UNITED STATES PATENT OFFICE

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COMBINATION WALL RECEPTACLE AND PLUG SWITCH

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1 Claim. (Cl. 200—51.07)

This invention relates to a combination wall receptacle and plug switch, the primary object of the invention being to insure a more positive connection between the wall receptacle and contacts of the plug inserted therein.

Another object of the invention is to provide a combination receptacle and plug switch wherein a plug inserted in the slot of the receptacle cover, will be held securely in place against displacement, until the plug has been moved to a predetermined position to release the plug from the receptacle cover.

A still further object of the invention is to provide a plug which may be moved to complete a circuit through wires carried by the plug or break the circuit by merely turning the plug within the opening of the wall receptacle.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing:

Figure 1 is an elevational view illustrating a combined receptacle and plug switch, constructed in accordance with the invention.

Fig. 2 is a bottom view thereof.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 1.

Fig. 5 is a disconnected view illustrating the inner end of the switch and plug.

Referring to the drawing in detail, the reference character 5 indicates the receptacle base which as shown is elongated, and provided with openings at its ends, for the reception of screws 6, which secure the receptacle to its supporting surface.

The reference character 7 indicates the cover plate for the receptacle, which cover plate is provided with a flange 7' formed at the margin thereof, which flange is also formed with openings to receive the screws 6, by means of which the cover plate 7 is secured to the base 5.

The cover plate is provided with an elongated opening 8 with substantially circular openings 10 at its end, the substantially circular openings 10 providing the entrance openings to the interior of the receptacle, through which the electric plugs to be used with the wall receptacle, are extended in positioning the plugs on the wall receptacle.

Disposed within the wall receptacle, and forming a part thereof, are the contact blades 11 which extend in parallel spaced relation with respect to each other, directly under the cover plate of the wall receptacle, the contact blades being disposed adjacent to the edges of the elongated opening 9.

The contact blades 11 have one of their respective ends secured to the base 5, which is constructed of insulating material, by means of the bolts 12 which extend through the base 5, the bolts providing terminals to which the wires 13 of the electric circuit used in connection with the wall socket, are secured.

The opposite ends 14 of the contact blades 11, bear against the surface of the base 5 and normally hold the contact blades outwardly and in such a way that the contact blades will yield when a plug is inserted within the wall receptacle and moved into contact with the blades 11, thereby insuring a true contact between the blades and plug associated therewith.

The plug which is used in connection with the wall receptacle forming the essence of the present invention, is indicated generally by the reference character 15 and is provided with an extension 16 on one end thereof, the extension being designed to pass through the opening 17 of the disc 18 which is supplied with indicia indicating "On" and "Off." Formed integral with the disc 18, is the elongated bushing 19 which is of a width to move freely in the slot 6 in such a way that the disc 18 will be held against rotation, as the plug 15 is rotated to complete or break a circuit through the plug and wall receptacle.

The reference character 20 indicates an insulated contact disc which is provided with a central opening 21 adapted to align with the opening 17 and bore of the extension 15, to accommodate the screw 21' for securing the insulated contact disc in position. This contact disc 20 backs up the disc 18 to further hold the plug within the elongated opening 9 of the cover plate 7.

Contact points 22 are secured to the disc 20 and are so arranged that when the plug 15 is rotated a predetermined distance in one direction, the contact points 22 will engage the contact blades 11, completing a circuit through the wires 23 that extend through the plug 5 and provide an electric circuit to an electric appliance, lamp or the like.

The plug 15 is provided with an extension 24...
which provides an indicator which extends in the direction of the indicia "On" and "Off," so that the person using the plug may determine the position of the contacts 22 with respect to the contact blades.

When using the combination receptacle and plug switch, the plug is inserted in one of the circular openings 10 at the ends of the elongated opening $8$, and slid laterally. When it is desired to complete a circuit through the contact blades and contact points of the disc 20, the plug 15 is rotated to move the plug until the indicator 24 falls opposite to the indicia "On." In this position, the contact points 22 are firmly pressed against the contact blades providing an electrical circuit. It follows that several of these plugs may be inserted in the openings at the ends of the elongated opening, and electric current taken off for operating various types of electrical appliances or the like. It will further be seen that the plugs can only be removed from the wall receptacle, by sliding the plugs longitudinally thereof opposite to a circular opening at one end of the wall receptacle, where the plugs may be readily withdrawn.

Having thus described the invention, what is claimed is:

A wall receptacle comprising a base, a cover plate secured to the base in spaced relation therewith, said cover plate having an elongated opening disposed longitudinally thereof with substantially circular openings at the ends thereof, a pair of contact blades secured to the base at one of their respective ends, the opposite ends of the contact blades being movable with respect to the base, a plug having contact members movable over the contact blades completing a circuit, a bushing formed on the plug, said bushing being fitted within the elongated opening of the cover plate guiding said plug along the cover plate, an insulated contact disc to which said bushing is secured, said plug operating said disc and moving the contact members into and out of contact with the contact blades, and wires connected with the plug and contact blades, providing electrical circuits.

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