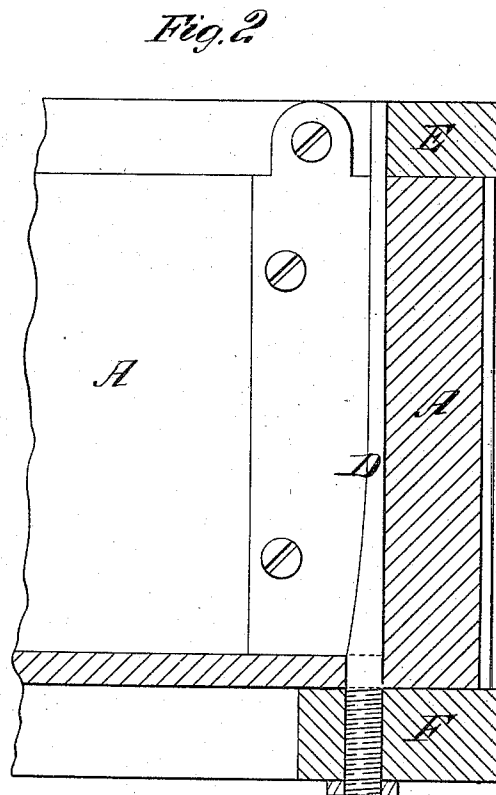
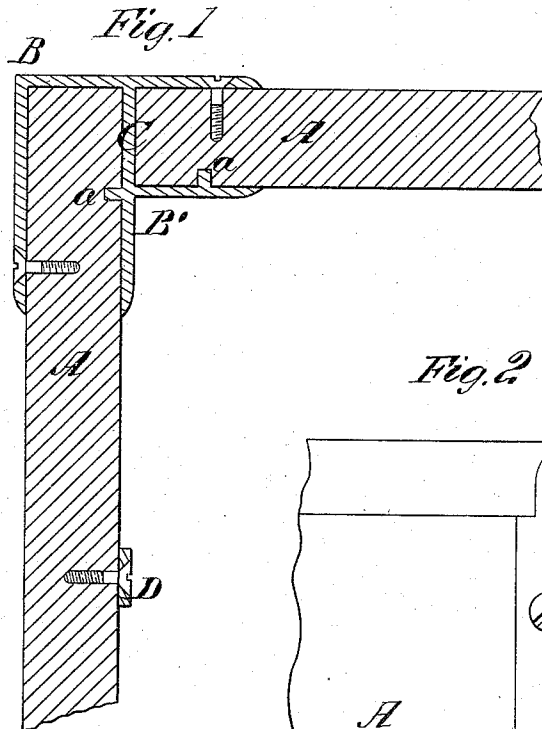


N. L. HOLMES.
Angle-Irons for Boxes.

No. 157,399.

Patented Dec. 1, 1874.



WITNESSES

Mary J. Utley
H. B. Hollingshead

INVENTOR

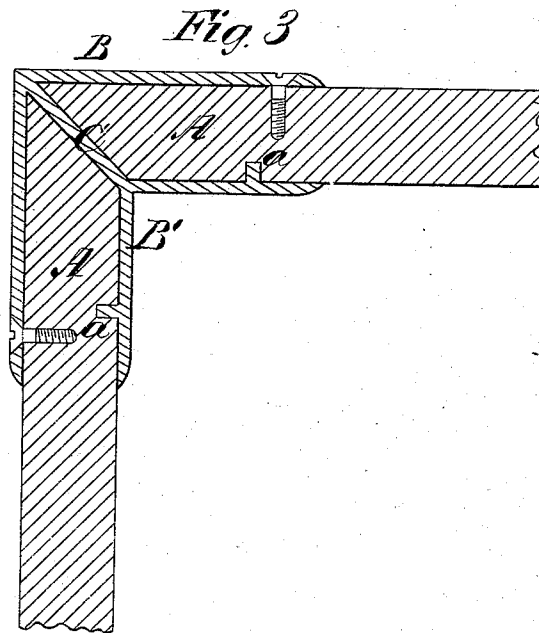
N. L. Holmes,
Chipman & Osburn & Co

Attorneys

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WITNESSES

Mary S. Witty.
H. C. Hollingshead

INVENTOR

N. L. Holmes
Chipman & Somers & Co

Attorneys

UNITED STATES PATENT OFFICE.

NATHAN L. HOLMES, OF RACINE, WISCONSIN.

IMPROVEMENT IN ANGLE-IRONS FOR BOXES.

Specification forming part of Letters Patent No. **157,399**, dated December 1, 1874; application filed August 29, 1874.

To all whom it may concern:

Be it known that I, N. L. HOLMES, of Racine, in the county of Racine and State of Wisconsin, have invented a new and valuable Improvement in Angle-Irons for Boxes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional view of my angle-iron. Fig. 2 is a vertical sectional view, and Fig. 3 is a cross-sectional view, of a modification of the same.

This invention has relation to means for securing the corners or angles of boxes and other objects; and it consists in two angle-irons, which are connected together by a cross-plate, against which the ends of the box-stuff abut, and which are provided with ribs that enter grooves made in the box-stuff, whereby a rigid and very durable fastening is obtained, as will be hereinafter explained.

In the annexed drawings, Figs. 1 and 2, A A designate two pieces of box-stuff, which are secured together by means of my improved angle-iron. This iron consists of two right-angular portions, B B', and a connecting portion, C, with ribs *a a* formed on the in-

ner sides of the angular portion B'. The inner sides of the pieces A A are grooved, as shown in Fig. 1, and when these pieces are inserted between the angle-irons B B' the ribs *a a* enter the said grooves, and prevent the pieces from being drawn out of place. The portion C not only serves as a means for connecting the two angles, but it also affords a metallic abutment for the ends of the pieces A. As an additional security I screw both of the angles B B' to the pieces A, and use cap and foot pieces E F to cover the ends of the angles. The pieces E F are confined in place by means of a tie-strap, D. (Shown in Fig. 2.)

When the box-stuff is sawed mitered, as shown in Fig. 3, the connecting-piece C extends diagonally across from one angle to the other.

What I claim as new, and desire to secure by Letters Patent, is—

The angle-irons B B', connecting portion C, and ribs *a*, constructed as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

NATHAN L. HOLMES.

Witnesses:

TITUS G. FISH,

ALBERT W. CRITES.