United States Patent

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[54] **ESCUTCHEON**
2 Claims, 6 Drawing Figs.

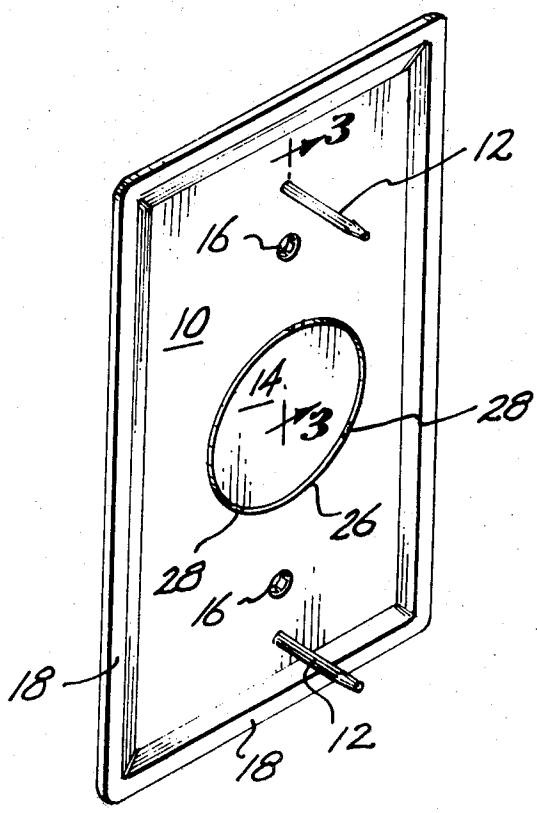
[52] **U.S. Cl.** **174/66,** 220/24.2, 220/27
[51] **Int. Cl.** **H02g 3/14**
[50] **Field of Search** 174/66, 67; 220/27, 24.2, 24.3; 29/462, 525

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ABSTRACT: An escutcheon to cover an electrical outlet receptacle has a pair of rear standing studs to be manually engaged to and disengaged from a pair of pin-receiving openings in such a receptacle.



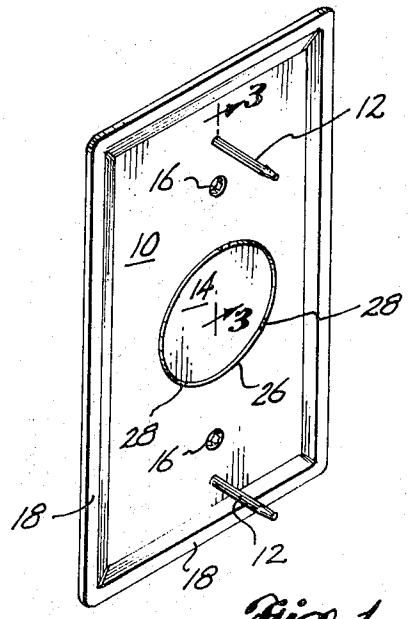


Fig. 1.

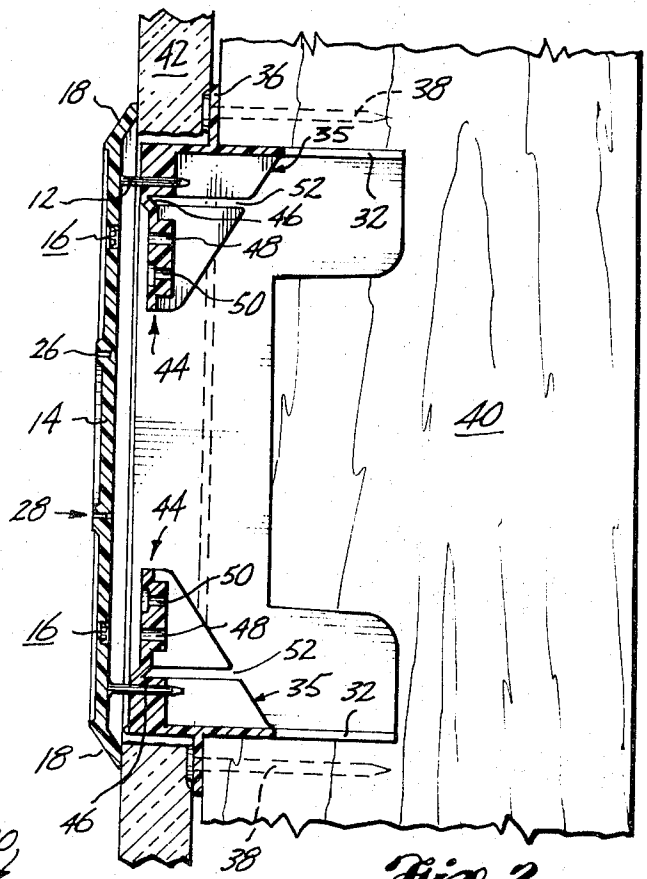


Fig. 2.

