

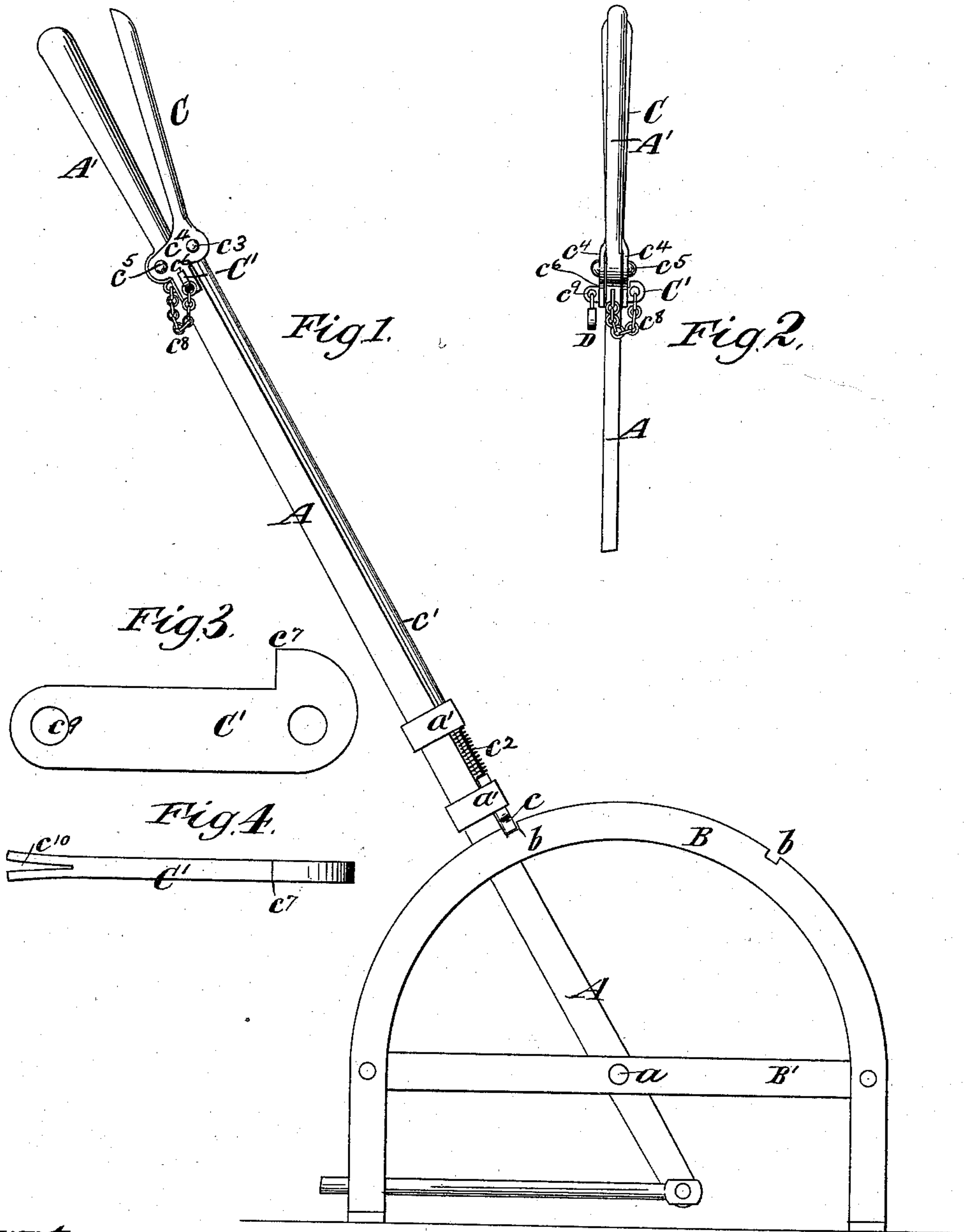
(No Model.)

A. POLLOCK.

SWITCH LOCK.

No. 383,654.

Patented May 29, 1888.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALEXANDER POLLOCK, OF NYACK, NEW YORK.

SWITCH-LOCK.

SPECIFICATION forming part of Letters Patent No. 383,654, dated May 29, 1888.

Application filed February 24, 1888. Serial No. 265,141. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER POLLOCK, of Nyack, in the county of Rockland and State of New York, have invented a new and useful Improvement in Locks for Switch-Levers and other Operating Levers, of which the following is a specification.

The lever for operating switches, signals, and analogous devices has usually combined with it a sliding catch-bolt which is actuated by a spring to engage locking notches in a bar or segment concentric to the lever-fulcrum, and this sliding catch-bolt is withdrawn from the notches by means of a catch-lever pivoted to the operating-lever and which has the catch-bolt connected with it.

