

GRAND TRUNK RAILWAY.—CENTRAL DIVISION.

ENGINEER'S OFFICE,

Kingston, October 31st, 1859.

DEAR SIR,—In compliance with your circular of the 15th inst., calling for a statement as to condition of Iron and Ballast on this Division, I beg to report for your information as follows:

1ST.—PRESENT STATE OF IRON.

The condition of the Iron at present in use on the Central Division, both in main line and sidings, is far from satisfactory; the rails are generally very much worn, and in many cases cracked, flanges broken off, &c., &c. This, which is rather an unusual state of things in lines so recently opened for traffic as this, I apprehend to be due chiefly to the following causes:

1st. The quality of iron was originally inferior.

2nd. It was very much bent and otherwise damaged during construction, by running ballast engines over it, without its being properly packed up and supported; and, as I am informed, only two ties being used in many cases to keep up centre of rails.

3rd. The chairs are very inferior; they do not fit the rails, so that it is nearly impossible to maintain a good true joint, and the ends of the adjoining rails not being kept level or square, causes a considerable amount of wear to the iron.

4th. The line has never been properly ballasted, and even yet is far from being as it should in that respect, if we desire to reduce cost of maintenance, wear and tear of rolling stock to a minimum.

5th. The maintenance of the line being performed by contract, and the cost of iron not falling on contractors, there has not been the same attention paid to preserving it as otherwise might be the case.

2ND.—RENEWALS TO IRON THIS YEAR.

There has been no new iron received or used for repairs on this Division during the present year, with the exception of about 180 tons of light (56 lbs.) T iron, which has been laid on Lachine Swamp, or is now delivered for that purpose. There has been about 50 tons of U iron recovered from the Lake near Duck Harbor, at a cost of about \$400 to the Company (or \$8 per ton) which was also used for repairs. A considerable amount of iron has been repaired this year, at a cost up to the 1st of October of about \$900, including shops. I may further add that all the sidings have been robbed long since for the use of the main line, partly this year and partly last year. In some few cases those sidings taken up last year have been re-laid with T iron (new), but the great majority have been re-laid with the old worn-out rails taken from the main line.

3RD.—IRON REQUIRED NOW TO PUT ROAD IN EFFICIENT ORDER.

I have had a very close estimate made of this by the various Inspectors, from which it appears that fully 2500 tons is required in order to remove *all* defective bars from the track, and leave a reserve of 500 tons or so for accidents, &c., &c., but I believe if we receive 1000 tons now we can keep the line in very fair order for twelve months or so longer, by keeping our repair shops going at the same time.

4TH.—AMOUNT OF BALLAST AT PRESENT ON LINE.

This can only be very roughly estimated. In some places the material used as ballast was so very fine, and was put on in such small quantities, that it has mixed up with the formation or roadbed, or been washed away by storms, so that at present it has nearly all either disappeared, while in other places, as at River Beaudette and Moss Bank Pits the material used has been so acted upon and disintegrated by the frost and exposure to the atmosphere, that it is now rather difficult to distinguish it from clay. The following