No. 632,393. Patented Sept. 5, 1899.

L. B. BADGETT.

LOCK FOR RAILWAY SWITCHES, &c.

(Application filed Apr. 4, 1899.)

(No Model.)

Fig. 1.

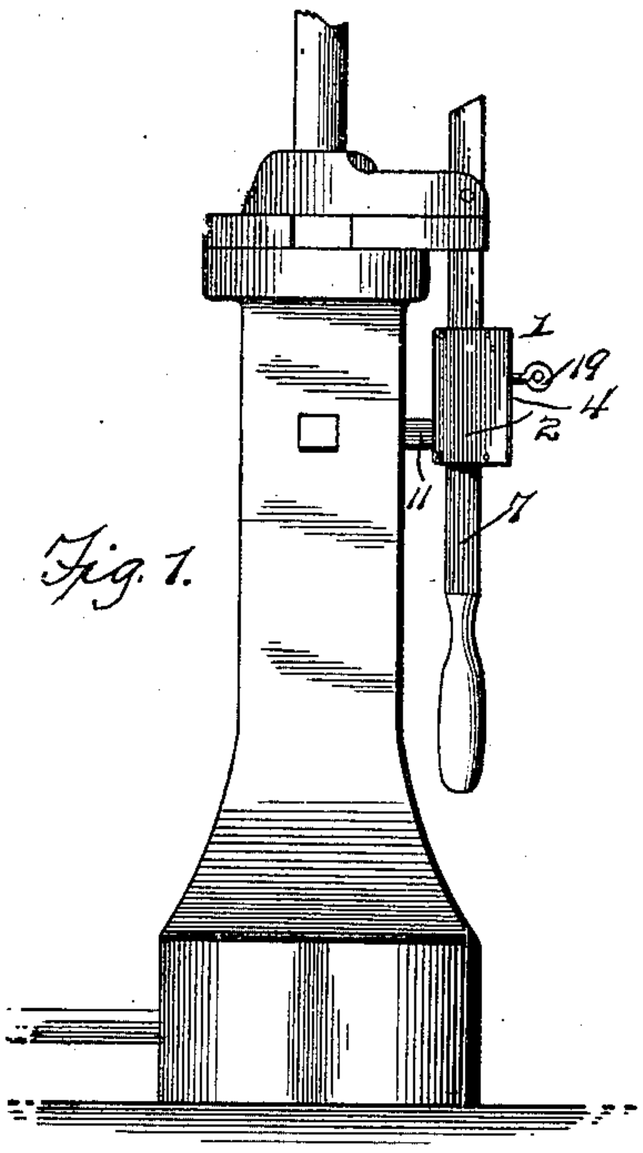


Fig. 4.

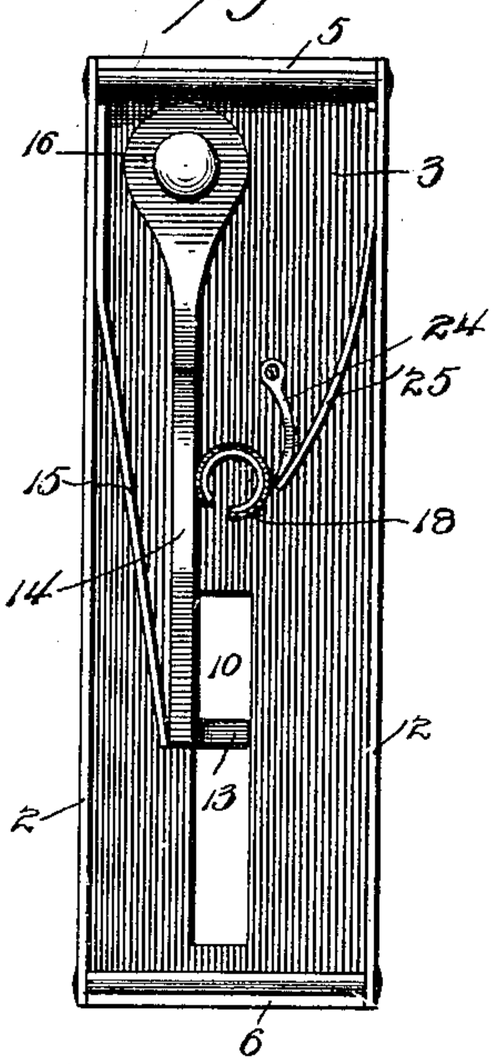


Fig. 5.

