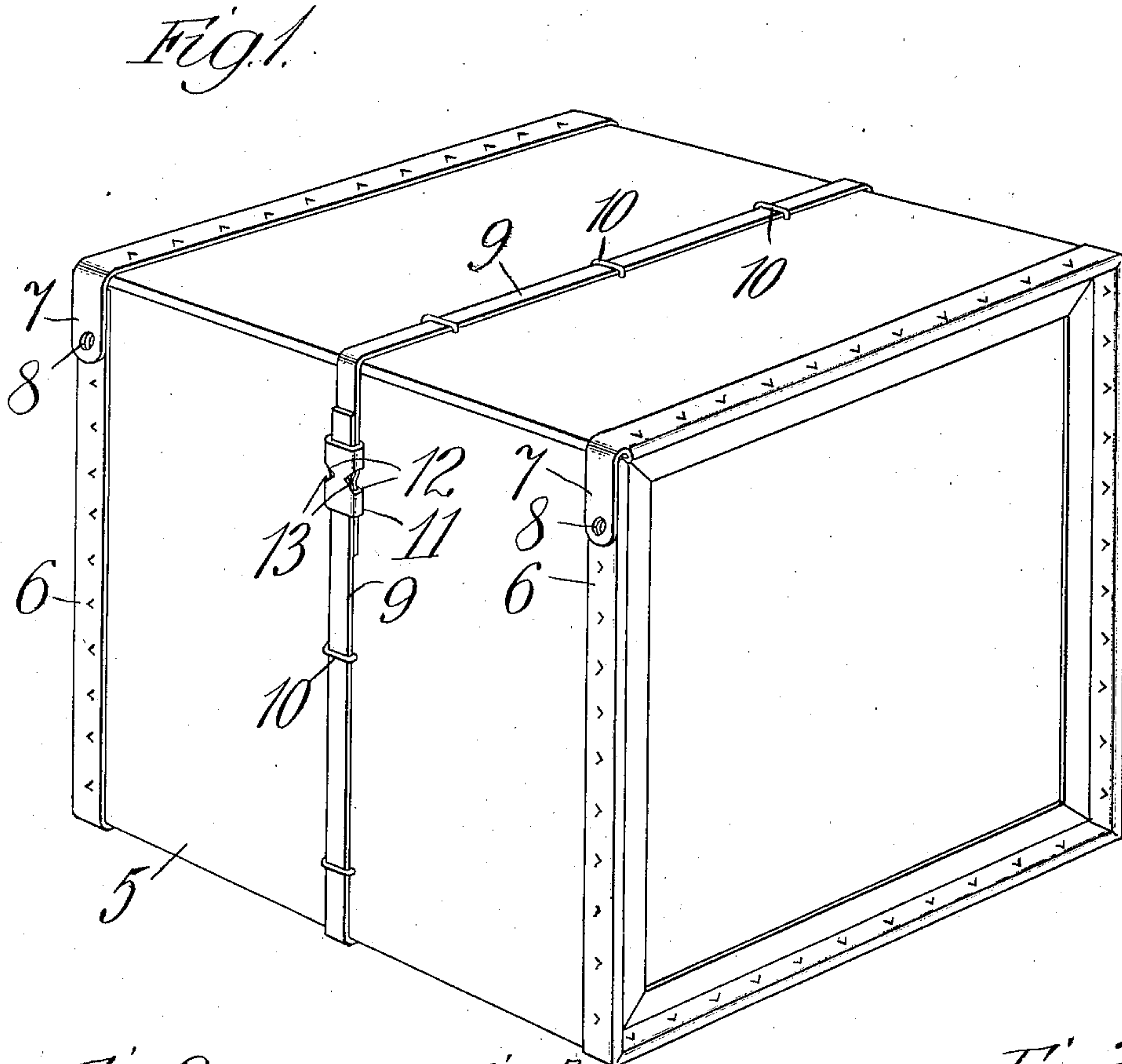


E. E. FLORA.  
FASTENER FOR METAL STRAPS.  
APPLICATION FILED JAN. 30, 1911.

997,186.

