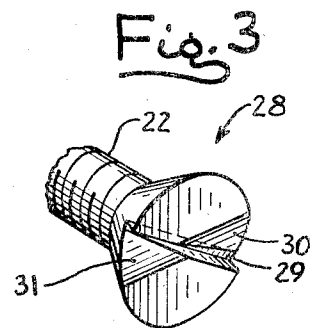
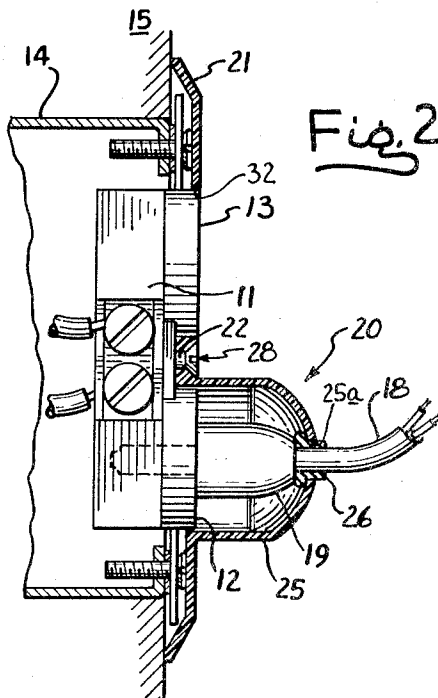
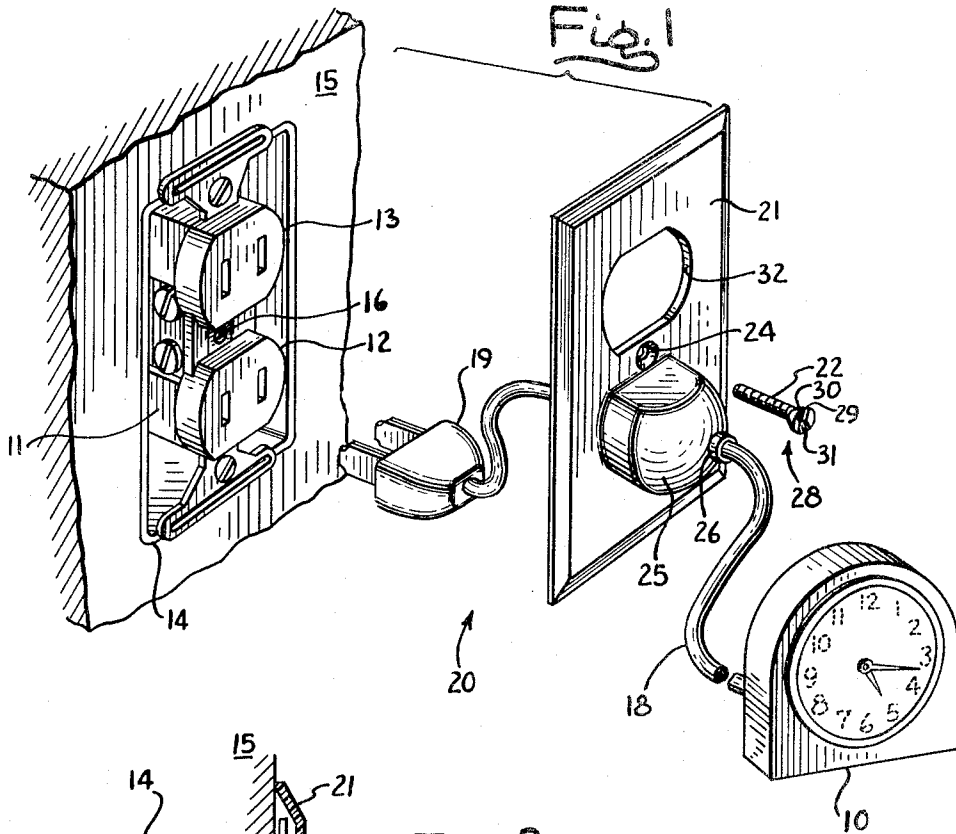


Dec. 1, 1964

D. E. PROTZMANN
PILFERPROOF WALL PLATE

3,159,446

Filed Nov. 13, 1961



INVENTOR.
DONALD E. PROTZMANN
BY *H. K. Kules*
ATTY.

1

2

3,159,446

PILFERPROOF WALL PLATE

Donald E. Protzmann, Athens, Ga., assignor to General Time Corporation, New York, N.Y., a corporation of Delaware

Filed Nov. 13, 1961, Ser. No. 151,691

1 Claim. (Cl. 339-82)

This invention relates to electrical appliance plug and socket connections and more particularly to a securing assembly for locking the plug and socket together.

The conventional appliance is provided with a cord carrying a plug which can be easily inserted in a socket of an electrical receptacle to provide power for the appliance and can also be easily removed. Consequently, convenient portability of the appliance is achieved. This portability is not an advantage, however, in some respects. First, an appliance used in a hotel, motel or the like, where transient guests stay, can be easily pilfered if all that need be done in moving the appliance is to unplug it. Additionally, since the ordinary plugs are made easily removable they can come part way out of a socket and leave exposed, current conducting prongs to be touched and thereby injuring persons, especially children. Furthermore, a plug may be accidentally unplugged where removing power from the appliance is detrimental as with a freezer or sump pump.

It is an object of the present invention to provide a securing assembly for an appliance cord which will secure a plug carried by the cord to a plug receptacle or outlet socket. It is an additional object to provide such a securing assembly which can be used with conventional electrical receptacles and appliance cord plugs, which has an attractive outward appearance, and in which the guard features are not apparent to a casual observer.

