

No. 687,113.

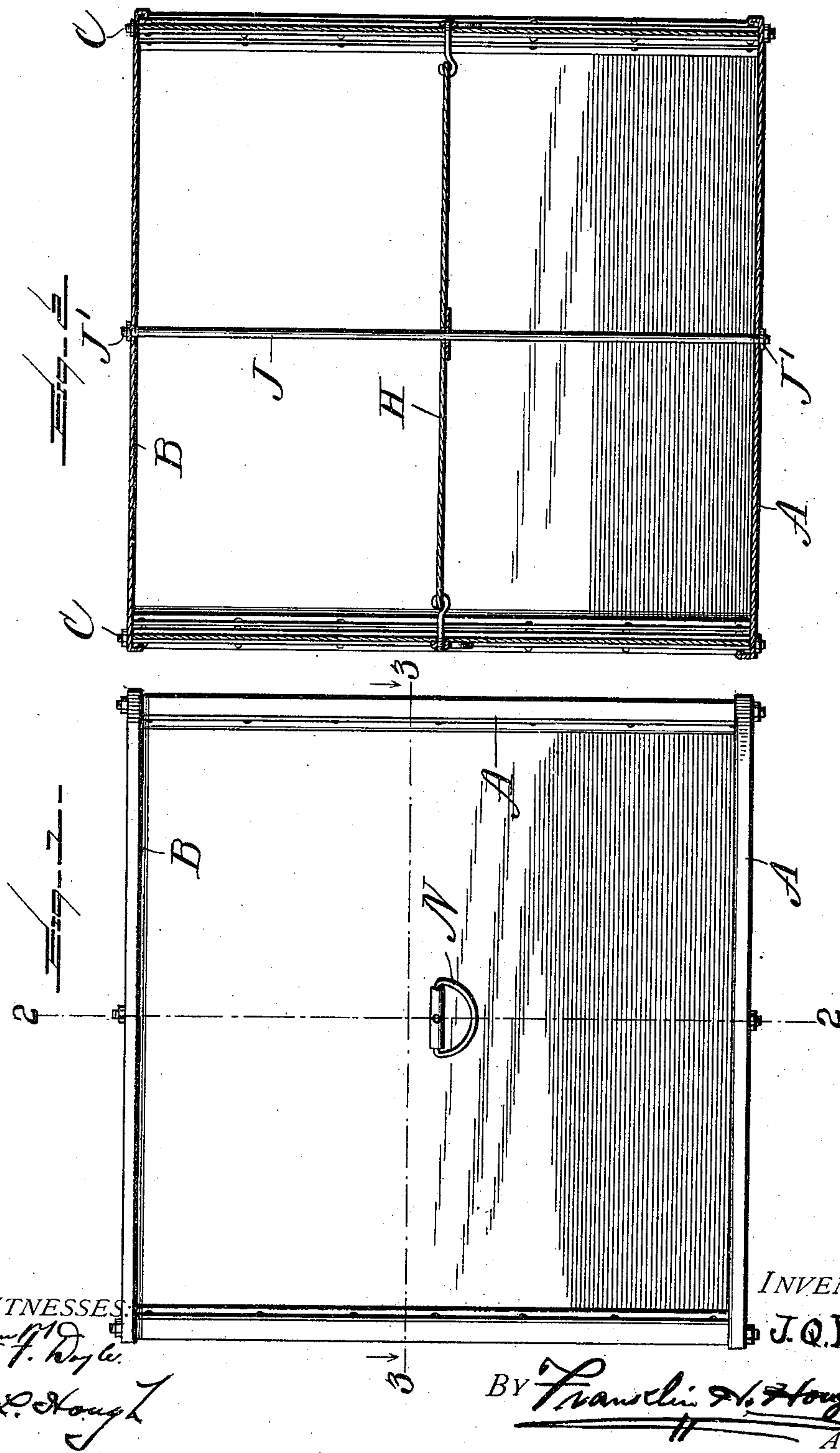
Patented Nov. 19, 1901.

