

F. B. WILLIAMS.
SEAL LOCK FOR BOXES.
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949,342.

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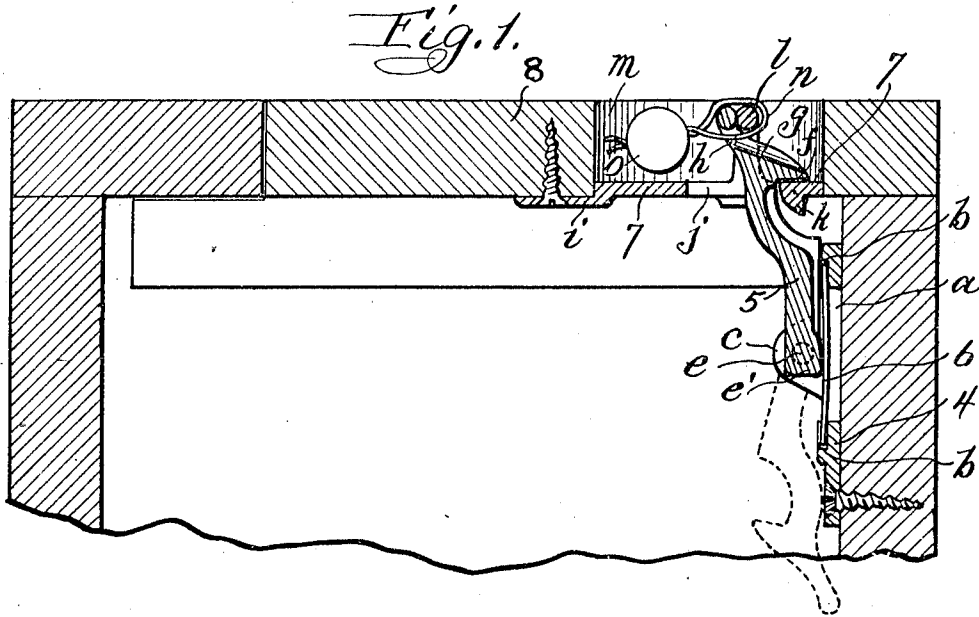


Fig. 2.

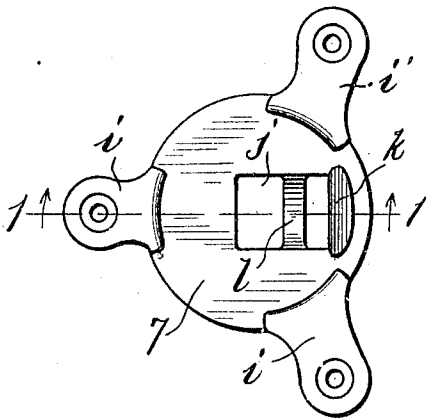
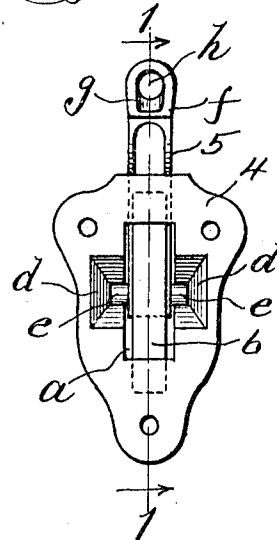


Fig. 3.



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UNITED STATES PATENT OFFICE.

FITZALLAN B. WILLIAMS, OF CHICAGO, ILLINOIS.

SEAL-LOCK FOR BOXES.

949,342.

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To all whom it may concern:

Be it known that I, FITZALLAN B. WILLIAMS, of Chicago, in the State of Illinois, have invented a certain new and useful Improvement in Seal-Locks for Boxes, of which the following is a specification.

My invention relates to improvements in means for locking and sealing wooden boxes or beer cases by locking devices adapted to be applied on the inside of the box in such manner as to be sealed on the outside of the cover and flush with the outer surface thereof; and the objects of my improvement are, first, to provide a simple inside locking device which can be cheaply made, and to which a seal can be quickly and easily applied so as to be flush with or below the outer surface of the box cover; and second, to provide a spring-pressed pivotal latch, the spring and latch being of such form and relative arrangement that the latch can be turned up to work with a striking-plate or turned down and stay out of working relation with the striking-plate. I attain these objects by the means illustrated in the accompanying drawings in which—

Figure 1 is a front-to-rear fragmentary section of a wooden box showing in sectional view (on lines 1 1 Figs. 2 and 3) my improved locking devices applied thereto; Fig. 2 is a plan showing a bottom view of the striking-plate detached, and; Fig. 3, is a bottom view of the latch-plate detached, showing also in plan view the manner of mounting the latch and spring thereon.

Like signs marked on the drawings refer to like parts throughout all the views.

