

Company are receiving tenders for the erection of six new grain elevators in different parts of the province and for the enlarging of their flour mill in this city. The tenders will be opened on the 15th inst.—The Northern Elevator Company are also said to contemplate erecting ten or twelve new elevators throughout the province and a large one in this city with a capacity of 200,000 bushels.

FIRES.

The Carding Mill at Grondines, Que., owned by Irene Trotter, was destroyed by fire last week. There was little insurance on the mill. The residence of Wilson Montrose, at Kingsville, Ont., was burned on the 27th ultimo; partially insured.—A large flour mill at Thedford, Ont., owned by James Calvert, was consumed by fire a few days ago. Loss, \$7,000; insurance \$6,000.—The Presbyterian church at Woodville, Ont., was damaged by fire recently to the extent of \$1,500. The loss is covered by insurance.—A. E. Alexander's shingle mill near Campbellton, N. B., was burned last week. Loss, \$2,000; no insurance. The mill will be rebuilt.—The residence of Andrew Hayes, on Colborne street, London, was destroyed by fire on the 28th of December. Total loss, \$2,000; partially insured.—Fire at Maple Creek, Man., on the 30th ultimo, destroyed the residence of John Dixon.—The Methodist church at Canning, N. S., was damaged by fire last week to the extent of \$2,000; covered by insurance.

CONTRACTS AWARDED.

CHATHAM, ONT.—The Bell Telephone Company have been awarded the contract for an electric fire alarm system for the town, to cost \$1,210.

TORONTO, ONT.—Messrs. Darling, Sproatt & Pearson, architects, have awarded the contract to the Dominion Ornamental Iron Co., of Montreal, for elevator car and enclosure for the Imperial Bank building in this city.

LISTOWELL, ONT.—Messrs. Binning & Baxter, architects, of this town, have awarded the contract for the erection of a Presbyterian church at Whitechurch, to J. H. Gay, of Dungannon, Ont. The building is to be of white brick, with composition stone trimmings, leaded cathedral glass windows, hot air heating, modern style of seating, etc. Frink reflectors to be used for lighting.

ANTIQUITY OF THE CARPENTER'S PLANE.

A very interesting discovery has been made at the Roman city of Silchester. The excavators came across a dry well which, on being explored, proved quite a little museum of antiquity. Some fifteen feet down, a Times correspondent says, the diggers found an urn-shaped pottery vase about a foot in length, quite intact, and curiously enough protected by lumps of chalk built around it. The vase, which probably originally contained some precious substance, was, however, quite empty. Above it were deposited a great number of iron implements, most of which were in a wonderful state of preservation. They seem to have been the tools of a carpenter and coppersmith, or silversmith, with some miscellaneous objects of blacksmith's work thrown in. The principal specimen is a carpenter's plane of quite modern type, although unquestionably more than five hundred years old; three or four axes, retaining their fine cutting edges, and still quite serviceable; a number of chisels and gouges, of all shapes and sizes; hammers, adzes, saws, files, etc. In the smith's department may be specified a brazier for burning charcoal, quite complete; two or three anvils of different sizes and shapes; a fine pair of tongs, adapted for lifting crucibles; a curious tripod candelabrum lamp, or candlestick; and several other curious objects, the precise use of which has not yet been determined. In addition there are several large bars of iron, a couple of plover's

and a broken sword. Probably more will be found deeper down in the well. This is undoubtedly the most important find at Silchester since the discovery of the bronze Roman eagle, now at Strathfield-saye, some time ago.

THE WORTHINGTON PUMP.

The firm of John McDougall, proprietor of the Caledonian Iron Works, Montreal, announce in this issue of the CONTRACT RECORD that they have been appointed by Messrs. Henry C. Worthington & Co., of New York, agents and manufacturers in Canada of the celebrated Worthington pumping and hydraulic machinery. This machinery ranks among the highest in point of economy and efficiency. The Canadian agency has been placed in most capable hands; there is thus a guarantee that the machinery manufactured in Canada will be fully up to the standard reached by the original manufacturers.

