R. MEAD.
Box-Fastener.

No. 205,286. Patented June 25, 1878.

Fig. 1

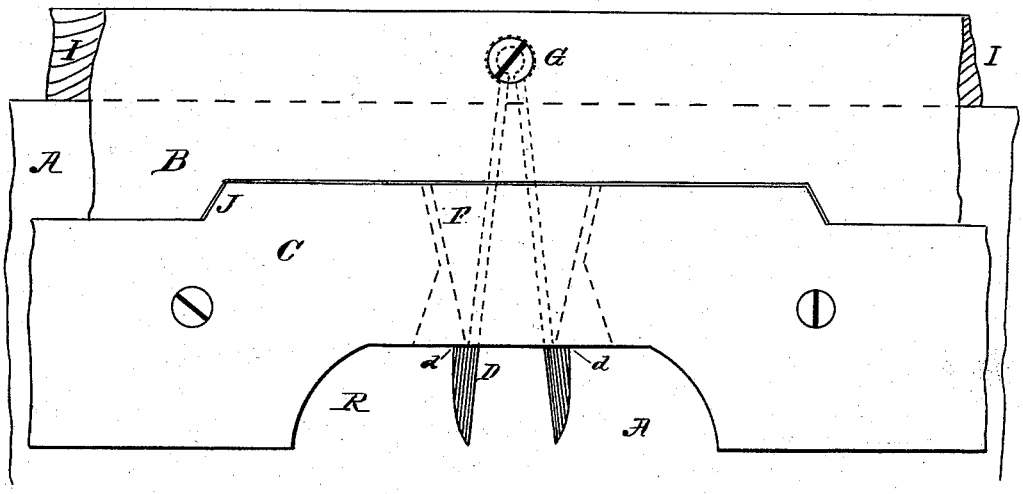


Fig. 2

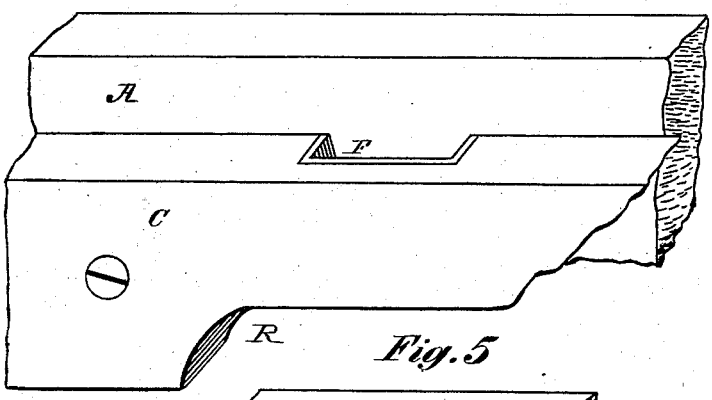


Fig. 3

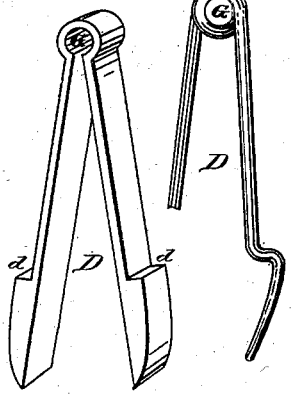
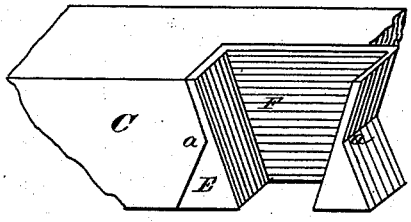


Fig. 4

Fig. 5



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UNITED STATES PATENT OFFICE.

ROMEYN MEAD, OF McMINNVILLE, TENNESSEE.

IMPROVEMENT IN BOX-FASTENERS.

Specification forming part of Letters Patent No. **205,286**, dated June 25, 1878; application filed April 1, 1878.

To all whom it may concern:

Be it known that I, ROMEYN MEAD, of McMinnville, county of Warren, Tennessee, have invented certain new and useful Improvements in Box-Cover Fastenings, of which the following is a full, clear, and accurate description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to fastenings specially for transportation-cases, such as egg-carriers, fruit-boxes, &c., in which it is necessary that the cover shall be securely held during transit, and equally desirable that it shall be easily and quickly removable on arrival, and, if possible, without injury to the cover.