The latch-plate 4 has a flat bottom surface adapted to fit the interior of the front side of the box and to be secured thereto with screws or nails. Said plate has a central longitudinal slot *a*, there being a recess *b* in the upper side of the plate at each end of the slot. The upper side of said plate is provided with raised parts *c* on each side of the slot, which are recessed from the bottom at *d* as shown in Fig. 3. The latch 5 is provided with trunnions *e* and may be passed through the slot and turned therein so as to bring the trunnions to rest in the bottom of the recess at *d*. When in such position a flat spring 6 can be slipped under the latch and rest with its ends in the recesses *b* so as to bear against the latch and hold it in place on the plate and pressed against the

same. The extreme end *e'* of the latch projecting beyond the trunnions, operates as a cam bearing with increasing pressure upon the spring when the latch is vibrated and operating to hold the latch in its turned-up position shown in full lines, or in the turned down position shown in dotted lines Fig. 1, as may be desired. The head of the latch is formed with a hook-like projection *f* having a bevel on the top, which has a groove or channel *g* terminating in a hole *h* near the tip of the head, the groove forming a guide-way under the top of a loop of the striking-plate, and to the hole *h* which is extended transversely to the plane of said bevel. It is noted that the plate 4 and the latch 5 with their described features are of such form as to be cast as integral parts which are adapted to be held together by the spring 6 when assembled.

The striking-plate 7 is, preferably, a disk and has perforate radial extensions *i* whose upper surface is preferably in the plane of the lower surface of the disk, as seen in Fig. 1. Said striking-plate is provided with a slot *j*, and preferably a downwardly-extending beveled part *k* at the front end of said slot. The upper side of said plate is provided with a perpendicular loop or bridge *l* extended over and across the slot *j*, its extension above the disk being less than the thickness of the box-cover. The striking-plate with all its described features may be cheaply made of malleable metal by being cast as an integral part. The said plate may be applied to the under side of the cover 8 of half inch stuff by boring a hole *m* through the cover near the front edge the size of the disk, fitting the disk in the hole and securing it by screws in the holes of the radial extensions.

The latch-plate is secured to the front side of the box under the striking-plate, being adjusted in position so that the beveled latch-head will strike the bevel *k*, and be thereby sprung back sufficiently to pass up through the slot *j* until the part *f* springs forward into engagement with the upper surface of the said plate at the front end of the slot as seen in Fig. 1.

It is noted that the loop *l* when applied as designed does not rise above the upper surface of the cover, and that the perforated tip end of the latch-head and the guide-way *g* are so adjusted relatively to the catch *f*

and said loop as to strike said loop simultaneously with the completion of said engagement of the latch with said striking-plate. The opening through the loop immediately under its top cross-bar and through the tip of the latch-head and the guide-way are thus brought together on a level, and the distance through both the loop and latch tip end is made as short as possible so that a small wire *n* having its end dropped into the guide-way can be threaded through both the loop *l* and the hole *h* as through a hole in a single piece. The ends of a short piece of the wire *n*, when thus threaded through the loop *l* and hole *h*, may be brought together and twisted so as to tie the latch to the loop and provide means for attaching a seal *o*.

The principle of the invention is found in a slotted striking-plate, preferably disk-shaped, having perforate attaching-lugs extended from its edges and adapting said plate to be readily secured to a box-cover in or over a hole therein, near its front edge, and a perpendicular loop on the upper surface of said plate spanning the slot therein near its front end, the upward extension of the loop being less than the thickness of the box-cover, in combination with a spring-pressed latch having a bevel hook-like head provided with a perforation near its tip end extended transversely of the bevel and adapted to register with the slot of said plate and to vibrate therein in order to engage said plate and be released therefrom, the arrangement of said latch relatively to said loop and slot being such that the bevel of the latch-head passes under and through said loop to lock with said plate and the tip end of the latch strikes the rear side of the loop at the top simultaneously with the com-

pletion of the locking action, for more readily attaching a seal as shown.

What I claim is:

1. The combination with a box-cover provided with an opening near its front edge, of a slotted striking-plate adapted to be secured to the under side of the cover over the opening therein and provided with a perpendicular loop over the slot near its front end, the upward extension of said loop being less than the thickness of the cover, a spring-pressed latch having a hook-like, bevel head provided with a perforation near its tip end extended transversely of the bevel, the head being adapted to vibrate in said slot transversely of the loop so that the hook-like part will pass under the loop in order to lock with said plate and the tip end of the head will strike the rear of the loop simultaneously with the completion of the locking action and means for fastening the latch to the loop, as specified.

2. The combination with a box-cover having an opening near its front edge, of a slotted striking-plate attached to its under surface at said opening, a perpendicular loop on the upper side of said plate over the slot near its front end, the upward extension of the loop being less than the thickness of the cover, and the spring-pressed latch having a hook-like beveled head provided with a groove terminating in a perforation extended transversely of said bevel, the latch being adapted to register with and vibrate in the slot in order to engage said plate and strike the loop, as specified.

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