

## Correspondence.

## COLLAPSE OF THE OTTAWA AND NEW YORK RAILWAY BRIDGE.

Editor MONETARY TIMES.

SIR,—Once more the community has been shocked by one of those terrible calamities to which, by common consent the misnomer "bridge accident" is applied. The accident occurred on Sept. 6th, opposite Cornwall on the River St. Lawrence, and by it a pier of the iron bridge, just about completed for the Ottawa and New York Railway, collapsed, and the two iron spans fell, becoming a total wreck, several lives being lost, besides many persons dangerously wounded. As to the cause no doubt is felt, everything pointing unmistakably to the foundations of the piers, as flagrantly defective in design and workmanship. Had the ordinary care been exercised by a competent engineer in charge, no such calamitous accident need have occurred, as there was nothing insurmountable to overcome, in erecting the structure, beyond the ken of a practical man in such work. The problem was to properly place the piers and to build them safely and permanently on whatever foundation was known to be at the site of each, whether put down to the bed rock, built with a combination of pilings, or using cofferdams or caissons, with concrete, and the usual and necessary protection at the bottom to prevent scour from the current. But from all that can be learned or surmised, few of these precautions could have been taken, and there is no language expressive enough to describe such ignorant or else careless blundering. Although great has been the calamity which revealed the true nature of the work, the loss of life, had the railway been opened for traffic, when the pier fell, would have been unparalleled.

Such dangers as these are a menace to the public. Where ignorant builders, or supervisors, ostensibly in charge of important works, are chosen by careless and greedy corporations to be allowed to carry out important works, which are duly approved of by so-called inspectors, of questionable fitness for the office, it behooves both the Canadian and American Governments to have a most searching enquiry made into the cause of so extraordinary an accident, and to place the blame on the shoulders of those deserving it.

One means of averting such accidents, or of minimizing the same, is to revert to the well-tried policy, pursued for years on all public works—but required more particularly on railways—namely, to place the engineer absolutely in charge of all works pertaining to construction, where skill or technical knowledge is actually required. As carried out at present, the engineer is often made subservient to the so-called superintendent of the road, who, is not previously educated as a civil engineer. This innovation has been imported from the United States.

I have known cases in this country where a capable and well-tried engineer who had reached the age of fifty years, received various hints, by letter or word of mouth, that his health needed a holiday, and he had better take a trip somewhere. Eventually, such a man discovers that his employers want to be rid of him, and he takes them at their word and resigns. What follows? The gap is filled by some young fellow, lately from school, who has never built even a foot of stone wall in his life, but who has a valise full of recommendations from professors or members of parliament, judges and doctors, as to his school work and his fitness. And thus, I tell you, young and cheap men are put to fill the responsible places that ought to be filled by engineers of long experience in actual construction. After occupying the position some years, dur-

ing which time many grievous mistakes and expensive blunders may be made, of course at the company's expense, this young man in twenty years from the time of his appointment, if he has any brains, may be expected to be gradually approaching the proficiency possessed by his predecessor.

I do not by any means infer or insinuate that the young man may not prove himself, when the time comes, a capable engineer, and a credit to the profession. But it takes a long time to arrive at such a point; there, is no royal road to it. It is a great risk, it is, indeed, a grave wrong, to put a young fellow in such an important position until he had proved himself, by dint of hard work. Pitched into it by favoritism or politics, through such a procedure, the young man runs a risk, while capable and most useful men of long experience are kept out of positions honestly due them. And if the result of employing half-educated and half-experienced men is the loss of life and property by such accidents as this at Cornwall, I submit that my protest against the system is timely.

CONSTRUCTOR.

24th Sept., 1898.

## DIVERSION OF GRAIN TRADE.

Grain grown in the Western States of the American Union, comes through the Great Lakes to Buffalo in growing volume. But it does not go thence to New York City for export in the same proportions now as formerly. This fact is the basis of our article in the Journal of Commerce and Commercial Bulletin. It sets out by showing that since 1891 Buffalo has been receiving between 100,000,000 bushels and 200,000,000 bushels every year since 1890.

In the last three full years the grain received here, New York, by canal has been 70,000,000 bushels; about twenty years ago the receipts in three consecutive years were 190,000,000 bushels. But this enormous decrease in the grain brought to New York canal does not prove that the canal has lost any of its usefulness. Its competition has kept down the charges of the railroads, and the business lost by the canal is popularly supposed to have been gained by the railroads.

