

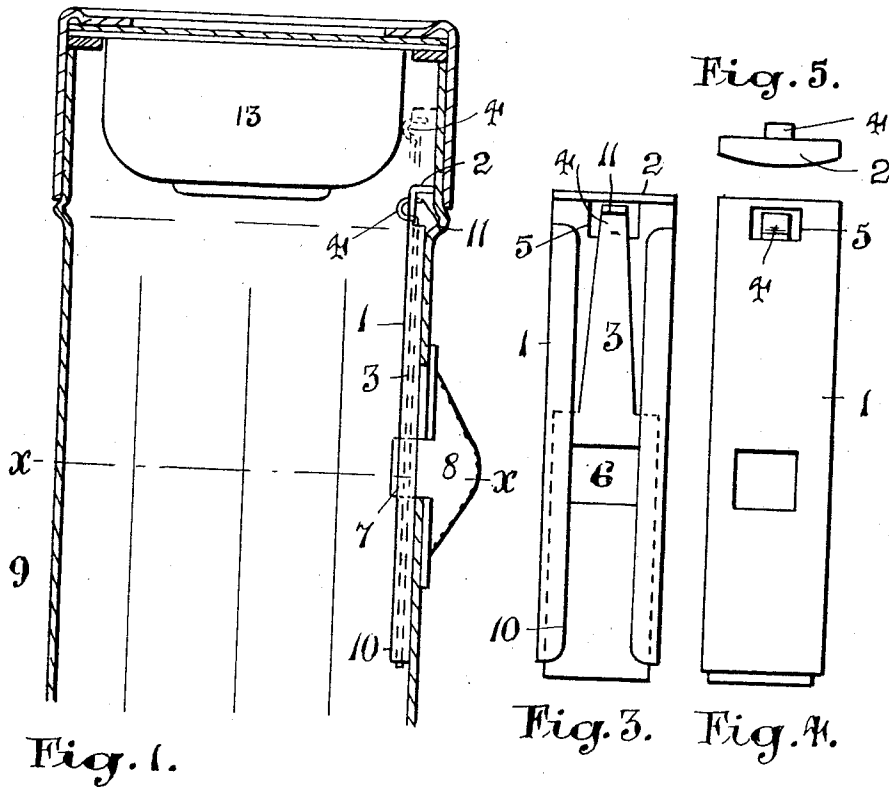
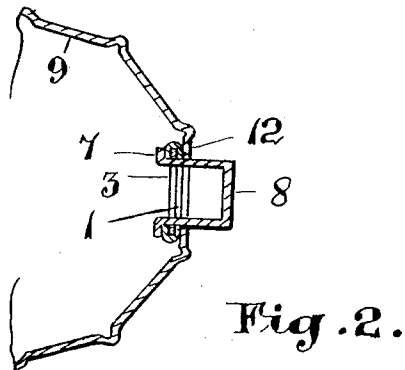
June 8, 1943.

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2,321,180

SWITCH FOR ELECTRIC FLASHLIGHTS OR THE LIKE

Filed Dec. 2, 1941



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2,321,180

SWITCH FOR ELECTRIC FLASHLIGHTS OR
THE LIKE

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Application December 2, 1941, Serial No. 421,349
In Great Britain December 6, 1940

4 Claims. (Cl. 200—60)

This invention relates to switches for electric flashlights or the like of the type comprising a sliding contact bar or member mounted to slide longitudinally in the casing containing the battery, for contacting with the lamp reflector or the like. A spring contact nose has previously been formed on the bar or a member carried by the bar. This invention has for its object an improved construction which reduces the liability of the same getting out of order in use and which facilitates manufacture. A further object of the invention is to obviate the need of shaping the contact nose from the main body of the contact bar or relying on a nose on a strip bent from such bar. A further object is to form the spring contact nose separate from the slide bar and arranged so that the tongue is correctly positioned with regard to the face of the contact bar when assembled. A still further object is to protect the contact nose against derangement.

According to the present invention, the switch comprises a sliding bar and a spring controlled nose or projection carried thereby and adapted to be depressed inwardly of the sliding bar on pressure contact with another member, the arrangement being such that the slide bar forms a protection for the nose or projection and prevents the contacting member from distorting or damaging the spring controlled nose or projection. The spring nose or projection conveniently passes through a perforation in the slide bar which thus forms a socket device which acts as a receiver for the nose when depressed. The length of the nose projecting from the slide bar is predetermined and governed by a stop on the spring device coacting with the slide bar.

In order that the invention may be clearly understood and readily carried into effect, reference may be had to the accompanying drawing, on which:

Figure 1 is a sectional side elevation of a switch constructed according to this invention fitted to an electric flashlight casing.

Figure 2 is a section taken in the plane x.x. of Figure 1.

