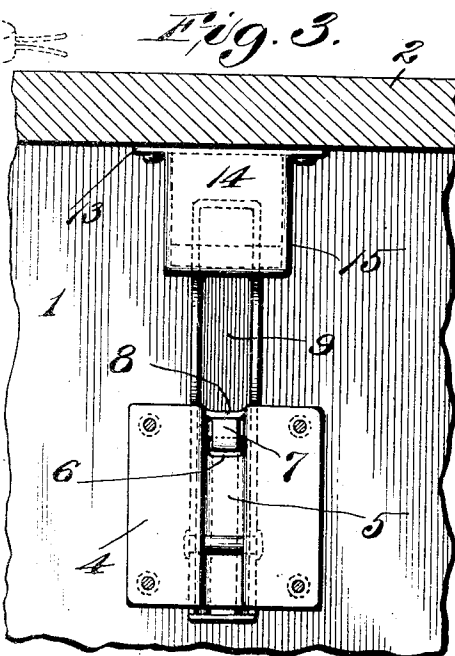
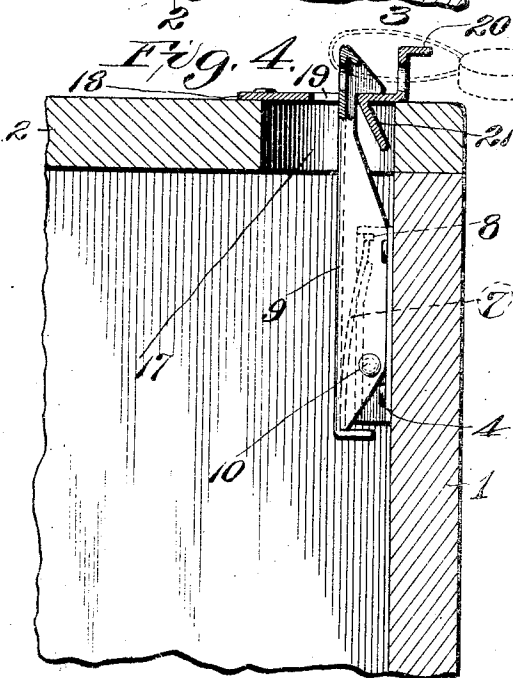
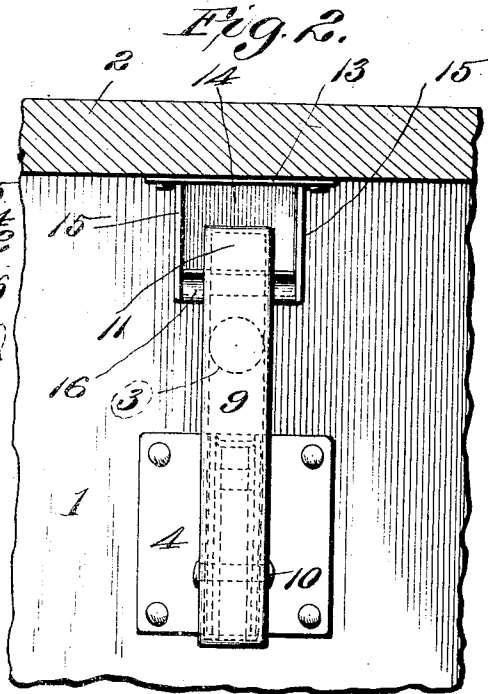
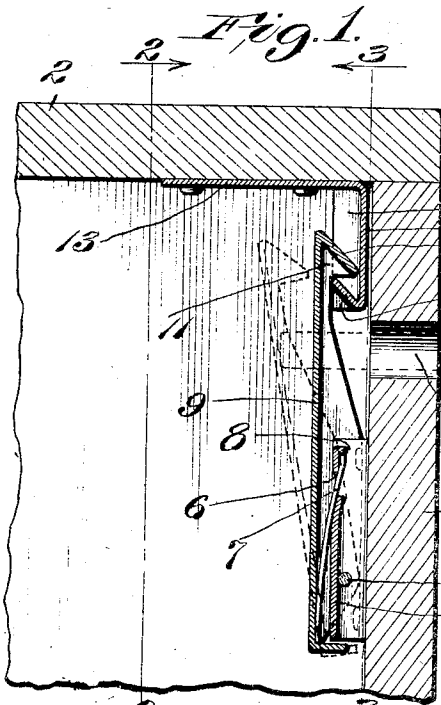


J. F. BEEHLER.
BOX LOCK OR FASTENER.
APPLICATION FILED AUG. 16, 1913.

1,094,773.

Patented Apr. 28, 1914.



Attest:
Wm. H. Scott.
Ruth Peterson.

Inventor:
James F. Beehler

UNITED STATES PATENT OFFICE.

JAMES F. BEEHLER, OF ST. LOUIS, MISSOURI.

BOX LOCK OR FASTENER.

1,094,773.

Specification of Letters Patent.

Patented Apr. 28, 1914.

Application filed August 18, 1913. Serial No. 785,094.

