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A. U. SNOOK

1,774,850

BOX FASTENER

Filed July 18, 1927

Fig. 1.

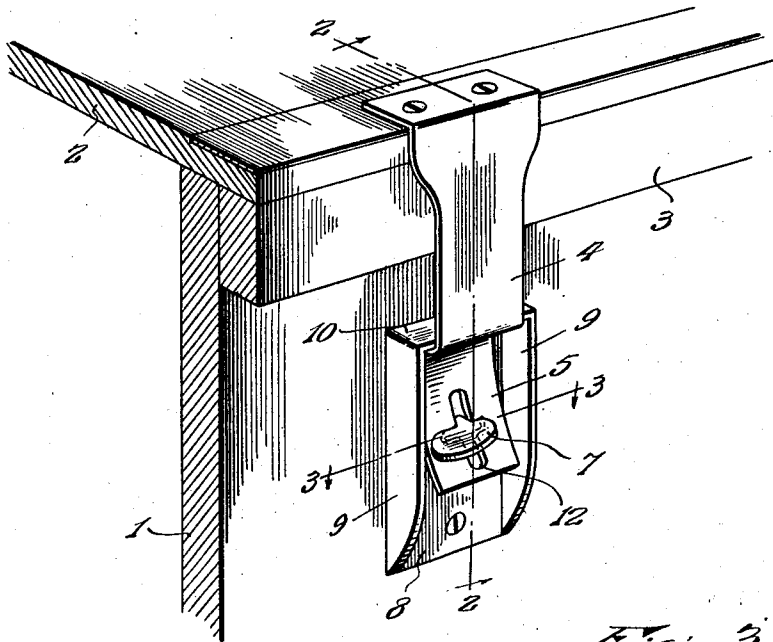


Fig. 2.

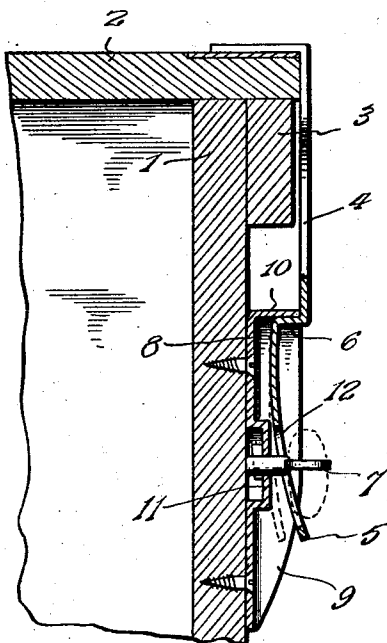


Fig. 3.

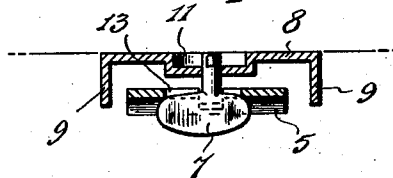
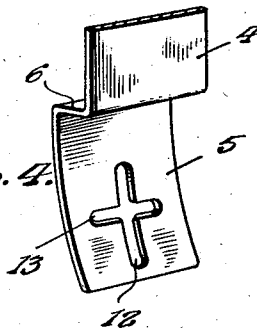


Fig. 4.



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BOX FASTENER

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This invention relates to securing means for the covers or lids of boxes, crates and like packages in which goods are shipped, and which are returned, the purpose being to
5 obviate the practice of hinging said covers or lids or nailing the same to the box or crate.

The invention provides a fastener which not only secures the cover or lid, but which prevents lateral movement thereof, thereby
10 obviating the necessity of additional means to prevent lateral and longitudinal movement of the cover when placed in position upon the box.

The invention supplies a fastener including a latch and a stop, the latch being spring actuated, and the stop having a catch applied thereto and adapted to engage the latch and prevent casual disengagement thereof
15 from the stop.

While the drawing illustrates a preferred embodiment of the invention, it is to be understood that in adapting the means to meet specific needs and requirements, the design may be varied and changes in the minor details of construction may be resorted to within the scope of the invention as claimed,
25 without departing from the spirit thereof.

For a full understanding of the invention and the merits thereof, reference is to be had to the following description and the drawing hereto attached, in which,—

Figure 1 is a detail perspective view illustrative of an embodiment of the invention.

Figure 2 is a detail, sectional view on the
35 line 2—2 of Figure 1.

Figure 3 is a detail, sectional view on the line 3—3 of Figure 1.