Figure 3 is an inside view of the switch detached.

Figure 4 is an outside face view, and

Figure 5 is an end view of the switch.

According to a convenient embodiment of this invention, the sliding switch bar comprises a strip of metal forming a protector cover 1 which is intumed at one end to form a distance flange 2 spacing such end from the wall of the battery container. A thin strip of sheet metal forming

the spring arm or strip spring 3 is anchored at the inner end to the switch bar and is bent into a U-shape at the other end to form a U-shaped contact nose 4 which passes through a rectangular perforation 5 in the switch bar. The spring arm normally lies flat against the back of the switch bar which forms a stop for the outward movement of the spring, so that the nose projects through the switch bar to a predetermined extent and therefore the depth of the complete switch bar can be readily manufactured to a definite size, whilst again the movement of the spring nose is also definitely defined which ensures that the switch can be made by mass production for accurate assembly. The switch bar has a rectangular perforation 6 for receiving lugs 7 on the switch thumb piece 8 by means of which the bar is slidably fixed on the wall of the battery casing 9. The inner end of the said spring arm 3 is fixed to the inner face of the switch bar by enlarging such end and turning over the edges 10 of the switch bar over this enlarged end, which is also perforated to receive the said fixing lugs of the thumb piece.

The free limb 11 of the spring nose is extended to prevent the end of such limb passing through the perforation 5 in the switch bar. A rounded nose only projects through the switch bar and the pressure contact of any member having relative longitudinal movement will merely press the nose inwards into the socket formed by the said perforation which is maintained distanced from the wall of the battery container by the said intumed flange 2 on the switch bar. The casing is conveniently polygonal in cross section as shown by Figure 2, and the switch bar is slidably mounted on one flat face 12. The rounded end 13 of the casing is of a diameter to enable the tip of the flange 2, which may be deeper than the thickness of the switch bar, to slidably bear thereon. The switch arm may be curved laterally to conform with the shape of a round battery container. When the switch bar is moved into the "on" position as shown in dotted lines by Figure 1, the nose 4 is depressed by engagement with the casing 13 holding the electric lamp.

With the aforescribed construction there will be no liability of any member catching on the spring and deranging the same, as for instance when removing or fitting a battery.

I claim:

1. A switch for electric flashlights comprising a flashlight casing, a switch bar slidably mounted on the casing and formed of sheet metal, a strip

spring on the inner side of the bar, intumed longitudinal edges on the switch bar folded over the rear portion of the spring, a contact nose on the front end of the spring, an opening in the bar through which the contact nose passes to the limit allowed by the strip spring bearing against the inner face of the bar, a flange on the front end of the switch bar, a portion of the flashlight casing of larger size than that on which the switch bar is slidably connected on which the said flange bears for distancing the end of the bar from the flashlight casing and a recess formed between the switch bar and said portion of the casing of larger size into which the contact nose is depressed when making contact.

2. A switch for electric flashlights, comprising a flashlight casing, a switch bar unit slidably mounted on the casing and made of a strip of sheet metal forming a protector cover and a strip of sheet metal forming a spring arm arranged flat in an unflexed condition against the inner face of the cover which prevents the spring arm being flexed beyond a predetermined extent, intumed flanges on the sides of the protector cover fixing the spring arm on the protector cover and slidably bearing on the casing and distancing the spring arm from the casing, a nose bent on the end of the spring arm and projecting through the protector cover, and means distancing the end of the protector cover from the casing and forming a recess under the protector cover for receiving the nose when depressed.

3. A switch for electric flashlights comprising a flashlight casing, a switch bar unit slidably

mounted on the casing and made of a strip of sheet metal forming a protector cover and a strip of sheet metal forming a spring arm arranged flat in an unflexed condition against the inner face of the said cover which prevents the spring arm being flexed beyond a predetermined extent, intumed flanges on the sides of the protector cover fixing the spring arm on the protector cover and slidably bearing on the said casing and distancing the spring arm from the casing, a nose bent on the end of the spring arm and projecting through the protector cover, and an intumed flange on the end of the protector strip distancing the end of the protector cover from the casing and forming a recess under the protector strip for receiving the nose when depressed.

4. A switch for electric flashlights, comprising a flashlight casing, a switch bar slidably mounted on the casing and made of sheet metal and forming a protector cover, a strip of sheet metal forming a spring arm fixed to the inner face of the protector cover, a U-shaped nose bent on the spring arm and projecting through an opening in the protector cover, means on the protector cover distancing the spring arm from said casing and forming members for sliding on the casing, means distancing the inner face of the protector cover from said casing to form a recess under the protector cover for receiving said nose when depressed and means for slidably connecting the switch bar to the casing and for operating the switch bar.

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