

A. F. WALLBILICH.
ELECTRIC SWITCH.
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1,038,995.

Patented Sept. 17, 1912.

Fig. 1.

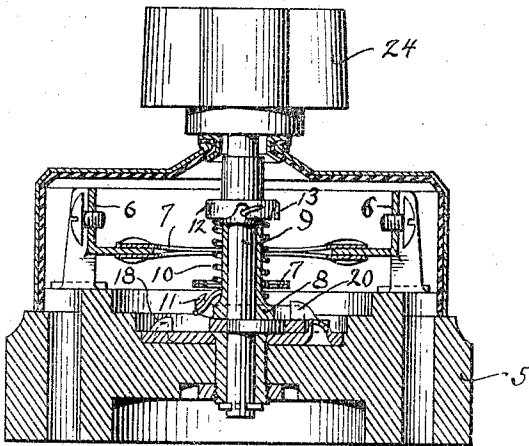
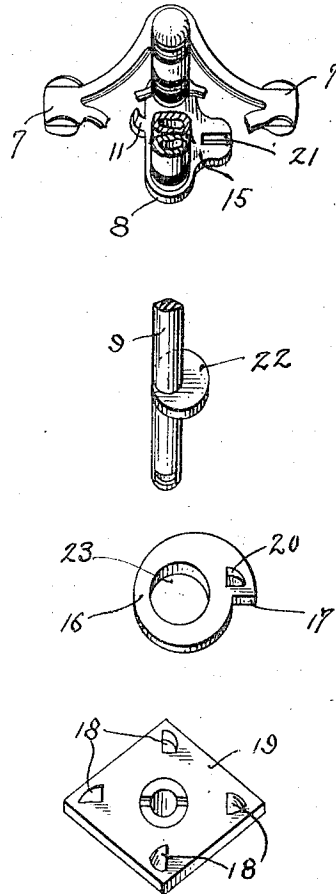


Fig. 2.



Attest:
L. H. Grote

Inventor:
ANTHONY F. WALLBILICH
by *Howard and Howard* Attys.

UNITED STATES PATENT OFFICE.

ANTHONY F. WALLBILICH, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE PERKINS ELECTRIC SWITCH MANUFACTURING COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

ELECTRIC SWITCH.

1,038,995.

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Application filed August 18, 1911. Serial No. 644,824.

To all whom it may concern:

Be it known that I, ANTHONY F. WALLBILICH, a citizen of the United States of America, and residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Electric Switches, of which the following is a specification.

My invention relates to electric switches and particularly to rotary snap switches the object of my invention being to provide an efficient escapement mechanism of simple construction.

In the accompanying drawings, Figure 1 is a vertical section through a switch in which my invention is embodied in one form; Fig. 2 is a perspective of the escapement elements detached.

The switch illustrated is of usual type having an insulating base 5 carrying combined wire and switch terminals 6. The switch blades 7 are carried by a yoke 8 rotating freely on the spindle 9 and subjected to the action of the coil spring 10, one end of which engages the lug 11 on the yoke while the other end engages in one of the notches 13 of the collar 12, fast on the spindle 9.

The snap make and break of the switch is obtained through an escapement mechanism cooperating with the slotted lug 15 of the yoke. This escapement mechanism comprises an eccentric 16 with detent shoulder 17 which engages successively the stop lugs 18 punched up from the rectangular plate 19 which is held against rotation in a rectangular recess in the base 5. A pin 20 projecting from the upper face of the eccentric 16, slides in the slot 21 of the yoke lug 15 and insures the simultaneous rotation of the eccentric and yoke.

The cam 22, fast on the switch spindle 9, works in the bearing aperture 23 of the eccentric 16. Upon the rotation of the spindle 9 through the button 24 fast thereon, the cam 22 rotating in the bearing aperture 23 of the eccentric 16, slides the latter across the stop plate 19 thus drawing its shoulder 17 out of engagement with the stop lug 18 engaged thereby. During the rotation of the spindle 9, which effects this disengagement of the the eccentric from the stop lug, the actuating spring 10 has been brought under tension by reason

of the fact that its lower end is held stationary by the yoke 8 while its upper end is carried around with the collar 12 on the spindle. Consequently the moment the shoulder 17 of the eccentric clears the stop lug 18, the eccentric being in engagement with the yoke through the sliding pin and slot connection 20—21, is suddenly rotated with the yoke by the spring 10. As the yoke rotates on the cam 22, a horizontal sliding motion is simultaneously imparted thereto, and the shoulder 17 is moved outward so that it engages the next stop lug 18 and is suddenly halted thereby, together with the switch yoke, in the make or break position of the switch.

I claim as my invention:

1. A switch mechanism for rotary snap switches, comprising a switch spindle, a pair of switch blades, a yoke freely journaled on said spindle and carrying the switch blades, a shouldered eccentric in sliding engagement but rotarily movable with said yoke, a series of stop lugs cooperating with the shoulder of said eccentric, and a cam for operating said eccentric.

2. A switch mechanism for rotary snap switches, comprising a switch spindle, a pair of switch blades, a yoke freely journaled on said spindle and carrying the switch blades, an eccentric in sliding engagement but rotarily movable with said yoke, a peripheral shoulder on said eccentric, a series of stop lugs cooperating with said peripheral shoulder and a cam for operating said eccentric.

3. A switch mechanism for rotary snap switches, comprising a stop plate with punched up stop lugs projecting from its upper face, an eccentric with peripheral shoulder cooperating with said stop lugs and a pin projecting from the upper face of said eccentric, a slotted yoke moving with the switch blades and in sliding engagement with said pin, in combination with a cam for operating said eccentric.

4. A switch mechanism for rotary snap switches comprising a switch spindle, a yoke freely journaled thereon, contacts carried by said yoke, a radially slotted lug on said yoke, a cam fast with the switch spindle, a yoke with bearing aperture journaled on said cam and provided with a punched up pin engaging in the radial slot

of the yoke, and a peripheral shoulder, in combination with a stop plate with punched up lugs engaging said peripheral shoulder on the eccentric, substantially as described.

- 5 5. A switch member for rotary snap switches, comprising a switch spindle, a cam thereon, an eccentric with peripheral shoulder and struck-up lug journaled on said cam, and a contact carrying yoke having a slotted
10 lug in the slot of which said struck-up lug engages, together with a series of station-

ary stop lugs adapted to be serially engaged by said peripheral shoulder on the eccentric, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

ANTHONY F. WALLBILICH.

Witnesses:

G. W. GOODRIDGE,
R. M. EAMES.