UNITED STATES PATENT OFFICE.


INDICATOR FOR SNAP-SWITCHES.

1,128,757.


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To all whom it may concern:

Be it known that I, George B. Thomas, a citizen of the United States of America, and residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented a certain new and useful improvement in Indicators for Snap-Switches, of which the following is a specification.

My invention relates to indicators for snap switches and particularly for rotary snap switches, the object of my invention being to provide a simple and efficient device of this character and of improved construction.

In the accompanying drawings, Figure 1 is a cross section through a snap switch in which my invention is embodied in one form; Fig. 2 is a plan thereof; and Fig. 3 is a partial side elevation of the switch.

The snap switch mechanism proper may be of any suitable character. As here shown it comprises a rotary spindle 10 mounted on the insulating base 11 and carrying two switch blades 12 and 13 which are subjected to the action of the switch spring 14 and to an escapement device, not shown, by means of which a snap make and break for the switch is secured. On the upper part of the spindle I mount a crown piece 15 engaged by the upper end 16 of the switch spring. Above the crown piece and also fast with the rotary spindle I provide a bridge piece with legs 17 and 18 projecting upwardly and engaging in the apertures 19 and 20 cut in the disk 21. This disk 21 forms the upper portion of the disk casing, the cylindrical body 22 of which surrounds the switch mechanism and is held against rotation by the engagement of a lug 23 on the base in the notch 24 in the side of the casing. The upper edge 25 of the casing is rolled over the periphery of the disk 21 while pin pricks 26 or the like spaced around the periphery and below the edge of the disk serve to hold the latter up in position. The disk is thus peripherally journalled in the casing and is free to be rotated with the switch spindle 10 on the rotation of the latter by the turn button 27. While the disk may be made flat, I prefer to provide it with a beveled outer portion 28 which thus forms a well defined ring on which the insignia for indicating the switch position may be placed. Where the switch is a four-way device, the insignia may be as indicated, for high, medium, low and off positions of the circuit. The lug 23 on the base serves as a convenient pointer with which the insignia on the disk come successively into register and thus advises the operator as to the position of the switch. In order to insure the proper positioning of the disk with relation to the switch blades, the aperture 19 is made larger than the aperture 20, while the lug 17 is made too large to enter the aperture 20. Consequently the disk can be adjusted on the spindle only in predetermined position.

The casing as a whole is held down upon the base 11 by the button 27 which screws down on the spindle 10 into engagement with the ends of the legs 17 and 18. The insulating lining 29 fits closely within the body 22 of the casing but is angled inward clear of the peripheral bearing of the disk 21 and is apertured centrally at 30 to permit the legs 17 and 18 to rotate freely.

Various modifications of the structure will readily suggest themselves, and I do not limit myself to the details shown.

I claim as my invention:

1. A snap switch comprising a stationary body portion, a rotary indicating disk forming the top thereof and journaled in the upper portion thereof, the upper edge of said body portion being rolled over the periphery of said disk, and the wall of the body portion being pricked inwardly below the periphery of the disk to form a support therefor, substantially as described.

2. A snap switch casing comprising a stationary body portion, a rotary indicating disk forming the top thereof and journaled in the upper portion thereof, said disk having a central aperture for the passage of the switch spindle therethrough, and recesses adapted to receive engaging means carried by the spindle, together with means rigid with the spindle engaging said recesses to effect the rotation of the disk with the spindle, substantially as described.

3. A snap switch casing comprising a stationary body portion, a rotary indicating disk forming the top thereof and journaled in the upper portion thereof, said disk having a central aperture for the passage of the switch spindle therethrough, and recesses
of different size adapted to receive engaging means carried by the spindle, together with lugs of different size rigid with the spindle and engaging said recesses only in predetermined position, for the purpose described.

4. A snap switch comprising a casing having a stationary body portion and a rotary indicating disk peripherally journaled at the upper edge of said casing and forming the top thereof, in combination with a switch mechanism within the casing and having a switch spindle passing axially through said disk and an operative connection between the switch mechanism and the disk to rotate the latter upon the actuation of the switch.

5. A snap switch comprising a casing having a stationary body portion and a rotary indicating disk forming the top thereof, said body portion being inwardly offset above and below the periphery of said disk to form a peripheral support therefor, in combination with a switch mechanism within the casing and having a switch spindle passing axially through said disk and an operative connection between the switch mechanism and the disk to rotate the latter upon the actuation of the switch.

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

GEO. B. THOMAS.

Witnesses:
G. W. GOODRIDGE,
H. M. WICHERT.