

(No Model.)

J. H. BONN & A. DE BEVOISE.

COMBINED CHAIR, KNEE, AND TRUSS BRACKET.

No. 282,697.

Patented Aug. 7, 1883.

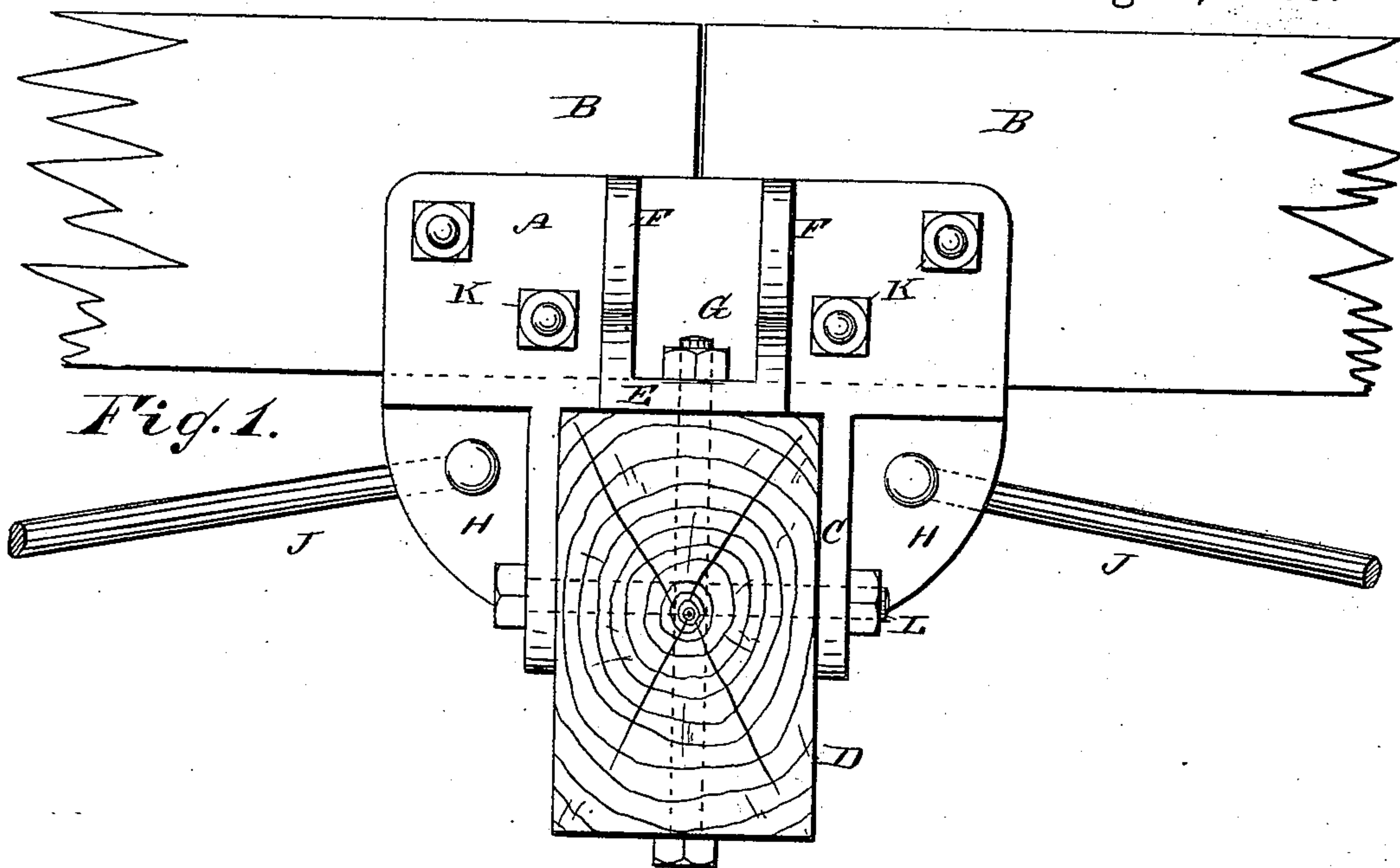


Fig. 1.

Fig. 2.

