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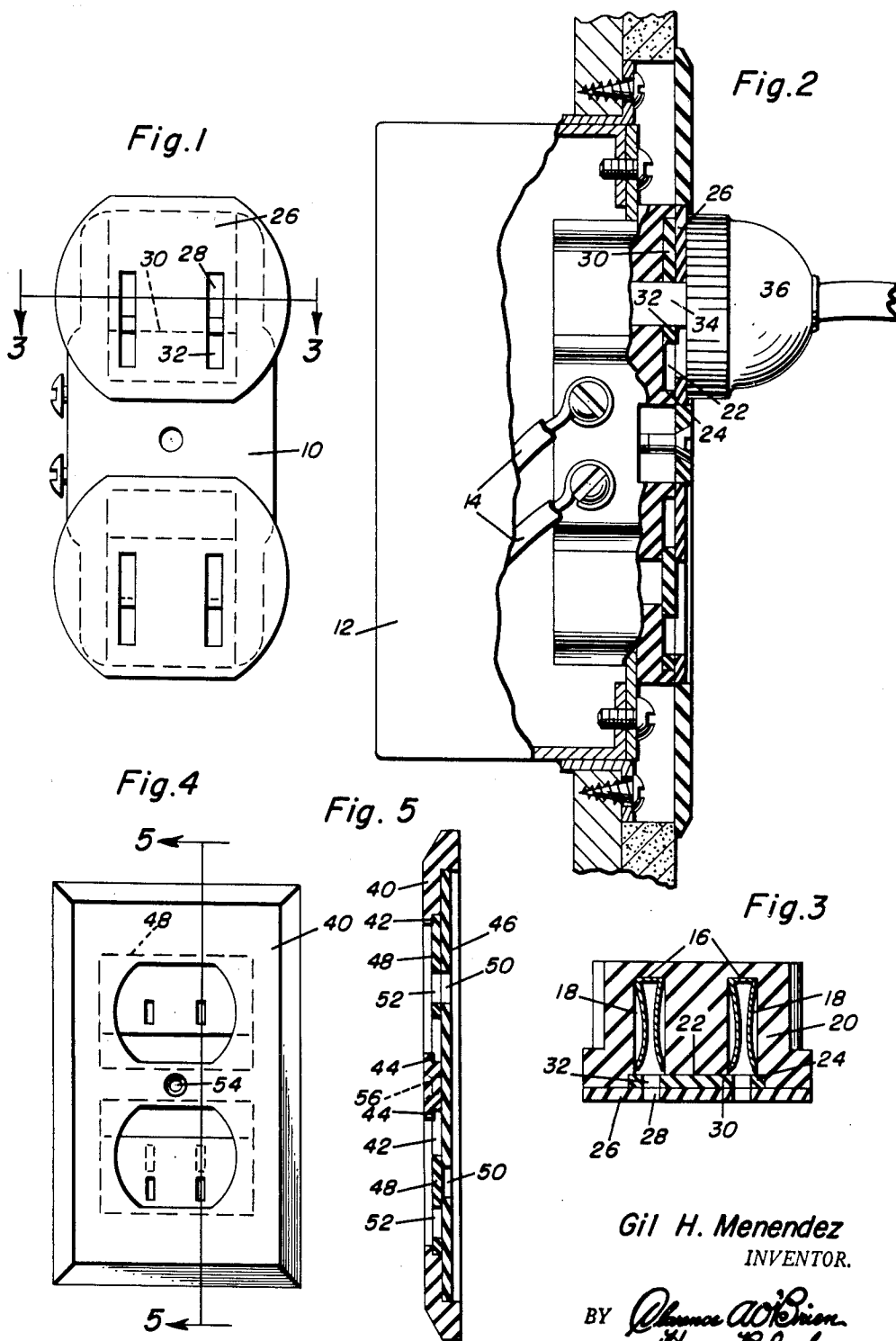
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SAFETY DEVICE FOR ELECTRICAL RECEPTACLES

