

in round numbers the sum of \$600,000 before eight years expire in running the ordinary rail, while about \$300,000 would be sufficient to replace the wearing surface of the improved rail in double the period. In other words, while the renewal of the common rail would prove an annual drain of \$75,000 on the earnings of the Company, the improved compound rail would annually draw upon receipts to the extent of from \$18,000 to \$19,000 only.

It may be observed that the strongest claim which this improvement possesses is, economy in maintenance, and unless this advantage be satisfactorily established the adoption of the system on new or existing lines cannot be hoped for. The fact that railway investments have almost universally turned out profitless to the stockholders, while the public has received and daily receives unmeasured benefits, is a sufficient reason why all improvements in railway construction or in railway management, should have a tendency to distribute the benefits in a more equitable proportion. The public ought not to have a monopoly of them. The parties who invest their capital in railways should have a fair return for their money and their enterprise ; indeed it would be infinitely more satisfactory to the thinking public to know and feel that they were in the enjoyment of the most perfect system of internal communication without loss or it may be ruin to the proprietors. Railways must be made to pay, or their extension into unoccupied fields must cease, and thus suspend the progress of modern civilization. Before they can pay one of two things is necessary, either the receipts must be increased or the expenditure diminished. Experience goes to prove that the amount of traffic which centres in any particular railway is limited by variable local circumstances and the laws of commerce, and beyond this limit the traffic cannot safely be forced ; if the earnings cannot be increased beyond what the limit of traffic will allow, then, to make the enterprise pay, a reduction of expenditure must be attempted. In this latter respect it is thought that the change now proposed in the construction of the permanent way has every appearance of being one step in the proper direction, and I avail myself of the facilities furnished by the Canadian Institute for giving such publicity to the proposed plan as may bring it under the notice of those most interested in the removal of the evils which it is designed to avert.