CUMBERLAND VALLEY RAILROAD BRIDGE

ACROSS THE RIVER SUSQUEHANNA, AT HARRISBURG.

The original contract price for the erection of the superstructure of the bridge was $52,000; but, in consequence of various accidents, the actual cost of construction was increased to $62,000.

It was used, from the time of its completion until Dec. 4, 1844, for locomotive engines, and was without roof; on this day a fire occurred, which destroyed all but four spans on the Harrisburg side of the river. It was quickly rebuilt on the same general plan as the original structure, with some slight alterations in the details; the hand-rail was omitted on the top, and a pointed roof substituted. On the new bridge locomotives are not allowed to pass.

As at present constructed, the bridge is an ordinary double lattice, the spans vary in length from 170 to 180 feet. There are 28 spans in all, and the total length of the bridge is 4,277 feet, making the average 186 feet from centre to centre of pieces, or 176 feet in the clear. The bridge is graded with one inclination towards the eastern shore, of 19 feet 10 inches in length of the bridge. There are two roadways on the lower chords, each 11 feet 1 inch from centre to centre of trusses, or 9 feet 1 inch in clear of chords.

Between the carriage-ways was a space of 6½ feet, designed for the accommodation of foot-passengers, but it was found necessary to use this space for diagonal bracing. A single railroad track is on the top of the bridge, supported by the middle trusses, which are double lattice, while the outside trusses are single.

The trenails, or lattice-pins, are of oak, 1½ inches in diameter, there are 4 at each intersection of the chords, and 3 at the intermediate intersections.

The total height of the outside trusses, from the top of the upper chord to the bottom of lower chord, is 18½ feet. From