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1,445,847.

C. D. PLATT.
ELECTRIC SWITCH.
FILED OCT. 29, 1918.

Fig. 1.

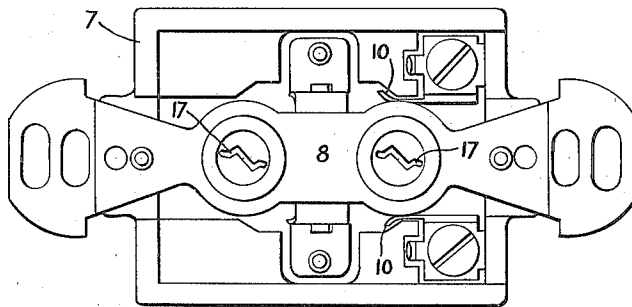
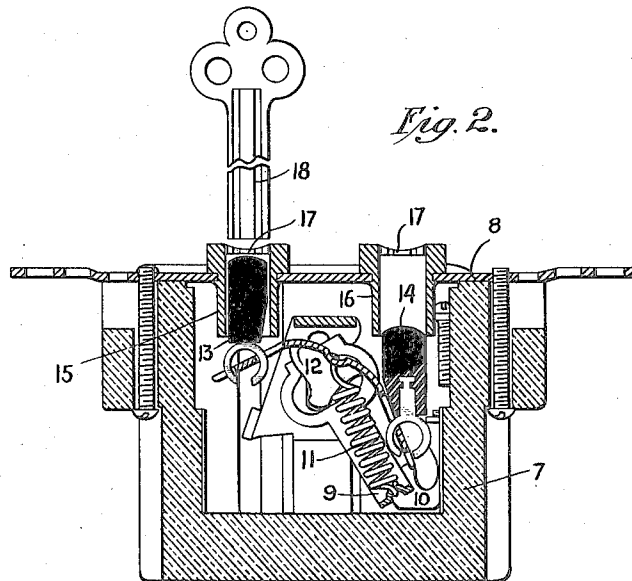


Fig. 2.



WITNESSES
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CLARENCE D. PLATT, OF BRIDGEPORT, CONNECTICUT.

ELECTRIC SWITCH.

Application filed October 29, 1918. Serial No. 260,081.

To all whom it may concern:

Be it known that I, CLARENCE D. PLATT, a citizen of the United States of America, residing at Bridgeport, Connecticut, have invented a new and useful Electric Switch, of which the following is a specification.

My present invention relates to key operated switches of the push button type.

The objects of the invention are to provide a practical and desirable switch of this type in simple and inexpensive form.

A further and special object is to eliminate the danger of electric shock upon the insertion of the operating key.

Briefly stated, the invention may be said to reside in the combination with the pivoted switch operating rocker, of plungers connected with said rocker and working in tubular guides provided for the purpose, said guides being closed at their outer ends to the passage of said plungers but provided with key openings therein for admission of a key into engagement with the ends of the plungers. In a preferred construction, the plungers are made of insulating material and therefore in addition to their function as an operating connection between the inserted key and rocker, they provide means for insulating the key from the current carrying portions of the switch.

The accompanying drawings illustrate the switch embodied in one practical form, but it will be understood that desired changes and modifications may be made without departure from the scope of the invention.

In said drawings:

Fig. 1 is a plan view of the switch constructed in accordance with and embodying features of the invention.

Fig. 2 is a longitudinal sectional view of the same taken substantially on the plane of the line 2—2 of Fig. 1.

Referring to said drawings now in detail: The switch base, designated 7, is shown as of the usual hollow construction designed to be supported by a bridge or yoke 8. The switch mechanism per se in the form of construction illustrated is like that disclosed and claimed in my Patent #1,218,890 of March 13th, 1917, and requires no further description here other than to point out that it consists generally of a swinging lever 9 designed to engage the contacts 10 and arranged to be snapped in opposite directions through a spring connection 11 from the rocker or switch operating lever 12.

Connected with the ends of the rocker are the two plungers or operating stems 13—14, the engagement of said plungers with the rocker being such as to permit of a substantially straight up and down movement of the plungers during the oscillating movement of the rocker, a connection suitable for such purpose being that disclosed in my patent above mentioned.

Tubular guides 15—16 are provided for the plungers 13—14, said guides in the present instance being supported on and carried by the yoke-piece 8. These tubular guides are closed at their outer or exposed ends against passage of the plungers, but are provided with key-slots 17 therein for admission of a suitable operating key 18. The plungers have a loose sliding fit in the guides provided therefor and the closed outer ends of the guides prevent exposure of the plungers and guard against access to said plungers except through the medium of a key designed for the purpose. These relatively closed outer ends of the guides may be formed as escutcheon plates, substantially as indicated in the drawings.

In the form of the invention illustrated, the rocker is in electrical connection with the contact making lever, and hence, carries current. To guard against injury which might result from a flow of current from said rocker to the key in the hands of an operator, I construct the plungers in this form of switch of suitable insulating material such as hard molded composition. This absolutely prevents the passage of current from the rocker to the key, to the guides, or to the yoke or face plate which usually covers the switch parts.

I claim:

In a key actuated switch of the push button type, a body member, a pivoted rocker on said body member, plungers of insulating material in operative engagement with said rocker and adapted to actuate the latter for making and breaking a circuit, tubular guides for said plungers, said guides being rigidly supported from said body member and having their outer ends closed against passage of said plungers, said guides having their outer ends provided with openings of irregular shape for the reception of a key for engaging the plungers and actuating the rocker.

CLARENCE D. PLATT.