

MUNICIPAL ENGINEERS, CONTRACTORS, AND MATERIALS.

forbidding the taking of private property for public use without compensation. The property injured is not "taken," but merely suffers a consequential injury.

IN RE PRITTE AND CITY OF TORONTO.
 - The Court of Appeal for Ontario has decided that a municipal corporation has power to expropriate lands for the purpose of constructing a sewer, and also has power to expropriate, as incident thereto, the right of entry thereto for the purpose of maintenance and repair. The date of the passing of the by-law defining the lands and the nature of the rights required is the date in relation to which the compensation should be assessed.

LASTING QUALITIES OF PAVEMENTS.

Who can tell how to estimate the lasting qualities of a pavement? says Louis H. Gibson, in *Paving*. What are the fixed conditions? The width of the street, the number of vehicles which pass over it, their speed, their character, the number of hour's service in a day, the way in which the pavement is cared for, all are varying, all have to do with the life of the pavement. We say a pavement lasts five or ten years. Would it last five or ten years some place else? The physical strain of service as outlined above, the weather, are hardly to be found alike at all times. Take, as an instance, the travel in Paris. Rue de Rivoli, 23,000 vehicles and 42,000 horses in twenty-four hours; Avenue de l'Opera, 29,000 vehicles; Boulevard Sebastopol, 46,000; Boulevard des Itiens, 30,000; Rue Lafayette, 12,000. One would not think from this that they have had quite as much trouble with Rue Lafayette as any other street notwithstanding the fact that the travel is apparently lighter than on the other streets named. It is light in one sense and heavy in others. Rue Lafayette is a relatively narrow street. The travel is concentrated. Again, it is heavy; that is, each particular vehicle will average much more in weight than those on the other streets named. Taking the weight of the vehicle, the width of the street and all into consideration, it is altogether possible that its covering has to submit to more strain per square foot per hour than that of the other streets named. It is hardly possible to affirm this positively because of the general difficulties of the problem as outlined above. Yet results on this street and the general opinion of experts indicate such a statement to be true.

An option to buy the works of a water company at an appraised valuation is one of the most valuable rights a growing city supplied by private waterworks can possess, and one which it should surrender under no conditions. This is true because: (1) Every growing city will sooner or later desire to own its works, and (2), a purchase option insures a city a possible good water service, either by quickening a company's desire to give such service or by permitting a city to buy and operate the works itself.—*Engineering News*.

The municipal clerks of the County of Oxford have formed themselves into an association for the consideration of municipal affairs. Mr. E. Cotly, of Embro, is the Secretary.

THOROLD CEMENT

WELLAND CANAL ENLARGEMENT.
 RESIDENT ENGINEER'S OFFICE,
 WELLAND, April 17th, 1884.

JOHN BATTLE, Esq., Thorold.

Dear Sir, - Yours of yesterday, relative to Thorold Hydraulic Cement, is received. In reply, I beg to say that my tests of the Thorold Hydraulic Cement have extended over a period of twenty-eight years, and have been on a large scale, as exemplified in the locks, bridges, culverts and other masonry on the Welland Canal and Welland Railway, and that the record, which has been invariably satisfactory, is to be found in examination of the structures. The necessary tearing down of masonry and concrete, during the Welland Canal Enlargement, has afforded abundant evidence of the reliability of the Thorold Hydraulic Cement, both in masonry and concrete, and above and under water. I desire no better cement for the class of work referred to.

I am, dear sir, yours truly,
 W. G. THOMPSON,
 Resident Engineer.

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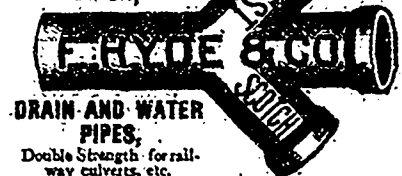
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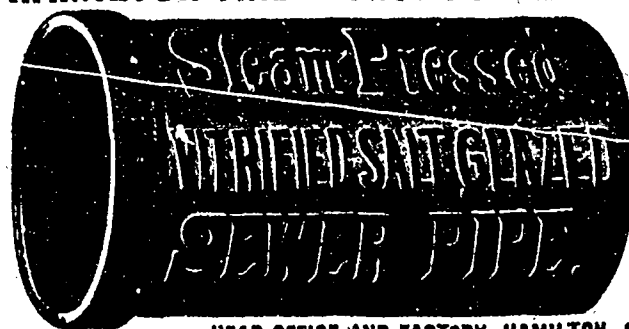
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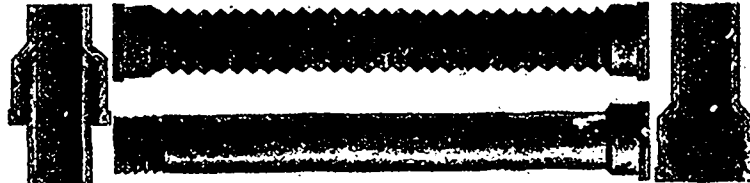
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