

John Hamilton, three storey tenement bk. building on St. Martin st., cost \$3,400; G. Constantineau, three three storey stone front stores and dwellings corner Notre Dame and Aqueduc streets, cost \$12,000.

TORONTO, ONT.—A Com. of Revision will be held on the 31st inst. for the purpose of hearing appeals against the assessments for the proposed construction by the city of the following works: an asphalt pavement on Adelaide street, from Yonge to Church street; a macadam roadway on Pine Hill road, between Rosedale road and its western terminus; sewer on Preston avenue, from Northumberland street to Dupont street, estimated cost \$6,000.—Messrs. Strickland & Symons architects, Adelaide street east, are receiving tenders until 5 p.m. of the 24th inst. for remodelling a house, corner Dovercourt Road and Shannon street. Building permits have been granted as follows: Col. Grasset, 2 story bk. add. to 66 St. Patrick st., cost \$1,000. T. Buley, erection of 2 story bk. dwelling, No. 1 McGee st., cost \$1,500.

FIRES.

The carding, saw and shingle mills of Mr. Chamberland, at La Patrie, Que., have been totally consumed by fire. No insurance.—The plumbing establishment of John Date, Craig street, Montreal, was damaged by fire recently to the extent of \$20,000, fully covered by insurance.—John Mather's summer residence at Kewatin, Ont., was destroyed by fire recently. Loss, \$3,000.—A Kelly & Co.'s extensive flour mills at Brandon, Man., were entirely consumed by fire on the 17th inst. The loss is estimated at \$55,000 and the insurance \$24,000.—A large three-story brick building on Antoine street, Montreal, occupied by the Montreal Steam Laundry Co., was burned to the ground on Friday last. Total loss, \$75,000. The building was owned by W. B. Smith and was insured for \$7,500.—William Dunbar's saw and shingle mill at Stirling Falls, Ont., was destroyed by fire last week. Loss \$2,100; insurance \$600.—The residence of Rev. Mr. Wilson at Iona, Ont., was burned on the 19th inst. also the residence of County Constable D. McIntyre.—Buildings on Bay street, Toronto, owned by Mr. Goodhall, of Woodbridge, and valued at \$3,000, were destroyed by fire on Sunday last.—N. Bawlf's grain elevator at Winnipeg, Man., has been destroyed by fire. It will be rebuilt.—Thomas Chew's shingle mill at Midland, Ont., was destroyed by fire on Monday last. Loss \$3,000; no insurance.—The Tourville Saw Mill Company's stables and about 30 dwellings at Pierreville, Que., were burned a few days ago. The loss is about \$35,000.

CONTRACTS AWARDED

ST JOHN, N. B.—John Sime has secured the contract for the erection of a new brick church, 40 x 50 feet in size.

QUEBEC, QUE.—The contract for coal for the British vessels has been awarded to Crawford & Co. and for the Federal Government buildings to Madden & Ellis.

CALGARY, N. W. T.—The Hospital Building Committee has accepted the tender of McComb & Waugh for the erection of the new hospital. Contract price, \$9,000.

WOODSTOCK, ONT.—The Hospital Building Committee has accepted the tender of Thos. McClay for the erection of the building, Whitney Bros. for plumbing, and the Pease Furnace Co. of Toronto, for heating. The total amount of the contracts is \$11,775. The building is to be completed by the 1st of January, 1895.

TORONTO, ONT.—Contracts for interior work on the Main block of the new Union Station have been awarded as follows:—Plastering, W. J. Hynes; roofing, galvanized iron and copper work, Douglas Bros., marble work, J. S. Gibson, painting and glazing, J. McCausland. A sub committee of the Board of Works has recommended the acceptance of the tender of

Burns & McCormack for a 12-foot granolithic sidewalk on Queen street east, north side, between Yonge and Berkeley streets, at \$1.91 per lineal foot.

HAMILTON, ONT.—The Hospital Committee having discovered that a mistake had been made in awarding the contracts for the erection of the House of Refuge, a special meeting was held to straighten out the matter at which the following tenders were accepted: carpentering, J. Jacques, \$6,000; masonry, J. G. Hahnan, \$5,388; steam heating, Adam Clark, \$1,900; plumbing, G. A. Truman, \$774; slating, J. Findlay & Son, \$1,147; galvanized iron work, Irwin & Son, \$640; electric lighting, Lowe & Farrell, \$215; painting, John Goodfellow, \$442; plastering, H. Thomas, \$873; total \$17,379.