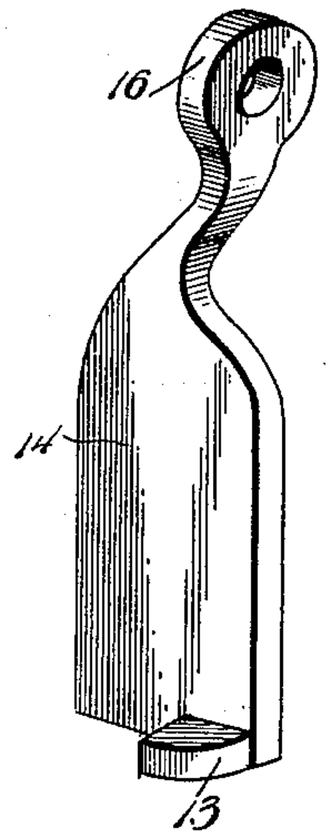


Fig. 3.

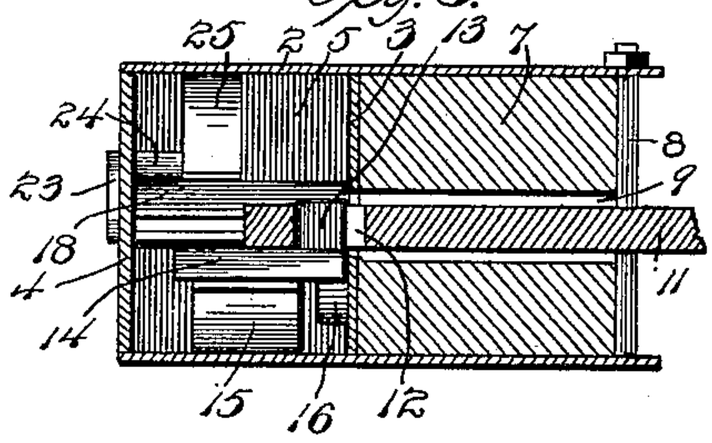


Fig. 2.

