(No Model.)

R. M. WILLIAMSON.

BOX FASTENER.

No. 267,122. Patented Nov. 7, 1882.

Fig. 1.

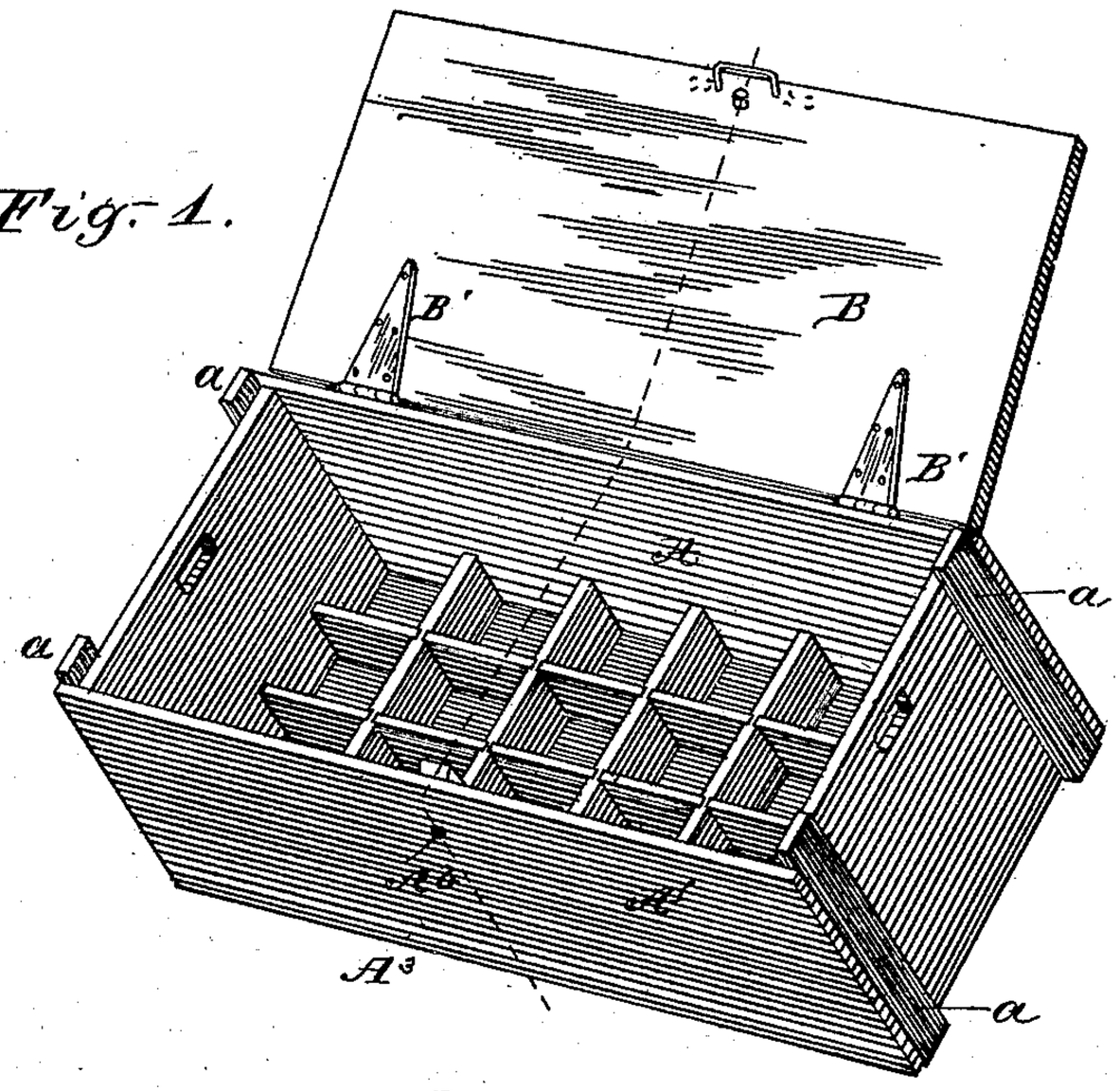


Fig. 2.

