of rapids and mill sites, with an unlimited supply of water at all seasons of the year. The Otonabee connects with an extensive chain of Lakes, surrounding which and their tributaries exist vast and inexhaustible groves of valuable pine timber.

At Peterborough half a dozen fine saw mills cut about 25,000,000 feet of lumber annually, and have capacity to cut twice that amount. This great lumber business has been developed by the Cobourg & Peterborough Railway. Previous to its construction not more than 1,000,000 feet was annually exported. Large quantities of square timber for the Quebec market are also obtained from the pine lands north of Peterborough, and floated down the Otonabee River.

The Cobourg and Peterborough Reilway, $28\frac{1}{2}$ miles in length, was constructed at a cost of \$1,100,112. Of this sum, the iron and chairs cost \$200,000; the right of way and station buildings, \$85,000; the excavation and embankment, \$225,000.

The gauge, like that of all Canadian roads, is 5 feet 6 inches. The iron on the line is of very superior quality, 56 lbs. to the yard. The chairs are also of the very best description. The soil on the line of Railway in the Township of Hamilton is sandy, and makes a good road bed. In the Township of Otonabee the soil is elay, and the line partially ballasted. The exeavation and embankment averages 20,000 cubie yards to the mile. There are no bridges of consequence on the line, other than the one aeross Riee Lake, which is situated about mid distance between Cobourg and Peterborough. The Lake is two and a half miles wide and 25 miles long.

The Railway was carried over the Lake on a pile and truss bridge, $2\frac{1}{2}$ miles in length. This bridge was well built, but totally unsuited to the locality. It was destroyed by the expansion and contraction of the ice in winter. The water in Riee Lake on the line of the bridge averages $17\frac{1}{2}$ feet in depth to the elay bottom, with a stiff and tenacious und for half that distance. The depth of water is remarkably uniform.

it was ascersan ______ she company, when too late, that the Rice Lake could have been permanently embanded from shore to shore for one half the cost of the original wooden structure, and an effort was made in 1858 to all in the bridge.

The material of the hills in the vicinity of the Bridge at either end, is a coarse gravel with sand and boulders, known to geologists as the Drift formation. It is a most excellent material for the formation of an embankment in water, and is easily worked. With this material, composed as it is of about seventy-five per cent stone, one half the Bridge has been embanked.

The embankment from the south shore extends $\frac{3}{4}$ of a mile, to a small Island in the lake. It is carried up six feet above the usual water-level, is twenty feet wide on top, and presents easy slopes of gravel and boulder rock to the action of the water. The track is iaid down on this embankment, is ballasted, and forms a