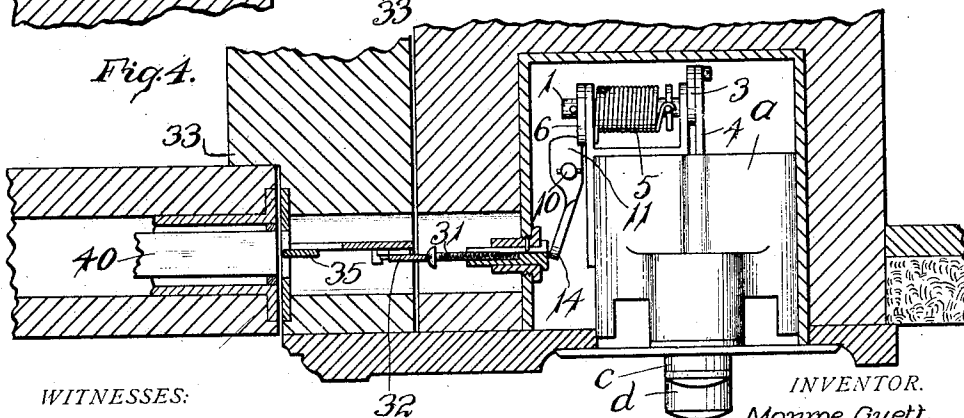
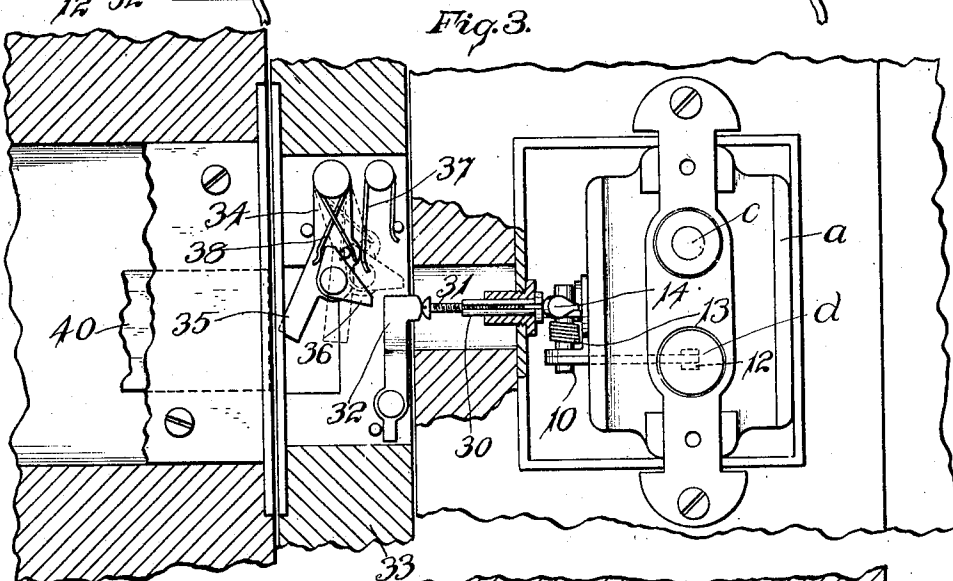
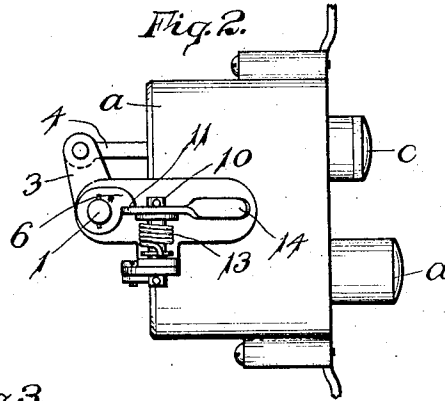
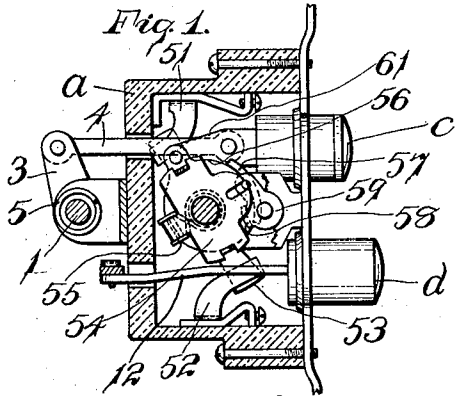


M. GUETT.
ELECTRIC SWITCH.
APPLICATION FILED NOV. 3, 1911.

1,050,211.

Patented Jan. 14, 1913.



WITNESSES:

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ELECTRIC SWITCH.

1,050,211.

Specification of Letters Patent.

Patented Jan. 14, 1913.

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To all whom it may concern:

Be it known that I, MONROE GUETT, a citizen of the United States, and a resident of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Electric Switches, of which the following is a specification.

The object of the invention is to produce an electric switch having features of novelty and advantage, and particularly one which is adapted to be operated by the push buttons or other operating handle in the usual manner, and also by a door bolt.

Switches of this class are designed particularly for use in hotels and similar buildings where it is desirable to shut off the lights in a room when the door is locked from the outside. Provision is also made so that the lights may be turned on at the switch while the door is locked by the switch operating bolt.

An embodiment of the invention I have illustrated in the drawings in which—

Figure 1 is a sectional view of a switch mechanism. Fig. 2 is a side view thereof. Fig. 3 is a view of the switch as installed, some parts being shown in section. Fig. 4 is a sectional plan view showing the manner of installing the switch.

