

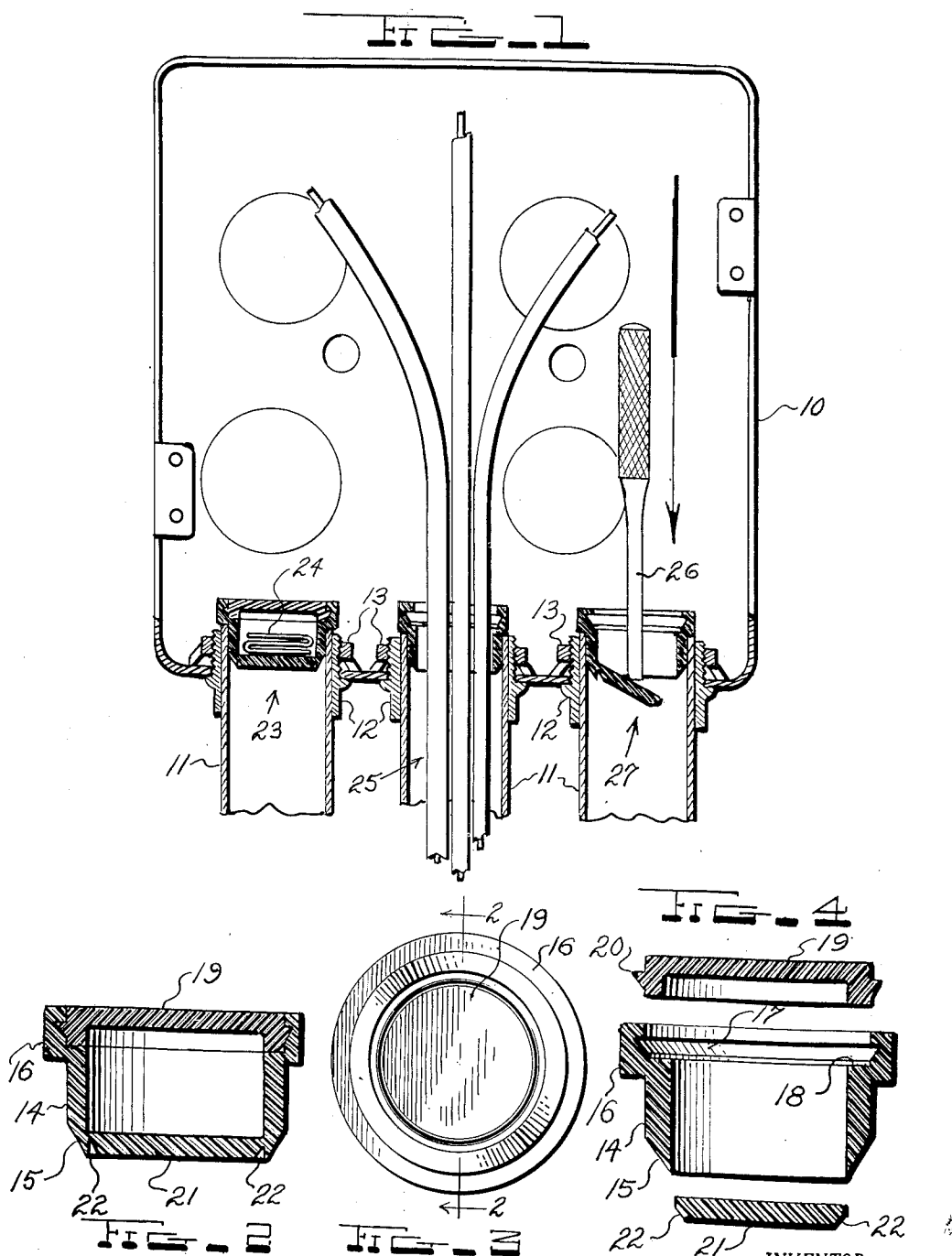
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COMBINED PIPE PLUG RECEPTACLE AND INSULATOR

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COMBINED PIPE PLUG RECEPTACLE AND INSULATOR

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2 Claims. (Cl. 174-65)

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The present invention relates to a combined pipe plug and insulator and it consists in the combinations, constructions and arrangements of parts herein described and claimed.

In the pouring of concrete in building foundations, floors, etc., a vibrator is used. This gives the concrete a tendency to float or run into all loose openings in seeking an exit, and will get into conduits which have been installed for the reception of electrical wires. In some instances, these conduits are plugged with wads of paper, but this eventually becomes soggy and will permit the concrete and other debris to seep into the conduits.

