

C. D. PLATT.
 ROTARY SNAP SWITCH.
 APPLICATION FILED OCT. 27, 1911.

1,021,208.

Patented Mar. 26, 1912.

Fig. 1

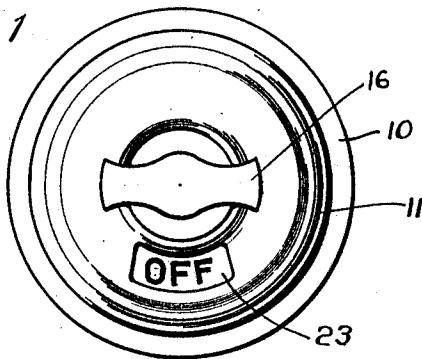


Fig. 3

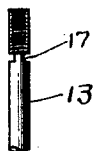


Fig. 2

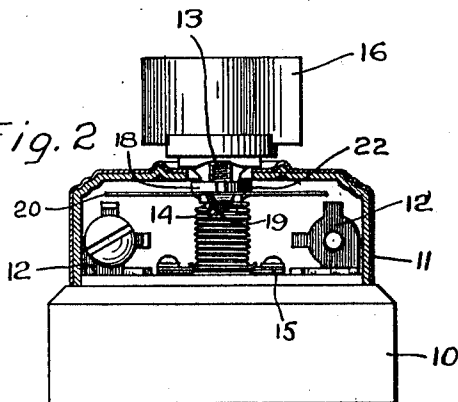


Fig. 5



Fig. 4



Fig. 6

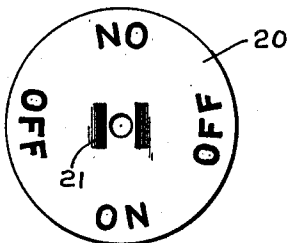
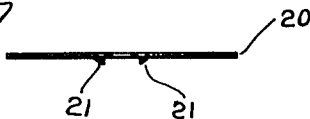


Fig. 7



WITNESSES:

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ROTARY SNAP-SWITCH.

1,021,208.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLARENCE D. PLATT, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Rotary Snap-Switches, of which the following is a specification.

This invention relates to the class of snap switches illustrated and described in Letters Patent to C. A. Clark, Number 906,386, dated December 8, 1908, and has for its object to simplify, cheapen and to generally improve the construction and operation of indicating switches of this type, and especially to provide indicating means of extreme simplicity which may be readily applied or removed thus making of the switch an indicating or a non-indicating switch, as preferred.

A further object of the invention is to provide an indicating dial which is carried by the spindle and moves relatively slowly, that is with the handle, thus avoiding the strains upon the mechanism and the liability to get out of repair that is unavoidable in switches where the indicating dial is permitted to move forward to each indicating position with a snap.

A further object of the invention is to provide simple and inexpensive means for connecting the dial with the spindle which shall insure perfect registration of the dial, projections upon the dial interlocking with a clip or holding plate on the spindle in such a manner that each retains the other in place.

With these and other objects in view the invention consists in the construction and combination of parts which will be hereinafter described and then specifically pointed out in the claims hereunto appended.

In the accompanying drawing forming a part of this specification, Figure 1 is a plan view of my novel switch as in use; Fig. 2 a view partly in elevation and partly in section; Fig. 3 an elevation of the upper end of the spindle detached; Fig. 4 a perspective of the clip or holding plate detached; Fig. 5 a plan view of the nut detached; Fig. 6 a plan view of the dial or indicating plate detached; and Fig. 7 is an edge view corresponding with Fig. 6.

10 denotes the base, 11 the cap, 12 contact plates, 13 the spindle, 14 the operating spring, 15 the contact bar and 16 the handle, all of which may be of any ordinary or pre-

ferred construction adapted for this type of switches.

As the switch mechanism specifically forms no portion of the present invention it will not be described in detail. It is sufficient for the purposes of this specification to say that the spindle is rotated by the handle in the usual manner and that the lower end of the operating spring is connected to the contact bar. The upper end of the spindle is threaded for engagement by the handle and below the threaded portion is provided with slots 17 in opposite sides thereof, which are engaged by an angular clip or holding plate indicated by 18. The clip or holding plate is provided with a hook 19 which is engaged by the upper end of the operating spring.

20 denotes a dial or indicating plate which is simply a disk of metal provided on its upper side with any suitable indications, as, for example, the words "Off" and "On" to indicate whether the current is off or on. The dial is provided with a central hole through which the spindle is passed in assembling and is provided on its under side with projections 21 which are adapted to engage the angular clip or holding plate. In the present instance the clip or holding plate is shown as provided with parallel sides and the projections on the dial are formed by striking out wings from the metal of the dial leaving them attached at one end. These wings engage the sides of the clip or holding plate, as will be readily understood from the drawing, the projections on the dial preventing the arms of the clip from spreading and the clip from becoming loose on the spindle and the clip acting to hold the dial against any rotary movement except with the spindle. The dial is secured in place by a nut 22 threaded to engage the spindle and acting to retain the projections on the dial in engagement with the sides of the clip. The cap is provided with an opening 23 through which the indications upon the dial are exposed.

The switch is assembled in the usual manner up to the point of attaching the operating spring, which is put in place with one end engaging the contact bar and the other end engaging the hook upon the clip or holding plate. After the tension of the operating spring has been adjusted, the dial or indicating plate is passed over the spindle, the projections on the under side of the dial

engaging the parallel sides of the clip or holding plate and then the nut is turned to place to secure the parts in their operative position. When assembled it is impossible
5 for the dial to turn on the spindle or for the clip to become loose thereon owing to its engagement with the projections on the dial.

To convert an indicating switch into a non-indicating switch, it is simply necessary to remove the handle and cap and then
10 remove the dial and replace the cap and handle. A non-indicating switch of this type can be converted into an indicating switch by simply applying the dial and
15 forming an opening in the cap.

As the dial is attached directly to the spindle it moves only as the handle is turned and is not subjected to the blows and sudden strains to which the switch bar is subjected
20 and the objectionable features of connecting a dial with the switch bar, as in most switches of this type now in use, are avoided.

Having thus described my invention I claim:

25 1. In a switch of the character described, the combination with a slotted spindle and a clip engaging said spindle and carried there-

by, of a dial having projections engaging the clip and means for holding the parts in engagement.

2. In a switch of the character described, the combination with a spindle and a clip rigidly engaging said spindle and having parallel sides, of a dial resting on the clip and having projections engaging the sides
35 of the clip and means for retaining the parts in engagement, the clip acting to retain the dial against rotation independently of the spindle and the projections on the dial preventing the clip from spreading.

3. In a switch of the character described, the combination with a spindle threaded at its upper end and having slots on opposite sides and a clip engaging said slots, of a
45 dial resting on the clip and having projections engaging the sides of the clip and a nut on the spindle whereby the parts are held in interlocked engagement.

In testimony whereof I affix my signature in presence of two witnesses.

CLARENCE D. PLATT.

Witnesses:

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S. W. ATHERTON.