The next two have a section of 8.80 square inches, and the rest
to the centre 7.60 square inches.

The two T irons of each post are connected by a plate of $\frac{3}{4}$" thickness, riveted to the T irons, in place of the diagonal bracing
described for the longer spans.

The tie bars are placed in pairs outside the vertical plates of the
chords as in the other spans, and are of the following dimensions;

Two of 6" by $\frac{5}{6}$", Area of pair = 7.50 square inches.
Two " 5" " $\frac{5}{6}$ " " " = 6.25 " ",
Two " 4" " $\frac{5}{6}$ " " " = 5.00 " ",
Two " 3" " $\frac{5}{6}$ " " " = 3.75 " ",
Four " 2$\frac{1}{2}$" " $\frac{5}{6}$ " " " = 3.12 " ".

A middle section of the chord is shown in Fig. 6.

The top chord at its middle section has one horizontal plate, 18' 
$\times \frac{5}{6}$", two vertical plates, 12' $\times \frac{5}{6}$, and two angle irons, 3$\frac{1}{2}$" $\times$
$\frac{5}{6}$"; making an area of 26.7 square inches.

The bottom chord at the middle has one horizontal plate, 18' 
$\times \frac{5}{6}$", with the same sized vertical plates and angle irons as the
top chord. The area of the cross section is 25.6 square inches,
or, deducting rivets, it is 22.0 square inches.

At the ends, the top chord has a horizontal plate of $\frac{5}{6}$" and the
bottom one of $\frac{5}{6}$" with the same vertical plates and angle irons as
at the middle.

Between the vertical plates of the top chord there are cast iron
distance pieces, placed near the lower edge and bolted through the
plates to stiffen them. There are two of these in each panel
between the vertical posts.

The girders are braced horizontally by T bars, 4" $\times$ 4' $\times$
$\frac{5}{6}$", across the top and bottom, and with diagonal braces 1" in diameter.

These spans rest upon castings as before described, one end
being fixed, and the other movable on rollers to allow for expan-
sion and contraction.

After being put in place, each two of these spans were connected
together by plates riveted to the top chords at the fixed ends.
The fixed ends of each pair of spans are placed together and the
expansion allowed for at the other ends. This connecting plate
is only to retain the girders in their proper relative positions, and
is not intended to act at all on the principle of a continuous girder.

These spans were framed and built with a camber of 2 inches.
As near as could be measured, the actual average of the twelve