If we look at the statistics of grain transportation compiled by Captain Clark the first impression is that the railroads are getting a good part of what the canal has lost. In the last three years the roads brought 293,000,000 bushels here, and twenty years ago they brought only 211,000,000 bushels. But if we look more closely we shall observe that 1897 was a phenomenal year. The grain export was extraordinary, and whether this port got its share or not, it certainly got a great deal. The railroads found it necessary to compete with the canal for the immense business offering regardless of rate agreements among themselves; this resulted in a great increase of the grain business of the roads. But if we omit 1897, because of its unusual character, we shall find that the railroads are not getting what the canal has lost; they are not even holding their own. In four years, 1878—81, the railroads brought to New York 284,000,000 bushels of grain, and in four years 1893—96, they brought 264,000,000 bushels of grain. Here is a loss of 20,000,000 bushels by the railroads in addition to the loss by the canal in fifteen years. During those fifteen years the receipts of grain by lake at Buffalo increased from 315,000,000 to 520,000,000 bushels. Comparing these two four-year periods, fifteen years apart, the receipts here by canal have fallen from 288,000,000 to 133,000,000 bushels, and the receipts by rail from 284,000,000 to 264,000,000 bushels. The total receipts here have declined from 512,000,000 bushels to 397,000,000 bushels. The ex-

ports from here fell in the same period from 386,000,000 bushels to 207,000,000.

The grain coming from Buffalo is increasing; the grain coming here by canal is decreasing very largely, and that coming by rail is decreasing slightly; in the aggregate there is a heavy decrease in the amount of grain received here from all sources, and in the export of grain from this port. Where does the grain go to from Buffalo? Only one answer can be made; it goes to other ports. It does not matter particularly what ports it goes to; it goes elsewhere than New York. In 1878 the receipts of grain by rail in New York were equal to 80 per cent. of the receipts by lake alone at Buffalo; in 1897, in spite of the very great increase in grain receipts here, the amount received was but 66 per cent. of the lake grain received at Buffalo.

The loss of export grain at New York has been attributed to a variety of causes that have had very little to do with the matter. Among other things, the growth of the South Atlantic and Gulf ports has been invoked to explain it. We do not apprehend that anyone will suggest that grain that reaches Buffalo by lake is on its way to New Orleans or Galveston, or even to the South Atlantic ports. The loss of New York is due to the fact that the railroads are diverting grain at Buffalo to Boston, Philadelphia, and Chesapeake ports.

## HOW LONDON IS FED.

Here is something discovered at Deptford recently by a reporter of the London Leader, who had not previously known much about such a thing as a cattle market for the great city:

(He is writing about the advertised arrivals of cattle carriers in the Thames last month).

"Minneburg," s., River Plate for Deptford, 10th August.

"Montana," s., Baltimore for Tilbury and West India Dock, 10th.

"Ormiston," s., Montreal to Deptford, 12th.

These are London cattle boat dates. You can see them noted in the shipping columns of the dailies every day. Sometimes in one day you might see five or six big steamers listed. It's a big trade, this four-footed immigration from Canada, the States, and South America to London.

"How do you know the 'Ormiston's' coming in to-night? Who told you? Who told you there was a foreign cattle market in Deptford? No one in London knows it!" The big-hearted and six-foot-high pushing superintendent of the city's foreign cattle market, Deptford, had a genuine fit. I happened to know something about this business. He has been manager at the market for 27 years. G. P. replies:

"'Ormiston,' 4,000 tons. Regular trader? Yes; 200 head cattle, 500 sheep. Thirteen days out. Coming in eight o'clock. You'd better wait." There were no waste words about Mr. Philcox. I went round the market with him: It took an hour to walk along the many ramifications of the huge affair. "Thirty acres of it. Been 27 years growing, you see," said Mr. Philcox. Then he was all figures. "Put 8,000 cattle and 14,000 sheep under cover here. All comfortable, as you see."

We were in a huge building, as big, if not bigger, and as high as Kensington's Olympia. Thousands of cattle from the plains of Texas and Montana and the prairies of Argentine and Brazil, and the fat lands of Manitoba or Assiniboia in Canada, stood or lay down in rows of thirty, chewing the cud or pulling at the bountiful supply of hay in the racks. Happy cattle these. No signs of sea-voyage agonies here.