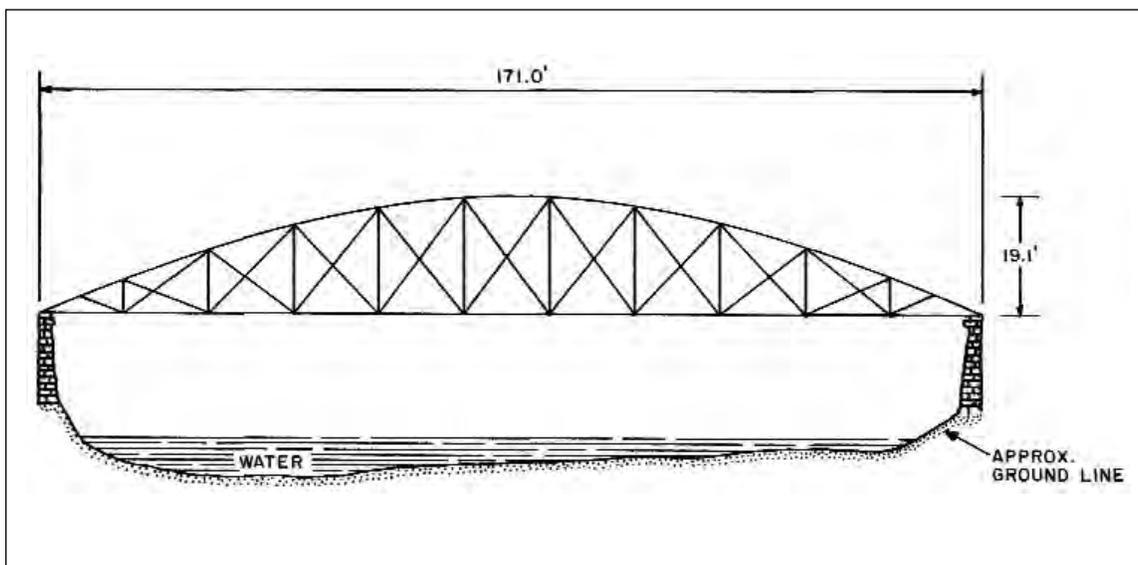


The bridge contains one span, a 76 foot pinned pony Pratt. Top chords and end posts are channels with battens, bottom chords are paired rectilinear eyebars, posts are angles with cross lacing, diagonals are paired rectilinear eyerods and counters are single cylindrical tie rods. An unusual feature is the patented end connections (U.S. Commissioner Patents 1874:150152) of paired eyerods extending diagonally and the vertical end posts extending through the end cover where they are secured on the outside by nuts. Another unusual feature is the composition of the angles that make up the posts that have a bulb or beaded T on their outside edge. More difficult and expensive to manufacture than a normal angle, this feature was possibly intended to add stiffness.

The Tennessee Department of Transportation, in cooperation with Bradley County and the Federal Highway Administration, replaced the bridge in 1990 and relocated the truss to the nearby Rolling Hills Golf Course where it again spans Candies Creek.

(#6) 52-A0183-05.54: Kelso/Cowley Bridge spanning the Elk River east of Fayetteville in Lincoln County (Mulberry Quad, 80 NW).





Significant under Criterion C as the only Bowstring truss in the state, for its patented features, and as rare surviving work of the King Iron Bridge Company.

The nationally famous King Iron Bridge Company built this bridge, the only Bowstring truss in the state, in 1878 for \$8,000 (Fielder 1983; Lincoln County Court Minutes Book A-1:611-614, 246-248). The bridge contains one span, a patented Bowstring tubular arch through truss that is 170.5 feet long sitting on masonry abutments. The superstructure contains portal plaques identifying the builder as the King Iron Bridge Company, and a small oval plaque on the top chord lists the patent date as 30 July 1867. The substructure contains a plaque that gives the erection date and names of the masons, an unusual feature.

As a patented design, the connections and composition of the members are quite different from those found on most truss bridges. The top chord is tubular rather than being formed of channels with lacing. Bottom chords are paired eyebars that become circular in shape as they pass through a plate at the abutment where they are threaded and secured by nuts on the outside. The verticals are right angles with lacing but are unique in that they flatten and flare near the floor and then become circular rods that are bolted into the floor beams. The floor beams themselves are lightweight and have inverted trussed bracing. Top and bottom lateral bracing consist of four short rods attached to a circular member in the center rather than the typical paired rods that extend diagonally across the full panel. Unusually long, the truss is 13.8 feet wide with a minimum vertical clearance of 14.5 feet and an overall height of 19.1 feet. The panels in most truss bridges are the same length, but in this bridge the center panel is 17.5 feet while the others are only 15.2 feet long.

In the 1980s Lincoln County built a new bridge nearby that rendered this bridge and a short road section redundant. The bridge is now closed to traffic but remains intact.