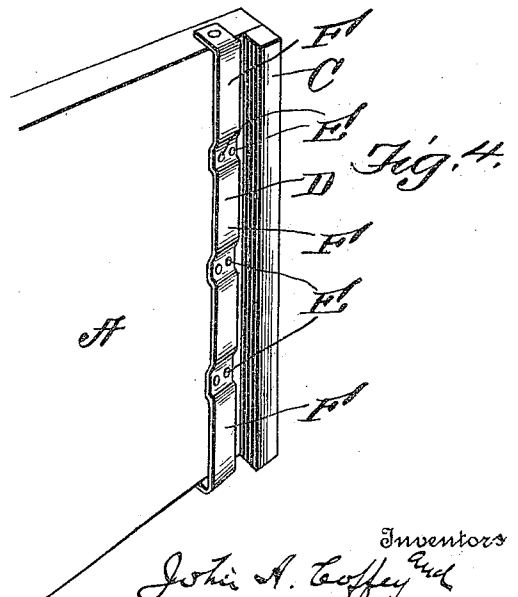
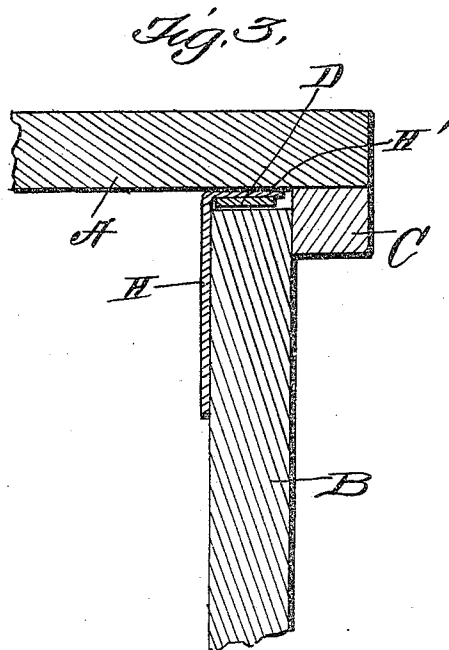
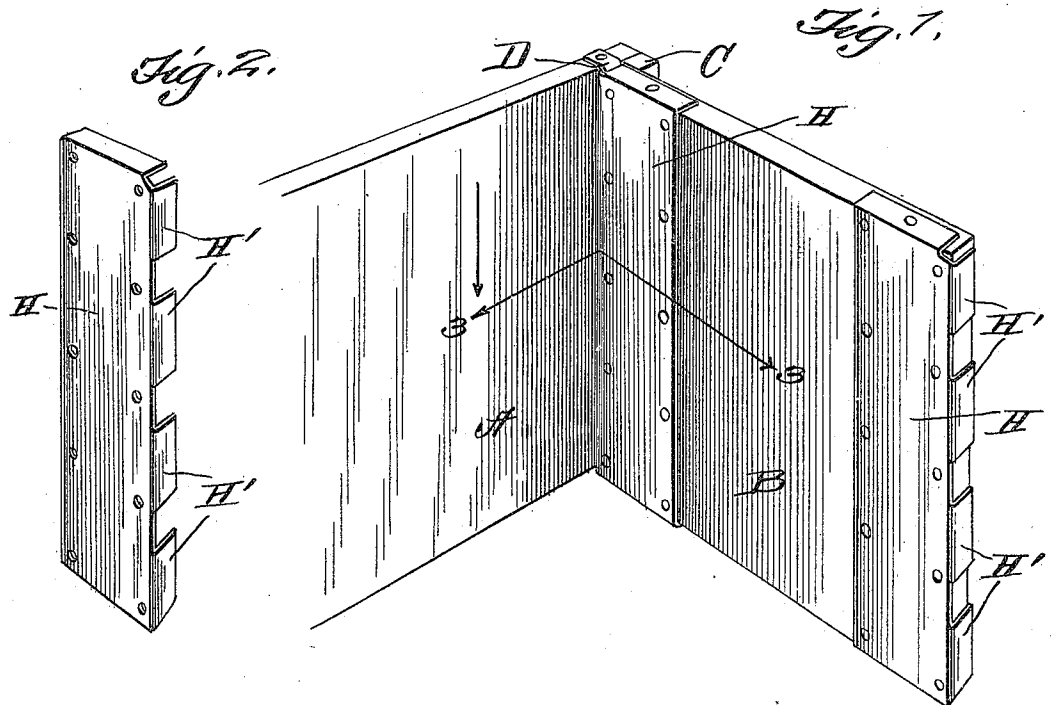


J. A. COFFEY & C. C. BOWEN.  
 CORNER FASTENING DEVICE FOR BOXES, GRATES, &c.  
 APPLICATION FILED AUG. 31, 1909.

952,785.

