

## EDITORIAL COMMENT.

The council of a thriving Western municipality announce that they will erect a jail and storehouse in one building at a cost of \$20,000, but omit to state what preparation has been made to preserve the "long termers" during the storage period.

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The executive of the Ontario Good Roads Association announce that the annual meeting will be held on February 26th, 27th and 28th, in the Machinery Hall of the Toronto Exhibition grounds. A Good Roads exhibit, showing different classes of road-making machinery and samples of various roadbeds, will be held at the same time. This exhibit should be an added stimulus to this already very successful Association. No doubt, the different manufacturers will be interested in making the exhibit a success.

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In this issue, under "Letters to the Editor," will be found certain correspondence in connection with an editorial which appeared in our issue of November 7th on "Protection of Canal Lock Gates." Our impression was, at the time this editorial was written, that the Gowan Safety Device had been in use on gates other than Lock 24 of the Welland Canal. We are glad to note Mr. Gowan's correction. The letter from Mr. W. H. Sullivan, Superintending Engineer of the Welland Canal, corroborates Mr. Gowan's statement that the gates at Lock 24 have had some severe tests.

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In our last issue, November 21st, the City Commissioners of Edmonton advertised for sealed tenders for "Paving for 1913" for approximately 400,000 square yards of asphalt and bitulithic pavement. The Commissioners of Edmonton cannot be too highly congratulated for their progressiveness in this matter. The only sure way of getting a paving contract started early in the spring is to call for tenders in the preceding fall. Far too often paving work is just being started in September or October, with the result that the pavements are always at least a year behind. If more city engineers would follow the move of the City Commissioners of Edmonton there would be less trouble in the letting of contracts for the summer's pavements, the work would be better done, and it would be finished on time.

## LETTERS TO THE EDITOR.

## PROTECTION OF CANAL LOCK GATES.

Sir,—Your article in last week's issue of The Engineer re "Protection of Canal Lock Gates," is timely and appropriate, as far as the necessity for the adoption of some efficient device for the protection of lock gates against the impact of vessels is concerned.

In this article you describe the "Gowan safety device" and the "chain fender system," the former as applied on the Welland Canal, the latter to be on the Panama. While you admit the Gowan safety device has been very successful on the Welland in cases of small speed, you conclude that, from the number of accidents recently occurring, some more suitable device is necessary, and suggest the "chain fender," as to be applied on the Panama.

Admitting that the intention of your article is to be fair to both devices and in the interests of navigation, the writer must take exception to your conclusion, as it is based on

a wrong idea, viz., that the gates on the Welland Canal are equipped with the Gowan safety device. This is not so.

In the description of the Gowan safety device, supplied you by Mr. J. L. Weller, now engineer-in-charge of the new Welland Ship Canal, and appearing in your issue of July 4th, 1912, the words, "as applied to the existing gates of the Welland Canal," are incorrect, and may have misled you. This device has, so far, been installed on one lock only on the Welland, viz., Lock 24, one of the most dangerous points on the canal, and has proved by three actual tests to be a decided success, not only against a light impact, as you describe, but against a vessel under full steam, as in the case of the "Harry Packer," which snapped three cables and cut an oak wale on the gate, 6 x 10, completely in two with her stem. Had the Welland Canal lock gates been equipped fully with the "Gowan safety device," the accidents you record would have in no case happened, and your article in reference would have been uncalled for.

The Engineer can get full corroboration of the above statements as to the merits of this device under actual tests from the Department of Railways and Canals, Ottawa, or by applying to W. H. Sullivan, Engineer-in-Charge, Welland Canal, St. Catharines, Ont.

It is hoped you will give this letter as full publicity as your article, to which it is a reply, said article having been copied by other papers.

Yours respectfully,

N. W. Gowan,

Inventor and patentee.

St. Catharines, Nov. 16th, 1912.

Sir,—Replying to your communication of the 19th inst., I would state that the Gowan safety device for the protection of lock gates was installed by Mr. Weller, now Engineer-in-Charge of Welland Ship Canal, on the upper gates of Lock No. 24 of the Welland Canal about two years ago.

This lock was chosen on account of its being the one where the consequences of a break would prove most serious. Until the present season no vessel collided with these gates with sufficient force to give the device a severe test.

On May 20th, 1912, the steamer "Beaverton," bound up, while locking, surged ahead with sufficient force to break a wire hawser, striking the upper gates and opening them sufficiently to admit the boat's stem into the mitre. I feel satisfied that but for the device the gates would have been carried out.

On August 16th, 1912, the steamer "Harry E. Packer" entered the lock with speed, and through some misunderstanding of signals the engineer, instead of backing up, drove the vessel full speed ahead against the gates.

Three large snubbing lines were broken, and the boat struck the right head gate, cutting a 6 in. x 12 in. oak wale through and opening it quite a distance.

The upper finger of the device supporting the left gate broke, which was, so far as can be judged, due to a flaw in the casting. The full load was thus thrown on the lower finger, which held, and prevented a very serious accident.

The injured gate, though badly twisted, was sufficiently repaired in three hours to resume navigation, and later on was replaced by a spare gate.

The device will be placed on at least five more locks this winter.

Trusting the above information covers your requirements, I remain,

Yours very truly,

W. H. Sullivan,

Superintending Engineer,  
Welland Canal.

St. Catharines, Nov. 21st, 1912.