Fig. 3.

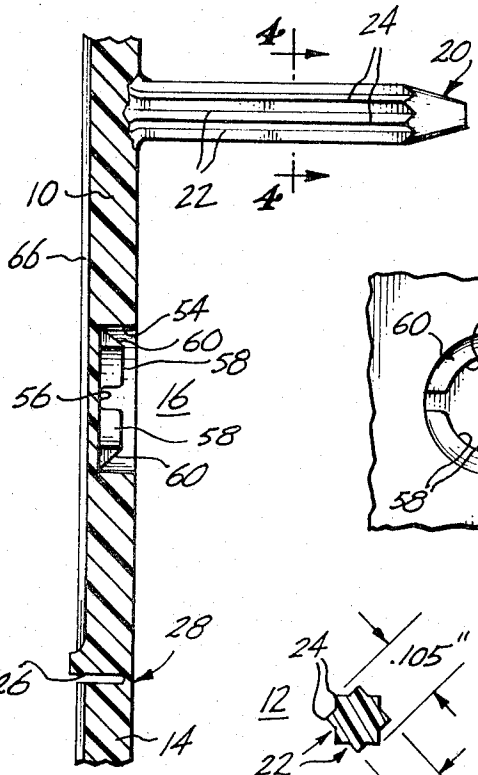
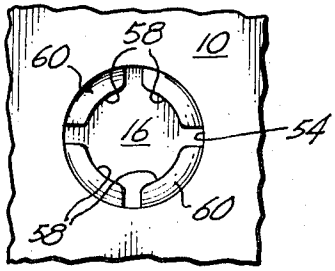


Fig. 5.



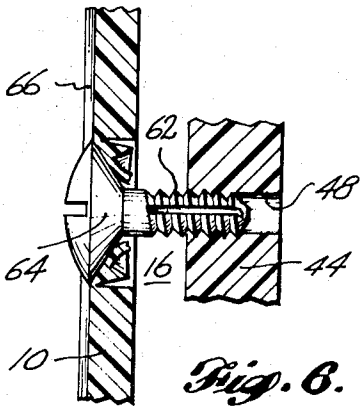


Fig. 6.

Fig. 4.

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ESCUTCHEON

SUMMARY OF THE INVENTION

It is regular practice for telephone companies to install outlet receptacles in buildings during their construction or renovation, to which the usual conductor wires are run even though it is not immediately contemplated that telephone service will be established at each receptacle. Normally such installation includes one or several receptacles that are to be closed and not used until later when it may become desireable to establish supplemental service or to move an instrument to a new location. This is advantageous because the initial installation is made for a fraction of the cost as compared with cutting into a wall and fishing conductors through a finished and closed structure.

This invention is concerned with providing an escutcheon to first close an unused outlet receptacle. The escutcheon with slight modification may later be adapted to surround and trim a service outlet element installed in the receptacle. The escutcheon is formed of molded phastic having an appreciable degree of resilience or flexibility. On its rear is a pair of rearstanding resilient studs slidably insertable in pin-receiving openings in an outlet receptacle. The studs or pins in cross section are in part greater and in part lesser in diameter than the size of the pin-receiving openings. They may be manually inserted and withdrawn. They are also frangible for easy removal on occasion. The escutcheon is also provided with thinned areas which are easily punctured or pierced to form screw-receiving openings useful when the escutcheon is to be attached in conventional manner to an outlet box. The margins of the thinned areas when punctured deform, when a conical headed screw fastener is inserted, to produce a countersink about a screw head.

DRAWINGS BRIEFLY DESCRIBED

FIG. 1 is perspective view of the rear of an escutcheon;

FIG. 2 is a vertical section showing the escutcheon secured to an outlet box;

FIG. 3 is an enlarged sectioned view on line 3—3 of FIG 1;

FIG. 4 is a cross section on line 4—4 of FIG. 3 of a stud;

FIG 5 is an enlarged rear face view of a puncturable thinned area of an escutcheon, and

FIG. 6 shows in enlarged detail a screw attachment of the escutcheon as to an outlet box.

DETAILED DESCRIPTION

An escutcheon according to this invention comprises a plate **10** having rear standing studs **12, 12**, a removable or knockout closure disc **14** and thinned areas **16,16**, all as seen in FIG. **1**. Preferably the margins **18** of plate are angularly flanged in conventional manner to provide sloping front face margins and on the rear a slight cavity inside the margins.

