Sept. 8, 1925. 1,552,911

G. H. CALHOUN

SWITCH BOX

Filed May 19, 1923

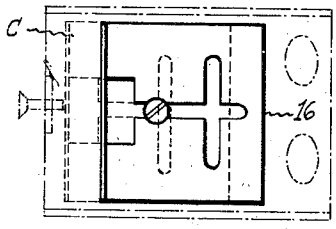



FIG. 1.

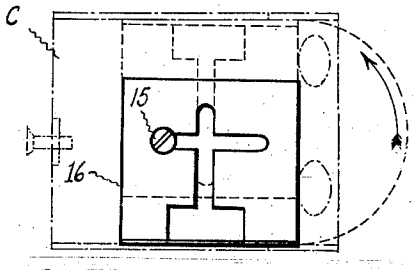



FIG. 3.

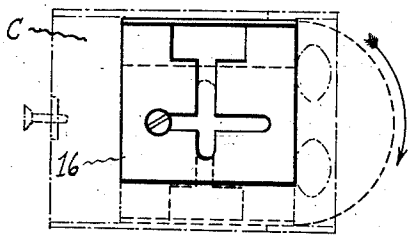



FIG. 4.

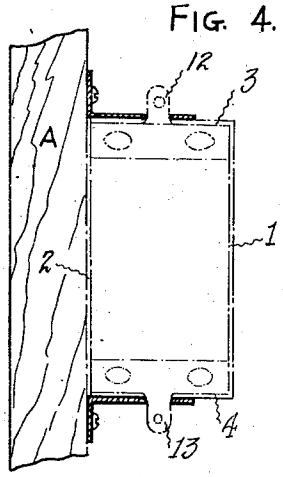



FIG. 5.

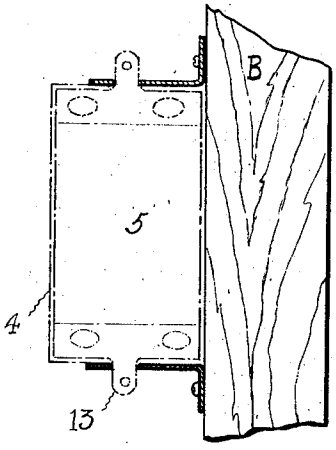



FIG. 6.

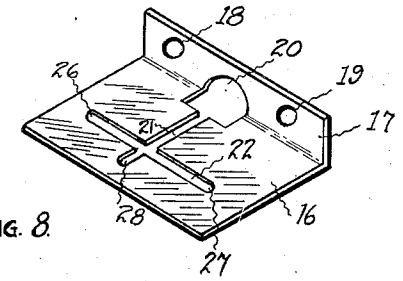



FIG. 8.

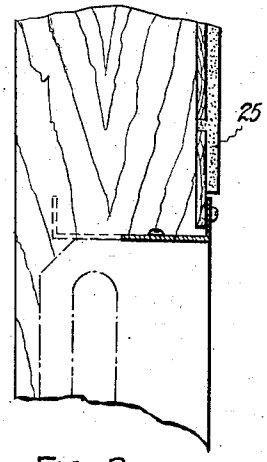



FIG. 2.

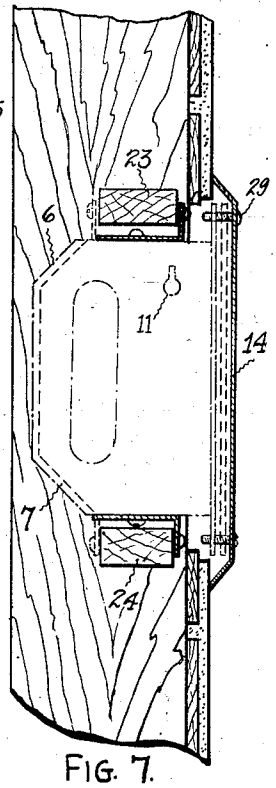



FIG. 7.

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# UNITED STATES PATENT OFFICE.

GEORGE H. CALHOUN, OF MANSFIELD, OHIO, ASSIGNOR TO SAMUEL DAVEY, OF MANSFIELD, OHIO.

## SWITCH BOX.

Application filed May 19, 1923. Serial No. 640,074.