The invention will be described as embodied in a switch of the push button type. The switch parts are of usual construction comprising a receptacle *a* having the stationary contacts 51, 52, switch plate 53 carried by the plate 54 connected through the medium of the spring 55 with an escape plate 56 having a ledge 57 with which a projection 58 on the pivoted member 59 coöperates, this escape plate 56 being connected with one of the push buttons *c* through the link 61. The push button *c* may be referred to as the "on" button and *d* as the "off" button.

Mounted on the rear of the receptacle is a rock-shaft 1 having at one end a crank arm 3 which is connected by a link 4 with the "on" push button *c*. About this shaft there is coiled a power spring 5 one end of which is secured to the shaft and the other end held against a fixed abutment so that when the rock-shaft is locked in one position by the "on" push button, the spring will be wound up to store power for the further operation of the switch. On the side of the receptacle is mounted a rock arbor 10 se-

cured to which is a catch 11 arranged in operative relation with the dog 6 on the rock shaft 1 and adapted, when the switch is set in the "on" position, to interlock with said dog and hold the power spring under tension. This rock arbor 10 is connected by the link 12 with the "off" push button. The catch 11 has a spring 13 tending to throw it into engagement with the dog when such movement is possible and the trip 14 which is in the path of movement of a trip which will be hereinafter referred to. The trip arrangement is most clearly seen in Fig. 3 comprising a longitudinally sliding plunger 30 whose inner end is adapted to engage the trip 14, a screw 31 being threaded into the outer end of this plunger in order to adjust its length.

The switch is preferably installed in the face of the wall near to the door casing, so that the screw 31 will be in position to be engaged by a rocker 32 pivoted in the bolt receiving recess in the door casing 33, this rocker 32 being operated by the lever 34, the end 35 of which is adapted to be engaged by the door bolt, there being pivoted to this lever a finger 36 which engages the rocker 32 when the door bolt is thrown to lock the door. This finger 36 clears the rocker 32 when the bolt is thrown making it possible for the switch to be operated by the push buttons while the door is locked. When the bolt is withdrawn, the spring 37 throws the lever 34 back to normal position and the pivotal mounting of the finger 36 allows it to ride by the rocker 32. It is normally held in its operative position by the spring 38.

The operation of the device is as follows: An inward movement of the "on" button *c* throws the poles in a position to bridge the stationary contacts 51, 52 and light the lights. Through the link 4 this inward movement of the "on" push button rotates the rock shaft 1 moving the dog 6 under the catch 11 until such time as the catch is thrown down by its spring 13 into engagement with the dog. If it is desired to put the lights out from the switch, a pressure on the "off" push button *d* rocks the arbor 10 moving the catch 11 out of engagement with the dog 6 when the spring 5 will operate the escape plate 56 until the pivoted member 59 is released when the switch spring 55 will return the parts to "off"

position. For this purpose, the spring 5 is made slightly stronger than the switch spring 55. Assuming that the switch is in its "on" position and the lights are lighted, whenever the door bolt which is indicated at 40 is thrown to lock the door, it engages the end 35 of the lever 34 moving it so that the finger 36 engages the rocker 32 which in turn moves the screw 31 and plunger 30 longitudinally, engaging the trip 14 and disengaging the catch 11 from the dog 6.

It will be apparent that when the bolt 40 is thrown, the finger 36 is carried by the rocker 32 as indicated in dotted lines in Fig. 3 so that the switch can be operated from inside the room.

I claim as my invention:

1. The combination with a door casing provided with a recess, door and lock bolt adapted to be projected into the recess in the casing and an electric switch provided with spring actuated operating mechanism, and a catch to hold said mechanism in operative position, of devices interposed between said catch and said bolt and by means of which said switch operating mechanism is released, said devices comprising a pivoted lever adapted to be engaged by said lock bolt, a finger pivotally supported on said lever, and a reciprocating plunger in operative engagement with said catch and adapted to be actuated by said finger.

2. In an electric switch, the switch mechanism including poles, an operating handle directly connected with the operating mechanism of said switch to move the poles to one extreme position, means for moving said poles to their other extreme position, comprising a power device operatively connected with said handle and by means of which it is made operative, means for holding said power device in operative condition, a second handle connected with and

adapted to release said holding means in combination with devices for actuating said handle by the operation of a door bolt comprising a longitudinally movable plunger having one end in operative relation to said holding means, a lever mounted in the door bolt recess in position to be moved by said bolt when it is thrown, said lever being operatively positioned with respect to the other end of said plunger.

3. The combination with a door casing having switch and lock-bolt recesses and a connecting passage between them, a switch located in the switch recess and provided with operating mechanism, a trip controlling said operating mechanism arranged opposite said passage, a plunger mounted in the connecting passage and having one end in operative relation with said trip, and a pivoted lever mounted in the lock-bolt recess and adapted to operate said plunger through the medium of the lock bolt.

4. The combination with a door casing having a switch recess and a lock-bolt recess connected by a communicating passage, a switch located in the switch recess, a catch controlling the switch operating mechanism arranged opposite said passage and provided with a trip, a plunger located in said passage with one end in operative relation to said trip, a rocker pivoted in the lock-bolt recess and lying against the other end of the plunger, a lever pivoted in the lock-bolt recess and having an arm adapted to engagement by said lock bolt and a finger pivoted on the lever and adapted to act upon said rocker when said lock bolt is thrown and a spring to hold said finger in normal position.

MONROE GUETT.

Witnesses:

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