



To the Honorable Board of County Commissioners of the  
 Town of \_\_\_\_\_, County of Cumberland  
 State of Pennsylvania

Gentlemen:

We propose to furnish all material and erect complete and ready for travel the superstructure of a **Wrought Iron Truss Bridge**, according to the annexed specifications and drawings, for the prices below specified.

1 Span 155 ft in clear for the sum of Thirty Six dollars + Thirty cts. per foot (\$36<sup>30</sup>)

1 Span 129 ft in clear for the sum of Thirty dollars  $\frac{12}{100}$  (\$30<sup>00</sup>) per foot.

Should the above proposal be accepted, we will enter into a contract with your Honorable Body; said contract to be annexed and to form part of these specifications.

Very truly,

THE BERLIN IRON BRIDGE CO.

Sept. 12, 1889

By Newton C. Bond Agt.

# THE BERLIN IRON BRIDGE CO.

EAST BERLIN, CONN.

## Specifications for a Wrought Iron Truss Bridge.

LOCATED

*Across Yellow Bunches Creek, Cumberland Co. Pa.*

General Dimensions. Extreme length, *159* feet. Number of Spans, *1*. Clear length of each Span, *155* feet. Bridge to have *1* roadway *18* feet wide in the clear, and *0* walk each *0* feet wide in the clear. Trusses to be *30* feet high and to consist of *10* panels.

### IRON WORK.

Top Chord. The top chord shall be constructed of two *8x1/4* inch *made* channel bars and top plate *16* inches wide *x 1/4* united by  $\frac{1}{2}$  inch rivets *3 to 6* inch pitch, and on the bottom by lattice bars with one  $\frac{1}{2}$  inch rivet in each end. Chord to be re-inforced and accurately drilled at each panel point for pin holes. *See 12*"

Lower Chord. The Lower Chord shall be composed of *2* chord bars *3 1/2 x 1 1/4* made from refined iron connected at each panel point and at end post by pins, which latter shall be turned to exact size to fit drilled pin holes in enlarged head of chord bars. *See 8, 76*"

End Post. The End Post shall be composed of two *8x1/4* inch *made* channel bars united on the face side by *1-16 x 1/4 Pl.* The opposite flanges of channels shall be united by lattice bars same as top chord. The bed plate shall be *3/4* inch thick, securely riveted to end post by wrought iron angle brackets.

Web Posts. The Web Posts shall be made of one solid rolled **I** beam at each panel point or *L<sup>s</sup>* reinforced and accurately drilled at each end for pin holes. The post shall be held at the centre by a *5/8*" wrought iron central tie-rod passing through the web of post, and secured to same with jam nuts on each side.

*Post #1 = 4-1 3/4 x 3/16 L      Post #2 = 4 x 2 x 3/16 L*  
*" #3 = 4-2 x 1/4 L      " 4 x 5 = 4-3 1/2 x 1 1/2 L*

Web Ties. The Web Ties in each panel shall be formed of *1* bar of *round* iron having pin connections with top and bottom chords and sleeve nut adjustment. All screw ends shall be enlarged that bar under the thread shall be *1-16* inch larger than in the body.

Overhead Bracing. The Bracing over the floor shall be high enough to leave a clear headway of *—* feet, and constructed of *Portal = 4-3 1/2 x 1 1/2 x 1/4 L* ~~at~~ *other points 4-2 x 3/16 L*

Overhead Laterals. The Overhead Lateral Rods shall be made of *1* inch to *3/4* inch round iron, placed two in each panel, and united direct to top chord pins; they shall be provided with sleeve nut adjustment.

Floor Beams. There shall be a Wrought Iron Floor Beam at each panel point, fastened direct to lower chord pins with wrought iron stirrups of same capacity as beams. The beam shall be made of plate *24* inches to *12* inches wide and *1/4* inch thick, with top flange made of two angles *3 x 3 x 5/16* inch; bottom flange of two angles *3 x 3 x 5/16* inch and *3* inch angle iron web stiffeners; the whole united by *5/8* inch rivets

Lower Laterals. The Lower Laterals shall be made of *1 1/8* inch to *3/4* inch round iron, placed two in each panel, secured to floor beams by *Bent Pl.* and adjusted by means of *Nuts*

Supplementary Wind Truss. The Supplementary Wind Truss shall be composed of *4-2 x 2 x 1/4 L<sup>s</sup>* securely fastened to end post brace and to the floor beam at each panel point.

End Post Bracc. The End Post Brace shall be made of \_\_\_\_\_ fastened at foot of end post and at first panel of lower chord by pins.

RAILINGS.

~~Sidewalk~~  
Railing.

The Sidewalk Railings shall be made of open lattice about 3 feet high with projecting pickets.

Truss Railing.

The Truss Railing shall be made of two <sup>lines Gas Pipe</sup> ~~bars of round Iron~~ on each side secured to trusses.

GENERAL.

All Iron Work shall be neatly and accurately fitted up in a thorough and workmanlike manner. It shall be painted two coats of metallic paint and boiled linseed oil; one before it leaves the works of the Company, and a second coat after being erected in place. All joints and compressive members shall be planed or dressed to form a perfect bearing. All rivets shall be driven hot. The form and number of parts of bridge may be changed from sizes herein specified without reducing section. In case the weather will not permit the second coat of paint being applied after the erection of the bridge, it is not to prevent the acceptance of the work, but a sufficient amount may be retained from contract price to guarantee said painting as soon as the weather will permit.

WOOD WORK.

The Floor Joist shall be of good, sound Oak lumber 12 inches deep and 3 inches wide, placed 2 feet apart.

Floor Plank to be of good, sound Oak lumber 2 1/2 inches thick and — to — inches wide, and laid Crosswise. The ends to be secured by 3 by 6 inch wheel guard.

Sidewalk Joist to be — by — inches, placed — feet apart. Sidewalk Plank to be — inches thick.

There shall be an Ornamental Name Plate giving names of Commissioners and Builders also date of Erection

**The Berlin Iron Bridge Co.**

RETURN TO  
**THE BERLIN IRON BRIDGE CO.,**  
**East Berlin, Conn.,**

If not called for in TEN DAYS.

Please return to N.C. Bond  
East Berlin Conn.  
if bid not accepted.

To the Hon.

Board's of County Commissioners

Cumberland & York Cos.

Penn.

Proposal  
for Bridge