Feb. 25, 1958 J. BUTURUGA 2,824,915

ELECTRIC SWITCH GUARD

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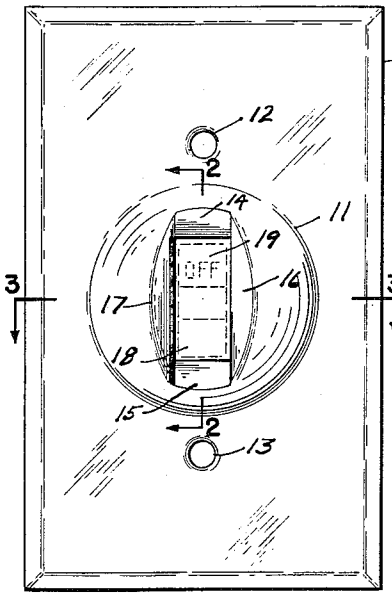

FIG. 1

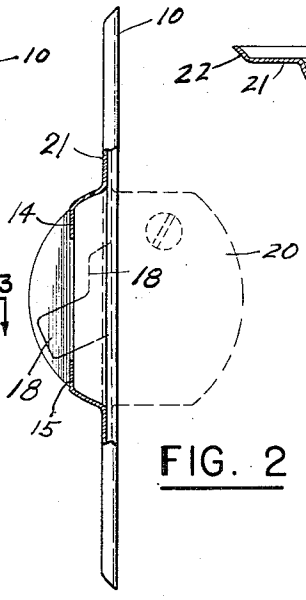

FIG. 2

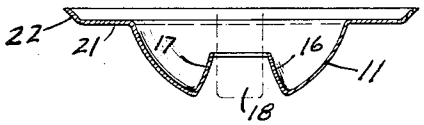

FIG. 3

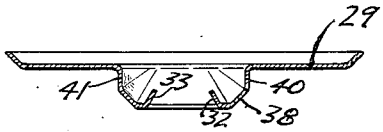

FIG. 7

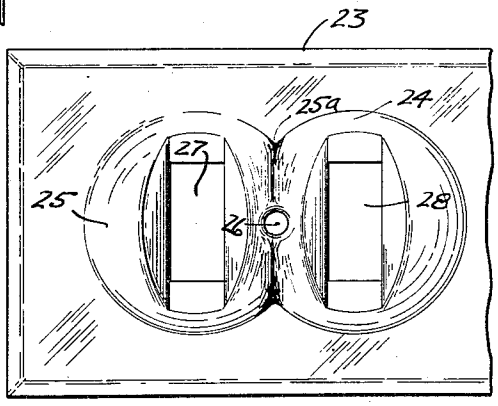

FIG. 4

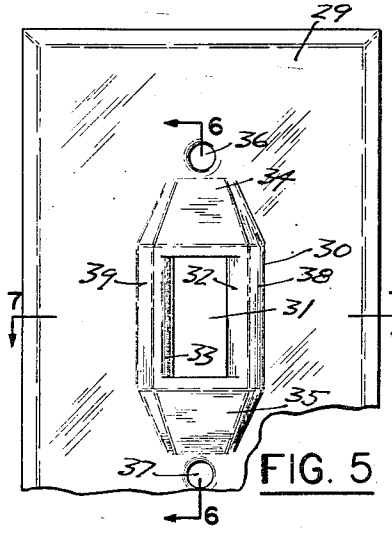

FIG. 5

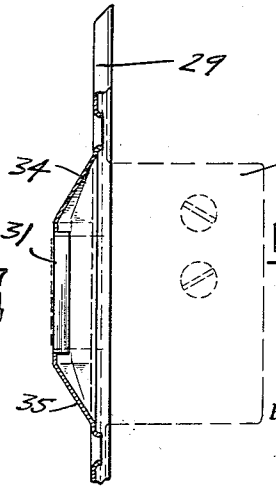

FIG. 6

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ELECTRIC SWITCH GUARD

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2 Claims. (Cl. 200—42)

This invention relates to a guard for various conventional electric switches.

Conventional electric switches generally project transversely from their mounting bracket in a manner whereby the switch can readily be accidentally actuated by children or other unauthorized personnel. The device herein disclosed briefly comprises a mounting fixture which encloses the switch in a fashion which protects the switch from inadvertant actuation and permits convenient actuation by authorized personnel.

Consequently the broad object of this invention is the provision of a mounting bracket for conventional electric switches which can not be accidentally actuated and which permits to be conveniently actuated when so desired.

A more specific object of this invention is the provision of a guard bracket for conventional light switches which prevents actuation unless one deliberately inserts a finger into a specially designed aperture.

Another object of this invention is the provision of a guard fixture for a pair of parallelly mounted electric switches which restricts actuation of the switches to the deliberate insertion of one's finger into a specially contrived aperture and which can be fabricated for substantially the same costs as an ordinary mounting bracket not equipped with guard structure.

Further objects and inventive features will become more apparent from the following detailed description, claims, and appended drawings in which:

Figure 1 is a front elevation of a specie of the novel switch guard showing its relationship to the protected switch.

