which, according to previous practice, would have been regarded as fearfully inadequate, such as the small portions of the chords at the ends, and the small diagonals in the middle of the truss, exhibited even less signs of over-stress, than the parts containing greater sections.

The other bridge above-named, is 150' in length of stretch, and 15' in depth of truss, (between centres of chords,). It is also 15' in length of panels, being a single-cancelled bridge, like F. A, P. 14, with 3 more panels. The trusses are of spruce timber,—upper chord, (aggregate section,)  $12 \times 12$  inches at the ends, &  $12 \times 20$  in the middle;—lower chord, the same at the ends, &  $12'' \times 24''$  in the middle. The main end braces are  $9''^2$ , and the other thrust diagonals, from 3 to 5, by 6", while the tension diagonals are from  $3 \times 10$ , to  $5 \times 12$  inches.

The Top Chord has a single  $l_{4}^{3}$ " bolt in the centre, and at the other nodes, each, two bolts, from  $l_{2}^{1}$ " to  $2_{2}^{1}$ ". The Bottom Chord has two  $l_{2}^{1}$ " bolts at the centre & each end, and the same number at each of the other nodes, from 2" to  $2_{4}^{1}$ ".

The Road-way is 16' wide in the clear, and the bridge was enclosed at first, with a shingled roof, projecting about two feet, and 3-4" siding, leaving about two feet under the upper chords, open, for light and ventilation. The cost of the superstructure complete, at contract price, was a little under \$10. per lineal foot, which was remunerative, at the low prices prevailing at that time & that locality.