To all whom it may concern:

Be it known that I, JAMES F. BEEHLER, a citizen of the United States, residing at St. Louis, Missouri, have invented certain new and useful Improvements in Box Locks or Fasteners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved box lock or fastener, particularly intended for use on beer boxes, egg cases, shipping crates and the like, the principal object of my invention being to provide a simple, inexpensive lock or latch which is adapted to effectually hold the lid or cover of the box in closed position, and which lock can be readily released when desired.

Further objects of my invention are to construct a box lock or fastener from sheet metal, punched and bent to proper shape by suitable dies, which construction enables me to produce the locks or fasteners at comparatively little cost, and further to provide a lock or fastener having a latching plate or keeper located either on the interior or exterior of the box, thereby making the device either an inside lock or an outside lock.

To the above purposes my invention consists in certain novel features of construction and arrangement of parts hereinafter more fully described, claimed and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section taken through the upper portion of a box and the lid thereof, and showing my improved lock or fastener applied thereto as an inside lock. Fig. 2 is a vertical section taken approximately on the line 2—2 of Fig. 1. Fig. 3 is a vertical section taken on the line 3—3 of Fig. 1. Fig. 4 is a vertical section similar to Fig. 1, and showing my improved lock or fastener as an outside lock.

Referring by numerals to the accompanying drawings and particularly to Figs. 1, 2 and 3, which show the lock on the inside of the box: 1 designates the front wall of the box, 2 the lid thereof, and 3 an opening in the front wall through which a suitable tool is passed to release the latching member of the device. Fixed to the inner face of the wall 1, immediately below the opening 3, is a plate 4, the central portion of which is stamped or bent outwardly to form a vertically disposed rib or housing 5, and formed in the upper portion of the front wall of this

rib is an aperture 6 which receives the upper portion of a flat spring 7. The lower portion of this spring is positioned on the exterior of the rib or housing 5, and the upper end of said spring bears against an inwardly turned lip 8 on the upper end of the housing 5. The latching member of my improved device comprises an elongated body 9 formed of sheet metal and channel shape in cross section, and the lower portion of said body is positioned immediately over the housing 5. Passing through said housing 5 and through the side walls of the body 9 is a pin 10 which pivotally connects the latching member to said housing, and when so positioned the lower portion of the spring bears against the inner face of the lower portion of the front wall of said member 9. The upper end of the latching member is provided with a hook shaped head 11, said head being provided with an inclined top plate 12. The keeper used in connection with the inside lock comprises a flat plate 13 which is fixed to the underside of the box lid, near the front edge thereof, and depending from the front edge of said plate is a rectangular housing comprising a front wall 14, side walls 15, and inclined bottom wall 16. When the lid of the box is closed the hook 11 on the upper end of the body 9 occupies a position within the housing just described, said hook engaging the upper edge of the inclined bottom wall 16, as shown in Figs. 1 and 2. This arrangement effectually holds the lid in closed position until the latching member is unseated by means of a pin or suitable tool inserted through the aperture 3. The front wall 14 is imperforate, which construction together with the side walls 15 prevents the latching member from being actuated by means of a wire or the like inserted between the lid and the upper edge of the front wall of the box, for if an attempt is made to disengage the latching member in the manner just described, the walls of the housing surrounding the hook on the upper end of the latching member will prevent the wire or like device from engaging with the latching member.

The spring 7 normally holds the latching member in engagement with the keeper, and when the lid of the box swings downwardly in closing movement the inclined bottom wall 16 bears against the inclined top plate 12 of the latching member and moves the

same rearwardly against the resistance of the spring, after which the spring restores the latching member to its normal position.

Where it is desired to provide an outside lock, an aperture 17 is formed in the lid of the box near the front edge thereof, and positioned on said lid over said aperture is a plate 18 provided with an aperture 19 through which the upper end of the latching member passes when the latch is fastened, and formed on the front edge of this plate 18 is an upwardly and outwardly projecting lip 20. Formed integral with the plate 18 and projecting downwardly with the aperture 17 is an inclined lip 21, against which the inclined upper end of the head on the latching member engages when the lid moves into closed position. In this form of device the upper end of the latching member and the lip 20 are perforated in order to receive a suitable sealing device.

A box fastener of my improved construction is comparatively simple, comprises a minimum number of parts, can be easily and cheaply manufactured inasmuch as it is con-

structed wholly of sheet metal cut and bent to proper form and forms an efficient latch or lock for all forms of boxes and shipping cases.

I claim—

In a box fastener, a plate adapted to be fixed to the front wall of the box, a latching member pivotally mounted on said plate, a spring interposed between the plate and latching member, a plate adapted to be applied to the lid of the box and a housing depending from said last mentioned plate, which housing comprises an imperforate front wall, imperforate side walls, and an inclined bottom wall, the upper free edge of which is adapted to be engaged by the latching member when the box lid is closed.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 31st day of July, 1913.

JAMES F. BEEHLER.

Witnesses:

RUTH PETERSON,
WM. H. SCOTT.