

affairs of the Company in a better position. The fact that American freight was, and is, being carried at a loss is nothing new. Mr. Brydges, we think, has stated that more than once in his reports. But we were not prepared for the extraordinary results which these figures point to. Working for nothing, and paying expenses is eschewed by most people as an undesirable way of spending one's time, but it seems to have fallen to the lot of our great railway to carry American productions nearly on these terms, trusting to other sources to make good the adverse balance so created. This is justified by Mr. Brydges in this way: it is necessary to carry at these low rates in order to get through freight at all: this through freight cannot be dispensed with; the business must be retained at whatever cost, till the "temporary" depreciation of American currency disappears, or it cannot be regained. Several questions arise here; are not the Company paying "too dear for their whistle?"—is the depreciation of American currency likely to be any more "temporary" than the existence of the Grand Trunk itself, if its credit be not improved, and would it not be better to do a small paying business, for the time being, with less rolling stock and reduced annual outlay for new plant and repairs to the permanent way, than to do a large non-paying business, in which the increase of loss and of traffic go together? It is these heavy through trains which are especially trying on the permanent way as well as on the rolling stock. More light is wanted on these points.

MONTREAL vs. TORONTO.

The active efforts of the merchants of Toronto to head off Montreal in the trade with Western Canada, seem to have borne fruit. As a leading commercial organ of the east, the *Montreal Herald* displays commendable candor in the following, which we extract from that paper of Saturday last:—

"Our own Province will be in a decidedly better position to meet its obligations than it was last year, on account of the crops turning out so much superior, and although Upper Canada must be fully as well off as as she was in 1867, it is very doubtful if Montreal will benefit in future so much by her prosperity. It is quite natural for those doing business in the West, to confine as much of that trade as possible to their own territory, and we confess to have observed a most vigorous effort in Toronto to prevent so large a share of the trade so necessary to the maintenance of Montreal from coming beyond the first named place. The attempt has not by any means failed; on the contrary, it has succeeded, perhaps to a degree which at first was hardly looked for. Lately Western merchants have been stimulated by the low rates of through freight from Liverpool to Toronto; in not

"a few cases, goods having been laid down at their doors for less than was being paid to this port. This, if only a comparatively small advantage is one which will be made use of against the trade of this port, and while business here has ruled with unusual quietness since last fall, it may be that what has been taken from Montreal by competition has rendered it more depressing."

UNITED STATES CHAMBER OF LIFE INSURANCE.—An extra of the *Monitor* informs us that the Chamber met at Saratoga, August 19. Some discussion took place as to the propriety of requiring the data of policies *seriatim*, it being contended that a valuation by groups would answer every purpose. The rule, however, was allowed to stand. A Committee was appointed to nominate a suitable person for ACTUARY-IN-CHIEF, and to name the salary to be attached to the office. This Committee will report in November. Some suggested \$5,000 and others \$10,000 as proper sums. After some other business the meeting adjourned.

PHENIX INSURANCE COMPANY.—In giving a list of Companies, last week, which do not intend to comply with the Insurance Act, we included the Phenix of Brooklyn. This we did from information furnished us which we learn proves to be incorrect. We now hear from the Toronto agent, Mr. C. G. Fortier, that the Company has no intention of withdrawing from the Dominion.

Communications.

WOODEN RAILWAYS.

The Editor Monetary Times.

SIR,—Some correspondence on the subject of "Wooden Railways," which was published in the *Peterborough Review*, for the information of those interested in opening up the rear of the County of Peterborough, was noticed a short time ago in your journal.

I have just returned from a visit to the Railway particularly referred to by my correspondent, Mr. Hulbert, and a short account of it may perhaps be of interest to your readers. The party consisted of Mr. Morris, M.P., Mr. Cartwright, M.P., Col. D. E. Boulton, Mr. George Kirkpatrick, of Kingston, and myself. I mention these names merely to shew that the subject of "Wooden Railways," for our undeveloped country, is now attracting some attention in different parts of Ontario.