To provide a cover-fastening that will meet these requirements is the object of my invention; and to this end it consists in a double spring-latch fastened to the cover of the case, and engaging a cleat attachment of the box in such manner as to be instantly detached when desired.

My invention embraces other features also, all of which are fully set forth hereinafter.

In the drawing, Figure 1 shows my improved fastening applied to a box. Fig. 2 is a perspective view of a fragment of box end and cleat, showing mortise for admission of the latch. Fig. 3 is a detached view of the double spring-latch detached. Fig. 4 is a similar view of latch made of spring-wire. Fig. 5 is a perspective view of metal mortise-casing, showing how, by its form and that of the cut in the cleat to receive it, it may be held in place without screws.

A is either end of a box; B, a cleat secured to the cover I, and dropping a little below the top of the box externally; and C another cleat, fastened to the box immediately beneath B. The meeting-faces of these cleats are provided with the corresponding offsets J, in form shown, so that when the cover is held in place upon the box all side or end strain upon it is met by the cleats, and not by the fastening.

The fastening proper consists of the double spring-latch D, secured to the cover or cover-cleat, and projecting downward, as shown.

In or at the back of the cleat C is cut the mortise F at the proper point to receive D. This mortise narrows at the bottom, so as to compress the latch-points as they enter, and the cleat is of such width at this point as to allow them to expand and the shoulders *d* to engage the under surface of the cleat when the lid rests down upon the box.

At a little distance on either side of the projecting latch-points the cleat C drops, to leave a recess, R, within which they are guarded by the surrounding parts of the cleat from injury in transportation.

When it is desired to remove the cover, the latch-points are compressed by the fingers and the cover lifted and set aside, to be replaced when desired.

The latch D may be made of a flat strip of spring metal, or it may be of wire, as shown respectively in Figs. 3 and 4. In either case it is best to form the eye G at the bend, so that the latch may be cheaply and strongly secured to the cleat or cover. The latch may be in two pieces, however, if thought best, and its upper ends bent in any manner to facilitate other methods of attachment.

The recess in the cleat B, in which the latch is held, should hold the same partly compressed, so that, by the tension of the spring, the latch may be rigid enough with the cover to be easily guided into the mortise F.

In order to prevent wearing of the mortise F, I have provided the metal casing E, made of cast or malleable iron, and formed as shown, to be held by the cleat when fastened to the box without the aid of screws or nails—that is to say, it has opposite re-entering angles *a a*, in conformity with which the cleat is conveniently cut away, and the widening shape of the casing in both directions prevents its being withdrawn either way.

Obviously other forms may be given the casing to effect the same result; but that shown is believed to be the simplest of application.

The fastenings described are intended to be used on covers not provided with hinges. Hinges, however, may be used, in which case, instead of a latch at each end, as above provided, a single latch may be used, applied in the usual place of a lock.

In boxes supplied with my cover-fastenings the cleats C will answer as convenient handles, by which the box is lifted, and, if de-

sirable, the latches may be placed at one side, instead of in the middle, to be out of the way of the hand.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with a box-lid and lid-latch, the cleats B and C, mutually formed on their meeting-faces to engage one another when in contact, to prevent lateral movement of the lid, substantially as described and shown.

2. In a box-cover fastening, the combination, with a vertical latch, of the meeting-cleats B and C, recessed as described and shown—that is, the former on its inner face, to permanently hold the spring-latch, and the latter on its inner and bottom faces, to temporarily receive it and to guard its lower projecting portion, substantially as and for the purposes specified.

3. The combination of the metallic mortise-shell E, having external double tapering sides or shoulders, and the correspondingly-formed mortise in the back of the box-cleat, substantially as described, so that when the cleat is fastened to the box the shell is held in place without other fastening.

4. In combination with a lid-latch engaging on the under face of the box-cleat, the downward projection of the cleat on both sides of the latch to guard its protruding portion, substantially as described.

5. A box provided with the lid-cleat B and box-cleat C, mutually formed on their meeting-faces as shown, and with the double spring-latch D, secured to the lid and engaging the box-cleat C, substantially as described, and for the purposes set forth.

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