Generally there is provided a hollow plug of flexible plastic material which is adapted to be inserted into pipe or conduit ends to prevent dust, dirt, paint, plaster, concrete and the like from entering such pipes. The devices are hollow in construction so that slips of paper bearing identifying information relative to the particular pipe may be placed therein and a cap is also provided and is likewise made of flexible plastic material whereby the same may be quickly and easily inserted or removed from the plug. The bottom of the plug is scored so that, when the device is to be utilized as an insulator the bottom may be easily knocked out and the cap removed in conventional manner after which the sides of the device may act as an insulator for the upper end of the pipe. As a further identifying means, the devices may be manufactured in different colors.

It is accordingly an object of the invention to provide a device of the character set forth which is simple in construction, inexpensive to manufacture and yet effective and efficient in use.

A further object of the invention is the provision of a combined pipe plug and insulator.

A further object of the invention is the provision, in a device of the character set forth, of a novel removable bottom forming a part of the invention.

A further object of the invention is the provision of novel means for identifying particular conduits amongst a plurality of conduits.

Other and further objects of the invention will become apparent from a reading of the following specification taken in conjunction with the drawing, in which:

Figure 1 is a vertical sectional view, partly in elevation, of an embodiment of the invention,

Figure 2 is a sectional view taken along line 2-2 of Figure 3,

Figure 3 is a plan view of a plug constructed

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in accordance with the teachings of the present invention, and

Figure 4 is an exploded vertical sectional view of the device illustrated in Figures 1 to 3, inclusive.

Referring more particularly to the drawing, there is shown therein a conventional outlet box 10 through the bottom of which protrudes a plurality of vertically extending conduits 11 each of which is locked in position by means of a locking sleeve 12 and a locking collar 13 all of which are conventional and form no part of the invention.

The plug comprising the present invention consists of a hollow cylindrical body 14 whose outer wall is downwardly and inwardly tapered, as indicated at 15, in the lower portion thereof and whose upper portion is enlarged, as indicated at 16.

The enlarged portion 16 is provided on its inner wall with a peripheral groove 17 and the enlarged portion 16 forms with the upper end of the main body 14 a shoulder 18. A cap 19 is provided upon its outer wall with an outwardly extending flange 20 which is adapted to engage in the groove 17 when the cap is pressed into the enlarged portion 16 and the lower end of the cap 19 rests upon the shoulder 18.

The plug is provided with a bottom 21 which is provided with a scoring 22 adjacent the outer periphery thereof.

In use, it will be apparent that the upper ends of the conduits 11 may be closed by pressing the plug assembly therein in the manner shown, for example, at 23 in Figure 1 an identifying data relating to the conduit in which the same may be placed may be inscribed upon a paper 24 which may be folded and placed within the plug prior to the placing of the cap 19 therein. When it is desired to extend wires through the plug and to use the plug as an insulator in the manner indicated generally at 25 in Figure 1, it is only necessary to first remove the cap 19 from the enlarged portion 16 by squeezing the enlarged portion 16 until the cap 19 bulges therefrom whereupon it may be removed with the fingers. Thereafter the bottom 21 may be easily removed from the body 14 by utilizing, for example, a total 26 to force the same therefrom in the manner illustrated, for example, at 27 in Figure 1. It will be understood that the removal of the bottom 21 is facilitated by the scoring 22 after which the main body 14 and the enlarged portion 16 will act as an electrical insulator for wires and the like extended therethrough. It will also be understood

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that the various plugs may be formed of different colors to further distinguish one from another.

As an alternative form of the invention, the plugs could be made without the bottom 22 which would eliminate the step of knocking out such bottom in the form previously described. Since this alternative is amply illustrated in Figure 4 by simply disregarding bottom 22, no further illustration is believed required.

While but one form of the invention has been shown and described herein, it will be readily apparent to those skilled in the art that many minor modifications may be made without departing from the spirit of the invention or the scope of the appended claims.

What is claimed is:

1. A combined seal and insulator for electrical conduits comprising a hollow plug formed of flexible dielectric material adapted for removable positioning within an end portion of the conduit, said plug comprising an annular body portion having a head end, and a closure fitted within and bodily removable from said head end, said head end and closure having opposing faces complementally formed to provide a sealing engagement, the wall thickness of the head end being such as will permit deformation of the circular contour under pressure applied transversely of the plug axis to squeeze the closure in releasing direction for removal of the closure.

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2. Means as in claim 1 characterized in that the body portion of the plug includes a bottom wall integral with the annular wall but having a weakened annular line in correspondence with the inner periphery of the body annular wall, said weakened line enabling removal of such bottom subsequent to removal of the closure and by tool pressure applied through the plug body in the direction of such axis.

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