Spadina Ave., near College, cost \$3,000; T. A. Lytle & Co., 3 storey bk. add. to factory, Richmond st. w., cost \$3,000; David Richards, pair a storey and attic bk. dwellings, McCaul st., cost \$12,000; Scott & Graham, a detached bk. dwellings, Dovercourt Rd., cost \$10,000; Wm. Dinneen, alterations at 224 and 226 Sherbourne st., cost \$2,400; J. L. Thompson, two 3 storey bk. stores, Lombard st., cost \$20,000; Victoria Rink Co., brick and glass rink, Huron st., cost \$30,000; Public School Trustees, a storey and attic bk. school, Duke st., cost \$20,000; R. Starr, two 3 storey bk. stores, Wellington st., cost \$45,000; Mrs. Gilbert, pair s. d. 2 storey r. c. dwellings and alterations at 146 and 148 Seaton st., cost \$5,500; A. Patterson, 7 mt. 3 storey bk. stores; Gloucester and Yonge sts., cost \$2,500; Mason & Risch, bk. add. to piano factory, King st. w., cost \$10,000.

Of Japanese raised leather paper designs for fillings, dadoes, borders and friezes, there is this spring an endless variety.

The erection of a reredos in St. Paul's Cathedral, London, is said to have caused great dissension in the ranks of the Evangelical party, some of whom defend such decoration, while others pronounce it unjustifiable.

There are friezes that look well in lighter tints than the wall color, but the general practice is to have the coloring stronger than the latter. One rule which should be applied to either mode is, that the forms should be distinct however vague the general wall design. Where mouldings of rooms are very heavy, grey and lightstone friezes of more than ordinary depth should be introduced to lessen the too heavy effect.

In the constructive arrangement of relief and chased work, mere tangles of leaves, branches, flowers and scroll work are not to be admired. The way to escape such floridity and exaggeration is by a geometric development of some feature of the form of the principal figure or figures in the other parts, with a certain amount of simplicity as opposed to bewildering labyrinthine windings.

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