J. Q. BOYD.
KNOCKDOWN BOX OR CRATE.

(Application filed Oct. 10, 1901.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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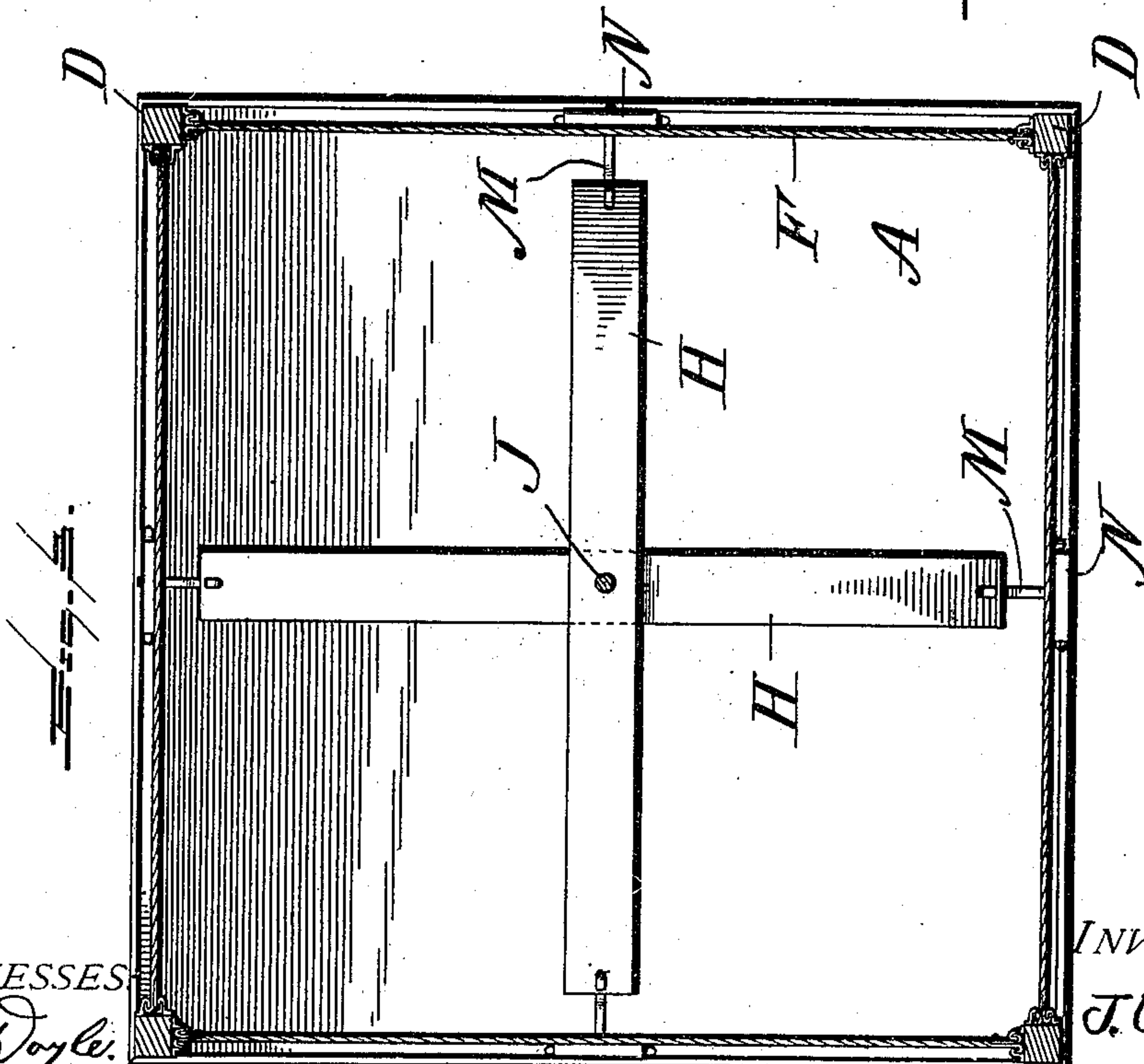
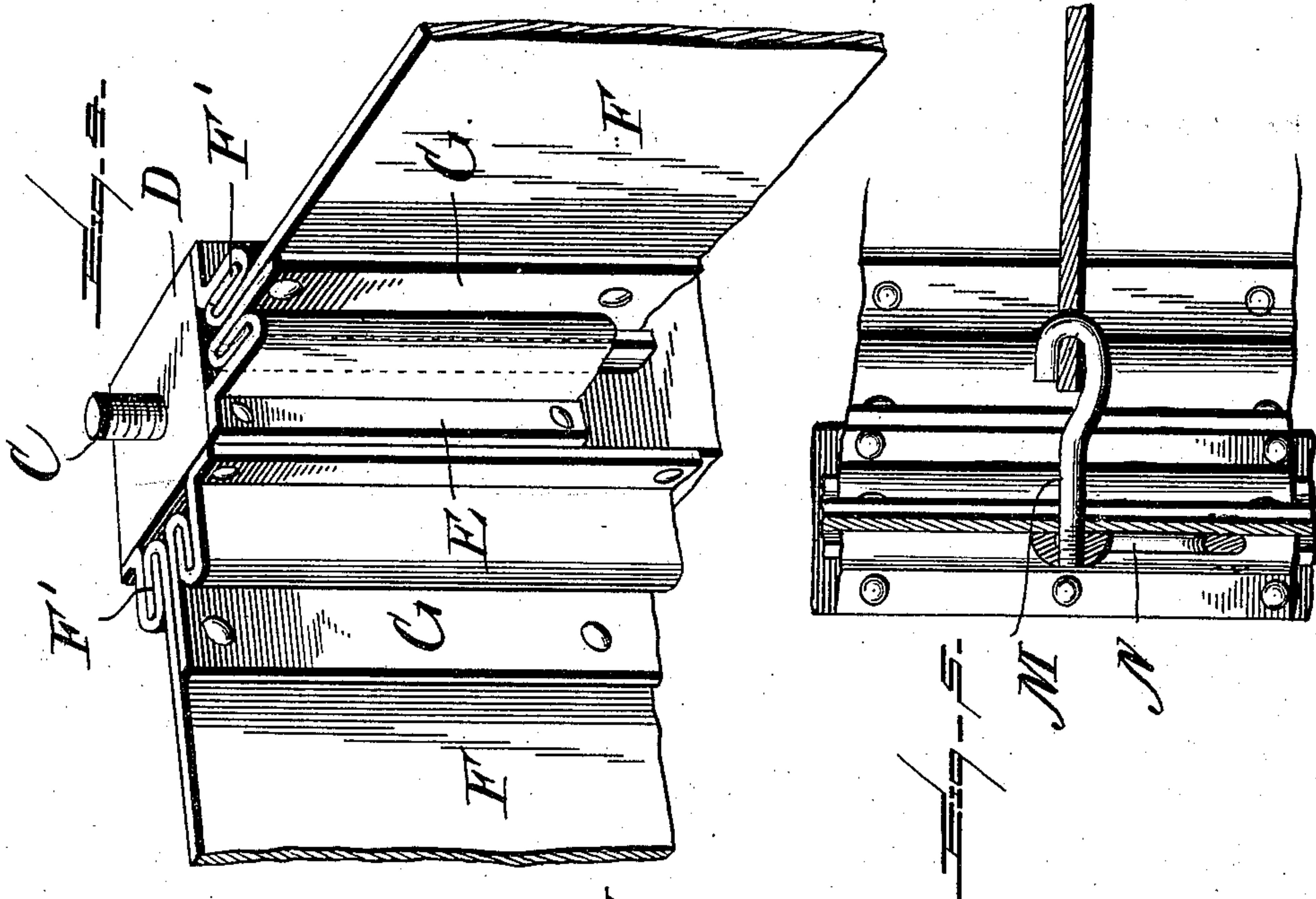
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UNITED STATES PATENT OFFICE.

