Aug. 31, 1948. E. D. DAVISON 2,448,359

SWITCH BOX HOLDER

Filed Dec. 7, 1945

Fig. 1.

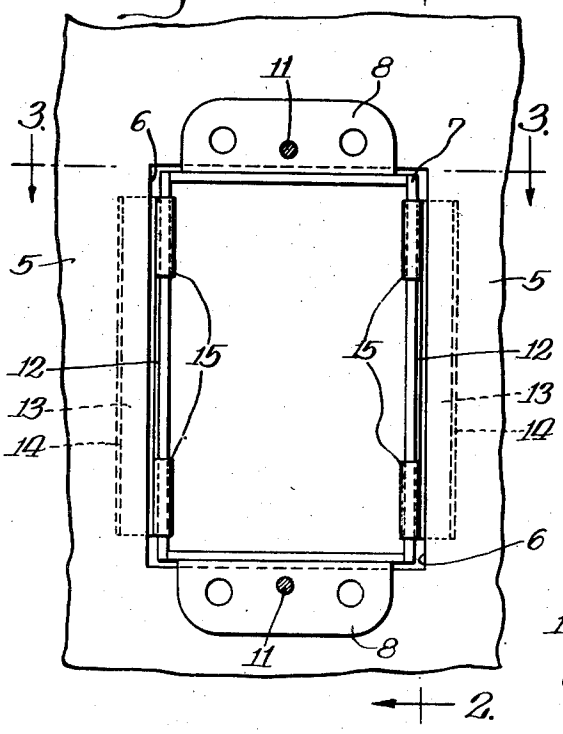


Fig. 2.

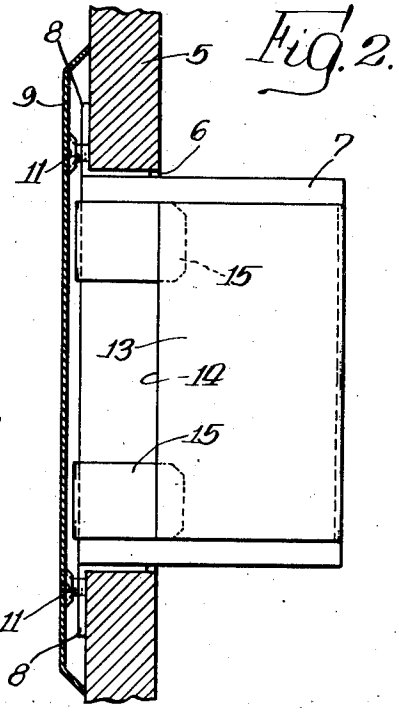


Fig. 3.

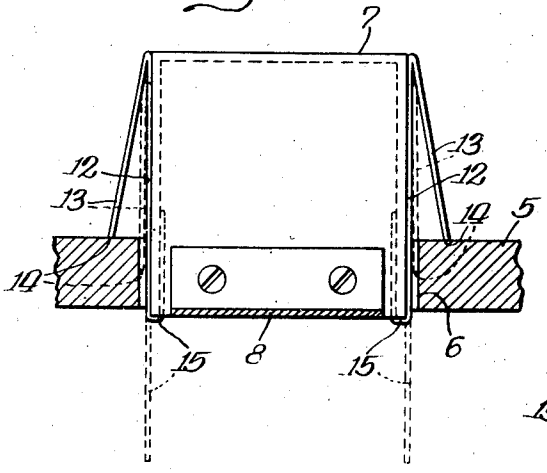
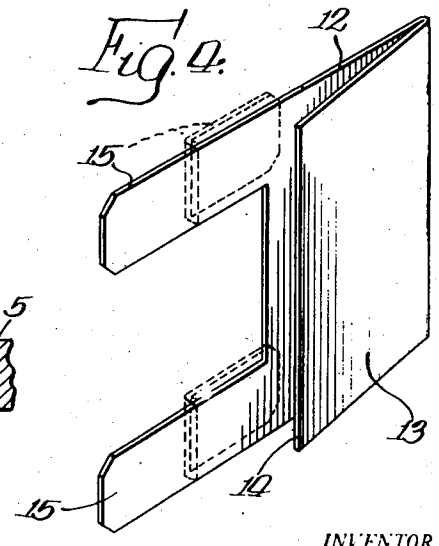


Fig. 4.



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2,448,359

SWITCH BOX HOLDER

Edward D. Davison, Waukegan, Ill.

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1 Claim. (Cl. 248—27)

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This invention relates to switch box holders for retaining wall switch boxes against displacement when installed in walls constructed of wallboard or in lath and plaster walls.

The primary purpose of my invention is to provide a holder of this character which will hold a switch box securely in place and which can be quickly and easily installed.

