Oct. 21, 1947. A. YESCHICK 2,429,443

CEILING BOX HOLDER

Filed Sept. 11, 1945

Fig. 1.

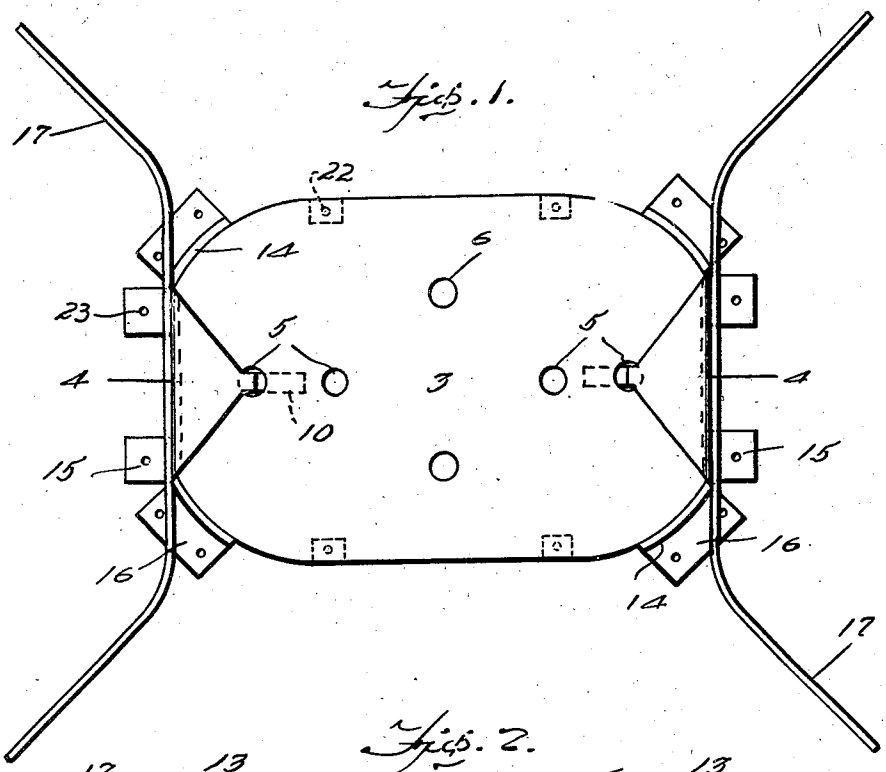


Fig. 2.

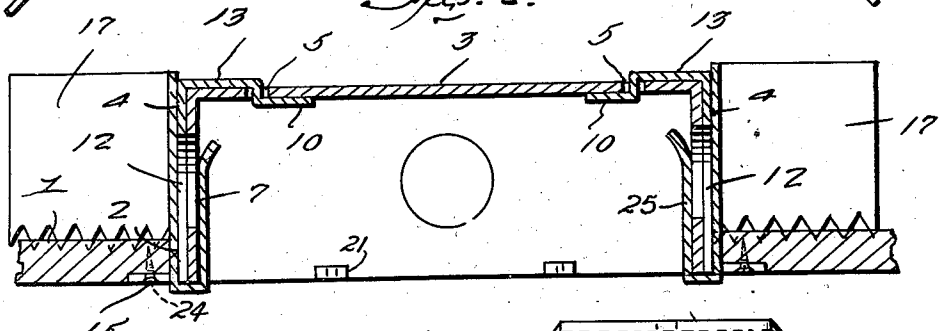


Fig. 3.

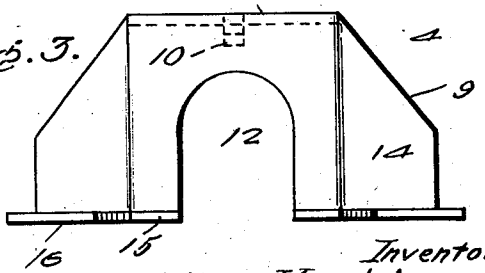
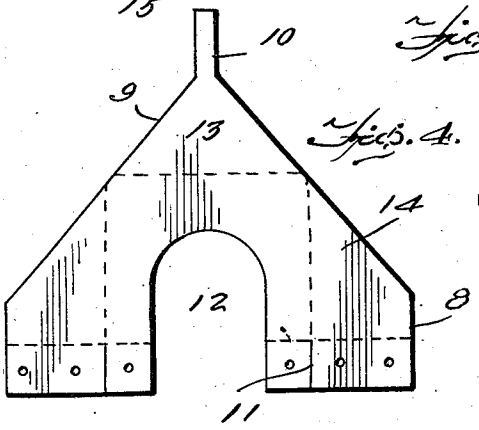


Fig. 4.



Inventor

Alex Yeschick

McMorrow, Berman & Davidson

Attorneys

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CEILING BOX HOLDER

Alex Yeschick, Thief River Falls, Minn.

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2 Claims. (Cl. 248—27)

1

The present invention relates to ceiling box holders.