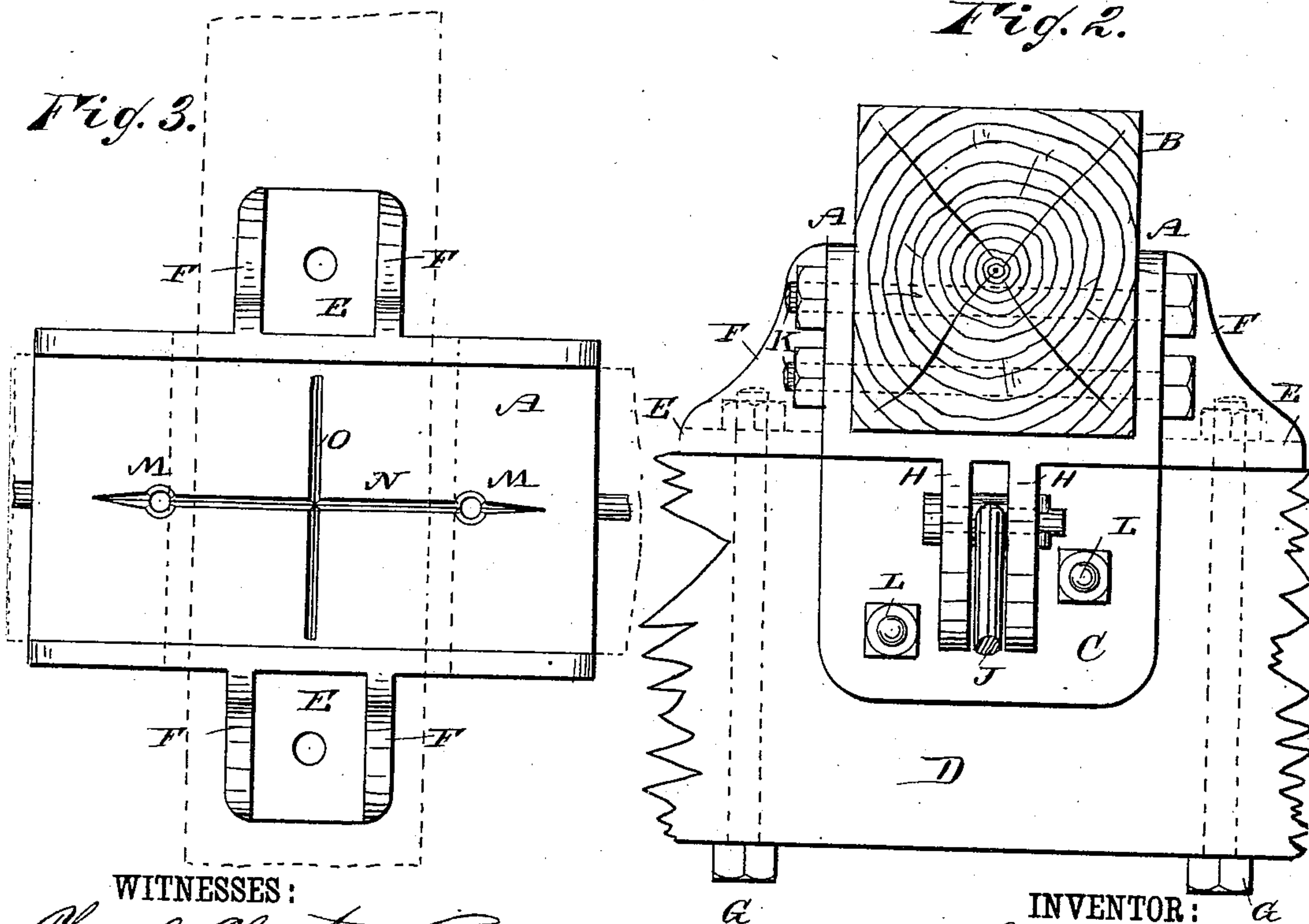


Fig. 3.

WITNESSES:

Theo. G. Horton
C. Sedgwick

INVENTOR:

J. H. Bonn
A. De Bevoise
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN H. BONN, OF WEEHAWKEN, AND ALFRED DE BEVOISE, OF WEST
HOBOKEN, NEW JERSEY.

