C. D. PLATT.

ELECTRIC SWITCH.

APPLICATION FILED AUG. 25, 1917.

1,287,425. Patented Dec. 10, 1918.

Fig 1

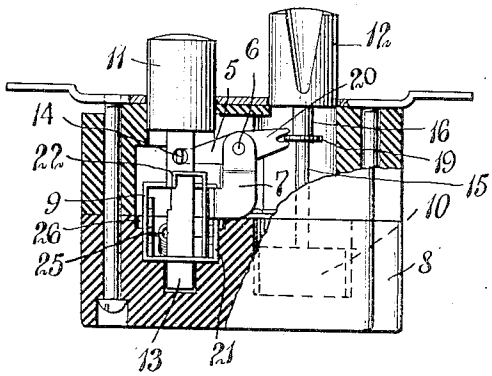


Fig 2

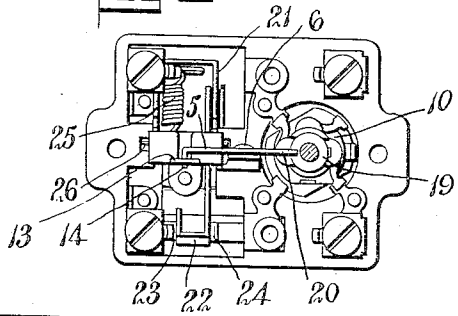


Fig 3

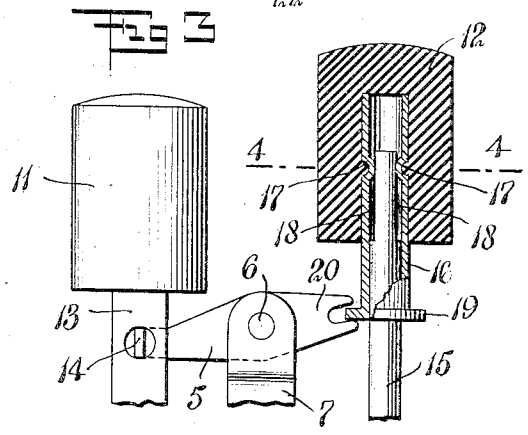
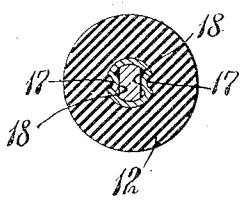


Fig 4



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ELECTRIC SWITCH.

1,287,425. Specification of Letters Patent. Patented Dec. 10, 1918.

Application filed August 25, 1917. Serial No. 188,101.

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.

The invention relates to push button switches and particularly to that compound type wherein a push button switch mechanism and a rotary snap switch mechanism are both combined on the same base, the principal object of the invention being to provide a simple, practical and efficient form of connection between the oscillating rocker of the push button switch mechanism and the spindle of the rotary switch.

Accordingly, the invention resides in the combination comprising a switch base on which is mounted the rotary switch mechanism having an upright spindle, a push button slidably keyed on said spindle and having an outstanding annular flange, together with a rocker pivoted on the base, having a forked end embracing the outstanding flange on the button, and push button switch mechanism, also mounted on the base and operatively connected with the opposite end of the rocker.

Other features of the invention will be made apparent as the specification proceeds.

Attention is now directed to the accompanying drawing wherein I have illustrated the invention embodied in a practical and preferred form and in which:—

Figure 1 is a partly sectional view of the switch.

Fig. 2 is a top plan view of the lower or main portion of the switch base and the parts mounted thereon.

Fig. 3 is an enlarged broken sectional view on an enlarged scale of the connection between the rocker and rotary switch spindle.

Fig. 4 is a cross sectional view taken substantially on the plane of the line 4—4 of Fig. 3,

Referring to the drawing by numerals:—

5 designates the so-called "rocker" or switch operating lever pivoted at 6 on an upstanding post or standard 7 mounted on the insulating switch base 8.

The oscillating or push button snap switch mechanism indicated at 9 is mounted on one end of the insulating base beneath one end of the rocker and the rotary switch mechanism indicated at 10, is mounted on the opposite end of the switch base beneath the other end of the rocker.

The two switch mechanisms are independently operable by means of push buttons 11 and 12, the first of these having a stem or shank 13 pivotally engaged with the end of the rocker at 14 and arranged to operate the push button snap switch, and the other push button being connected with the other end of the rocker and adapted to operate the rotary switch mechanism.

The rotary switch mechanism, which as to details, may be of any approved form, has an upstanding rotary spindle 15 by which it is operated and this spindle also serves as a guide for the reciprocating movement of the push button 12 by which it is operated, the push button having for the purpose an internal bearing sleeve 16 slidably engaged over the spindle. This button is also keyed to the spindle, in the illustration, by indenting opposite side portions of the sleeve to form oppositely disposed inwardly projecting keying lugs 17 engaging the flattened keyways 18 formed on opposite sides of the upper portion of the spindle. The indentation of these key lugs also provides an anchorage for the material of the button which is usually molded in place about the sleeve.

In addition to being slidably keyed upon the rotary spindle, the push button has a rotatable connection with the rocker, said connection, consisting of an outstanding annular flange 19 on the lower end of the sleeve, formed usually by striking out the lower end of the sleeve, engaged by the forked end 20 of the rocker, said forked end embracing this flange with one of the forks engaging above, and the other fork engaging below the flange so as to cause the button to reciprocate in accordance with the oscillating movements of the rocker. This construction while causing the rocker and push button to travel together permits of the independent rotation of the push button for the purpose of turning the spindle.

The push button snap switch mechanism may be of any approved construction and as illustrated consists of a swinging lever 21 carrying a contact 22 for bridging the relatively stationary contacts 23 and 24 and connected by a tension spring 25 with the stem 13 of the push button 11, whereby as this push button is reciprocated, the end of the spring which is connected with the push but-

ton shank will be carried to opposite sides of the point of pivotal support 26 to the contact making lever, thereby causing said lever to be alternately snapped to the "off" and "on" positions.

This snap switch mechanism is suitably connected with the rotary switch mechanism, usually so that the first will control the continuity of circuit and the rotary switch will control the flow of current to different branches, such as to the individual lights on a chandelier.

I claim—

1. A push button switch, comprising a switch base, an upstanding rotatable switch spindle on the base, said spindle being flattened on opposite sides thereof to provide key-ways thereon, a push button having a sleeve slidably engaged over said spindle, said sleeve being indented at opposite sides thereof to provide key lugs engaging the key-ways in the opposite sides of the spindle and the lower end of said sleeve being turned outwardly to form an annular flange, a rocker on the switch base having a forked end embracing said outstanding annular flange and snap switch mechanism on the opposite end of the base operatively connected with the opposite end of the rocker.

2. A push button switch comprising a switch base, push button switch mechanism mounted on one end of said base, independently operable rotary switch mechanism mounted on the opposite end of the base and provided with an upstanding spindle having a key-way therein, a rocker pivoted on the base and connected at one end with the push button switch mechanism, a push button connected with said end of the rocker, a sleeve slidably engaged over the spindle and having an indentation forming a key lug working in the key-way in the spindle, a push button molded about said sleeve and into said indentation as an anchorage, said sleeve having the lower end thereof flanged outwardly into an outstanding rim and the rocker having forks engaging above and below said rim to rotatably connect the push button with the end of the rocker.

CLARENCE D. PLATT.