Figure 2 is a sectional view taken along plane 2—2 of Figure 1.

Figure 3 is another sectional view taken along plane 3—3 of Figure 1.

Figure 4 is a front elevation of another specie of the invention adapted to protect two light switches.

Figure 5 is a front elevation of still another form of the invention adapted specifically for the push button type of switch.

Figure 6 and Figure 7 are sectional views taken along planes 6—6 and 7—7 respectively of Figure 5.

Referring now to the drawings, one form of the invention is seen in Figures 1 to 3 to comprise plate bracket 10 having a generally semi-spherical projection 11 located centrally of the plate. A pair of holes 12 aligned with the longitudinal axis of the projection 10 are provided for mounting the bracket on a wall or other supporting structure, about a pivotal type of switch assembly unit. The switch is shown more clearly in Figure 2 to include an operating button 18 and similar depressed surfaces 19 indicating the on and off positions of the switch. The switch mechanism is enclosed in a housing 20, shown in dotted lines on Figure 2. Button 19 projects thru a hole formed centrally thru the bracket and fits with close clearance between inwardly sloping lips 16 and 17 of the projection 11. A pair of stops 14 and 15 are provided

on either side of the extremities of projection 11 for the purposes of limiting the movement of button 19 and to present an indicating surface for further identifying the "on" and "off" positions of the switch. It is to be noted that the outermost projecting portion of projection 11 is aligned approximately with the outer surface of button 19, whereby actuation of the button can only be had by a deliberate insertion of a finger between lips 16 and 17 to obtain contact with the button. As seen more clearly in Figure 3, the projection 11 is formed integrally with the bracket base plate 21 and trimmed peripherally with a beveled edge 22.

In Figure 4 a modified form is shown which is specially adapted for use in connection with twin push buttons 27 and 28. This form comprises a pair of semi-spherical projections 24 and 25 joined along a common line 25*a* extending transversely from the base plate 23. A hole 26 is provided at the center of the plate 23 along the line 25*a* for the purposes of receiving a mounting screw (not shown). The construction of the aperture for receiving and surrounding the buttons 27 and 28 is similar to the construction of the aperture described in connection with Figure 1.

In Figures 5, 6 and 7 another form of bracket is shown which is adapted for a single push-button type of switch, i. e. the type which reciprocates at right angles to the plane of the bracket. This form comprises a base plate 29 from which extends transversely a centrally located projection 30. An aperture is provided at the center to encompass snugly a rectangular button 31 whose upper surface is aligned with the outer surface of the projection 30. The projection includes lateral sloping sides 38 and 39 and end sloping sides 34 and 35 which are integral with the plate 29. The inner edge of the projection is bounded by opposing lips 32 and 33 which clear the aperture slightly when the bracket is operatively mounted about a switch. The said lips can be sloped inwardly if desired to provide a better contact between the operator's finger and the button 31. Holes 36 are formed at both ends of the projection for mounting purposes. In Figure 6 the bracket is shown more clearly in relation to the switch assembly 32. In Figure 7, the inwardly sloping lips 32 and 33 are shown in more detail.

In connection with the form shown in Figure 5, it should be noted that similarly constructed brackets can be provided for push buttons of circular or other contour.

Although the forms herein depicted, show only a projection especially devised for preventing accidental or other unwanted actuations of a conventional switch wherein the projection is integral with the plate bracket, it is obvious that the projection can be made as an attachment which is adapted to be mounted on a conventional light switch bracket.

The spherical contours of the guard structure are preferred since it can be very economically formed by conventional stamping or casting methods. Moreover the spherical form presents a smooth surface devoid of sharp hazardous edges or corners. It is however within the contemplated scope of the invention to include other shapes which provide the same function as the preferred spherical shape.

Due to the simplicity of the guard herein described, a large variety of materials can be employed in the fabrication thereof. Thus sheetmetal, steel, tin, plastics, brass, etc. can all be used.

It is now obvious that switches provided with the guard disclosed herein will not be actuated unless such actuation is effected by a person who deliberately inserts a finger in the specially provided aperture for contacting and operating the switch button.

Having thus described in detail the nature of this invention, the following claims are presented for consideration as the subject of a grant of Letters Patent:

1. A guard adapted to prevent accidental actuation of a switch button comprising a planar outer flange and a transverse projection encompassed by said flange including means for mounting said guard on a flat supporting surface, including a channel separating opposing portions of the projection having a base in substantial planar alignment with the flange, said base having an aperture adapted to receive the button with sufficient clearance whereby the button can be reciprocated between on and off positions, the said opposing portions of the projections being substantially the same transverse distance from the flange as the button when the guard is mounted over the button, said channel being of sufficient width to permit the insertion of a human finger therein for the purpose of actuating the button, said projection having inclined outer surfaces that taper outwardly and gradually from the channel to the flange providing smooth aesthetic surfaces which prevent accidental button actuation without presenting hazardous sharp edges.

2. A guard as in claim 1 wherein the said outer surfaces are substantially of spherical contour.

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