Figure 4 is a detail perspective view of the engaging end of the latch.

Corresponding and like parts are referred to in the following description and designated in the several views of the drawing by like reference characters.

The numeral 1 designates the body of the
45 box, crate, or like package, which is closed by means of a cover or lid 2. A cleat 3 is applied to the top portion of each end of the box or crate to strengthen and reinforce the same. It is to be understood that each end of
50 the box or crate is adapted to be provided

with fastening means embodying the invention, the same including a latch 4, which is secured in any manner to the end of the cover or lid 2, and which terminates in an inclined end 5, which is offset from the body of the latch to provide an inwardly disposed shoulder 6.

The latch is resilient and the end portion 5 capable of spring action for engagement with and disengagement from a catch 7. The latch is of a length to extend across the cleat 3 and downwardly over the end of the box or crate to coact with a stop applied thereto. The stop is approximately of box form and is open at its front and lower end and comprises a back 8, sides 9, and an end 10 which is disposed so as to engage over the shoulder 6 of the latch 4. This stop is adapted to be secured to the side of the box or crate in position to receive the end portion 5 of the latch, with the shoulder 6 engaging under the end 10 when the lid or cover 2 is pressed close upon the top of the box or crate. It will thus be understood that the stop constitutes a housing for the end portion 5 of the latch. The shoulder portion 6 of the latch is of a width approximating the distance between the sides 9, whereby to prevent lateral displacement of the cover or lid 2. The stem of the catch 7 is mounted in a raised portion 11 pressed outwardly from the bottom or back 8 of the stop, a retaining pin being inserted diametrically through the end of the stem to prevent its withdrawal and the raised portion or boss constituting a housing in which the retaining pin may turn freely. The catch is rotatable and its head is elongated, one end projecting from the stem a greater distance than the opposite end, with the result that the latch is weighted, so that the head will normally occupy a vertical position, as indicated most clearly by the dotted lines in Figure 2. The end portion 5 of the latch has intersecting slots 12 and 13 formed therein, the slot 12 being disposed vertically, or lengthwise of the latch and the slot 13 transversely of the latch. One end of the transverse slot 13 projects from the vertical slot 12 to a greater distance than the opposite end, as indicated most clearly in Figures 3
100

and 4 to correspond with the end portion of the catch 7, the total length of the slot, however, being less than the extreme length of the catch.

5 The parts being assembled as herein indicated, and shown in the accompanying drawings, the lid or cover 2, when properly positioned upon the box or crate causes the end portion 5 of the latch to enter the space of
10 the stop circumscribed by the sides 9 and end 10. The end 5 of the latch riding over the catch 7 results in the latter passing through the vertical slot 12. The lower portion of the end 5 is now pressed inward to cause the
15 slot 12 to clear the inner edge of the catch 7, after which said catch is turned and the end 5 released, when it springs outwardly and receives the inner edge portion of the catch 7 in the cross slot 13, as shown in Figure 3.
20 This results in the formation of a lock and causes the catch 7 to supplement the action of the shoulder 6 and end 10 in preventing upward movement of the latch. To release the latch the end 5 is required to be pressed
25 inwardly to disengage the slot 13 from the catch 7, which is then turned to align with the vertical slot 12. The latch 4 is now drawn outward to clear the catch 7 and end 10, thereby releasing the cover or lid 2 which
30 may be removed.

The catch 7 includes a stem and a flat head and is pivoted to the back 8 of the stop so as to turn freely. The longitudinal slot 12 is of a length to permit the flat head of the
35 catch to pass freely therethrough. The transverse slot 13 is of less length than the flat head to prevent its passage therethrough, as shown most clearly in Figure 3 of the drawing. The flat head is partly received
40 in the slot 13 which forms a seat therefor and prevents its casual turning and partly sustains the strain incident to holding the cover 2 in place.

Having thus described the invention, I
45 claim:

A fastening comprising a stop of approximately box form including a back, sides and a top end, a catch journaled in the back of the stop and formed with a flat head, and a
50 latch having an end portion offset to provide a shoulder to engage under the top end of the stop, and having intersecting longitudinal and transverse slots in the offset end, the longitudinal slot admitting of the head
55 passing freely therethrough, whereas the transverse slot is of a length less than the flat head to partly receive but prevent its passage therethrough, whereby to form positive interlocking means between the parts
10 and prevent accidental turning of the catch, the offset end portion of the latch being housed in the box form stop.

In testimony whereof I affix my signature.