June 4, 1957 A. H. JOHNSON 2,794,568

FILLER FOR ELECTRIC OUTLET BOXES

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Fig. 1.

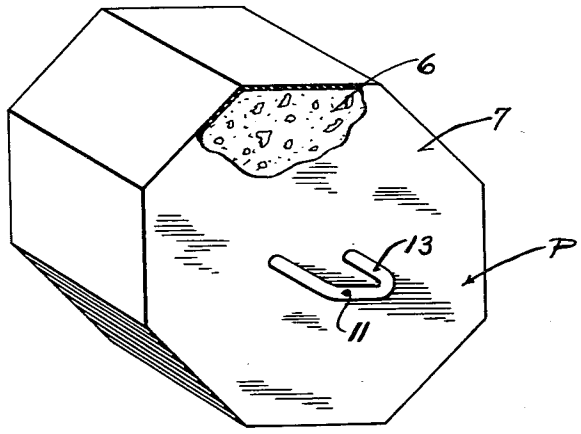


Fig. 2.

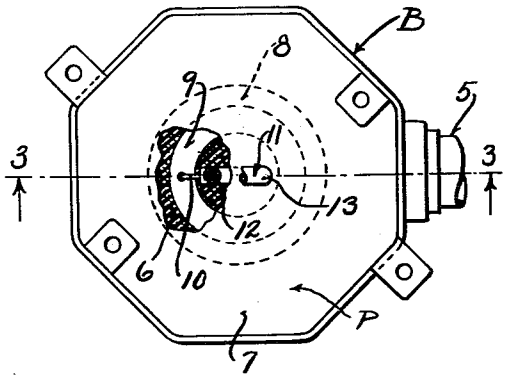


Fig. 3.

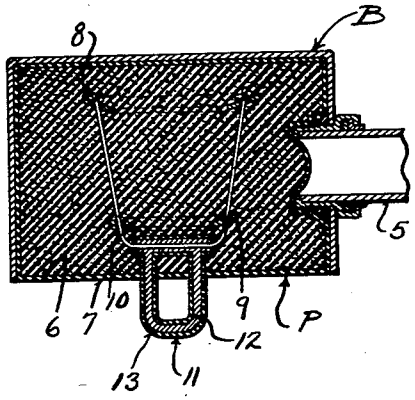
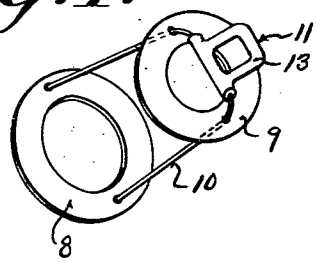


Fig. 4.



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FILLER FOR ELECTRIC OUTLET BOXES

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2 Claims. (Cl. 220—3.4)

This invention appertains to electric outlet boxes and conduits and more particularly to a novel filler plug for outlet and switch boxes of all types.

In the construction of concrete buildings and in the plastering of walls, the electric outlet boxes are often filled with this plastic material. The cleaning out of such boxes by the electrician is a tedious job and often the conduits leading into the box are clogged up, making the feeding of wire therethrough and into a box a difficult or impossible job. In concrete buildings, where the concrete is poured for floors and ceilings and into forms for walls, the boxes are often completely hidden by the concrete and the location of such boxes takes time and care.

It is, therefore, one of the primary objects of my invention to provide means for temporarily filling such boxes and for sealing the conduits leading thereto, whereby the entry of concrete or plaster into the box and the clogging up of the box and conduits is prevented.

Another important object of my invention is the provision of means carried directly by the filler plug for facilitating the quick location of a box by a magnetic finder, when the box is completely hidden from view by the concrete and the like.

A further important object of my invention is the provision of means for permitting the quick removal of the filler plug from a box for re-use in another location.

Another further important object of my invention is the provision of a compressible resilient filler plug or pad shaped to conform to the interior configuration of an outlet box, adapted to be forced into the box for completely filling said box and sealing conduits leading thereto for effectively preventing the entrance of foreign matter therein.

A still further important object of my invention is the provision of a temporary filler plug for electric outlet boxes formed from sponge rubber or similar material, coated with a flexible protecting skin and having embedded therein novel means for facilitating the pulling of the plug from the box after the plug has served its purpose.

Another further object of the invention is to provide novel means for forming the pulling element in the plug, so that when pulling force is exerted thereon the plug will tend to bunch toward its center and thus facilitate the releasing thereof from the box.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described and claimed and illustrated in the accompanying drawing, in which drawing,

Figure 1 is a perspective view of one form of my temporary filler plug for outlet boxes, parts of the plug being shown broken away and in section;

Figure 2 is an outer face view of one type of electric outlet box showing the filler plug inserted therein, parts of the plug being shown broken away and in section;

Figure 3 is a central sectional view through the outlet box and plug, the section being taken on the line 3—3 of Figure 2, looking in the direction of the arrows, and

Figure 4 is a perspective view of my novel pulling element which is incorporated with the body of the filler plug.

Referring to the drawing in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter P generally indicates my novel filler plug for an electric outlet box B.