It is another object to provide a securing assembly of the above type which is simple and inexpensive to manufacture and easily installable.

Other objects and advantages of the invention will become apparent upon reading the following detailed description and upon reference to the drawings in which:

FIGURE 1 is an exploded view showing the escutcheon plate constructed in accordance with the present invention;

FIG. 2 is a vertical section showing the escutcheon plate installed; and

FIG. 3 is an enlarged face view of the head for the fastening screw.

While the invention will be described in connection with a preferred embodiment, it will be understood that I do not intend to limit the invention to such embodiment, on the contrary, it is intended to cover all alternatives, modifications and equivalents, falling within the spirit and scope of the invention as defined by the appended claim.

Turning to the drawings, shown in FIG. 1 is an exemplary embodiment of the present invention as used with an appliance, in the present instance an electric clock 10. The clock 10 is energized from a common duplex receptacle 11 having electrical sockets 12 and 13. The receptacle 11 is installed in the usual manner within an outlet box 14 mounted in the wall 15. The receptacle 11 is provided with a threaded aperture 16 used for securing the usual wall plate.

The clock 10 is portable having a cord 18 on the end of which is a two-prong plug 19. The latter is preferably constructed of molded rubber, plastic, or the like with the prongs electrically conductive and adapted to slidably fit into either of the outlet sockets 12, 13.

For securing the plug 19 in electrical engagement with one of the outlet sockets, here chosen as outlet 12, a securing assembly 20 is provided. The assembly 20 includes an escutcheon plate 21 and appropriate fastening

means cooperating with the plate. In the present instance, the latter function is performed by a screw 22 received in a plate opening 24 and threaded in the threaded aperture 16.

In accordance with the present invention the escutcheon plate 21 is secured to the receptacle 11 so as to lock the plug 19 in electrical engagement with the outlet socket 12. In the present instance, locking of the electrically engaged plug is achieved by installing the escutcheon plate 21 to cover the plug and thereby prevent the removal of the plug 19 from the socket 12. Explaining the escutcheon plate construction in further detail, the plate is provided with a cup portion 25 for enclosing the electrically engaged plug 19. So that the plate 21 installs flat against the wall 15, the cup portion 25 is sufficiently deep to receive plugs of common sizes. Provided in the cup portion 25 is an opening 25a for receiving the cord 18. This opening is dimensionally chosen so as to allow the cord 18 to slip through, but restricting the passage of the plug therethrough. Sliding wear is reduced and closer fit is achieved between plate 21 and cord 18, by providing a bushing 26 having a smooth inner circumference. When the escutcheon plate 21 is fastened in place it overlies and shields the electrically engaged plug 19. It will be appreciated that pulling of the cord will not disengage the plug because the escutcheon plate restrains the attached plug.

For locking the escutcheon plate 21 and plug 19 together, the plate fastening screw 22 is constructed with a non-backout head 28. As can be best seen in FIG. 3, the screwhead 28 has a screwdriver slot 29 of the ordinary type except for the diagonally opposite half sides 30, 31 of the slot being chamfered or beveled. The chamfering is done so that a screwdriver or the like can be used to tighten the screw 22, but the same implement is ineffective to back out the screw. Therefore as long as the appliance and its attendant cord and plug are intact, the appliance cannot be carried away.

Further explaining the construction of the escutcheon plate 21, it has a socket aperture 32 so that it can replace any common duplex receptacle cover plate.

The present invention guards clocks, radios and the like from being carried away by transient guests as in hotels, motels and the like. To the casual observer the cup 25 appears as the plug itself on the end of the cord so as not to attract attention and reducing the possibility of antagonizing the guest by implied criticism of his honesty.

Furthermore, since the plug 19 cannot be disengaged from the socket 12 without removal of the escutcheon plate, accidental removal of power is prevented from freezers, sump pumps and such appliances where power removal is undesirable. Also, since the plug and socket are enclosed, partial removal of plug prongs from the socket is prevented and thereby the risk arising from exposed current carrying conductors is eliminated. These advantages are achieved with the present invention while maintaining simplicity and economy of manufacture.

I claim as my invention:

A securing assembly for an electrical cord having a plug at one end and an appliance at the other end, the plug being adapted for electrical engagement with an outlet socket of a receptacle having a tapped opening formed therein, said assembly comprising, in combination, an escutcheon plate provided with a first opening surrounding the receptacle outlet socket permitting the plug to be engaged with the socket, a second opening in said plate adapted to overlie the tapped opening in said receptacle, a screw received in said second plate opening and adapted for threading engagement with the tapped opening in said receptacle for anchoring said plate to said receptacle, said screw having a non-backout head, a cup formed integral

with the escutcheon plate, said cup being displaced laterally from said screw and projecting outwardly in overlying relationship with the receptacle outlet socket and enclosing the plug, said cup having a single substantially central opening for receiving the cord, said cup substantially restricting the plug against movement in a direction tending to disengage or remove the plug from the socket to effect anti-pilfer electrical connection of the appliance.

5

References Cited in the file of this patent

UNITED STATES PATENTS

131,843	Brooks	Oct. 1, 1873
2,462,756	Leopold	Feb. 22, 1949
2,709,198	Holtshouser	May 24, 1955
2,891,102	Grimes	June 16, 1959
2,934,591	Tiikkainen	Apr. 26, 1960
2,987,690	Marbais	June 6, 1961