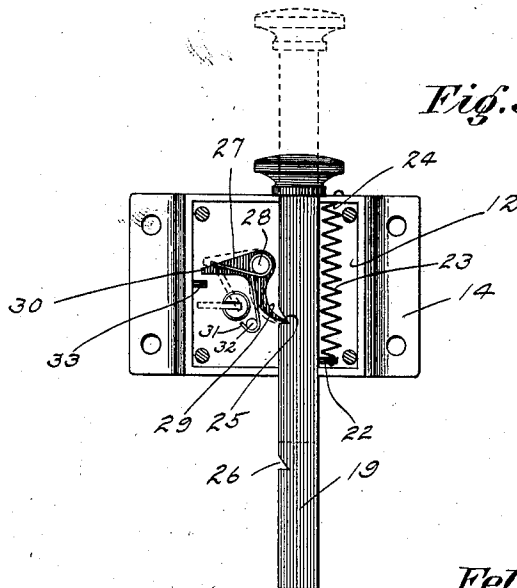
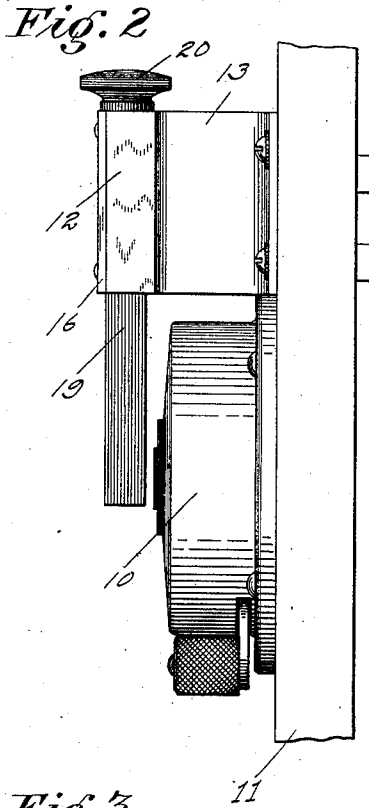
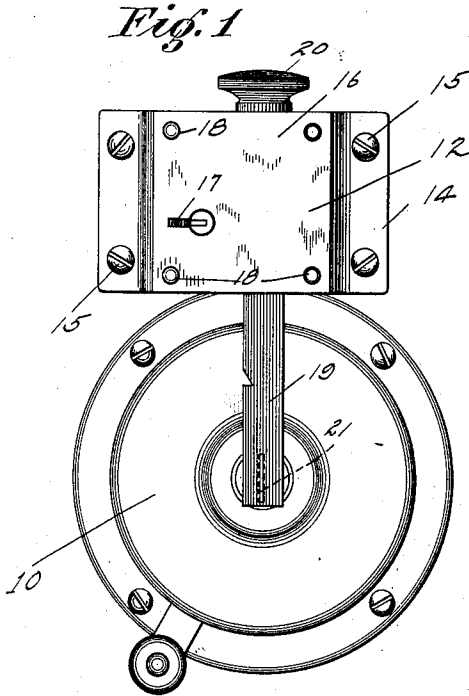


F. M. E. LOCHER.
 SWITCH BOX LOCK.
 APPLICATION FILED NOV. 15, 1912.

1,078,156.

Patented Nov. 11, 1913.



Witnesses

Frank H. Carter
H. A. Stock

Inventor

Felix M. E. Locher

By *Harry Schroeder*
 Attorney

UNITED STATES PATENT OFFICE.

FELIX M. E. LOCHER, OF OAKLAND, CALIFORNIA.

SWITCH-BOX LOCK.

1,078,156.

Specification of Letters Patent.

Patented Nov. 11, 1913.

Application filed November 15, 1912. Serial No. 731,565.

To all whom it may concern:

Be it known that I, FELIX M. E. LOCHER, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Switch-Box Locks, of which the following is a specification.

This invention relates to automobile ignition switch boxes and has for its principal object the production of a device that will prevent an unauthorized person from inserting the switch plug in the switch box of the machine.

Another object of this device is to provide a locking mechanism which may be thrown to a locked position by merely pressing on the head of a plunger and will also be easily released by a mere turning of a key.

With these objects in view this invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and pointed out in the specification and claim.

In the accompanying drawings: Figure 1 is a view in front elevation of the device as applied to an ignition switch. Fig. 2 is a view of the improved device in a side elevation. Fig. 3 is a view in front elevation of the lock with the cover plate removed.

Referring to parts by reference numerals 10 denotes the ordinary ignition switch mounted on the dash or coil box 11. Positioned adjacent this ignition switch is a locking box 12 which in the accompanying drawing is shown just above the ignition switch. This locking box 12 is provided with a web 13 which terminates in a securing plate 14 through which the securing screws 15 pass. The cover 16 of the locking box is provided with a keyhole opening 17 and is held in position by the rivets 18.

A plunger 19 passes through the locking box and is provided with a head 20 to limit its downward movement. This plunger 19 is so positioned as to cover the opening 21 in the ignition switch 10 when in a locked or lowered position. A pin 22 is positioned intermediate the length of the plunger 19 and a spring 23 has one end attached to the pin and its upper end attached to the top of the locking box as shown at 24. The plunger 19 is, therefore, held in a raised or released position by this coil spring, this po-

sition being indicated by dotted lines in Fig. 3.

On the opposite side of the plunger 19 from the pin 22 are notches 25 and 26 which are adapted to engage a pawl 27 pivotally mounted on a pin 28. This pawl comprises an engaging point 29 and an enlarged heel 30. Wound around the pivot pin 28 is a spring 31 which has two arms extending from said pivot pin 28 one of which engages a pin 32 and the other is bent over the heel 30. By means of this spring the pawl 27 is held in engagement with either of the notches 25 and 26 thereby holding the plunger in the position desired.

A lug 33 is formed on one side wall of the locking box to fix the combination for the key to unlock the pawl.

The operation of this device is as follows:—When leaving the automobile the operator after withdrawing the plug from the hole 21 merely pushes on the head 20 which forces the plunger over the opening 21. As the opening 21 in the switch box is now covered by the plunger 19 the circuit cannot be closed by any foreign piece of metal or plug, but when the authorized person returns he inserts the key in the opening 18 which turning rocks the pawl 27 which is then in engagement with the plunger 19 by means of its point 29 fitting in the notch 25 of the plunger 19. The plunger 19 will fly up to the dotted position as indicated in 3 when the pawl is released until the pawl again engages the plunger 19 this time in the notch 26 thereby preventing it from going any higher. Of course, as this is done the opening for the plug will be clear and the plug can be inserted.

It is obvious that minor changes may be made in the form and construction of the invention without departing from the material principles thereof. It is, therefore, not wished to confine the invention to the exact form herein shown and described, but it is wished to include all such as properly come within the scope claimed.

Having thus described the invention what is claimed as new, is:—

The combination with electrically actuated mechanism having a switch box permanently secured thereto, said switch box being provided with a switch plug opening, of a closure for said opening consisting of a

casing permanently secured to said switch
box, said casing being provided with means
manually slidable to close said switch plug
opening, and with a lock operating auto-
5 matically to lock said closure in its closed
position, said lock being operated only by
a removable key to release said closure, and
a spring mounted in said casing to auto-

10 matically retract said closure whenever said
lock is unlocked.

In testimony whereof I affix my signature
in presence of two witnesses.

FELIX M. E. LOCHER.

Witnesses:

H. W. STALEY,
W. A. STOCK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
