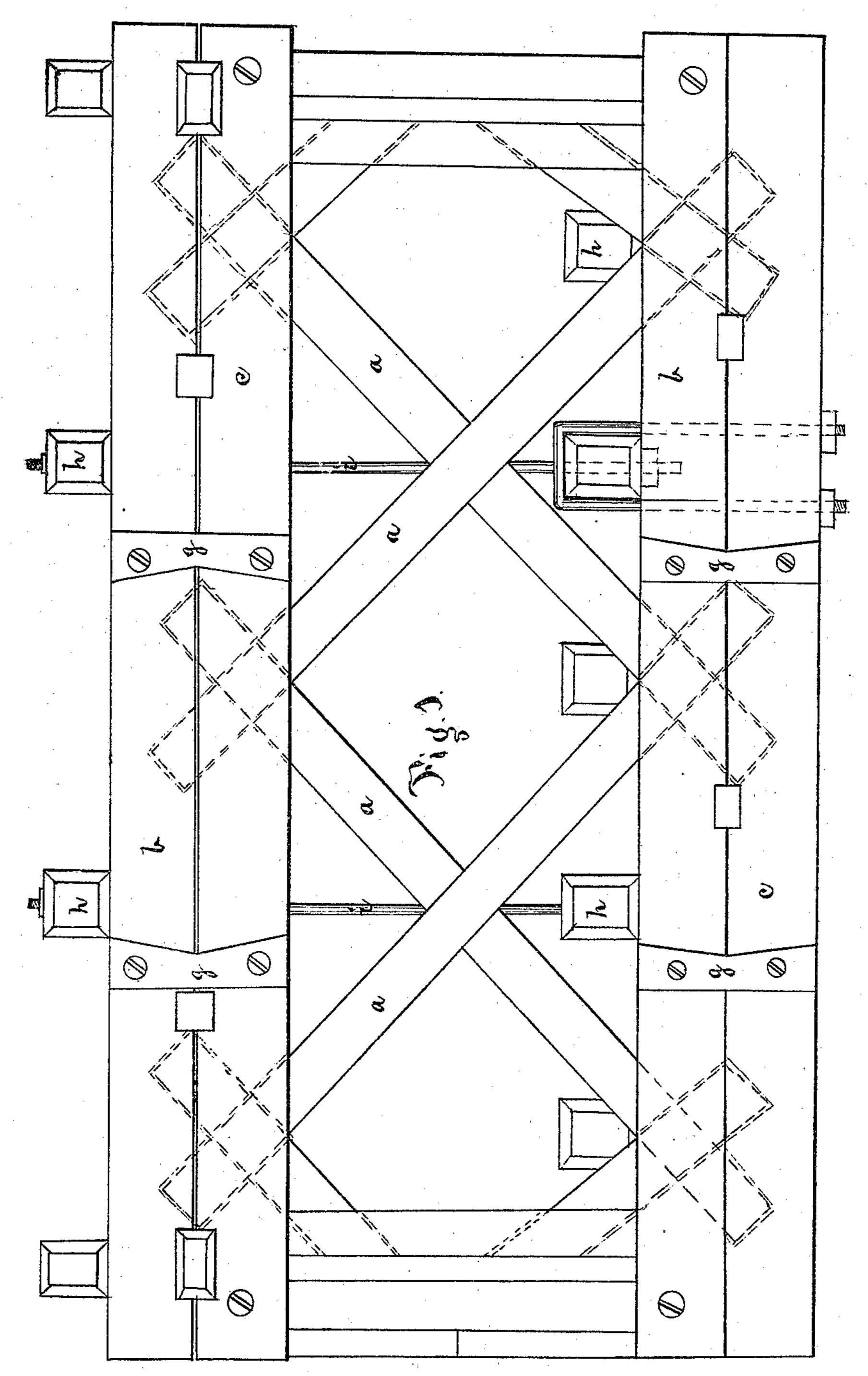
3. Sheets, Sheet. 1.

Muss Bridge.

10.60,799.

Fatented July. 16.1867.