The primary object of the invention is to provide a simple and inexpensive holder for outlet boxes which may be stamped out of sheet metal in large quantities and which may be secured to the ceiling and readily adapted to variations in the size of the openings.

Another object of the invention is to provide a ceiling box holder of simpler and more compact construction than that of prior devices.

With the foregoing and other objects and advantages in view the invention consists of the novel construction and arrangement of parts hereinafter described and claimed.

Referring to the drawings:

Figure 1 is a top plan view of the device.

Figure 2 is a longitudinal sectional view of the device in operative position.

Figure 3 is an end view of the device.

Figure 4 is a diagrammatic view of a blank cut for one of the fasteners with dotted lines showing where it will be bent to the final form.

In the accompanying drawings illustrating the invention like numerals designate the same parts of construction.

1 represents a ceiling provided with an opening 2 for the outlet box used for suspending electric fixtures from the ceiling. The outlet box holder 3 is adapted to be inserted in this opening and secured in place by the fasteners 4 which are similar in form. The holder 3 is constructed of any suitable material with open bottom and a top provided with longitudinally disposed apertures 5. Additional apertures 6, disposed transversely, are provided in case it is desired to use the fasteners transversely instead of longitudinally as shown. Holder 3 is also provided with suitably disposed apertures for insertion of the cable. At each end of holder is an aperture 7, Figure 2, adapted to facilitate the employment of a hanger strap if desired. The conventional strap with serrations may be used but this is not an essential of the present invention.

The fastener member 4 is cut out of sheet metal in blanks with the contour shown in Figure 4 and these blanks are cut in quantities. The cut blank is formed with short vertical sides 8 and converging sides 9 terminating at the apex in a vertical finger 10. The lower portion of the fastener member is slit vertically for a short distance, as at 11, on each side of an aperture 12 which is adapted to register with aperture 7 of box holder 3.

The blank for fastener member 4 is bent into

2

the shape shown in Figures 1 and 3 by bending along the dotted lines shown in Figure 4, thus producing a horizontally-disposed portion 13, with projecting finger 10, and lateral wings 14. The bottom of the blank is bent outwardly at right angles along the horizontal dotted lines to form outwardly projecting ears 15 and 16 and the blank is also bent along the vertical dotted lines to conform to the shape of the end of holder 3.

To use my improved device the workman will bend the fasteners along the dotted lines shown in Figure 4 to shape the wings 14 and ears 15 and 16 so as to conform closely to the ends of holder 3 and along the upper horizontal line to form the horizontally-disposed part 13. The finger 10 is inserted in aperture 5 of the holder and bent downwardly at right angles. That portion of 10 which projects below the aperture is then bent up against the under surface of the top of holder 3. The holder with its attached parts 4 is then positioned in the opening in the ceiling and the ears 15 and 16 of the fastener parts 4 are embedded in the cement or plaster of the ceiling or attached to the ceiling laths. The outlet box and electric cable may be installed before the box holder is put in place.

Hangers 17 which are now employed on outlet boxes may still be used when the outlet box is equipped with my invention as shown in Figures 1 and 2.

As shown in Figures 1 and 2, inwardly extending ears 21 are provided for the attachment of an outlet box into the holder. These ears have holes 22 for receiving the attaching screws of the outlet box. The ears 15 and 16 are also provided with openings 23 for receiving screws 24 serving to attach the ears and the fastening elements to the ceiling 1. By these screws the holder and the fasteners may be held in the ceiling when no hangers are used. The aperture 12 facilitates the assembly of the holder and the fastener elements into the ceiling. The hanger 17 has a hook portion 25 and by virtue of the openings 12 of the fastener elements, the fastener elements may be more easily and readily manipulated over the hook portions 25 of the hangers 17.

It should now be apparent that there has been provided an assembly of a ceiling box holder and fasteners and hangers which will positively lock the holder in the ceiling against vertical displacement in an upward direction and as well in a downward direction. The ears 15 and 16 positively prevent the holder 3 from moving upwardly from the ceiling, whereas the hook portion 7 of

the hanger 17 positively prevents the downward displacement of the holder 3 from the ceiling.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. As an element of a ceiling box holder, a fastener provided with an horizontally-disposed portion adapted to be inserted in an aperture in the top of an housing element and to be bent so as to be locked in engagement therewith, laterals or wings adapted to closely engage the ends of said housing element and angularly-disposed ears projecting from the bottom of said fastener elements and adapted to be secured in a ceiling.

2. As an element of a ceiling box holder, a fastener provided with an horizontally-disposed portion adapted to be inserted in an aperture in the top of an housing element and to be bent so as to be locked in engagement therewith, laterals or wings adapted to closely engage the ends of said housing element and angularly-disposed ears projecting from the bottom of said fastener elements and adapted to be secured in a ceiling, said

fastener horizontally disposed portions adapted to extend upwardly along the exterior of the holder and laterally for insertion into the aperture at the top of the housing, said horizontally disposed portions being downwardly offset at the point where it enters the aperture in the top of the housing.

ALEX YESCHICK.

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