I am aware that holders for boxes of this character have heretofore been employed which consist of metal strips having projecting portions adapted to be inserted through the wall box opening and then moved endwise to dispose the projections behind the wall. Typical of holders of this character are those disclosed in United States Patents Nos. 1,816,584, issued July 28, 1931, and 1,820,309, issued August 25, 1931.

The positioning of holders of this character requires that the extensions which are eventually bent over the forward edge of the box be grasped between the fingers of the installer and that the elongated body portion be inserted through the wall opening and then manipulated into holding position. This operation is time consuming and is somewhat difficult, and not infrequently during the manipulation the holder slips out of the grasp of the installer, drops down behind the wall, and is lost.

My invention aims to overcome the disadvantages of holders of the type above described by providing a holder which can be installed by simply inserting one end thereof through the slot between the side wall of the switch box and the surrounding wall of the opening, whereupon a holding abutment of the holder springs outwardly into holding position, thereby locking the holder against withdrawal without any edgewise movement of the holder or any manipulation thereof whatsoever.

For the purpose of facilitating an understanding of my invention, I have illustrated on the accompanying drawing a preferred embodiment thereof, referring to which

Fig. 1 is a front elevation of a switch box disposed in a wall opening and held therein against displacement by means of a pair of my improved holders;

Fig. 2 is a sectional view on the line 2—2 of Fig. 1, but with the front plate (which was removed in Fig. 1) in mounted position;

Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 1; and

Fig. 4 is a perspective view of one of my novel holders.

On the drawing, reference character 5 indicates a fragmentary portion of a wall having an opening 6 formed therein. 7 indicates generally a switch box having the usual fastener receiving angle stop plates 8 carried at the front edges of the upper and lower walls of the box in position to engage the front face of the wall to limit rearward movement of the switch box in the opening. The box when mounted is usually covered by a switch plate 9 which is attached to the ears 8 by screws 11.

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My invention contemplates the retaining of the switch box against forward displacement from the wall opening by means of holders of novel construction designed to be positioned along the outside face of each of the vertical walls of the box. Each holder comprises, as will be apparent from Fig. 4, a strip of metal shaped to provide a flat body 12 having one end reversely bent to provide a leaf 13 projecting at an acute angle from the body and presenting along its free edge 14 an abutment adapted to engage the inner face of the wall 5. The opposite end of the strip is shaped to provide a pair of integral fingers 15 which are adapted to be bent inwardly over the outer edge of the box into the dotted line position shown in Fig. 4 to hold the box against outward movement in the wall opening. The metal strip forming the holder is of sheet metal possessing sufficient resiliency to cause the leaf 13 to spring outwardly into the position illustrated in Figs. 3 and 4 after it has been compressed against the body by being projected through the space between the wall of the box and the surrounding wall of the opening, but at the same time is sufficiently pliable to enable the fingers 15 to be readily bent over into holding position, which they will retain.

In mounting a switch box with my novel holders, the box is first placed in the position illustrated by being inserted through the opening 6 until the flanges 8 engage the outer face of the wall, whereupon a holder is inserted along the outer face of one of the vertical walls of the box through the wall opening until the leaf 13 has cleared the wall and sprung outwardly to present its abutting edge 14 in opposition to the inner face of the wall. The holder is then pul'ed outwardly to snugly engage the abutting edge 14 with the inner face of the wall, whereupon the fingers 15 are bent inwardly over the edge of the box into the dotted line position shown. A second holder is then shoved through the wall opening on the other side of the box, pulled outwardly into snug engagement with the wall, and its fingers are similarly bent inwardly into holding position.

It will be obvious that in the mounting no

manipulation of the holders within the opening is necessary because, instead of being slid endwise to engage the holding abutments behind the wall as has been customary with the prior art devices previously mentioned, the spring leaves 13 of my improved holder automatically assume their holding position as soon as they have been projected through the wall opening. The difficulty of manipulating the holders within the opening and the liability of dropping them and losing them is accordingly entirely eliminated by the employment of my novel holders. When positioned as described, they securely hold the switch box in the desired position so that accidental displacement of the box is precluded.

The size, shape and proportions of a holder embodying my invention may obviously be varied within wide limits without exceeding the scope of my invention as defined in the following claim.

A switch box holder, comprising a body of sheet metal bent into V-shape, one leg of said V being provided with extensions forming holding fingers

adapted to be bent inwardly over the edge of a box to be mounted, the free edge of the other leg serving as an abutment for engagement with the inner face of the wall adjacent the opening in which said box is mounted, and said other leg being yieldably displaceable toward said one leg to permit the introduction of the holder in a straight line movement between the box and the opposed face of a wall opening in which the box is disposed.

EDWARD D. DAVISON.

REFERENCES CITED

The following references are of record in the file of this patent:

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Number	Name	Date
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2,309,189	Hancock et al.	Jan. 26, 1943
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