COMBINED CHAIR, KNEE, AND TRUSS BRACKET.

SPECIFICATION forming part of Letters Patent No. 282,697, dated August 7, 1883.

Application filed January 9, 1883. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. BONN, of Weehawken, in the county of Hudson and State of New Jersey, and ALFRED DE BEVOISE, of West Hoboken, in the county of Hudson and State of New Jersey, have invented a new and Improved Combined Chair, Knee, and Truss Bracket, of which the following is a full, clear, and exact description.

The object of our invention is to provide a new and improved combined chair, knee, and truss bracket for trestle-work, bridges, and other framed structures.

The invention consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal elevation of our improved combined knee, chair, and truss bracket, the supporting-beam being shown in cross-section. Fig. 2 is an end elevation of the same, the supported beam being shown in cross-section. Fig. 3 is a plan view of the same with the beams removed.

A trough-shaped box, A, of the width of the beams B to be supported, is cast integral with a transverse inverted trough-shaped box, C, of the width of the supporting-beam D, which is at an angle to the supported beams B, the said box C being adapted to fit on and straddle the beam D. Horizontal lugs E project from the outer surfaces of the sides of the box A, at the bottoms of the same, and are braced and strengthened by inclined ribs F, extending from the upper edges of the sides of the box to the ends of the lugs E and along the edges of the lugs. The lugs E are adapted to rest on the transverse supporting-beam D, through which and the lugs E screw-bolts G are passed, as shown. Vertical lugs or jaws H extend from the ends of the under surface of the bottom of the box A to the sides of the box C, which lugs H preferably have their edges curved, as shown. The ends of truss-rods or tie-rods J, which brace and strengthen the beams B in the usual manner, are pivoted by means of suitable pintles between the lugs

or jaws H. A series of bolts, K, are passed through the sides of the box A and through the ends of the supported beams B, and bolts L are passed through the sides of the box C and through the supporting-beams D, which supporting-beams are supported by posts or other suitable standards. The bottom of the box A is provided with two apertures, M, outside of the sides of the box C, which apertures are connected by a longitudinal groove, N, in the upper surface of the bottom of the box A, which groove N is crossed at an angle by a groove, O. The groove N is inclined toward the apertures M. The box C straddles the supporting-beam D, and the ends of the supported beams B are placed in the box A in such a manner that they abut at the middle of the same. The united boxes are then secured to the beams by means of the bolts K. L. Scarfing or other splicing of the beams B is not required, and much wood is thus saved, and the framing is very much simplified. The water that runs down the sides and abutting ends of the beams B collects on the bottom of the box A and flows off through the apertures M.

The above-described combined chair, knee, and truss bracket can be used for railroad trestle-work, bridges, and all other framed work. The beams B and brace-rods J form a continuous truss.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A combined chair, knee, and truss bracket, consisting of a trough-shaped box, A, and a transverse inverted trough-shaped box, C, the said boxes being made integral and the upper one provided with strengthening-ribs, substantially as herein shown and described.

2. The united boxes A C at an angle to each other, constructed with horizontal lugs E, projecting from the sides of the box A, at the bottom of the said sides, substantially as herein shown and described, and for the purpose set forth.

3. The united boxes A C at an angle to each other, constructed with horizontal lugs E, projecting from the sides of the box A, at the bottom of the same, and with the ribs F, extending from the upper edges of the sides of the

box A to the ends of the lugs E, substantially as herein shown and described, and for the purpose set forth.

4. The united boxes A C, constructed with
5 lugs or jaws H, extending from the ends of the under surface of the bottom of the box A to the sides of the box C, substantially as herein shown and described, and for the purpose set forth.

10 5. The box A, constructed with apertures M outside of the vertical walls of box C, and with crossed grooves N O in its bottom, substantially as herein shown and described, and for the purpose set forth.

6. The combination, with the united boxes 15 A C, having lugs or jaws H, extending from the ends of the bottom of the box A to the sides of the box C, of the brace or truss rods J, pivoted between the jaws H, substantially as herein shown and described, and for the purpose 20 set forth.

J. H. BONN.
ALFRED DE BEVOISE.

Witnesses:

JOHN C. BESSON,
GEORGE J. DUCKER.