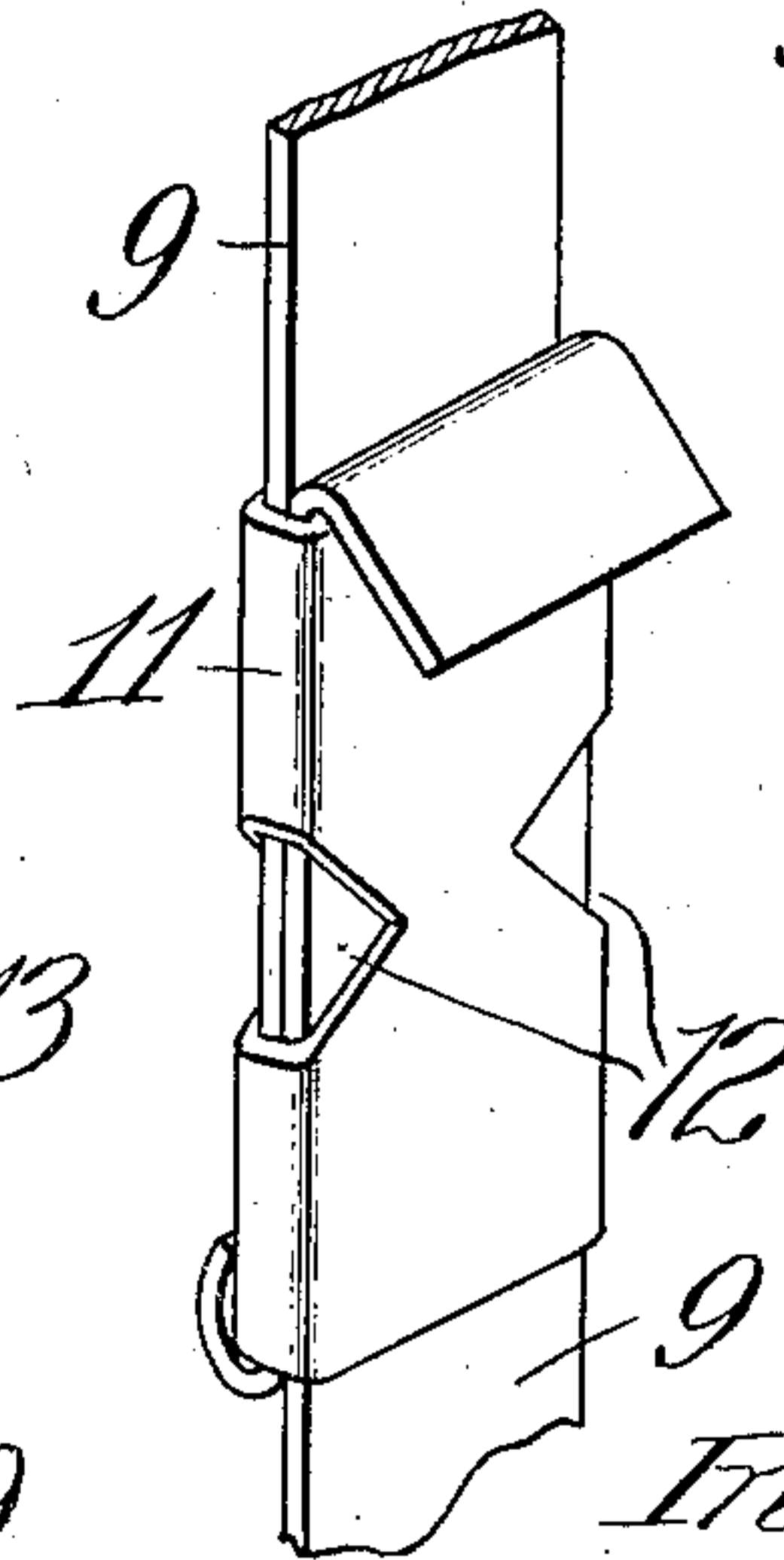
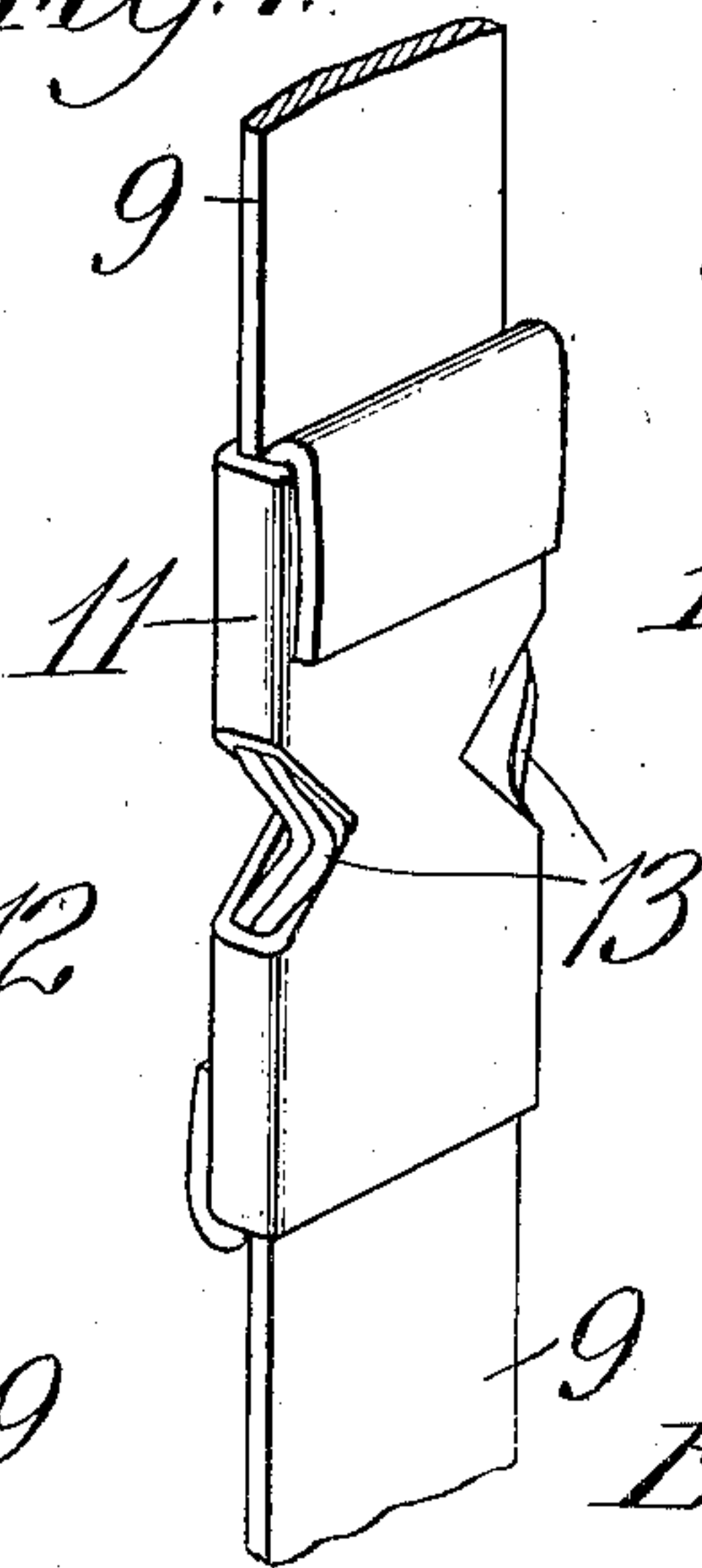