Patented Mar. 22, 1910.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN A. COFFEY AND CLARENCE C. BOWEN, OF CADILLAC, MICHIGAN.

CORNER-FASTENING DEVICE FOR BOXES, CRATES, &c.

952,785.

Specification of Letters Patent. **Patented Mar. 22, 1910.**

Application filed August 31, 1909. Serial No. 515,466.

*To all whom it may concern:*

Be it known that we, JOHN A. COFFEY and CLARENCE C. BOWEN, citizens of the United States, residing at Cadillac, in the county of Wexford and State of Michigan, have invented certain new and useful Improvements in Corner-Fastening Devices for Boxes, Crates, &c.; and we do hereby 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 detachable fastenings for corners of crates, boxes, etc., and comprises a simple and efficient device of this nature having various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

We illustrate our invention in the accompanying drawings, in which:—

Figure 1 is a perspective view of a corner of a box held together by our improved fastening device. Fig. 2 is a detail view of one of the fastening plates. Fig. 3 is a sectional view through the plates fastened together, and Fig. 4 is a detail view of one of the plates which is formed into loops for the reception of tongues upon a strap upon an adjacent section.

Reference now being had to the details of the drawings by letter, A and B designate a side and end respectively of a box or crate and to said side is fastened a cleat C transversely adjacent to the end thereof, and D designates a metallic strap, the ends of which are bent over the top and bottom edge of the side and fastened thereto and said strap is secured at intervals by nails or other fastening means, designated by letter E, to the side, forming a series of loops F. The end B has fastened thereto plates H having a series of integral tongues H' which are bent at right angles to the body portion of the plate H and extending about the marginal edge of said ends. Said fingers are substantially the width of the end and

are spaced apart a slight distance from the edge about which they turn and each tongue is adapted to engage a loop or pocket F formed by the strap D in the manner shown clearly in the sectional view of the drawings. Said strap D is positioned adjacent to the plate C and, when the side and end are fastened together, the outer face of the end B is adapted to contact with the inner edge of said cleat, thus securely holding the parts together.

It will be noted that the ends of the plates H are bent at right angles and extend over the top and bottom of the inner section of the box or crate and securely fastened thereto. One of said plates H is fastened to each vertical marginal edge of the end, as shown, and adapted to engage the loops or pockets upon the strips fastened to the opposite sides, thus forming a secure means for holding the walls of the box or crate together. When it is desired to knock down the box, said ends may be withdrawn by pulling the tongues out of the loops or pockets, thus allowing the box to be folded into a compact form for shipment, storage or other purposes.

What we claim to be new is:—

1. In combination with the end and side walls of a box, a cleat fastened to the end face of one wall, a bar fastened parallel to said cleat and to the wall carrying said cleat and spaced apart a slight distance from the latter, a metallic strip extending the height of the walls and provided with a series of tongues engaging intermediate said bar and the adjacent face of the wall to which it is secured, the outer face of the wall to which said cleat is fastened bearing against the inner face of said cleat, as shown and described.

2. In combination with the end and side walls of a box, a cleat fastened to the end face of one wall, a bar having its end bent at angles and fastened over the top and bottom edges of the wall to which said cleat is fastened, said bar having offset portions which are fastened to the inner face of the wall and forming a series of loops, a plate extending the height of the walls and having angled ends secured to the ends of one of said walls, a series of wings projecting from one mar-

ginal edge of said plate parallel to the edge  
of the wall to which it is fastened and de-  
signed to engage the loops of said bar, the  
outer face of the wall carrying said plate en-  
5 gaging the inner edge of said cleat, as shown  
and described.

In testimony whereof we hereunto affix

our signatures in the presence of two wit-  
nesses.

JOHN A. COFFEY.  
CLARENCE C. BOWEN.

Witnesses:

KATE COLLINS,  
FRANK E. BOWEN.