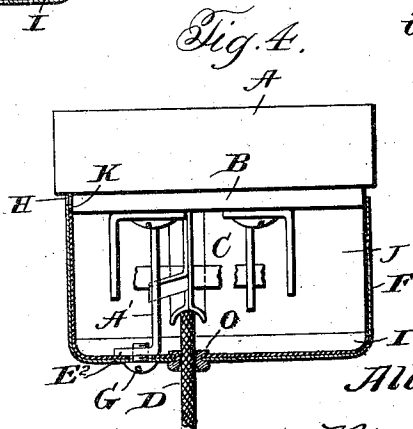
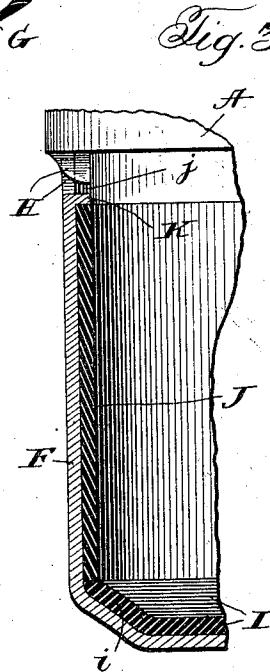
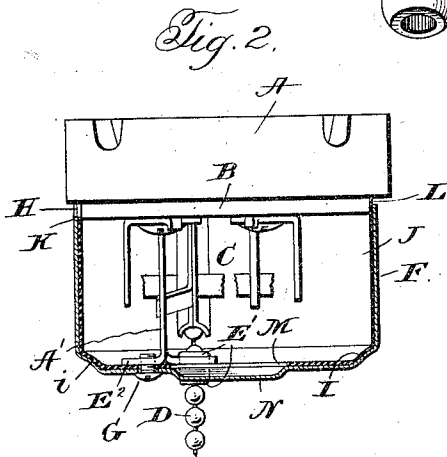
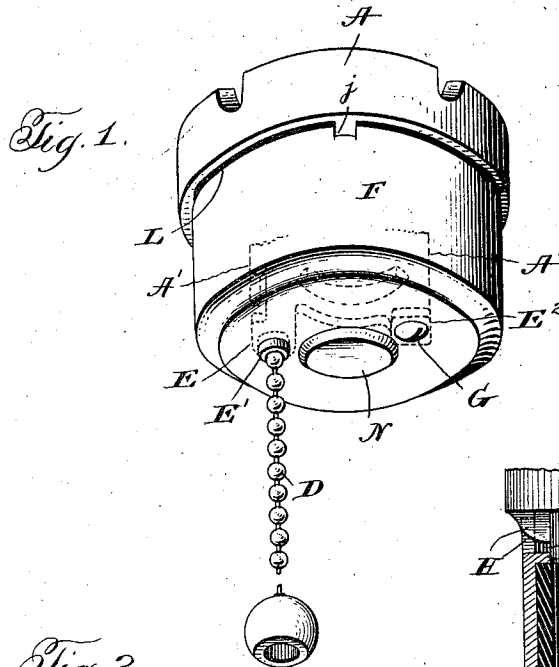


A. A. TIRRILL.
INSULATED SWITCH COVER.
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1,028,639.

Patented June 4, 1912.



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UNITED STATES PATENT OFFICE.

ALLEN A. TIRBILL, OF SCHENECTADY, NEW YORK.

INSULATED SWITCH-COVER.

1,028,639.

Specification of Letters Patent.

Patented June 4, 1912.

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To all whom it may concern:

Be it known that I, ALLEN A. TIRBILL, a citizen of the United States, residing at Schenectady, in the county of Schenectady and State of New York, have invented certain new and useful Improvements in Insulated Switch-Covers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in switch covers and has for its object the provision of a metallic cap adapted to cooperate with an insulated switch base for inclosing the switch mechanism, said cap being lined with insulating material adapted to insulate the same from the operating parts of the switch.

The invention contemplates the provision of an insulating lining for the metallic cap adapted to be inserted in the cap and retained in place by a simple and efficient fastening device, conveniently an interlocking engagement between a part of the metal cap and a part of the lining.

More specifically, the invention contemplates the formation of a metal cap having a notched or recessed portion, the metal adjoining the notch or recess being offset or struck inwardly to overlie an adjoining edge of an insulating lining within the cap to secure the lining in place.

The invention further embraces improved instrumentalities for centering or lining the cap with the mechanism of the switch when the cap is being secured in place.

The novel features in the construction and arrangement of the parts of one embodiment of the invention will be apparent from the detailed description hereinafter contained, when read in connection with the accompanying drawings forming part hereof and wherein said embodiment is illustrated.

In the drawings, Figure 1 is a perspective view of a switch showing my improved cover in place, Fig. 2 is a sectional view of the same, the switch mechanism being shown simply in a fragmentary way, in view of the fact that the latter constitutes no part of the present invention, Fig. 3 is an enlarged detail view, and Fig. 4 is a sectional view similar to Fig. 2 showing a slightly modified form of cap and insulating lining therefor.

Referring more specifically to the drawings, wherein like reference characters designate corresponding portions in the several

views, A represents a switch base of porcelain or similar insulating material provided with an annular cap seat B adjoining said seat.

