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OUTLET BOX ATTACHING MEANS

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Fig. 1.

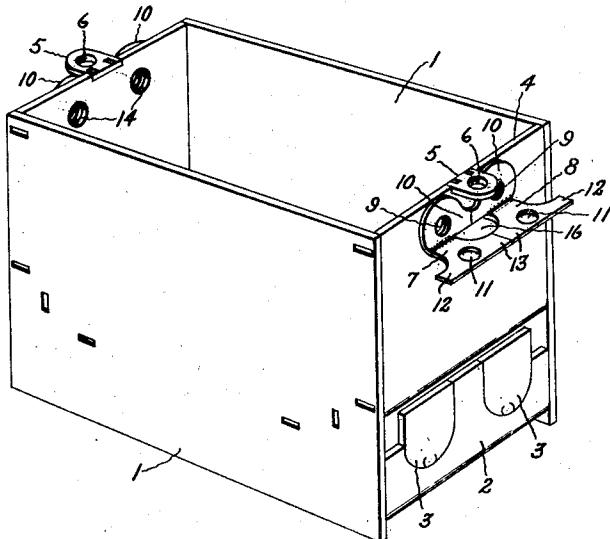


Fig. 2.

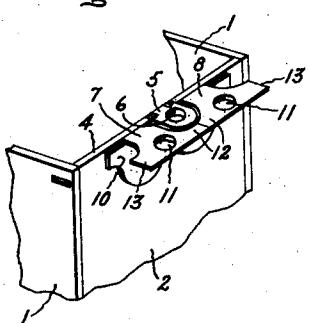
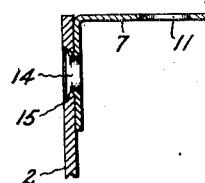


Fig. 3.



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OUTLET BOX ATTACHING MEANS

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10 Claims. (Cl. 247—21)

This invention relates generally to switch boxes and is directed more particularly to the means secured to said boxes for attaching them to building structures.

It is an object of the present invention to provide attaching members which are secured to a switch box but are adjustable either to a position lying in the same plane as the upper edge of the box or to a position offset from the edge of the box.

In carrying out this object the attaching members are each provided with two ears rotatably pivoted to a wall of the box. By rotating the ears to a position lying in the same plane as the edge of the box, the ears are caused to abut against, and to align with, one another to form an attaching member in the same plane as the edge of the box. By rotating the ears to a position offset from the edge of the box the ears are caused to abut against and to align with one another to form an attaching member offset from the edge of the box.

Other objects of the invention will be apparent upon reference to the following detailed description and to the drawing in which Fig. 1 illustrates a switch box with the attaching member offset from the edge of the box; Fig. 2 illustrates the attaching member in the same plane as the outer edge of the box; and Fig. 3 shows the manner of attaching the ears to a wall of the box.

Referring now to the drawing, the body of the switch box may be of any common or suitable form having the usual bottom (not shown), side walls 1 and end walls 2 which in this case are rectangular. The end wall 2 is provided with the usual knockout openings 3 for the introduction of electric conduits (not shown). Extending outwardly from the upper edge 4 of the end wall 2 is a lug 5 provided with a threaded hole 6 affording means for attaching to the end wall of the box a wiring device (not shown) positioned within the box.

Two ears 7 and 8 secured to each end wall 2 cooperate to form the attaching member which is adjustable to the two positions mentioned above. Each ear is formed from a blank having a first portion provided with an opening 9 and an arm 10 and a second portion substantially perpendicular to the first portion and provided with an opening 11 and with the oppositely disposed arms 12 and 13. Each ear 7 and 8 is rotatably pivoted to the end walls 2 by swedging part of the ear through an opening 14 of the end wall and spinning this part over on the inside of the wall as shown at 15 in Fig. 3.

When it is desired to have the attaching member offset from the upper edge 4 of the end wall 2, the ears 7 and 8 are rotated in opposite directions to the position shown in Fig. 1. In this position the arms 10 and 13 of the ear 7 abut against, or bear upon, the arms 10 and 13 of the ear 8. The second portions of the ears are accordingly aligned to form an attaching member offset from the upper edge of the box while the abutting arms 10 and 13 prevent any undesired movement of the aligned ears. By means of the openings 11 in the aligned ears 7 and 8 the switch box can then be secured to the wall structure, with its upper portion offset from the wall.

A wiring device (not shown) is disposed within the box and mounted upon the end walls 2. In order to have the face of this device flush with the wall surface it is sometimes necessary to raise it slightly by means of supports which rest on the plaster surface or by mounting it on washers disposed on the lugs 5. The screws or bolts (not shown) which serve to fasten the wiring device to the lugs 5 must accordingly be made of sufficient length to permit the device to be raised in the manner mentioned. To permit the screws or bolts from striking against the attaching member when the wiring device is not thus raised, the ears are designed to form an opening 16 when they are in the position shown in Fig. 1.

