

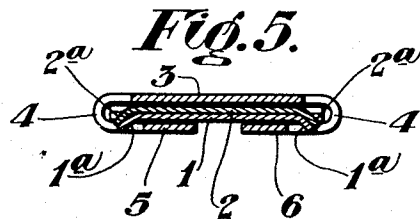
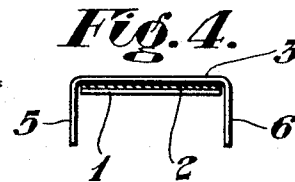
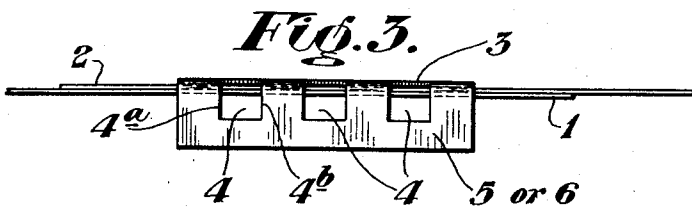
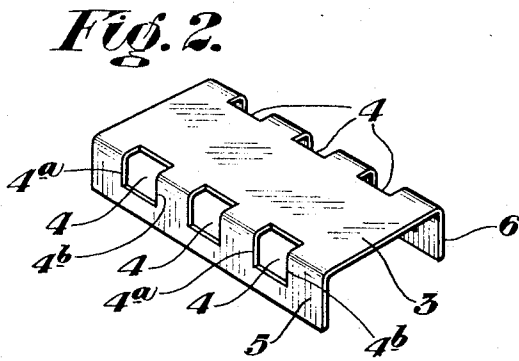
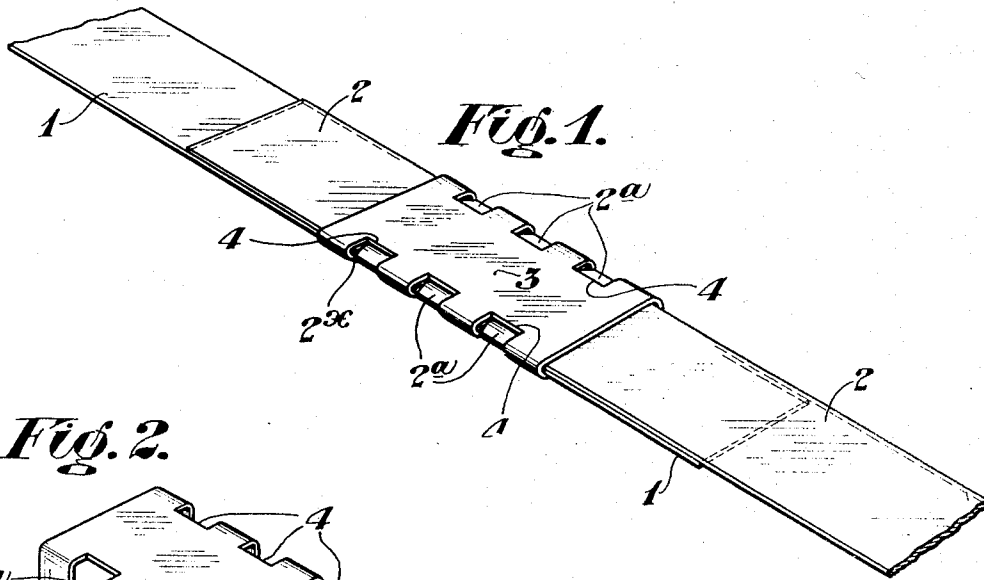
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FASTENER

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UNITED STATES PATENT OFFICE

2,118,158

FASTENER

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3 Claims. (Cl. 24—23)

This invention relates to fasteners, and more particularly to those used to firmly unite the ends of overlapping tying elements, such as box and package straps, and the like.

One object of the present invention is the provision of a novel fastener for the ends of overlapping tying elements which may be easily applied to positively prevent relative movement of the elements.

Another object is to provide a novel fastener of the class described which can be cheaply made and easily applied by existing types of hand tools, as well as specially designed devices.

These and further objects will be apparent after referring to the drawing, in which:

Figure 1 is a perspective view of the novel fastener of the invention as applied to the overlapping ends of a box strap, such as is frequently used for tying purposes.

Figure 2 is a perspective of the novel sleeve of the invention in its preformed shape prior to its application.

Figure 3 is a side elevation of the sleeve of Figure 2 about to be applied to the overlapping ends of a box strap.

Figure 4 is a sectional end elevation of the sleeve of Figure 3 and the box strap.

Figure 5 is an enlarged sectional end view of the completed fastener as completely applied to the box strap of Figures 1, 3 and 4.

Referring more particularly to the drawing, the numerals 1 and 2 indicate the overlapping ends of a box strap which are to be united together in such manner as to prevent their relative movement.

According to the teaching of the invention, a blank 3, composed of a relatively square plate, is provided with a plurality of apertures 4, parallel and adjacent both of its longitudinal edges. The edges of the blank 3 are bent downwardly, as at 5 and 6, with the axes of their bends intersecting the substantial midportions of the apertures 4.

In installing the fastener, the blank 3 is placed over the overlapping ends 1 and 2 of the box strap, and its downwardly extending legs 5 and 6 are pressed inwardly, as, for example, by means of suitable pliers, and in such manner as to cause the blank 3 and its legs to tightly embrace the box strap. Those portions of the edges of the end of the box strap which are exposed by the slots 4 are bent downwardly as by means of a punch, thus shearing the box strapping inward from the edges, transversely and in line with the edges 4^a and 4^b of the apertures 4, in such manner as to form small lugs on the edges thereof. These lugs firmly interlock with the

side edges 4^a and 4^b of the apertures. In this manner, no relative movement will be permitted between the ends of the box strap and the fastener blank 3, and the smooth outer surface of both the blank and box strap will be preserved, as the partially sheared portions extend downwardly.

While I have shown and described one specific embodiment of my invention, it will be understood that I do not wish to be limited exactly thereto, since various modifications may be made without departing from the scope of my invention, as defined in the following claims.

I claim:

1. A box or package tie including a flat metallic band with lapped end portions and a seal formed of a strip of material having an aperture spaced back from one end of the strip leaving the material unbroken at the extreme end, the seal strip being folded around the lapped portions of the band with said aperture positioned to expose the band surface adjacent its margin, and said exposed portion of the band being severed and offset to interlock positively with the edge of said aperture of the seal.

2. A box or package tie including a flat metallic band with lapped end portions and a seal embracing said portions, said seal being formed of a strip of material having apertures spaced back respectively from opposite ends of the strip leaving the material unbroken at the extreme ends, the seal strip being folded around the lapped portions of the band with said apertures positioned to expose the marginal portions of the band, and the margins of both lapped portions of the band being transversely severed at said apertures and offset into said apertures for interlocking engagement with each other and with the seal.

3. A box or package tie including a flat metallic band with lapped end portions and a seal embracing said portions, said seal being formed of a strip of material having an aperture spaced back from one end of the strip leaving the material unbroken at the extreme end, the seal strip being folded around the lapped portions of the band with said aperture positioned to expose the band surface adjacent its margin, the edges of the aperture extending substantially perpendicular to the lateral edge of the band, and said exposed marginal portion being severed at right angles to its said edge and offset into interlocking engagement with the edge of said aperture of the seal, but so that the offset portion does not protrude beyond the outer surface of the seal.

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