In the drawings I have shown the outlet box B of a particular shape and form, and it is to be understood that the box forms no part of the present invention and that the box can be of any shape and size now commonly used in electrical work. It is to be further understood, however, that the plug P is shaped to conform to the interior configuration of a particular box B with which the same is to be associated.

In the present showing the box B is of an octagonal shape and is provided with knockout plugs for the reception of electric conduit pipes 5, one of which is shown in the drawing. The box B is provided with the other usual adjuncts, namely, ears for the box cover (not shown) and ears for securing the box in place.

The filler plug P has been shown to be of an octagonal shape in plan so as to conform to the configuration of the box B shown and it is again stressed that the plug is shaped to conform to the particular box with which it is to be associated. The plug P includes a body 6 formed from compressible resilient material, such as sponge rubber. Other like material can be used, such as synthetic foam etc. It is preferred to provide an exterior skin 7 entirely around the body so as to seal the pores of the material from which the body is made and this skin can be rubber or any other flexible material.

Obviously, a plug of this character can be compressed and squeezed into an outlet box for completely occupying the space within a box, as best shown in Figures 2 and 3. As the plug is of compressible, resilient material, the same will conform itself to any irregularities in the box and completely cover and seal a conduit 5 leading into the box. This is clearly shown in Figure 3 and forms an important part of my invention. The complete sealing of the conduit 5 prevents the entrance of any foreign matter into the same and eliminates the necessity of sealing the conduit by a temporary disc which is common in electrical work.

Novel means is provided for facilitating the removal of the plug P from a box after the plug has served its purpose, and whereby the plug can be re-used in other boxes in different locations. The means for facilitating the removal of the plug forms an important feature of the invention. This means includes an inner pull ring 8 formed from flat stock. In conjunction with the inner pull ring 8, I utilize an outer pull ring 9 of a less diameter than the inner ring and both rings are dished in the same direction so that the same extend at an angle to the horizontal and vertical axis of the plug, for a purpose, which will later appear. The inner and outer rings 8 and 9 are firmly secured together by a pull cord 10 which is threaded through openings in the rings, as is clearly shown in Figures 3 and 4. The cord 10 is looped over the outer ring 9 and this looped portion of the cord has connected therewith a pull handle 11 which is of a novel construction, as will now be set forth. The handle 11 includes an interior metal core 12 formed from a material having magnetic properties and this handle is secured to the pull cord 10 and projects outwardly therefrom. The handle is preferably of a U-shape and can be coated with a flexible material 13, such as rubber. The entire pull member with the exception of a part of the handle 11 is molded directly into the body 6 of the plug with a part of the handle 11 protruding out from the plug to form

the desired pull hand grip. Hence, when it is desired to remove the plug from a box, it is merely necessary to firmly grasp the handle **11** and pull out on the plug. Due to the dished shaped inner and outer rings **8** and **9** the material forming the body **6** of the plug will be compressed toward the center of the plug which will facilitate the movement of the plug away from the walls of the box and thus permit the easy removal of the plug from the box.

When the box is used flat against a form for concrete, the handle **11** can be bent back flush with the outer face of the plug and against the form.

Great stress is laid on the fact that the core, **12**, of the handle **11** is formed from metal having magnetic properties and if the box is hidden from view by the concrete the electrician can utilize a magnetic finder for locating the handle and the concrete can be broken away from around the box.

It is also preferred to attach a tag or the like bearing a distinctive color or number, so that the particular outlet box can be readily identified for a particular type of wiring needed, etc.

Before the placing of the plug in an outlet box, it is preferred to cover the plug with talc powder and/or some type of antifreeze. This coating of the plug facilitates the removal thereof from the box.

Changes in details may be made without departing from the spirit or the scope of this invention, but what I claim as new is:

1. A temporary re-usable filler plug and locater for electric outlet boxes comprising a body formed from resilient compressible material shaped to conform to the interior configuration of a box with which it is to be associated, and a pull member including an inner and outer ring embedded in the central portion of said body, a pull cord connecting said rings together, said outer ring being provided with a pair of spaced aligned apertures through which the cord is threaded and said apertures being of a size and configuration to allow said cord to move freely therethrough, and said rings being dished in the same direction and at an angle to the horizontal and vertical axis of the body, and a pull handle connected with said cord extending partially exteriorly of the body, whereby a pulling force exerted on said handle will compress said body centrally between said rings.

2. A temporary re-usable filler plug and locater for electric outlet boxes comprising a body formed from resilient compressible material shaped to conform to the interior configuration of a box with which it is to be associated, and a pull member including an inner and outer ring embedded in the central portion of said body, a pull cord connecting said rings together, said outer ring being provided with a pair of spaced aligned apertures through which the cord is threaded and said apertures being of a size and configuration to allow said cord to move freely therethrough, and said rings being dished in the same direction and at an angle to the horizontal and vertical axis of the body, and a pull handle connected with said cord extending partially exteriorly of the body, including an inner core formed from material having magnetic properties and a flexible coating for said core.

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