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2 Sheets-Sheet 1



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Fig. 6

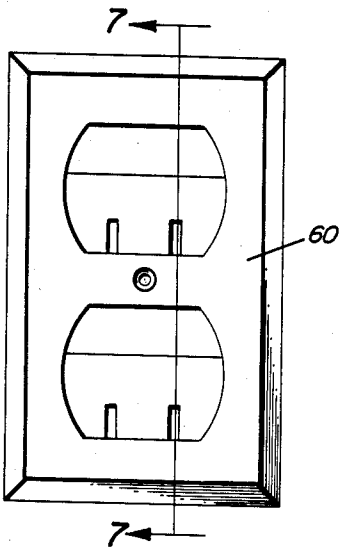


Fig. 9

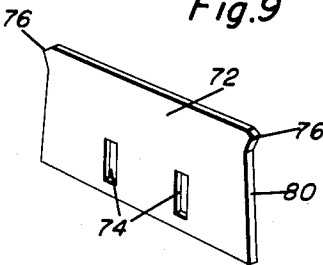


Fig. 8

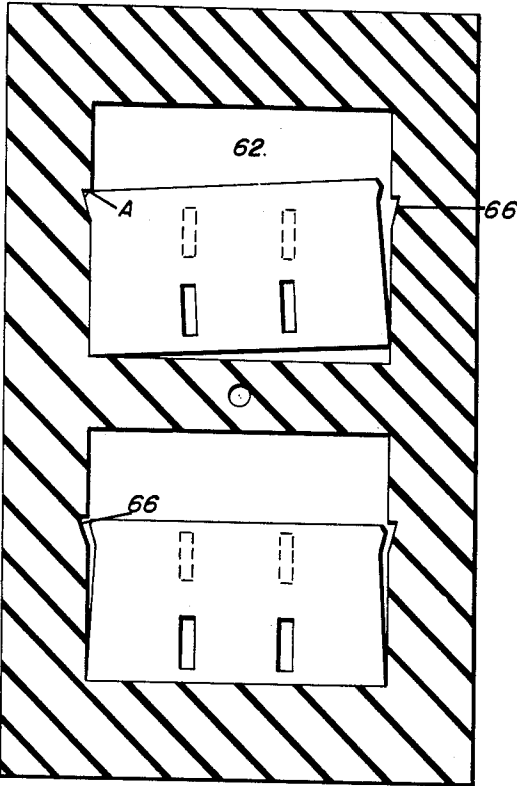
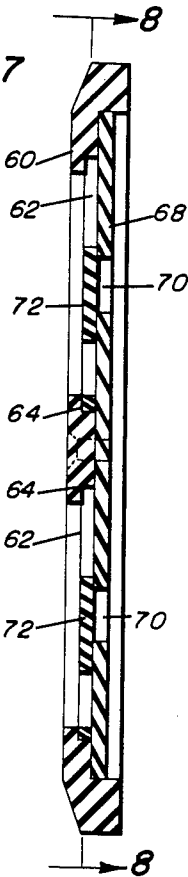


Fig. 7



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SAFETY DEVICE FOR ELECTRICAL RECEPTACLES

Gil H. Menendez, Patchogue, N. Y., assignor, by direct and mesne assignments, of one-third to David Stillwagen, Levittown, one-sixth to Julius Chinnman, and one-sixth to Charles A. Hewlett, Woodmere, N. Y.

Application January 7, 1954, Serial No. 402,710

2 Claims. (Cl. 339—36)

This invention relates generally to electrical connectors and more particularly to a device adapted to be associated with an electrical outlet for prevention of accidents which may occur due to tampering with electrical receptacles by children.

The primary object of this invention resides in the provision of means for preventing accidents caused by children sticking pins or other pieces of conductive material into an electric receptacle which often results in severe electrical shocks to the children, in fires and in other serious damage.

The construction of this invention features the use of slides in recesses formed in the body of the receptacle or the cover plate of the receptacle so that the slides will prevent access to the depressions in which the electrical contacts are located, thereby preventing the completion of an operative electrical circuit to the contacts.

One of the forms of the invention includes the provision of the recess directly in the body portion of the electrical receptacle, while another form of the invention resides in the provision of a cover plate having associated therewith slides mounted in a recess formed in the cover plate. It is to be noted that these slides are formed from electrically insulative material, thereby ensuring against a casualty should a prong of a plug become accidentally caught in the depressions in the receptacle and in view of the fact that the slide will normally engage the prongs.

Still further objects and features of this invention reside in the provision of a safety device for electrical receptacles that is simple in construction and manufacture, capable of being readily installed in various existing outlet boxes, and which is inexpensive to produce, thereby permitting wide distribution.

These, together with the various ancillary objects which will become apparent as the following description proceeds, are attained by this safety device, preferred embodiments of which have been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 is a front elevational view of the device as utilized in combination with an electrical receptacle;

Figure 2 is a vertical sectional view illustrating the manner in which a plug is inserted in the electrical receptacle;

Figure 3 is a horizontal sectional view as taken along the plane of line 3—3 in Figure 1;

Figure 4 is a front elevational view of a cover plate employing the principles of the present invention;

Figure 5 is a vertical sectional view as taken along the plane of line 5—5 in Figure 4;

Figure 6 is a front elevational view of a modified form of cover plate for a receptacle;

Figure 7 is an enlarged vertical sectional view as taken along the plane of line 7—7 in Figure 6;

Figure 8 is a vertical sectional view as taken along the plane of line 8—8 in Figure 7 illustrating the manner in which the modified form of slides operates; and

Figure 9 is a perspective view of one of the slides.