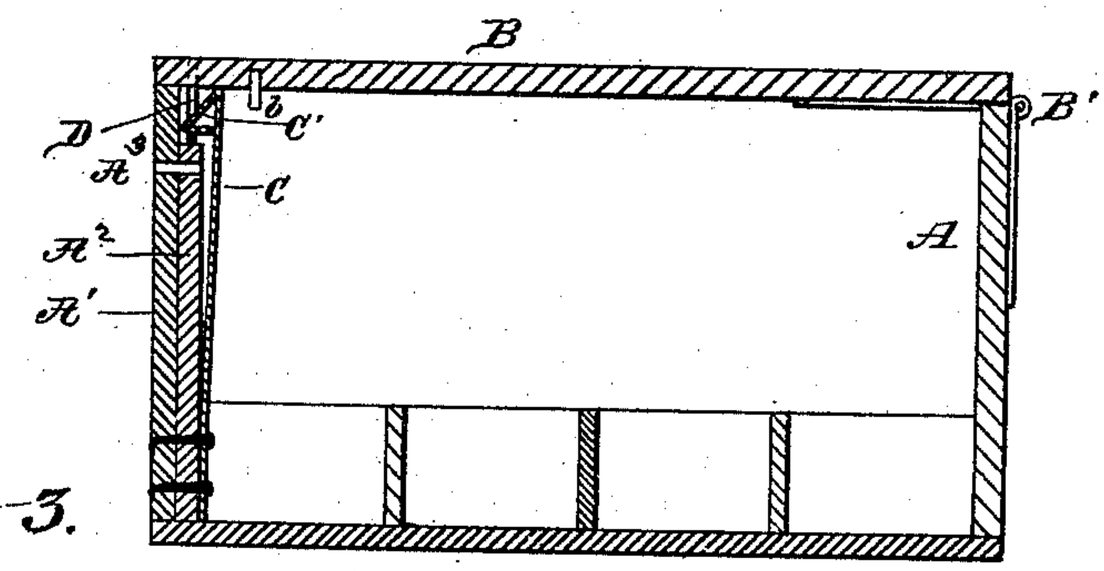


Fig. 3.

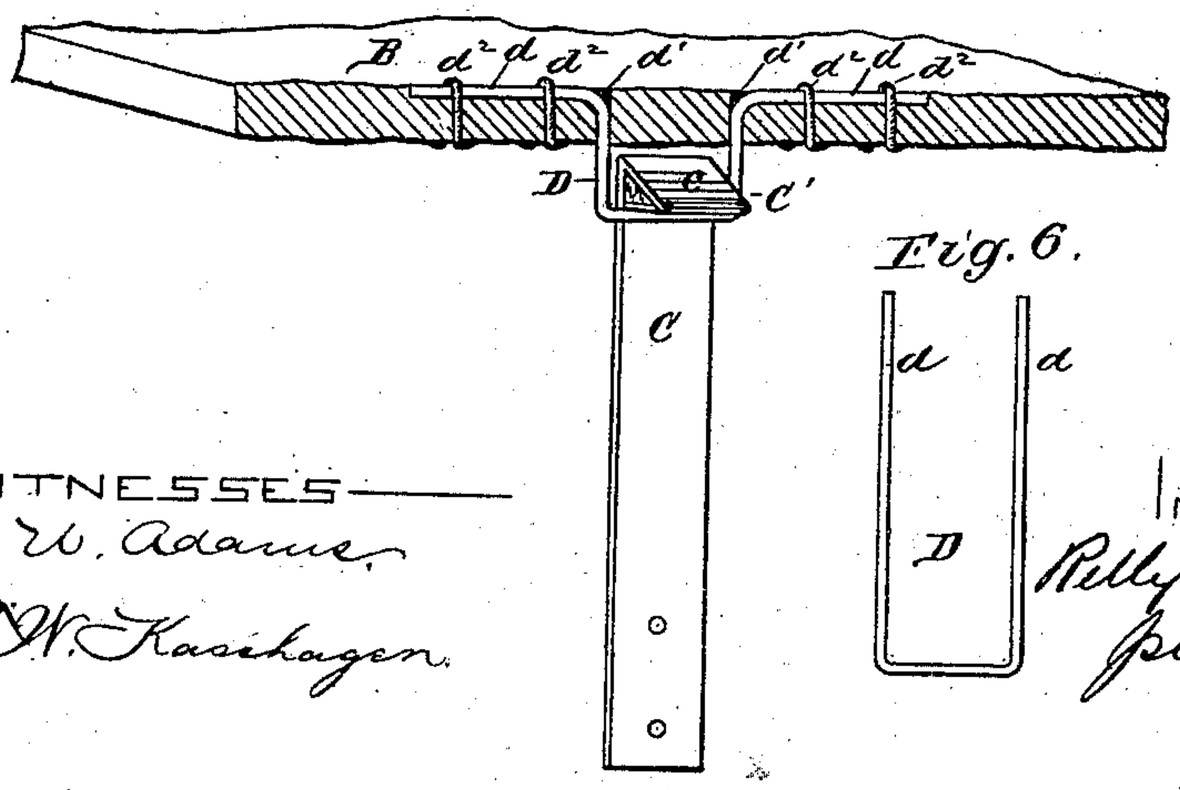


Fig. 6.

Fig. 4.

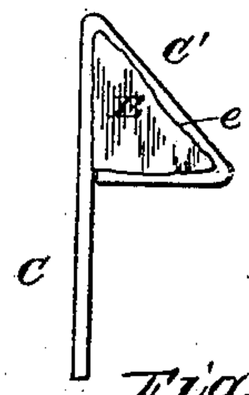
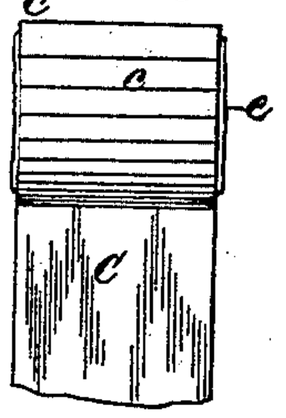


Fig. 5.