*To all whom it may concern:*

Be it known that GEORGE H. CALHOUN, a citizen of the United States of America, residing at Mansfield, in the county of Richland and State of Ohio, has invented certain new and useful Improvements in a Switch Box, of which the following is a specification.

This invention relates to a switch box or the like used for installation in a building wired for an electric light system and is adapted to be installed or mounted in the wall or any part of the structure of a new building or the like to receive and support a switch, outlet or junction box.

The objects of the invention are to provide adjustable means to attach the boxes to the structure of a building or the like; to support and maintain said boxes in alined or angular relation to the supporting structure; and to provide means of attaching and supporting the boxes by means that can be adjustably applied to either side or front of the box for supporting same.

A further object is to provide a supporting plate that can be located for attachment in such a position on the box so as to afford a gage or guide to measure or indicate the space required for the lath and plaster thereby positioning the front of the box, substantially flush with the face of the wall.

These and other objects are attained by the mechanism illustrated in the accompanying drawing, in which:

Fig. 1 is a top view of the switch box showing the supporting bracket adapted to be attached to auxiliary horizontal members other than lath which are in turn secured to vertical supports such as studs or the like, as shown in Fig. 7.

Fig. 2 is a side elevation of the switch box showing the means of supporting the switch box from the lath, when the switch box is used for installation in an old building.

Fig. 3 is a top view of the switch box showing a supporting bracket positioned for attachment to a vertical member from one side of the switch box.

Fig. 4 is a similar view to Fig. 3 showing a top view of the switch box supporting bracket positioned for attachment to a vertical member from the opposite side of the switch box than shown in Fig. 3.

Figs. 5 and 6 show front elevations of switch boxes showing same supported by the supporting brackets upon the vertical members or studs A and B and positioned on the right and left sides of the switch box.

Fig. 7 is a side elevation showing a switch box supported from auxiliary horizontally disposed wall or stud members with the supporting bracket spaced from the front of the switch box to permit of the lath and plaster being applied on a plane or flush with the plaster.

Fig. 8 is a perspective view of the supporting bracket.

The application of the invention is shown in the drawing as applied to a conventional type of switch, outlet, junction box or the like, which is constructed and assembled as follows.

The switch box as shown comprises side walls 1 and 2, top and bottom walls 3 and 4, and a rear wall 5, preferably with inclined corners 6 and 7. The corner members 6 and 7 are provided with knock out plugs 8 and 9 for the passage of electric wires or the like into and from the box. One of the side walls is preferably provided with a knock out plug 10 and both side walls are also provided with key hole apertures 11 for the usual purposes.

The top and bottom walls 3 and 4 are preferably formed with integral frictional ears 12 and 13 to provide means for attaching a frictional face plate 14 to cover the box. The side walls may be of such size as to extend above and below the top and bottom walls if desired as shown in Figs. 1, 2, and 3, or flush or on a plane with the top and bottom walls as shown in Figs. 4 and 5.

The invention is preferably applied and connected to the top and bottom of each switch box as described, through the medium of a screw 15 or the like. The supporting plate comprising the invention consists as an entirety of a bracket 16 having one end 17 bent up approximately at right angles to the body portion and which is perforated at 18 and 19 to provide means of attaching same to a supporting member.

The supporting bracket is also perforated as shown at 20 to provide means of permitting the flange of the supporting bracket to clear the ears 12 and 13 when it is desired to position the supporting bracket flush with the front of the box. It also provides

means of permitting the body portion of the supporting plate to be inserted underneath and removed from underneath the head of the screw 15. Slots 21 and 22 are provided in the plates and arranged to intersect and cross each other at right angles. When it is desired to install the box in a new building and support same from auxiliary horizontal members or the like 23 and 24, the supporting bracket 16 is positioned on the top and bottom of the box shown in Fig. 1 to leave substantially 5/8 of an inch between the flange 17 of the supporting bracket and the front of the box, thereby providing space to apply lath and plaster flush in front of the box and flush therewith. In applying the box for installation in an old building the supporting bracket is moved to position flush with the front of the box as shown in Fig. 2 and the supporting bracket is attached to the old lath in the building as shown at 25.