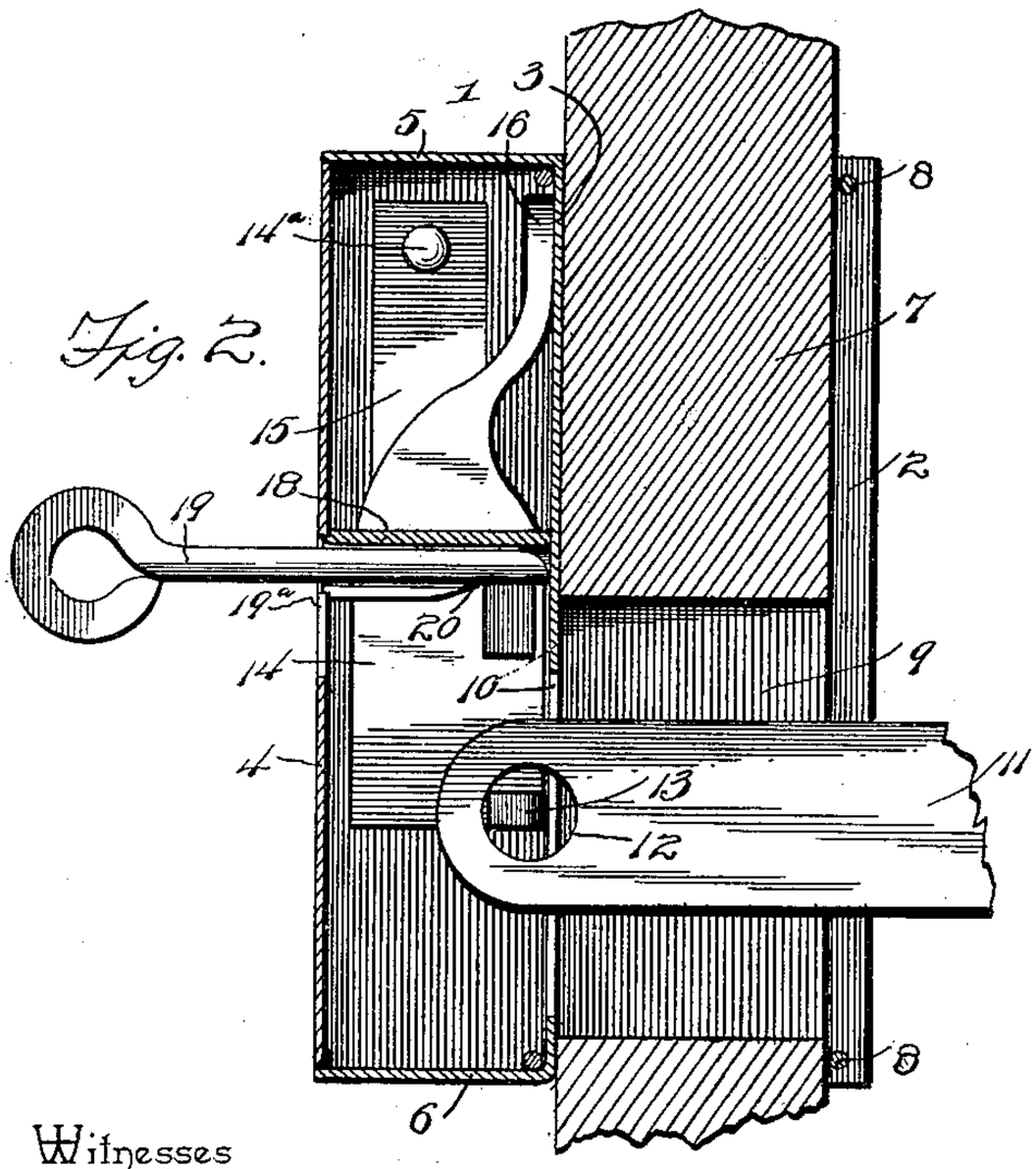
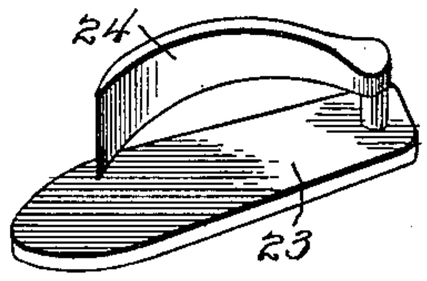


Fig. 6.



Witnesses
Ralph A. Shepard.
T. J. Riley

Luther B. Badgett Inventor
By his Attorneys,
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

LUTHER BRICE BADGETT, OF REEDY, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO MERCHANT EVERT NICHOLSON, OF SAME PLACE.

LOCK FOR RAILWAY-SWITCHES, &c.

SPECIFICATION forming part of Letters Patent No. 632,393, dated September 5, 1899.

Application filed April 4, 1899. Serial No. 711,716. (No model.)

To all whom it may concern:

Be it known that I, LUTHER BRICE BADGETT, a citizen of the United States, residing at Reedy, in the county of Roane and State of West Virginia, have invented a new and useful Lock for Railway-Switches, &c., of which the following is a specification.

The invention relates to improvements in locks for railway-switches and the like.

The object of the present invention is to improve the construction of locks for railway-switches and other constructions and to provide a simple and comparatively inexpensive spring-lock which will be strong and durable and which may be mounted on a switch-operating lever in such a manner that it will not require the operator to hold it in position while unlocking the switch.