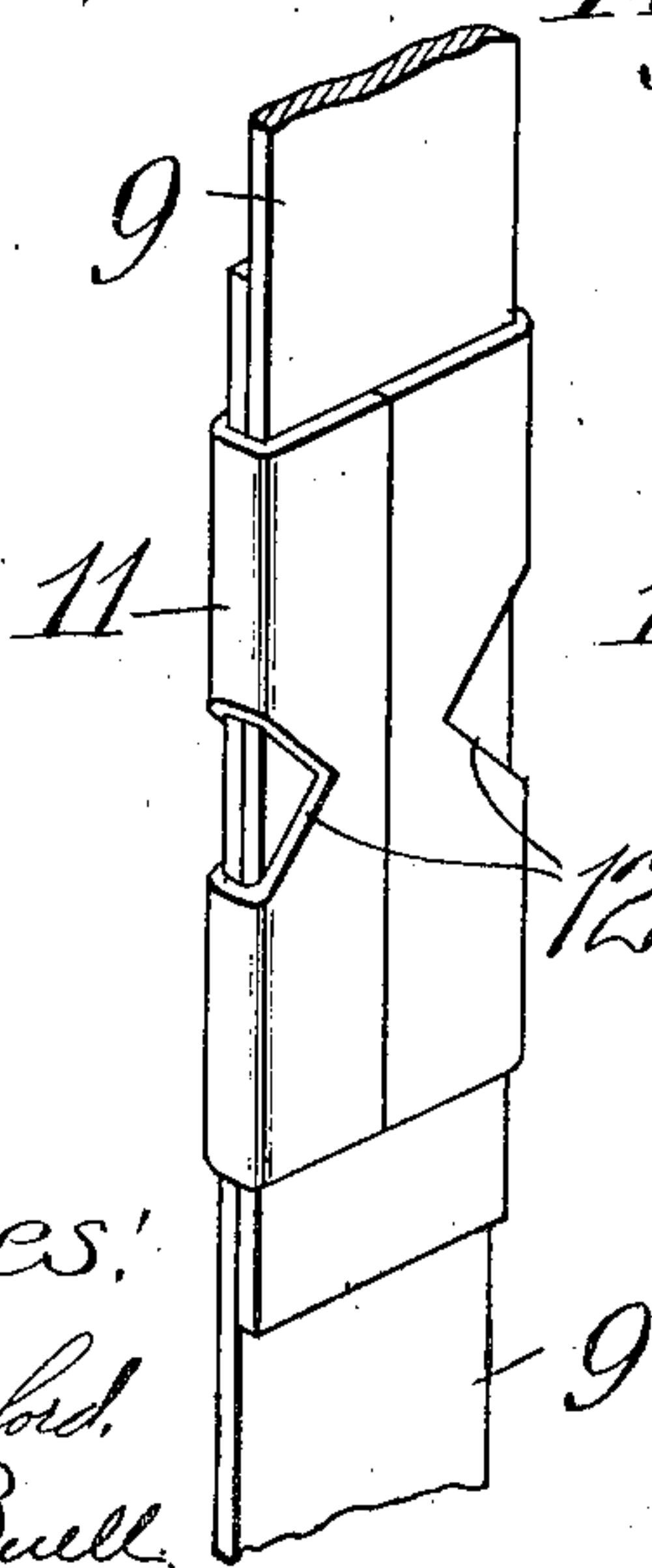
Patented July 4, 1911.