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UNITED STATES PATENT OFFICE.

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BOX-FASTENER.

SPECIFICATION forming part of Letters Patent No. 267,122, dated November 7, 1882.

Application filed August 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, RELLY M. WILLIAMSON, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Box-Fastenings; and I do hereby declare that the following is a full, clear, and exact description thereof, 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 fastenings for packing-boxes, such as are intended for repeated use in transporting bottles and similar articles; and it consists in certain features of construction hereinafter described, and pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of an open box containing my improvement. Fig. 2 is a vertical central transverse section of the box closed. Fig. 3 is a vertical section of the cover parallel with its front edge and in the plane occupied by the staple which forms part of the fastening. Fig. 4 is a side elevation of the head of the catch detached. Fig. 5 is a front view of said head. Fig. 6 is an elevation of the staple before it is secured to the cover.

A A′ is the body of the box, and B is its cover, hinged to the body by the strap-hinges B′.

C is a spring-catch, formed of a strip of elastic metal by having one end bent to form the triangular head C′. Said catch is secured to the inner face of the front A′ of the box with its head or hook directed outwardly, as shown in Fig. 2, by means of nails or screws located at the lower end of the strip, and preferably with a strip of wood, A^2, of width about equal to the catch, interposed between the latter and the box-front, and terminating far enough below the hook or head of the catch to admit the staple D, which depends from the cover and engages with said catch to complete the fastening. The staple D is of stout wire first bent to the U-shaped form shown in Fig. 6. In this form its legs *d d* are thrust upwardly through suitable holes, *d′ d′*, in the cover and bent outward into the form and position shown in Fig. 3, leaving the loop D depending the proper distance below the under surface of the cover B and set in proper position to strike the inclined surface *c* of the hook C′, and finally to engage said hook when the cover is completely closed, as shown in Fig. 2. The loop D is restrained from being forced upward, either by striking the catch or from other causes, by means of the staples d^2, which are driven into the cover astride the horizontal or downwardly-bent portions of the wire of which the loop is formed and clinched on the under face of the cover, as clearly shown in Fig. 3. The catch C is detached from the loop D by thrusting any slender article, like a pencil or nail, through the hole A^3, provided in the front A′ of the box and located as near the catch-head as practicable. A pin, *b*, projecting from the under face of the cover behind the catch C, prevents the latter from being thrust backward too far, but allows it to recede sufficiently to release the loop D.

In order to give durability in form to the head C′ of the catch, made, as described, from a strip of metal bent as set forth, a triangular wooden plug, E, is driven into the space inclosed by the head C′, said plug being cut a little longer than the width of the catch and having its ends battered, as shown at *e*, Figs. 4 and 5, so as to be thereby retained within the metal which embraces it.

The fastening described is obviously well adapted only to hold the cover down upon the box, and is not well calculated to hold the cover laterally in place. For the last-mentioned purpose the cleats *a a* are provided, being extended above the ends and sides of the box a short distance and arranged to admit the cover between them. The hinges B′ are also constructed and applied to give strength to the attachment of the cover, being of the strap order and arranged with one arm of the strap external to the box back and the other interior to the cover, as more clearly shown in Fig. 2.

In a packing-case for the shipment of goods, intended for repeated use, a convenient and effective fastening is necessary, and strength, durability, and cheapness are necessary in the entire structure. The box described has been found, by ample trial, to contain these desirable qualities. By applying the wooden strip A^2 beneath the shank or lower portion of the catch C the latter may be made straight, so as to give a more direct draft thereon and greater strength thereto, with, of course, less liability to be bent or sprung out of shape in closing the box violently. The plug E perfectly retains the head C′ in its original form, and the

stop *b* so limits the throw of the spring-catch as to prevent its being deranged in releasing it. The wire form of staple or loop D is cheap in the material of which it is made, and is perfectly secure in its mode of application, as described, and the simple orifice A^3, arranged in front of the spring-catch C, enables the box to be opened by means of such ordinary implements as are in possession of or accessible to all. To insure against the opening of the box by unauthorized persons, a paper seal may be pasted externally over the hole A^3, which, however, is not an essential feature of my invention.

The strip A^2 may be dispensed with and the box-front A′, of suitable thickness, notched on its inner surface to admit the outwardly-projecting hook C′ of the catch and the loop D on the cover.

I claim as my invention—

1. In combination with the box-front provided with the aperture A^3, and with the cover arranged to rest on the box-front when closed, the vertical spring-catch C C′, arranged over the aperture, secured at its lower end to the inner face of the box-front, and having its hook or head C′ directed outwardly, and a loop, D, applied and secured to the cover in position to engage said catch, the whole being located on the interior of the box when closed and arranged substantially as shown and described.

2. In the catch C C′, the combination, with the strip of metal bent to form the head C′, of the wooden plug E, fitted in the triangular space within the head, and having its projecting ends battered, as a means of securing the same, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

RELLY M. WILLIAMSON.

Witnesses:

M. E. DAYTON,

JESSE COX, Jr.