Each stud or pin **12** is molded integral with plate **10** and includes tapered nose **20** to ease insertion into a tight hole. In cross section (see FIG. **4**) each pin is serrated as a result of its being provided with longitudinally extending alternating grooves **22** and ridges **24**. By reason of their inherent resiliency or flexibility, pins **12** may swing or pivot to mate with slightly misaligned holes. However, they are frangible and may easily be removed with dike cutters or broken away with pliers.

In the center of plate **10** is the knockout disc **14** mounted in hole or opening **26** by means of frangible bridges **28**. Ordinarily the disc **14** remains in plate **10** so long as the latter is employed to close or cover an unused outlet box **30** as shown in FIG. **2**.

A suitable box comprises upper and lower walls **32,32**, at least one side wall **34**, and an out standing flange **36**. Nails **38** through flange **36** anchor the box to a stud **40** preferably with sidewall **34** juxtaposed thereto. In this arrangement, the front portions of walls **32** and **34** stand forward of flange **36** a distance usually the thickness of plasterboard **42**, whereupon their front edges are normally flush with the wall.

On the inner faces of walls **32** at the mouth of the outlet box are buttressed ears **44** having pairs of openings **46,46** and **48,48**, and **50,50**. The spacing of openings **46,46** coincides with the spacing of pins **12,12**. The spacing of holes **48,48** matches that of thinned areas **16,16**. And the spacing of holes **50,50** corresponds with standard fastener ears on various components often installed in the central portion of box **34**. Ears **44** stand normal to walls **32**. On their backsides, buttress walls **35** extend at the edges between the ears **44** and walls **32**. The buttress walls are parted by slits **52** as seen in FIG. **2**.

The thinned areas **16** are best seen as enlarged in FIG. **3** and FIG. **5** to comprise an annular cavity or recess **54** having a flat bottom wall **56** which is quite thin as compared to the thickness of plate **10**. Arrayed around the edge of recess **54** is a plurality of wedge shaped bolsters or bosses **58** each having an outer sloping wall **60**. When the bottom wall **56** is punctured and a screw shank **62** inserted therethrough, the bosses **58** are caused to fold down and out (see FIG. **6**) as the conical underhead **64** of the screw is drawn in and margins of the ruptured thinned area are displaced. The effect is to convert an otherwise thin wall flat surface into a bolstered countersink so that the slight rounded face of the screwhead is neatly flushed at the face of the escutcheon.

The escutcheon face **66** is shown as finely nibbed in design. Of course, other patterns may be employed.

This escutcheon is particularly useful to cover an outlet box installed and wired for future use, but not to be immediately used. The escutcheon is installed merely by inserting pins or studs **12,12** in holes **52,52**, and pressing home the plate against the face of a wall. The diameter of ridges **24** is greater than the diameter of a hole **52**. And the diameter of valleys **22** is less than the diameter of hole **46**. As a pin **12** is pressed home, the resilience of the pin material permits compression of ribs or ridges **24** with displaced material being accommodated in the valleys. The result is a tight, secure fit. Normally, with the aid of a pry, the escutcheon may be removed without pins **12** fracturing.

To attach an outlet component to be installed, screws associated with the component are inserted into holes **50,50**. Self threading screws are desirable. The installer pushes on knockout **14** fracturing the bridges **28** and clearing opening **26** which will closely encircle the component. While the escutcheon may be resecured by pins **12,12**, it is desirable to unify the assembly whereby plate **10** lends support to the ears **44** to stabilize the mounted component. This is accomplished by inserting the screws **62**, as described, whereby plate **10** and ears **44** are drawn closely and tightly together with bosses infolding and forming a conical countersink as shown.

It will be understood that the foregoing exemplary description may be subject to alterations and modifications as will occur to those skilled in the pertinent art without departing from the spirit of the invention. All such as fall within the scope of the subjoined claims giving due regard to the appropriate application of the doctrine of equivalents is to be embraced by this patent.

CLAIMS

What is claimed is:

1. An escutcheon, for an electrical outlet receptacle having a spaced-apart pair of pin-receiving openings therein, comprising:

a semiresilient plastic base plate;

a pair of spaced-apart, rodlike resilient studs integral with and projecting rearward from said plate for insertion into and removal from said pin-receiving openings;

said plate having at its face a spaced-apart pair of rupturable diaphragm portions, each closing a cavity in the rear face of said plate, said portions being aligned with said studs.

2. Structure according to claim **1** in which bolster means is provided on the rear of each said diaphragm portions in the associated cavity operable upon rupture thereof to form a countersink depression at the plate face to accommodate a tapered head fastener.