JAMES QUISENBERRY BOYD, OF ANTHONY, FLORIDA.

KNOCKDOWN BOX OR CRATE.

SPECIFICATION forming part of Letters Patent No. 687,113, dated November 19, 1901.

Application filed October 10, 1901. Serial No. 78,192. (No model.)

To all whom it may concern:

Be it known that I, JAMES QUISENBERRY BOYD, a citizen of the United States, residing at Anthony, in the county of Marion and State of Florida, have invented certain new and useful Improvements in Knockdown Boxes or Crates; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in knockdown boxes or crates; and it consists in the provision of corner-posts having grooved metallic plates designed to receive interlocking plates carried by the sides of the box or crate, suitable means being provided to hold the top and bottom pieces to the corner-posts and suitable means for bracing and holding the sides to make the box or crate rigid.

The invention will be hereinafter more fully described and then specifically defined in the appended claims, and illustrated in the accompanying drawings, which form a part of this application, and in which drawings similar letters of reference indicate like parts in the several views, in which—

Figure 1 is a side elevation of the box or crate. Fig. 2 is a central vertical sectional view through the box. Fig. 3 is a horizontal sectional view through same. Fig. 4 is a detail in perspective, showing the manner of holding the side pieces to the corner-post; and Fig. 5 is an enlarged detail in section through one side and of a brace.

Reference now being had to the details of the drawings by letter, A designates the bottom of the box or crate, and B the top, each having an aperture near each corner for the reception of the threaded bolt C. Each corner D is provided with a bolt C, as shown clearly in Fig. 4, and on two of the faces of each post are the plates E, having one of their longitudinal edges bent to form a groove. A slight space intervenes between each pair of said plates, as shown, to receive the side pieces of the box or crate. Each

side piece F has its opposite vertical edges bent to form a tongue F', which is designed to interlock with one of the grooved plates E, while on the opposite face of each side piece of the box is fastened a grooved plate G, which is designed to interlock with one of the grooved plates E, as shown. The four sides of the box being thus connected to the grooved plates on the corners, the sides are held rigidly in place by means of the braces H, which intersect each other at their middle portions. A rod J passes through registering apertures in said braces, and the ends of said rod pass through apertures in the top B and bottom A, the latter being held to the sides by means of nuts J' and J'. To the end of each brace H is fastened a hook M, the shank portion of each being threaded and engaged by a handle N.

From the foregoing it will be observed that by the construction of a crate as shown and described a compact receptacle is provided when knocked down, and when put together a rigid box is produced, the sides as well as the top and bottom of which will be securely held to the corner-posts and in their proper positions.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

1. A knockdown box, consisting of sides having opposite edges bent to form grooves, corner-posts having plates secured thereto on adjacent faces thereof, said plates being bent upon themselves to form grooves for engagement with the grooves of said sides, cross-braces held together and fastened at their ends to the opposite sides of the box, as set forth.

2. A knockdown box consisting of the sides, each having opposite edges bent to form grooves, a grooved plate fastened to each side piece and opposite its grooved edge, the corner-posts, grooved plates arranged in pairs and on adjacent faces of said posts and adapted to receive the grooved edges of the sides and the grooved plates fastened to said sides, cross-braces held together and fastened to the opposite sides of the box, and the top and bottom pieces held to said posts, as set forth.

3. A knockdown box consisting of the side

pieces and posts with interlocking plates as described, the threaded screws held in the ends of the posts, the top and bottom pieces held against the ends of said posts, the braces,
5 a rod passing through same, nuts on the ends of said rod and bearing against the top and bottom pieces, the hooks fastened to the ends of the braces, passed through the sides, and

the handles secured to the outer ends of the shank portions of said hooks, as set forth. 10

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JAMES QUISENBERRY BOYD.

Witnesses:

H. S. SMITH,

ELMA MORRISON.