MONTREAL, QUE.—T. A. Morrison & Co., have been awarded the contract for supplying 800,000 Laprairie pressed bricks for the new Montreal incinerator; olive green Miramichi stone for the Merchant's Bank of Halifax branch on Notre Dame street; ornamental terra cotta for Montreal Street Railway Co.'s offices, and 300,000 Laprairie pressed bricks for Messrs. Robin & Sadler's new factory.—Messrs. Brown and McVicar, architects, have awarded contracts for the Masonic Temple on Dorchester street as follows: Excavation and masonry, J. H. Hutchison; brickwork, Amos. Cowen; terra cotta, Don Valley Pressed Brick Works; carpenter and joiners' work, George Roberts; plastering, J. W. Cook; painting and glazing, Castle & Son; roofing, Geo. W. Reed; ironwork, Dominion Bridge Co.; electric wiring, Royal Electric Co. Plumbing, heating, and ventilation not let. Same architects have also awarded contracts for two three storey stone front stores and dwellings, on Notre Dame st. for estate Ogilvie as follows: excavation and masonry, J. H. Hutchison; brickwork, T. W. Peel; carpenter and joiners' work, L. Paton & Son; plastering, J. W. Cook; painting and glazing, Geo. S. Kimber; plumbing, J. Ballantyne; roofing, Montreal Roofing Co.; iron work, R. Donaldson & Son; electric wiring, Royal Electric Co.—Mr. W. McLea Walbank, architect, has awarded contracts for three three storey stone front stores and dwellings on Notre Dame st., for Mrs. Malone as follows: excavation and masonry, W. J. Turner & Co.; brickwork, D. Marsan; plastering, John McLean; painting and glazing, J. B. Owens; iron work, Dominion Bridge Co.; plumbing, Jas. Booth.—Messrs. Perrault, Messard & Venne, architects have awarded the contracts for an electric light plant for the Seminary of Philosophy to the Royal Electric Co.—Mr. C. St. Jean, architect, has awarded the contract for a new store facade to Joliette's Catholic church to M. Dostaler.—Mr. H. R. Falbord, architect, has awarded the contract for additions and alterations to stores on St. Lawrence st. for Messrs. Granger Freres to N. Lavoie.

NEW COMPANIES.

GANANOQUE, ONT.—Gananoque Buggy Co., applying for incorporation, capital stock, \$50,000.

OWEN SOUND, ONT.—Georgian Bay Cement Co., applying for incorporation, capital, \$95,000; to manufacture cement, etc.

MONTREAL, QUE.—Dominion Rubber Reclaiming Co., seeking incorporation; capital stock, \$100,000; to manufacture rubber goods; applicants, Wm. Clendinning, Wm. Curry, W. T. Costigan, and others.

CALGARY, N. W. T.—Sheep Creek Irrigation Co., seeking incorporation; A. Rodgers, H. McCrae, J. Rodgers, and C. C. McDonald.

Eugene McCafferty, contractor, Nanaimo, B. C., has assigned.

Joseph and J. E. Roy have formed a partnership in Montreal to carry on business as tinsmiths, under the style of Roy, Fils & Co.

HOW DUN-COLOURED TILES ARE MADE.

Nothing looks better on a roof than the dun-coloured Roman or treble tiles, which are used so much in the West of England, especially when they are interspersed with the red variety. The dun, or black colour, is not as a rule produced by glazing, but by the application of a simple slip-wash containing powdered manganese di-oxide.

The method of colouring tiles pursued in Somerset is as follows: The tiles, after being made, are laid in the shelving until they are quite dry, having in the interval been duly "thwacked" or dressed when in the "handle-able" condition. A tub is now brought into the shed, in which has been prepared a slip, of the consistence of rich milk, from finely ground tile-clay and powdered manganese. A board lies across the tub on which a tile is rested edgewise, so that when a bowlful of the slip is poured over the upper surface, the superfluous liquid falls back into the tub. One wash is usually sufficient, and the tile is put back to dry. The drying is so rapid, that in a short time the goods may be burned in the kiln. This treatment produces a dun-coloured stain which is quite permanent.

A correspondent describes a curious method of taking foul air out of a well which he saw: "The well was to be cleaned, but the man that took the job was afraid to go down until he had ascertained the quality of the air at the bottom. He let down a lighted candle, and when it descended to about 6ft. of the bottom it went out as suddenly as though extinguished by a whiff of air. That was all he wanted to know. He was then sure that the well had poisonous gas in it, and took a small umbrella, tied a string to the handle, and lowered it open into the well. Having let it go nearly to the bottom, he drew it up, carried it a few feet from the well, and upset it. He repeated this twenty or thirty times, with all the bystanders laughing at him, then again lowered the light, which burned clear and bright even at the bottom. He then descended to explain that the gas in the well was carbonic acid gas, which is heavier than air, and therefore could be brought up in an umbrella just as though it were so much water. It was a simple trick, yet perfectly effective.