The object of my invention is to provide for locking the catch-lever, and therefore the sliding catch-bolt with which it is connected, by a key or bolt inserted directly through the catch-lever; and the invention consists in a novel construction whereby this result is attained.

In the accompanying drawings, Figure 1 is an elevation of a switch-stand embodying my invention. Fig. 2 is an edge view of the upper portion of the operating-lever and the parts which embody my invention. Fig. 3 is a side view, upon a larger scale, of the locking bolt or key which may be employed; and Fig. 4 is an edge view of a locking bolt or key of modified form, which may also be employed, if desired.

Similar letters of reference designate corresponding parts in all the figures.

A designates the operating-lever, which is fulcrumed at *a*, and concentric with the fulcrum *a* is a segmental locking-bar, B, having in it notches *b*. The segmental locking-bar B has its ends prolonged downward and connected by a cross-bar, B', which receives the lever fulcrum or pivot *a*, and the two members B B' form the stand for the operating-lever A.

c designates a sliding catch-bolt which is upon the lower end of a rod, *c'*, lying along the edge of the operating-lever A and sliding in suitable guides, *a'*. Applied to the rod *c'*, for forcing the bolt *c* downward, is a spring, *c''*, and said bolt may be retracted or withdrawn from the notches *b* by a catch-lever, C, which is at the side of the handle A' of the operating-lever A. The rod *c'* is jointed at *c'''* to the catch-lever C, and said catch-lever has upon it cheeks or flanges *c''''*, which embrace the oper-

ating-lever A, as best shown in Fig. 2, and which receive through them the pivot or fulcrum *c''''*, whereby the catch-lever C is supported upon the operating-lever. To withdraw the locking-bolt *c* and move the operating-lever, the catch-lever C and the handle A' of the operating-lever are grasped in the hand, and the catch-lever C is drawn toward said handle, so as to withdraw the bolt *c*, and then the operating-lever A may be swung upon its fulcrum *a*.

According to my invention the cheeks or flanges *c''''* of the catch-lever C have formed in them a mortise, *c'''''*, and through this mortise is inserted a locking bolt or key, C', which engages with the operating-lever A. As here represented the locking bolt or key C' not only passes through the mortise *c'''''* in the cheeks or flanges *c''''*, but also passes directly through a mortise in the operating-lever A. Consequently when the parts are in the position shown in Figs. 1 and 2, and the locking bolt or key C' is inserted through the mortise *c'''''* in the cheeks *c''''*, the catch-lever C cannot swing upon its fulcrum *c''''*, but is locked and held in rigid relation to the operating-lever A, and therefore the catch-bolt *c* cannot be withdrawn. When it is desired to operate the lever A, the locking bolt or key C' is first withdrawn, and then the catch-lever C is free to swing upon its fulcrum *c''''* and to thus raise the catch-bolt *c* out of the locking-notch *b*.

The locking bolt or key is best shown in Fig. 3. It has at one end a shoulder, *c''''''*, forming a head, and by a chain, *c'''''''*, attached to this head, the said bolt or key may be hung from the operating-lever A.

For greater security, where there is danger of the locking bolt or key C' being withdrawn by malicious persons, a padlock, D, may be inserted through an eye, *c''''''''*, in the end of the key or bolt C', opposite its head; but where no danger is feared from malicious or meddlesome persons the smaller end of the locking bolt or key C' may be split, as shown at *c'''''''''* in Fig. 4, so as to prevent it from accidentally working out of place after it has been inserted.

I am aware that prior to my invention various devices applied to the rod *c'* of the catch-bolt *c* have been employed for locking said rod against longitudinal movement, and therefore I do not claim, broadly, as of my invention

means for locking the rod c' and the catch-lever C against movement relatively to the operating-lever A. According to my invention I apply the locking-bolt C' directly to the catch-lever at a point near its fulcrum c^5 ; and I desire to limit my invention to a catch-lever having cheeks or flanges which embrace the operating-lever and the locking key or bolt inserted through such cheeks or flanges and engaging the operating-lever.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the operating-lever A and its notched locking-segment B, of the

catch-bolt c , the catch-lever C, having cheeks which embrace the operating-lever and through which the catch-lever is pivoted to the operating-lever, and a locking key or bolt, as C' , inserted through said cheeks and engaging the operating-lever, whereby the swinging of the catch-lever on its pivot to withdraw the catch-bolt is prevented, substantially as herein described.

ALEX. POLLOCK.

Witnesses:

C. HALL,

FREDK. HAYNES.