A further object of the invention is to provide a lock of this character which after it releases the switch-lever will return the key to the position in which it is introduced into the lock, so that it may be readily removed therefrom.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a side elevation of a portion of a switch-stand provided with a spring-lock constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the lock, illustrating the manner of securing a switch-lever. Fig. 3 is a transverse sectional view. Fig. 4 is an elevation of the lock, the end plate being removed. Fig. 5 is a detail perspective view of the pivoted catch. Fig. 6 is a similar view of the pivoted keyhole-plate and its arm.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a lock-casing consisting of side plates 2 and inner and outer end plates 3 and 4, the inner end plate being extended and bent at right angles to form top and bottom pieces 5 and 6. The sides 2 of the casing are extended beyond the inner end plate 3 to form a space for the reception of a switch-lever 7, to which the lock-casing is secured by bolts 8, lying beyond the lever, as clearly shown in Fig. 2 of the accompanying drawings, and adapted to cause the side plates to clamp the lever, whereby the lock is detachably and adjustably mounted on the same. The lever 7 is provided with a slot 9, registering with a slot or opening 10 of the inner end of the lock-casing and adapted to receive a fixed arm 11 of the frame or stand of the switch, and the said arm 11 is provided at its outer extremity with an aperture 12, which is engaged by a projection or lug 13 of a spring-actuated catch 14. The lug is beveled to permit the catch to be readily depressed against the action of a flat spring 15 when the arm enters the lock-casing, and the lug or projection has a shoulder at its inner side to lock the lever to the arm. The catch 14, which is disposed longitudinally of the lever, has its upper end 16 flattened and perforated for the reception of a pivot 14^a, and the lower end of the catch, which carries the projection or lug, is capable of a limited lateral movement and is interposed between one side of the casing and a centrally-arranged slotted tube 18, which forms a guide for a key 19. The spring 15, which has its upper end secured to one side of the casing, has its lower end free and engaging the catch at the bottom thereof and is adapted to move the same inward and maintain the lug or projection in engagement with the aperture of the fixed arm of the stand.

The outer end plate 4 is provided with a keyhole 19^a, having its circular portion receiving the outer end of the tube, and the latter is cut away at 20 on the side adjacent to the catch to permit the key to be partially rotated into engagement with the same to carry the lug or projection out of the aperture of the fixed arm to release the lever, and the spring-actuated catch will operate to return the key to the position in which it was introduced into the casing, so that it may be readily removed therefrom. The keyhole is normally covered by a pivoted plate 23, mounted on the outer end of the casing and provided with an interiorly-arranged curved arm 24, having a connecting shank or stud passing through the casing and secured to and constituting the pivot of the plate 23. The curved arm is engaged by a spring 25, secured

at one end to the casing at a point opposite the spring 15 and having its lower end free and engaging the concave face of the curved arm, the inward movement of which is limited by the slotted tube.

The invention has the following advantages: The lock, which is particularly adapted for use on switch-stands, is capable of being employed in other relations. It is simple, strong, and inexpensive in construction, it automatically engages the fixed arm of the stand when the lever is swung downward, and it does not require the operator to hold it in locking or unlocking the switch. The spring-actuated catch which engages the fixed arm operates to return and hold the key in a position that will enable it to be readily withdrawn from the lock by the operator.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. In a device of the class described, the combination of a lock-casing provided with an opening and having its sides extended to form a clamp for engaging a switch-lever, the said opening being adapted to receive the fixed arm of a switch-stand, adjusting devices connecting the extended portions of the sides and holding the same in engagement with the switch-lever and a locking device arranged within the casing in position to engage the arm, substantially as described.

2. In a device of the class described, the combination of a casing having an opening at one side and provided at the opposite side with a keyhole, a spring-actuated locking device arranged at one side of the opening and adapted to engage an arm or member extended through the same, and arranged to return a key to the position in which it is introduced into the casing, and a key-guide limiting the movement of the locking device and the key and enabling the latter to be readily withdrawn from the casing, substantially as described.

3. A device of the class described comprising a casing having an opening and provided with a keyhole-slot disposed opposite the same, a slotted tube forming a guide for a key and cut away at one side, a spring-actuated locking device arranged at one side of the tube and adapted after it has been operated by a key to return the latter to its position for removal, and a lug carried by the locking device and extending across the said opening, substantially as described.

4. A device of the class described comprising a casing having a keyhole, a key-guide extending inward from the keyhole, a spring arranged at one side of the key-guide, a plate arranged to cover the keyhole and provided with a pivot extending through the casing, and an interiorly-arranged arm connected with the pivot and interposed between the spring and the key-guide, and having its movement limited by the latter, whereby the plate is held over the keyhole, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LUTHER BRICE BADGETT.

Witnesses:

GUY HOWELL,

E. M. HOWELL.