MUNICIPAL DEPARTMENT

TO MUNICIPAL OFFICERS.

The CONTRACT RECORD is desirous of publishing, as far as possible, advance information regarding projected works of construction in all parts of Canada, such as sewerage and waterworks systems, railways, street pavements, public and private buildings, etc. Municipal officers would confer a favor upon the publisher by placing at our disposal particulars of such undertakings which are likely to be carried out in their vicinity, giving the name of the promoter, character of the work, and probable cost. Any information thus furnished will be greatly appreciated.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

EWING V. THE CORPORATION OF THE CITY OF TORONTO.—The plaintiff sued to recover damages for injuries sustained through alleged negligence of the defendants in allowing a sidewalk to be so out of repair as to be unsafe for the use of pedestrians. The case is of special importance to merchants and manufacturers, in that the complaint was that the hinges of an iron trap over eight feet in length were so affixed as to rise from an inch to an inch and one-sixteenth above the level of the sidewalk. The door was a double one and used for the purpose of access to the cellar of abutting premises. The plaintiff, who was well aware of the existence of the hinges, stumbled against them and injured himself. It was held that the facts did not render the corporation liable for damages.

ATKINSON VS. CITY OF CHATHAM.—In December, 1897, a team of horses, driven by a son of N. H. Stevens, who was accompanied by Miss Atkinson, ran away in the city of Chatham. The sleigh was upset, Miss Atkinson's leg broken, and the horses and sleigh injured. Action was brought by three plaintiffs against the town to recover expenses and damages. Mr. Stevens, Miss Atkinson, and her father, Mr. Geo. R. Atkinson, were plaintiffs, and their plea was negligence of defendants in not keeping King street in proper repair. Mr. Justice Ferguson has decided against the city. He finds that the street was out of repair by reason of a certain pole or post planted in it, and that the corporation had notice and knowledge of it, and that it was the cause of upsetting the sleigh. The municipality claimed relief over against the Bell Telephone Company, who had placed the pole where it was, but the learned judge held that they were not entitled to such indemnity, because the pole was planted under the superintendence and with the sanction of the corporation. The defendants are to pay the plaintiff, George R. Atkinson, $120 damages, the plaintiff Nathan H. Stevens $125 damages, and the plaintiff Mary Louisa Atkinson $750 damages. They are also to pay the costs of the plaintiffs and of the Bell Telephone Company. The decision is a warning to corporations that they are responsible for the roadway and for the poles on it, and that they should secure bonds of indemnity from the companies using the streets.

TESTS OF CALCIUM CARBIDE.

Inspector McDevitt, of the Philadelphia Fire Underwriters' Association, who has been carefully investigating both calcium carbide and its product, acetylene gas, has submitted a report to members of the association as to the danger of that chemical when stored in warehouses or if accidentally brought into contact with water when in transit. He says:

That high temperatures are attained to the generation of acetylene gas from calcium carbide is already well known, especially in generators where the carbide is either immersed in or sprayed with water; several hundred degrees Fahr. being sometimes produced under certain conditions by the action of the water on the lime, which is one of the component parts of calcium carbide, in the same manner as fire has been known to have been produced by the slaking of ordinary lime. To convince some parties interested in the sale of the carbide, who doubted the possibilities of generating such high temperatures except when confined in an air tight vessel, I made the following test in the presence of the interested parties on June 18, 1898, viz: Fifty pounds of carbide were bought in the open market, and one-half of same placed in a half-barrel, open at one end, and at 8 a.m. these twenty-five pounds were soaked with water and the gas allowed to escape; then the balance of the carbide (twenty-five pounds) was placed on top of the first and pressed down—the intention being to produce conditions which would probably be met with should carbide on storage or under shipment become wet from the bottom, but the whole quantity not water soaked. Six hours later, at 2 p.m., smoke from burning wood was found to be issuing from between the staves of the barrel, and at 3 p.m. the barrel staves were in flames at the bottom. After smothering the fire, it was discovered that the bottom of the barrel had been entirely consumed. Inasmuch as the carbide was also found to be red hot, it is evident that the same results would have occurred had the carbide been contained in a metallic case surrounded with wooden outer jacket (as is commonly used in shipping same) or resting on floors or woodwork, if through any break in the case it had been subjected to attack by water. As such conditions are possible in warehouses and vessels, or wherever a generator is used, it is evident that the laws for the handling of this material are at the present time entirely inadequate.

NEW ROAD MATERIAL.

Roads almost as smooth as asphalt, capable of carrying any kind of country traffic except traction engines, at an annual cost of about 15 cents per square yard, is the proposition made to road building engineers by Mr. A. H. Campbell, city surveyor of Canterbury, England.

According to the Albany Journal, Mr. Campbell has been experimenting with what he calls tarred macadam, for a number of years, and his experience has been most satisfactory.

The materials used are broken stone and tar, and when properly prepared and laid, they make a roadbed as hard as stone, practically weatherproof and very smooth. The cost is $1.08 per square yard, and the life of the road about seven years, which would make the annual cost 15.4 cents.

In describing the building of such a road, Mr. Campbell says that the temperature of the stone when the tar is applied should be such that the palm of the hand can bear it with comfort. If it is too hot the tar will be destroyed as a binder, and if too cold it will be used so thick as to soften in very warm weather. The hot stone, when ready for mixing, is screened into material of three sizes, one to two inches for the body, one-half to one inch for the intermediate coat, and one-quarter to one-half inch for the top dressing. The coarsest material is used in a layer three to four inches thick; the intermediate size forms a coat of about three-fourths of an inch, and the top dressing is used in the thinnest layer possible, with a view to filling all interstices. Afterwards a dressing of quarter-inch and smaller granite screenings is scattered broadcast, and the traffic at once allowed on the road to work this top dressing into the tarred material. Each of the layers is rolled separately with a ten ton roller.

The building of tarred macadam roads in the resident portions of cities might prove more satisfactory than anything but asphalt, and would be far cheaper than that pavement.