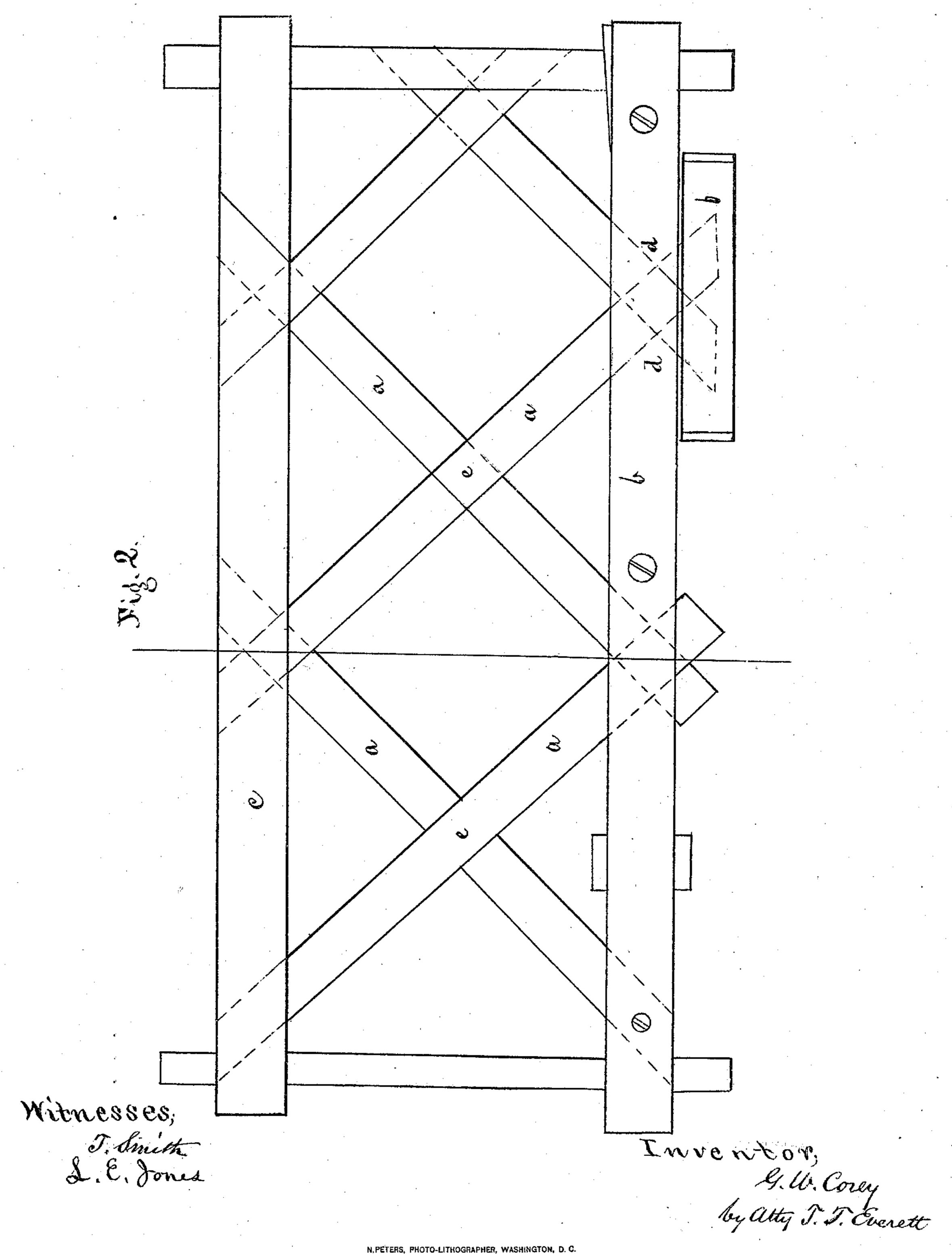


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Inventor; 4.W. Corey by Atty J. J. Everett.

Muss Bridge.