When it is desired to have the attaching member in the same plane as the upper edge 4 of the end wall 2, the ears 7 and 8 are rotated relatively to one another in opposite directions and counter to their first direction of rotation to the position in Fig. 2. This position is 180° distant from the position of the attaching member shown in Fig. 1. In this position the arms 12 of each ear abut or bear upon one another and these arms are so designed that they then provide an opening enclosing the lug 5. The second portions of the ears are again aligned to form the desired attaching member while the abutting arms 12 prevent any undesired movement of the aligned ears. As previously stated the openings 11 in the aligned ears afford means for securing the switch box to the wall structure but in this case the box is attached to the wall structure with its upper edge in the same plane as the wall surface.

The invention provides a novel means for adjusting the attaching member of a switch box or other receptacle to the two positions required by the conditions met with when installing such boxes. By providing the adjustable supporting member with two separate ears rotatably piv-

oted to the end wall, the supporting member can be adjusted to either of the two required positions by a simple rotation of each of the ears. At the same time the abutting arms of 5 the ears prevent any undesired movement on the part of the aligned ears.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. The combination with a switch box having 10 a plurality of walls, of a plurality of ears movable relatively to one another and rotatably pivoted to one of said walls, means for aligning said ears when they are rotated to one position to form a composite supporting member for the box and other means for aligning said ears when they are rotated to another position to form a similar composite supporting member for the box.
2. The combination with a switch box having 20 a plurality of walls, of a plurality of ears movable relatively to one another and rotatably pivoted to one of said walls, means for aligning said ears to form a composite supporting member for the box when they are rotated to a position 25 lying in the same plane as the upper edge of said wall, and other means for aligning said ears to form a similar composite supporting member for the box when they are rotated to another position offset from the edge of said wall.
3. The combination with a switch box having 30 a plurality of walls, of a plurality of ears movable relatively to one another and rotatably pivoted to one of said walls, means for aligning said ears to form a composite supporting member when they are rotated to one position and other 35 means for aligning said ears to form a similar composite supporting member for the box when they are rotated to another position substantially 180° 40 distant from the first position.
4. The combination with a switch box having a plurality of walls, of a plurality of ears movable relatively to one another and rotatably pivoted to one of said walls, a first and a second set of arms on said ears, said first set of arms cooperating to align the ears when they are rotated to one position to form a composite supporting member for the box, and said second set of arms 45 cooperating to align the ears when they are rotated to another position to form a similar composite supporting member for the box.
5. The combination with a switch box having 50 a plurality of walls, of a plurality of ears movable relatively to one another and rotatably pivoted to one of said walls, a first and a second set of arms on said ears, said first set of arms cooperating to align the ears when they are rotated to one position to form a composite supporting member for the box and said second set of arms 55 cooperating to align the ears when they are rotated counter to their first directions of rotation to another position to form a similar supporting member for the box.
6. The combination with a switch box having 60

a plurality of walls, of a plurality of ears movable relatively to one another and rotatably pivoted to one of said walls, a first and a second set of arms on said ears, said first set of arms cooperating to align the ears when they are rotated in opposite directions to one position to form a composite supporting member for the box, and said second set of arms cooperating to align the ears when they are rotated in the opposite direction to a second position substantially 180° 80 distant from the first position to form a similar composite supporting member for the box.

7. The combination with a switch box having an attaching lug projecting outwardly from one of its walls, a pair of ears movable relatively to each other and rotatably pivoted to said wall, means for aligning said ears when they are rotated to one position to form a composite supporting member for the box which encloses said lug, and other means for aligning said ears when they are rotated to another position to form a composite supporting member for the box provided with an opening opposite said lug.

8. The combination with a switch box having an attaching lug projecting outwardly from one of its walls, a pair of ears movable relatively to each other and rotatably pivoted to said wall, means for aligning said ears when they are rotated to one position to form a composite supporting member for the box which encloses said lug, and other means for aligning said ears when they are rotated to another position 180 degrees distant from the first position to form a composite supporting member for the box provided with an opening opposite said lug.

9. The combination with a switch box having an attaching lug projecting outwardly from one of its walls, a pair of ears movable relatively to each other and rotatably pivoted to said wall, means for aligning said ears when they are rotated to one position lying in the same plane as the outer edge of the box to form a composite supporting member for the box enclosing said lug and other means for aligning said ears when they are rotated to another position opposite from the other edge of the box to form a composite supporting member for the box provided with an opening below said lug.

10. The combination with a switch box having an attaching lug projecting outwardly from one of its walls, a pair of ears movable relatively to each other and rotatably pivoted to said wall, a first and a second set of arms on said ears, said first set of arms cooperating to align the ears when they are rotated to one position to form a composite supporting member for the box which encloses said lug, and said second set of arms 125 cooperating to align said ears when they are rotated to another position to form a composite supporting member for the box provided with an opening opposite said lug.

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