MUNICIPAL DEPARTMENT.

DETECTING WASTE OF WATER AT TORQUAY, ENG.

The towns of Torquay, St. Mary Church, Newton Abbot, and Cockington are included in the district of supply, having a population of about 45,000. In Torquay are two service reservoirs, one 250ft. above Ordnance datum, the other 400ft. From these are duplicate service mains running along the principal streets; the branch street service pipes are connected to both of these mains, and by an arrangement of stop-valves any street can be supplied through one pipe while the remainder is being fed through the other. Thus, the low level, or Chapel Hill division of Torquay proper, is divided into as many as 42 districts, any one of which can be supplied by what for the time becomes an independent pipe direct from the reservoir. The Deacon's meter is fixed in a small house at the commencement of the service main, on a by-pass, and in that way the isolated street can be supplied through the meter. The diagram, instead of being attached to the drum at the top of the meter, is altogether separate therefrom; the disc rod is attached by a wire to one end of a beam fixed to roof of the meter-house, the other end of the beam being connected also by a wire to the levers attached to the waste pen, great care having been taken to prevent friction in every part. The diagram paper is moved by clockwork and weights at one of two speeds, either at one-half inch to a minute of time or at one-twelfth inch to a minute of time. An automatic alarm arrange-

ment changes the speed from slow to fast and fast to slow at any desired hours (the reason for changing the speed to prevent the waste of paper); as a rule it is set to change to fast about 11 o'clock at night, and back to slow about 3 o'clock next morning, the night's work being done between those hours. About 1/2 in. from each side of the diagram paper the time pens are fixed (in duplicate, that should one cease working the other would record the time), connected electrically to the minute hand of an accurate clock, which actuates at the completion of each minute the magnets of the pens, moving them at right angles with the edge of the paper, marking a little dash thereon, and by clockwork distinctive marks are made to show every tenth minute and each hour; thus the time is recorded on the diagram. The waste pen has the same length of motion as the meter piston, drawing a continuous line on the diagram paper, indicating the quantity of water flowing at any time in the same manner as on the drum paper generally used in connection with Deacon's meter, the time pens showing the exact moment when any change in flow takes place. This mode of dealing with the waste may thus be described: Having isolated the district to be examined and directed its supply through the meter, the turncock and his assistant, having a watch corrected to the meter clock and a book containing the list of houses, commences at 12 o'clock at night to turn off house after house in the street under examination, carefully noting the stopcock of each house is closed, allowing not less than one minute between each house; as a rule this is done at the commencement of the minute in order that the change of flow indicated by the waste pen shall be opposite the minute mark on the margin of the diagram paper. When all the house services are closed, the sluice-valve at the junction of the pipe with the main is shut, that being also noted, that the waste outside the house stopcocks in the street mains may be recorded on the diagram. The length of main often interposing between the meter and the district operated upon causes an oscillation of the meter disc and waste pen from the frictionless character of their connections. These oscillations die out rather slowly, and are sufficient to make a leak manifest, when almost too small to be distinguishable on the vertical scale of the diagram. The diagram and turncock's book are examined next day, and a list of the leaky houses given to the inspector to search out and report the cause of the leaks, it being also his duty to see and report that the leaks are repaired. The waste of the whole district can be determined in two nights by supplying one district or street after another from the main fed through the meter. Thus, supposing meter main be "A," the other "B." "B" is supplying all the streets. Turn No. 1 district through the meter for five minutes (it has been found in practice it takes that time for the oscillation to die out), by shutting stopcock No. 1 "A" the waste will be recorded on the diagram; then open "A" cock of No. 2 district, and close "B" cock, allowing it to remain charged through the meter for five minutes as before, then shut "A" cock, thus recording the waste of No. 2 district; and so on, throughout the whole number, the time of the successive openings and shuttings of the different valves being carefully noted in the turncock's book. Experience has shown that the above is a good course to follow to discover the most wasteful district for house-to-house examination, it having been found that some districts need only occasional supervision, while others require constant attention. The advantages of this mode of dealing with the waste, which have been fully realised here, are (1) that it is only necessary to inspect those houses where leaks are known to exist; (2) that defects such as could not be detected by the most careful house-to-house inspection of fittings are found; (3) that those consumers who keep their fittings in good order are not annoyed by the visits of the inspector; (4) that the working expenses are small.