With continuing reference to the accompanying draw-

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ings wherein like reference numerals designate similar parts throughout the various views, and with particular attention initially to Figures 1 through 3, it will be noted that herein there is disclosed an electrical receptacle 10 which is adapted to be positioned in an outlet box 12 and to have suitable conductors 14 operatively connected thereto for supplying electrical power to the contacts, as at 16, mounted in depressions 18 in the insulative body 20 of the receptacle 10.

The body 20 is provided with a recess 22 therein forming a peripheral shoulder, as at 24. A plate 26 is secured to the body 20 in overlying relationship relative to the recess 22 and has apertures 28 therein in alignment with the depressions 18. A slide, as at 30, is positioned in the recess 22 and has holes 32 therein adapted to be raised into alignment with the apertures 28 and the depressions 18 so that the prongs 34 of a plug 36 can be readily inserted in engagement with the contacts 16. It is to be realized that in a conventional outlet box 12, dual arrangements of contacts 16 are provided for dual outlets, and it is the concept of this invention to provide a plurality of slides 30 within a plurality of recesses 22 in such dual or multiple outlet receptacles.

Referring now to the embodiment of the invention as is shown in Figures 4 and 5, it will be noted that herein there is disclosed a cover plate 40 composed of a body of insulative material having a plurality of recesses 42 therein forming peripheral shoulders, as at 44. An insulative plate 46 is attached to the body 40 and overlies the recess 42. Positioned in the recess 42 are slides 48 which are adapted to be actuated by gravity. Since the plate 46 has a plurality of apertures 50 therein, which apertures are adapted to be positioned in alignment with the contact receiving depressions in an electrical outlet receptacle, the holes 52 formed in the slides 48 can be aligned with the apertures 50 so that the prongs of any suitable electrical connector can be readily inserted through the aligned apertures 50 and holes 52 into contact with the electrical contact members. It is to be noted that the plate 40 may be secured by a suitable fastener 54, as is conventional through the aperture 56 provided in the plate 40 for such purpose.

Referring now to Figures 6 through 9, it will be noted that there is disclosed a cover plate 60 composed of a body of insulative material having a plurality of recesses 62 therein forming peripheral shoulders, as at 64. Angulated or wedge-shaped depressions 66 are formed in the cover plate 60 in communication with the recesses 62. An insulative plate 68 is attached to the cover plate 60 and overlies the recesses 62. Apertures 70 extend through the plate 68.

Positioned in the recesses 62 are slides 72 which are adapted to be actuated by gravity. The slides 72 have apertures 74 therein which are adapted to be slid into alignment with the apertures 70 to permit the prongs of a plug or other connector to be inserted therethrough. The slides 72 are further provided with triangular-shaped projections 76 on the upper side edges thereof.

The projections 76 are adapted to engage in the depressions 66 when the slides 72 are not lifted in a vertical direction but are tilted by an instrument, such as a pencil or the like, which might be inserted by a child. However, if a plug were to be inserted into the apertures 74 in the slide 72, the slide 72 may be vertically raised. When the slide 72 is lifted until the apertures 74 are in alignment with the aperture 70, the plug may be readily inserted into the receptacle through the aperture 70.

The tilting of the slide 72 prevents access to the aperture 70 from being achieved due to the fact that the projections 76 lock the slide 72 in position as shown at A in Figure 8.

The slides 72 are formed with the main portions 80

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of the sides thereof slanting convergingly inwardly and upwardly so that the entire slide 72 even with the projections 76 may be slidably moved within the recesses 62.

Since from the foregoing, the construction and advantages of this safety device for electrical receptacles are readily apparent, further description is believed to be unnecessary.

However, since numerous modifications will readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawing, it is not intended to limit the invention to the precise embodiments shown and described, but all suitable modifications and equivalents may be readily resorted to which fall within the scope of the appended claims.

What is claimed as new is as follows:

1. A safety cover plate for attachment to an electric outlet receptacle comprising a body having a recess therein forming a peripheral shoulder, a plate secured to said body overlying said recess, said plate having apertures

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therethrough, gravity actuated slides vertically slidably disposed in said recess and also vertically tiltable edge-wise therein, said slides having holes therethrough adapted to be aligned with said apertures when said slides are in a raised position, said slides being constructed of an electrically insulative material, said body having depressions therein at opposite sides of said recess opening into the recess, and projections on said slides engageable with and tiltable in said depressions by tilting of said slides in opposite directions whereby to prevent vertical sliding of said slides into a raised position.

2. A safety cover plate as in claim 1, said projections being on corners of said slides.

References Cited in the file of this patent

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