The Wooden Railway commences on the Watertown Railway, 22 miles from Ogdensburg, 2 miles past the De Kalb Junction. Its length is 24 miles to the Clifton-Iron Mines, or mountain, which is in the Adirondack range, and in what is known as John Brown's Tract. In this distance it rises no less than 1,100 feet. There is hardly any cutting, but the road is carried clear up and over the hills. There are three or four grades of 285 feet in the mile, and one short pitch even over that. In place of earthwork, tresselwork is used to a very great extent, and this generally of a rude but strong construction—cross logs. The line is a particularly difficult one, and considerable engineering skill has been displayed, in the manner in which it has been carried over rapid streams and rocky ravines. Many of the curves are very

sharp, and there is no great portion of the line—at least the part that we traversed—at all straight.

We commenced our journey near the neat little village of Hermon, and had about 19 miles of rail, and the chief rise in the road commences at that point. We travelled at a considerable disadvantage, the engine being a miserable affair, of a very weak constitution, with a small, upright boiler, two cylinders facing it, one of which we afterwards discovered was out of gear; so with one lung gone, we were not surprised at its wheezing and panting as it breasted the tremendous hills. However, with two cars loaded with bricks and one with lime, we did manage to get safely up to the Iron mountain. There we found large steel works in the course of construction by a Company prepared with capital to the extent of \$150,000. The ore, which contains from 65 to 70 per cent. of iron, is put in the furnaces, (like long box stoves), where it is "treated" with charcoal and blasts of carbon, and is turned out the purest steel. The Company expects to turn out about 50 tons per day. A Steel Rail manufactory is about to be erected shortly. These rails, which will be sold at a moderate price, will, in the estimation of Mr. Hulbert, before very long, supersede iron rails; and it is in contemplation in the future to lay down the rails on the wooden road. The Iron Mountain is all iron, nearly pure; no tunnelling or sinkingshafts is necessary, the mountain has simply to be cut away. There are now about six different branches of the road striking into the mountain at various points. The upper part of the road, about 2½ miles from the mountain to the youthful village of Clifton, was completed about a year ago to bring the iron down to the smelting works which are there in full blast, and along this portion trains were run nearly all the winter. The furnace, which is of enormous thickness, is filled with iron and charcoal, in due proportions, to the height of 36 feet, where there is a platform conveniently opening out on the top of the bank, the furnace commencing at the bottom. The crusher is worked by water power; it is a heavy iron wedge working at an angle against a fixed iron block. The wedge works on a pin, the bottom always in the same position, nearly close to the block, the top about a foot from the block, oscillating forward and backward. The ore is thrown in and is gradually crushed smaller and smaller, dropping with its own weight, until it falls out the right size—about that of a hen's egg. It appeared to me to be the best principle for a crusher, even for gold quartz, as it can be adjusted to any degree of fineness. The cost is about \$1200 U. S. currency, and the machine would be an admirable one for crushing stones for macadamizing roads, saving time, money and human labor, generally considered of a degrading character. The "General" who was superintending the boiler shewed us their enormous charcoal houses, where they always keep a reserve of 300,000 bushels for emergencies. If charcoal can be used with such excellent results in both iron and steel works, cannot our Canadian capitalists be induced to put a little money into smelting works in this country? From Clifton we took with us about 25 tons of ore; the grades being of course chiefly down hill, but some of them being ascents of 70 feet to the mile. With the new engine which Mr. Hulbert expects immediately, there is no doubt that he can take 50 tons with safety and at a fair rate of speed—eight or ten miles an hour. The day we were there, the General Superintendent of the Company authorised him to at once order several new engines and cars, which will enable him to take out 300 tons a day, besides the ore supplied to the steel works on the mountain. A good deal of ore is shipped by the Iron R. R. to different points for smelting.

The Company own about 74,000 acres. They supplied and are now supplying Mr. Hulbert with funds for construction of road and purchase of rolling stock; Mr. Hulbert getting out the ore himself under an arrangement with the Company, paying a royalty and selling it himself.