In Figs. 3 and 4 the supporting bracket is shown in full lines positioned on opposite sides of the box for attachment to vertical members A and B positioned on either side of the box as desired and in position to leave sufficient room for the lath and plaster to be applied in the space indicated at C to bring same flush with the front of the switch box.

When it is desired to reverse the position of the supporting bracket (as shown in Fig. 3) and to attach same to a vertical member on the opposite side of the box, the supporting bracket is swung on the shank of the screw 15 around the end of the slot 26 to the opposite side in the direction indicated by the arrow and dotted circular line.

When it is desired to reverse the position of the supporting bracket (as shown in Fig. 4) in the opposite side the supporting bracket is swung around the end of the slot 27 in the opposite direction as indicated by the arrow and dotted line in Fig. 4. When the supporting bracket is swung in either direction to change its position from one side to the other it can be stopped at a half turn and the supporting bracket moved to the opposite end of the slot for swinging in the opposite direction. This locates the supporting bracket in a position to swing in the direction desired and the supporting bracket will be positioned substantially 5/8 of an inch from the front of the switch box to guide and indicate the exact position of the supporting bracket for attachment to the supporting member and leave room for applying the lath and plaster flush with the front of the box.

The slots are adapted to engage the shank of the screw 15. One end of the slot 21 is indicated by reference numeral 28. The head of the screw 15 when tightened contacts with supporting bracket and holds same at any position of the various adjustments. Screws 29 and 30 threadably engage the ears 12 and 13 and hold the face plate 14 in contact with the wall when the installation is finished.

When the screw 15 is loosened the supporting bracket may be slipped out from under the head of the screw and reversed in position for attaching to either one of the vertical side members or removed for attaching in the same manner to the auxiliary horizontal members or lath as desired.

Attention is called to the fact that the box can be used if desired as a single unit or a plurality of the boxes can be built up in a gang from either side to meet all of the requirements and conditions of installation.

Attention is further called to the fact that the adjustment of the supporting bracket to either side or front of the switch box can be made, and the bracket held in any of the adjusted positions through the manipulation of one screw in association with the cross intersecting slots formed in the plate.

Attention is further called to the fact that the supporting bracket constructed as described to be used for side attachment to fasten the box to vertical members or the like, can be adjusted with relation thereto laterally and forward and back with respect to the front of the switch box, thereby making the supporting bracket interchangeable and with a universal adjustment.

It is of course, obvious that duplicate supporting brackets are preferably used on the top and bottom of the switch box as shown in Figs. 4 and 5 of the drawing.

Immaterial changes in the form and construction, combination and arrangement of the several parts of boxes may be made without departing from the principle or spirit of the invention.

Attention is called to the fact that the supporting bracket is shown in the drawing located in four different positions with respect to the switch box. See Figs. 1, 2, 3 and 4.

It will further be noted that the supporting brackets can be positioned and adjusted in angular relation with respect to the switch box if desired.

I claim:

1. In combination with an outlet box, a supporting member provided with cross intersecting slots formed contiguous with an opening in said supporting member and having apertures provided therein, whereby screws or the like can be inserted therein to support the bracket from an auxiliary support and a unit means engaging the slots in the bracket and connected to the outlet box to permit adjustment thereof laterally and longitudinally.

2. The combination with an outlet box, of a supporting member adapted for connection with a fixture and formed with cross-

intersecting slots of appreciable lengths, and a pin carried by the box and adapted for free ranging of said slots to dispose the box and supporting member in different relative positions.

3. The combination with an outlet box, of a supporting bracket having cross intersecting slots, one of said slots merging into a relatively larger opening, and a screw carried by the box with a body capable of sliding in said slots and a head larger than the slots and smaller than said opening.

4. The combination with an outlet box, of a supporting bracket, and a single means whereby the bracket may be fixed with relation to the box, said bracket being formed with means to permit slidable cooperation between the bracket and the fixing means in any one of several angularly-related directions.

5. The combination with an outlet box, of a supporting bracket formed with two crossing right-angled slots, a screw cooperating with the box and slidable in said slots, and means whereby the screw when in any position in either of said slots may be operated to relatively fix the box and bracket.

In testimony whereof I affix my signature.

GEORGE H. CALHOUN.