C represents fragmentary portions of a switch mounted on the base A, the same comprising in part a supporting bracket A' secured to the base having an apertured threaded offset securing flange E and a guide-eye or bushing E' formed therewith, and an operating cord or chain D adapted to work through said eye.

F represents an inverted cup-shaped metal cap adapted to cooperate with the base in inclosing the switch mechanism. This cap is held in place by means of a screw G passing therethrough and into engagement with the threaded aperture of the flange E'. In applying the cap, the same is easily centered or properly aligned with the operating part of the switch, by means of the bushing E', and the apertured flange E registering with complementary apertures in the cap, and the screw G being inserted, it is apparent that the cap is prevented from a relative turning movement, so that the operative association of the parts is constantly maintained.

The insulation of the cover is formed in two pieces, one being a shallow cup-shaped portion I, and the other a split cylinder J. The portion I is perforated to accommodate the operating cord or chain and the fastening screw, and has a flange i flaring inwardly and outwardly to secure a firm peripheral engagement with the metal cap when forced in place. The split cylindrical portion J snugly fits the interior of the cap, abutting at its inner edge against the edge of the flange i of the portion I, and the two members are firmly secured in position by means of a tongue K struck inwardly from the metal cap at the top of a notch or recess H therein and engaging beneath a corresponding notch or recess j in the cylindrical portion of the insulation. The insulation extends outwardly, as indicated at L, to an appreciable extent beyond the edge of the cap to bear upon the seat B on the porcelain base A.

It is desired that the insulated cap shall fit closely relative to the switch mechanism, in order that the device may be as compact and small as possible, and inasmuch as the center of the cup-shaped portion I of the insulation may have a tendency in time to buckle inwardly and possibly contact the

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operating parts, the same is cut away as at M, and the corresponding center part of the metal cap raised as at N to effectually remove the same away from possible metallic contact with the switch parts. This raised central portion of the cap also materially strengthens the same against inward depression.

It is, of course, to be understood that the bracket A' for fastening the cover in place is supported from the porcelain base and insulated from the switch blades and contacts in any convenient manner.

As shown in the enlarged detail view constituting Fig. 3, the porcelain base A may be provided with a lug C' adapted to enter the notch or recess H in the cap or cover to serve, as desired, either alone, or as an additional means, for properly centering or aligning the cap or cover, and to prevent turning of the cover relative to the base, as is obvious.

In Fig. 4, I have shown the top of the cap flat, as distinguished from the cap of the preceding figures, the cup-shaped portion I of the insulating lining being continuous throughout save the apertures for the fastening screw and operating cord or chain, and in this instance an interiorly rounded hollow rivet O secures the cup-shaped portion of the lining to the top of the cap and constitutes a convenient guide for the operating cord or chain.

It will be understood by those skilled in the art that the present invention is capable of embodiment in forms and devices other than that specifically disclosed herein.

I claim:

1. In a switch, a supporting base having a lug thereon, switch mechanism mounted on said base, a cover for said mechanism, means for securing the cover in place, an insulating lining for the cover, the cover and lining having a notched portion adapted to receive the lug on the base, and a portion of the cover adjoining the notched portion thereof being offset to engage beneath a corresponding portion of the lining to retain the lining in place.

2. A switch cover of the character described comprising a metallic cup-shaped member notched at one edge, an insulating lining therefor, said lining being correspondingly notched at its edge, and a part of the metal of the cup-shaped member being offset at said notched portion thereof to underlie a corresponding portion of the edge of the lining, substantially as described.

3. A switch cover of the character described comprising a cup-shaped body hav-

ing a notched lower edge, and an insulating lining therein comprising a cup-shaped portion fitting the top of the cup-shaped body, and a cylindrical portion fitting the lower part of the cup-shaped body abutting at its upper edge against the edge of the cup-shaped portion of the lining and projecting at its lower edge an appreciable distance beyond the edge of the cup-shaped body, the lower end of the lining being notched to correspond to the notch of the cup-shaped body, and the cup-shaped body having a part offset to underlie a corresponding part of the lining adjoining the notched portions thereof to retain the lining in place.

4. An article of the character described comprising a metallic switch cover having an inwardly turned lug at its open edge, and an insulating lining for the cover comprising an end member and a side member, the inner end of the side member engaging the marginal portion of the end member to hold the same in place, and the lug on the cover engaging the outer edge of the side member substantially as described.

5. An article of the character described comprising a metallic switch cover, and an insulating lining therefor comprising an end member for the closed end of said cover, and a side member, the inner end of the said member engaging the marginal portion of the end member to retain the same in place, a part of the metallic cover engaging the side member to retain the same against removal, substantially as described.

6. An article of the character described comprising a metallic switch cover, and an insulating lining therefor, the switch cover being notched to provide a lug overlying the lining to secure the same in place, the notch being arranged at the open edge of the cover, substantially as described.

7. An article of the character described comprising a metallic switch cover and an insulating lining therefor comprising a cup-shaped end member for the closed end of the cover, said end member having a flaring marginal portion and a side member having its inner edge abutting the end of the flared portion or flange of the end member so that the lining is continuous and substantially flush, the cover having a part engaging the side member to retain the same in place, substantially as described.

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

ALLEN A. TIRRILL.

Witnesses:

DANIEL NAYLON, Jr.,
M. M. HOCKFORD.