

July 13, 1943.

R. E. HAYNES

2,324,155

OUTLET BOX

Filed Jan. 16, 1943

Fig. 1.

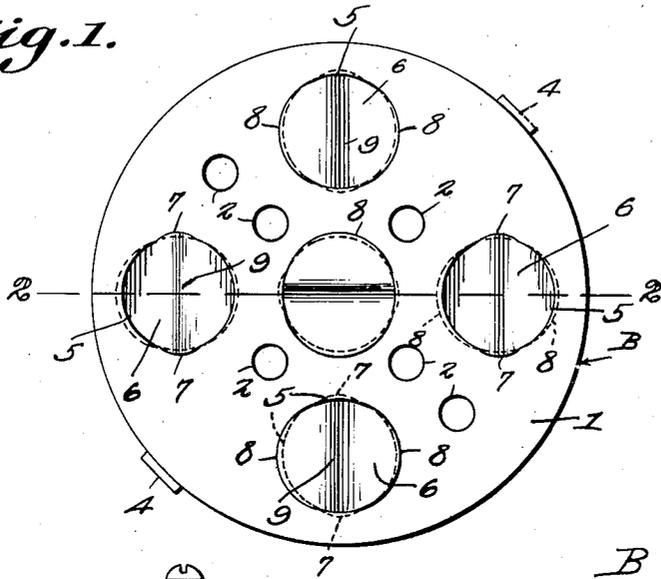


Fig. 2.

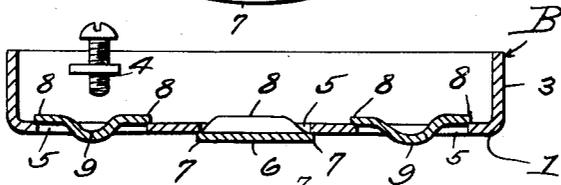


Fig. 3.

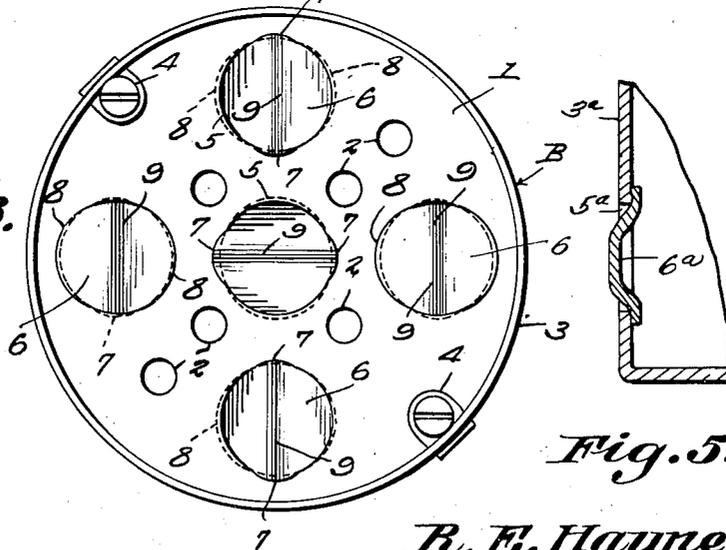


Fig. 5.

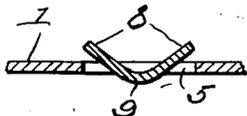


Fig. 4.

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OUTLET BOX

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1 Claim. (Cl. 220—27)

The device forming the subject matter of this application is an electrical outlet box, and the invention aims to provide a knock-out disk of novel construction.

In outlet boxes as at present constructed, the knock-out disk is joined to the head of the box by a reduced neck, which is broken when the disk is knocked out, the disk then being of no further service as a means for closing the resulting hole, it being a matter of common knowledge that electricians often knock out a disk, and then desire to close the hole, disks of known constructions being incapable of accomplishing that end.

A further object of the invention is to supply a knock-out disk which, having been removed, may be accumulated in any desired quantity, for use wherever necessary, when it is desired to close the hole in an outlet box.

In known constructions, a detached disk has a junk value only, whereas, in the present invention, the disk has an increased value, as a means to a specific end, to wit, closing the hole in the outlet box.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing:

Fig. 1 shows in plan, an outlet box constructed in accordance with the invention;

Fig. 2 is a cross section on the line 2—2 of Fig. 1;

Fig. 3 is a plan showing the opposite surface of the box from that delineated in Fig. 1;

Fig. 4 is a fragmental section illustrating a step in the mounting of the knock-out disk in place;

Fig. 5 is a fragmental section illustrating that the knock-out may be disposed anywhere in the box, and that the box need not be of circular construction.

The letter B marks an outlet box, made of any preferred material, and comprising, as constituent portions, a disk-like head 1 having ventilating openings 2, and a rim 3 connected to the head and supplied with any suitable attaching means 4.

There results from the formation of holes 5 in the head 2 of the box B, the disks 6, the constituent material of which is extruded slightly, to form oppositely disposed, integral, peripheral

lips 7, and oppositely disposed, integral, peripheral wings 8, extended between the lips and of greater area than the lips.

When the disk 6 is in place, as shown in Fig. 2, the wings 8 on the one hand, and the lips 7 on the other hand, engage opposite surfaces of the head 1, to hold the disk removably in place. The drawing shows that either the wings 8 or the lips 7 may engage the outer surface of the head 1, beyond the perimeter of the holes 5.

Each disk 6 is supplied with a transverse, depressed tool seat 9, extended between the lips 7. A screw driver, or like tool is placed in the seat 9 and if the screw driver is hit with a hammer or other object, the disk 6 will be expelled.

As to the manner of mounting the disk 6 in place, it is bent diametrically, as shown in Fig. 4, to fashion the tool seat 9, and to bring the wings 8 close enough together so that they will pass through the hole 5, the lips 7 then engaging one surface of the head 1 of the outlet box. The wings 8 then are flattened down on the opposite surface of the head 1, as shown in Fig. 2, and the disk is securely but removably held in place.

After the disk 6 has been knocked out, it may be restored to the condition shown in Fig. 4, and it is then in shape so that it may be used again.

The extrusion and shaping of the disk 6 may be done as a die stamping operation, or as a distinct operation to be carried out either by machinery, or, if necessary, by hand.

The device forming the subject matter of this application is simple, but will be found capable of carrying out the ends set forth in the opening portion of this specification.

As shown in Fig. 5, wherein parts hereinbefore described have been designated by numerals previously used, with the suffix *a*, the knock-out 6a is shown as located in the side of the box, which need not be of circular form. The openings and the disk need not be located in the head of the box.

Having thus described the invention, what is claimed is:

A knock-out disk for an electrical outlet box, the disk having its constituent material extended peripherally at oppositely-disposed places about the periphery to form outwardly-projecting lips and having its constituent material extended between the lips to form outwardly projecting wings, the disk being creased entirely across to form a tool seat, the crease passing across the lips, and the lips being of substantially less circumferential length than the wings to facilitate the aforesaid creasing, the creasing serving to form the disk into two parts disposed at such an angle to each other that the disk may pass through the opening in the outlet box which the disk is intended to close.

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