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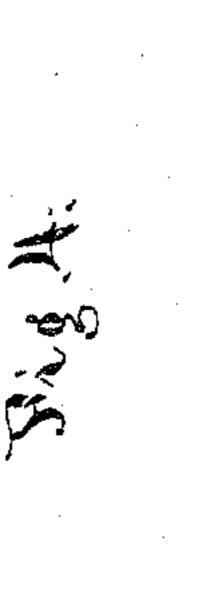
C. M. Correy

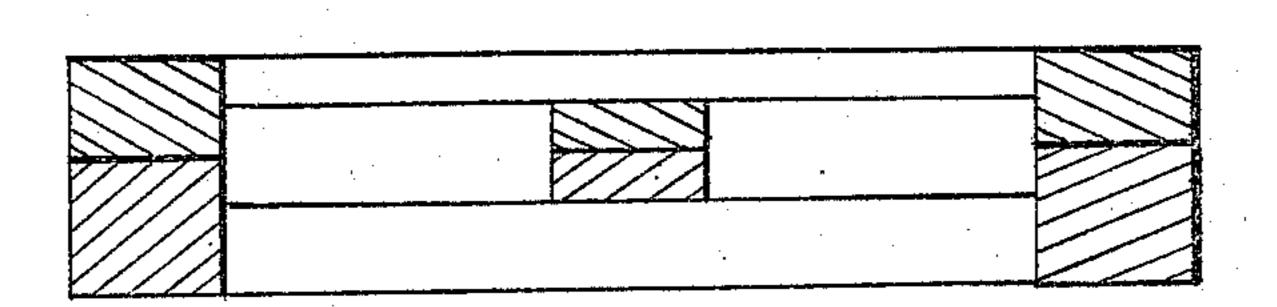
3. Steets Sheet.3.

Muss Bridge.

10.60,799.

Fatented July 10.1867.





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Mitnesses; I Smith L.E. Jones

Inventor; G.W. Corey by Atty S. T. Everett

## Anited States Patent Office.

## G. W. COREY, OF PORT JERVIS, NEW YORK.

Letters Patent No. 66,799, dated July 16, 1867.

## IMPROVED BRIDGE.

The Schedule referred to in these Petters Patent and making part of the same.

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, G. W. Corey, of Port Jervis, in the county of Orange, and State of New York, have invented a certain new and useful Improvement on Bridges; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters and marks thereon, which said drawings form part of this specification, and by the several figures thereof represent parts and portions of a bridge constructed with my improvement as a part thereof. The general construction of the bridge here represented does not differ materially from bridges well known, the improvement relating to points of special construction.

By reference to Figure 1 of these drawings it will be noticed that the braces a, passing from the string-pieces b and c of the upper and lower chords, have their ends fitting into recesses in the string-pieces, so that the part d of the string-piece on each side of the brace, as is indicated by Figure 2, fits into the angular point of union of the two braces. At this point of union of the braces, as also at the crossing point e, one-half of each brace is cut out, so that at these points the thickness of the two is only equal to the one brace at all other points than that where they are united. This fitting in of the braces at the crossing points is shown by the cross-section, Figure 3. The braces thus united and fitted into the recesses in the string-pieces act as ties as well as braces. Where the ends of the braces project beyond the string-pieces a shoe, shown separately by Figure 4, having recesses for the ends of the braces, is secured to the string-piece. This shoe, f, therefore, aids in binding the braces and stringpieces to each other. At certain points of the chords, and particularly at points where joints occur, as when the string-pieces are fitted to each other on the "break-joint" system, keys g, fitting in recesses, are secured to the string-pieces, also adding to the binding together of the pieces of timber composing the bridge. The recesses for the braces in the string-pieces are made one-half in each string-piece, the chords consisting of two or more string-pieces, and when it is desirable to use four or more string-pieces for the chord, two or more sets of braces may be used, and they be so arranged in relation to each other as to have the points of union of the one set be in line with the space between the braces of the other set. Bridges constructed with my improvement as a part can have the track on the upper or lower chord, and can have the usual cross-timbers h, and tie-rods i, with such system of wedges, &c., as may be preferred. The shoe f is designed to be used in instances where the chord is of the thickness of one string-piece only, as where it is of the thickness of two string-pieces the ends of the braces will be recessed in the lower string-piece.

What I claim as my invention, and desire to secure by Letters Patent, is-

The braces a, shoe f, and keys g, all constructed and arranged as described, and for the purpose set forth. This specification signed this 15th day of January, 1867.

Witnesses:

G. W. COREY. JAMES M. PENNEY,

JACOB BOGERT.