"APPRECIATION OF THE RECORD."

Mr. J. W. Holmes, Town Clerk of Dunville, Ont., writes: "I am very much pleased with the CANADIAN CONTRACT RECORD, and greatly appreciate the articles in the 'Municipal Department.'"

RUBBER-HEADED NAILS.—Rubber stud blocks are being experimented with on the steps of cars used by the Glasgow and Southwestern railroad, with a view of testing their suitability as a preventive to slipping on entering and leaving the car. These blocks consist of inch square iron plates with rubber on one side and nail points on the other. They are readily driven into the wood.

MUNICIPAL DEPARTMENT.

UNIFORMITY IN PAVING BRICK SPECIFICATIONS.

Writing on this subject in the Clayworker, Mr. Daniel W. Mead says: There is really comparatively little known about the essential qualities of paving brick which can be set down in specifications in such a manner that an engineer or inspector, unfamiliar with the material, can readily decide where the limit, between a paving brick which is just good enough for use, and one which is a little too poor for use, should be drawn. Unquestionably both classes of brick are usually taken to some extent at least, from the same kiln.

All know that a first class paving brick is a brick which placed in the pavement will stand the traffic for a long term of years without disintegration from frost or traffic. The difference between an unquestionably good and an unquestionably bad brick is wide and easily defined. The limiting case is where the difficulty arises.

The question which remains to be answered is then, how, in the limited time to be devoted to the construction of a pavement, can those qualities be unquestionably developed. The writer cannot answer that question at this time and believes it is at present unanswerable. Will chemical analyses, or physical tests for compression, transverse strength, absorption or abrasion give the necessary information? Unquestionably they will in the extreme cases, but not at present in the limiting case; although they may ultimately do so when their relation to each other and to the wearing qualities of the brick are better known.

What is necessary is to show the relation under various circumstances between the tests which can readily be made and the actual staying qualities of the brick.

The test for compressive and transverse strength undoubtedly has a value in determining the qualities of a brick, but just what relations there are between either one and durability is unknown. These qualities at present can hardly be claimed to define the limiting case. Neither can absorption be so considered. The writer

is familiar with brick, which, while absorbing four or five per cent. of water, will still withstand frost; while brick of a different manufacture and made from a different clay, will go to pieces with frost if they absorb two or three per cent.

The common rattle test is perhaps of more value than any other, if rightly conducted, as it comes nearer the actual condition of use. As often conducted, however, it gives little information. It is usually made under such widely varying circumstances as to be of no value whatever, as a means of comparison with other tests at other places. These tests are all of value as indicative of the general character of the brick but do not define the limiting case. Uniformity in making these various tests, whatever the specifications might be, or however much they might vary, would certainly accumulate much valuable data which could in such case be compared. Much definite information would thus gradually be accumulated and definite conclusions could be ultimately drawn.

CONSTRUCTION OF SMOKE FLUES IN BUILDINGS.

The municipal authorities of Atlanta, Georgia, have just passed an ordinance regulating the building of stove flues within the city limits, which might be followed with advantage by some other places in the country. The law is to the effect that all stove flues hereafter built in the city of Atlanta shall be constructed of hard burned or fire clay brick, lined inside with fire clay pipe, and so placed as to rest on iron or other non-combustible material, no wood whatever being placed in them. A section of the city code is amended so as to render any owner, builder or contractor violating the provisions of this section of the ordinance liable on conviction to a fine not exceeding \$100 or imprisonment for not more than 30 days for each offence. In commenting upon this ordinance the Southern Architect states that the law is of vastly more than local interest, as it shows a disposition to improve methods of building, and with better methods of construction will be sensibly lessened the fire risk to life and property.

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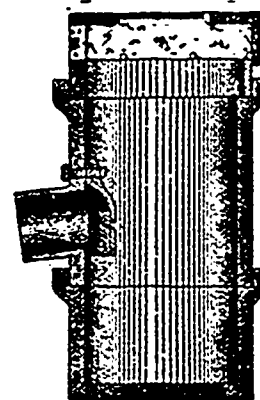
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