*Fig. 2.*

*Fig. 4.*

*Fig. 3.*



Witnesses:

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# UNITED STATES PATENT OFFICE.

ELLSWORTH E. FLORA, OF CHICAGO, ILLINOIS, ASSIGNOR TO SIMPLEX METAL-BOUND BOX COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

## FASTENER FOR METAL STRAPS.

997,186.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed January 30, 1911. Serial No. 605,542.

*To all whom it may concern:*

Be it known that I, ELLSWORTH E. FLORA, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Fasteners for Metal Straps, of which the following is a specification.

My object is to provide a particularly simple, secure and easily applied fastener for the meeting ends of metal strips or straps, such as are employed upon boxes, bales and the like packages.

In the accompanying drawing—Figure 1 is a perspective view of a metal-bound box of the "Simplex" type to which is applied a box-strap secured at its ends by my improved fastening means; Fig. 2, an enlarged broken perspective view of the fastener-parts before they have been secured together; Fig. 3, a similar view showing the ends of the strap bent over the ends of a retaining sleeve to hold the parts against relative slipping; and Fig. 4, a similar view showing the way the parts are secured to fasten them permanently together.

The box illustrated is of a well-known metal-bound type consisting of top, bottom, side and end-sheets held together by the binding-strips 6. On the ends of the binding-strips are tongues 7 projecting past the edge of the cover and adapted to be fastened down with seals applied at the perforations 8 in a well-known manner. Extending around the box between its ends is a metal strap 9 which may be fastened to the sheets with staples 10. The purpose of the strap is to give additional security to the box and prevent separation by warping of the meeting edges of the sheets.

The numeral 11 designates a rigid metal-sleeve or channel-piece having gaps 12 midway of its ends at opposite sides. The bore of the sleeve is just large enough to permit the opposite ends of the strap 9 to be passed through it from opposite directions and overlie one another. When the strap-ends are passed through the sleeve, the marginal portions of the straps are exposed in the

gaps. A tool for the purpose, and of the general form of a pair of pliers, may then be applied to the strap-edges in the gaps 12 and squeezed against the marginal portions of the straps to crimp or bend them out of their original alinement, as shown at 13. The shoulders thus presented by the straps to each other and to the marginal edges of the gaps hold the parts securely together. The sleeve 11 may only partly encircle the strap-ends instead of completely encircling them, as shown, and the gaps 12 in the sleeve may be of rounded or any other form instead of angular, as they are illustrated. In applying the fastener one strap-end may be passed through the sleeve and bent over upon the same, so that when the other strap-end is passed through the sleeve it may be drawn taut without danger of the other ends slipping out of the sleeve, as illustrated in Fig. 3. When both strap-ends are bent over the sleeve they hold the parts against relative slipping while a tool is being applied to form the crimps 13.

While I prefer to provide my improved fastening means as shown and described, the construction may be variously modified in the matter of details without departing from the spirit of my invention as defined by the claim.

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

In a device of the character described, a metal strip, a sleeve embracing said strip lengthwise thereof and through which the strip-ends are passed to overlie one another, the said sleeve being provided with openings in its sides to expose the strip ends on the top and bottom of the sleeve, said ends being compressed toward the center of said strips, whereby the same are caused to present shoulders to each other and to the edges of the sleeve openings, for the purpose set forth.

ELLSWORTH E. FLORA.

In presence of—

L. HEISLAR,  
R. SCHAEFER.