M. L. SILVERSTEIN.

EMERGENCY DOOR LOCK AND UTILITY INSTRUMENT.

APPLICATION FILED FEB. 10, 1921.

1,434,411.

Patented Nov. 7, 1922.

Fig. 1.

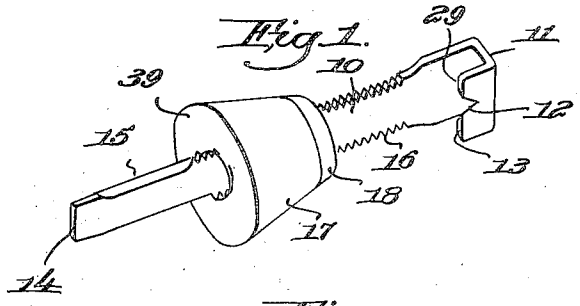


Fig. 2.

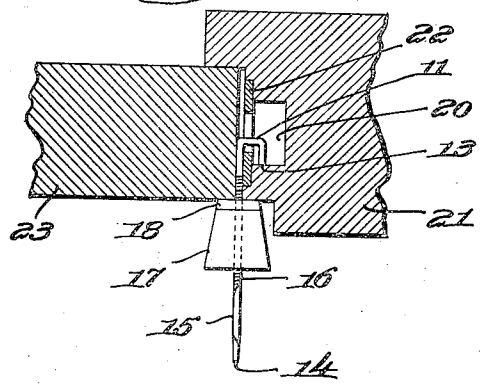


Fig. 3.

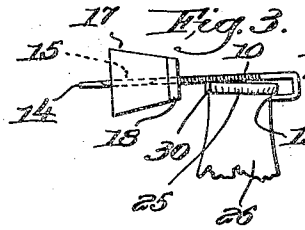


Fig. 4.

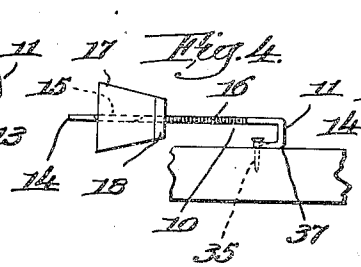
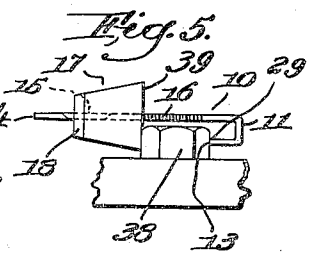


Fig. 5.



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his Atty.

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UNITED STATES PATENT OFFICE.

MORRIS L. SILVERSTEIN, OF BOSTON, MASSACHUSETTS.

EMERGENCY-DOOR LOCK AND UTILITY INSTRUMENT.

Application filed February 10, 1921. Serial No. 443,816.

To all whom it may concern:

Be it known that I, MORRIS L. SILVERSTEIN, a subject of the Government of Russia, and a resident of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Emergency-Door Locks and Utility Instruments, of which the following is a specification.

This invention relates to a combined door lock and utility instrument. An object of this invention is to produce an emergency door lock that is exceptionally simple in structure and operation and cheap to manufacture. While this device is primarily a door lock, other uses of equal or more importance have been found for it.

As a utility instrument it may be used to remove the so-called crown caps from bottles and, if desired, it may be used as a tack puller or in the event of the absence of a wrench it may be used to remove or secure a nut or bolt. A portion exceptionally well adapted to serve as a screw-driver and a knife edge adapted to serve as a cutting instrument are among other objects of this invention. The invention consists in certain novel features of construction and arrangement of parts that will be clearly understood from a description of the drawings and the claim hereinafter given.

Of the drawings:

Figure 1 represents a perspective view of the device embodying the invention;

Fig. 2 shows a section through a door and door jamb with the device applied thereto to indicate its use as an emergency lock;

Fig. 3 shows the device in position to remove a cap from a bottle;

Fig. 4 shows the device in position to remove a tack; and

Fig. 5 shows the device when in use as a wrench.

Referring to the drawings:

The flat sided body of the device or shank 10 has at one end thereof a hook 11 which has a notch 12 resembling a claw adapted to engage a tack or nail. Said hook terminates in an end 13 conveniently adapted for two purposes to be hereinafter explained. At the opposite end 14 the shank 10 is so shaped as to conveniently serve as a screw-driver, while adjacent thereto an edge 15 of the shank is sharpened to produce a cutting edge. A screw-thread 16 intermediate the ends of the shank 10 is adapted to receive a nut 17 which may be of any suitable size and shape but herein shown as conical, having a resilient pad 18 fixedly attached to one end thereof, preferably the smaller one.

Among the many uses of this device it is especially handy as an emergency door-lock, and to use it for this purpose the nut 17 is first moved toward the end 14 of the shank 10 whereupon the hook 11 is engaged with the receptacle 20 in the door jamb 21 provided for the usual lock bolt not shown, said receptacle 20 being provided with the usual perforated bolt plate 22. The door 23 may now be closed and the nut 17 screwed on the shank 10 until the pad 18 bears firmly against the door and the jamb, as readily seen in Fig. 2 of the drawings.

It will be understood that the usual clearance between the door and the jamb at this point is sufficient to allow of the application of the device as described. It is obvious that this novel arrangement is a practical one for the purpose just described as well as for the uses about to be explained.

Viewing Fig. 3 the device is shown as it would be used when a so-called crown cap 25 is about to be removed from a bottle 26. In this instance the shank 10 is laid upon the cap 25 so that the hook end 13 will abut the neck of the bottle at two points and downward pressure will be brought to bear on the other end of the shank 10, whereby the upper edge 29 of the end 13 will engage with the crimped lower edge or skirt of the cap. This causes a slight tilting of the shank 10, causing it to fulcrum on the said cap at approximately the point 30. Further downward pressure will cause the cap to be effectually removed. In view of the fact that at least one edge of the shank is formed with a cutting edge it would be advisable, for this operation, to position the nut 17 so that it will overlap at least the greater portion of the cutting edge 15 to protect the hand of the user. The nut may be grasped as a handle and in this instance serves two useful purposes.

Viewing Fig. 4 the device is shown as in use to remove or pull a tack, the claw-like end of the shank being in engagement with the tack 35 beneath the head thereof, the nut 17 serving as before as a protecting handle. Upward movement of the left end of the shank will cause the hook portion 11 to

fulcrum at the point 37 which arrangement gives the device tack-pulling qualities of considerable power.

Another of the uses of the device is clearly shown in Fig. 5 wherein the nut 38 is shown as clamped between the hook edge 13 and the broad face 39 of the nut 17 which, for this purpose, has been reversed on the shank, and is not provided with a resilient pad.

The application of the screw-driver end 14 and the cutting edge 15 seem obvious, and therefore have not been illustrated in the drawings. While the form shown and described is a handy and efficient one, it is possible to change the arrangement and structure without departing from the spirit and scope of the invention.

Having described the invention I claim:

In a door lock of the class described, a flat sided body portion of comparatively stiff metal having one end thereof bent at right angles thereto and backwardly a short distance parallel to the body portion to form a hook adapted to span a latch plate in such manner that the terminus of said hook meets the material behind said plate into which it may be pressed; the said body portion having screw threads on the edges thereof; a nut adapted to engage said screw threads; and a cushion on the door engaging face of said nut adapted to expand when said terminus is pressed into said material.

Signed by me at Boston, Mass., this 8th day of February, 1921.

MORRIS L. SILVERSTEIN.