bottom are seven T bars, 4" × 4" × \(\frac{3}{8}\)" , between which are horizontal diagonal braces of 1" round iron.

There are four sets of vertical cross braces of 1\(\frac{1}{8}\)" round iron at each alternate T bar.

The ends of the girders rest upon cast iron plates arranged at one end with rollers, as before described, and fixed at the other.

1" rivets were used for the ends of the ties and posts, \(\frac{3}{8}\)" rivets for the chords, and \(\frac{3}{4}\)" rivets for the posts.

This span was built with a camber of 1\(\frac{3}{8}\) inches.

In the old bridge there was one continuous truss across the first two spans of 140 and 76\(\frac{1}{2}\) feet, framed as though it was originally intended for one long span of 216\(\frac{1}{2}\) feet. The girders were above the level of the track, while in the new iron bridge the track passes over the top of the girders of the second span.

As the old superstructure had to be removed from the piers before bringing them up to the proper height for the new girders, it was considered best to support the lower chords of the old trusses with trestles, which likewise carried the cross pieces for the platform of the new girders. These were built in the same position as those of the 88\(\frac{1}{2}\) feet spans, with the top chord above the old floor timbers, and were lowered into their places by similar means.

DESCRIPTION OF DRAW AND ROADWAY SPANS.

The other two spans, of 43 and 25\(\frac{1}{2}\) feet, are single web plate girders, and were built before being placed in position.

The height of the 43 feet girders is 3' 6" between the horizontal plates. The width between the centres is 8' 9".

The upper flange consists of a horizontal plate, 18" × \(\frac{9}{16}\)" in the middle, and 18' × \(\frac{9}{16}\)" at the ends, connected with the vertical web by two angle irons 4" × 4" × \(\frac{3}{8}\)" each.

The lower flange has a horizontal plate 18" × \(\frac{3}{4}\)" at the middle, and 18" × \(\frac{3}{8}\)" at the ends, likewise connected with the vertical plate by the same sized angle iron.

The thickness of the vertical plate is \(\frac{3}{8}\)" at the ends, and \(\frac{9}{16}\)" in the middle.

At the ends there are cross plates, crossing the end of the girders, stiffened by angle and T irons.