

RESIDENT ENGINEER'S REPORT.

ENGINEER'S OFFICE,

Saint John, 29th Dec., 1862.

ROBERT JARDINE, Esquire,

Chairman of Railway Board.

SIR,

I have the honor to submit the following Report for the year ending October 31st, 1862.

The principal object kept in view has been to maintain the Roadway in the best and safest condition, and to do so in the most economical manner; and while I can certify to the perfect efficiency of the Road, the General Superintendent's Report will shew that this efficiency has been maintained at an unusually small cost. Wherever renewals have been necessary, the materials used have been of the best description, and while nothing has been wasted, a false economy, which would sacrifice permanence to present cheapness, has been carefully avoided.

For purposes of maintenance, the line has been divided into 12 nine-mile track sections, and it is this division which I have adopted in speaking of the different repairs, &c.

The most important work has been the total renewal of the Bridge at Big Scadouc Brook. This was originally a Pile Bridge, and as is usually the case in such structures, the Piles had decayed near the surface of the ground, while the parts above and below were comparatively sound.

In rebuilding the Bridge, I had the Piles cut off three feet below the surface of the ground and walings bolted to them; on these foundations, Piers of Masonry were built to the height of four feet, and on these the Trestles were set. By this method of construction all the timber is kept away from the surface of the ground, which is the place at which it is exposed to alternations of wet and dry, and consequently to decay. The durability of the structure is thus much increased. Wooden Bridges built in this way of good materials and kept well painted, ought to last fourteen or fifteen years. The greatest pains have been taken to preserve the timber in this Bridge, all the joints were whiteleaded, and wherever one timber rests on another, the contiguous surfaces were coated with Stockholm tar.