

Sept. 16, 1930.

J. W. MacMILLEN

1,776,126

DUPLEX SWITCH OR OUTLET BOX

Filed April 20, 1925

2 Sheets-Sheet 1

FIG. 1

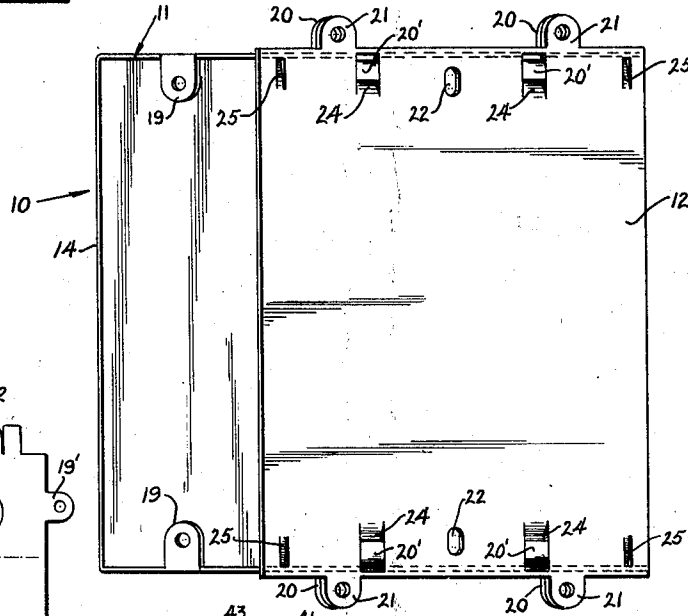


FIG. 4

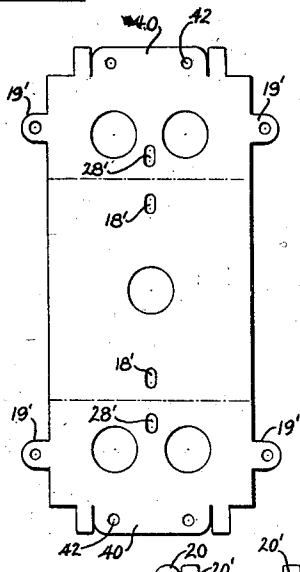
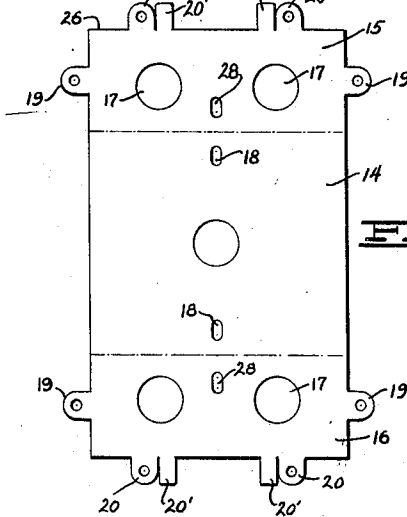


FIG. 2

FIG. 5

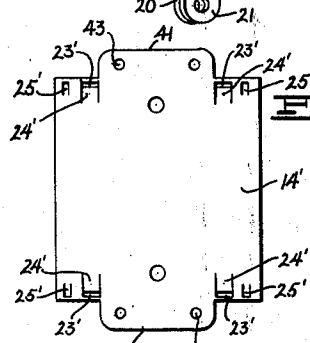
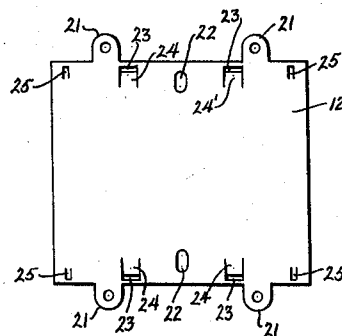


FIG. 3



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FIG. 2

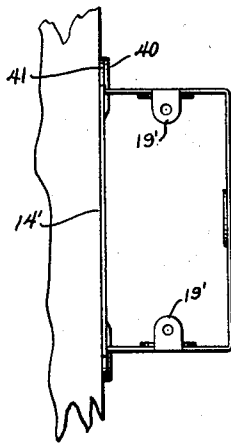


FIG. 7

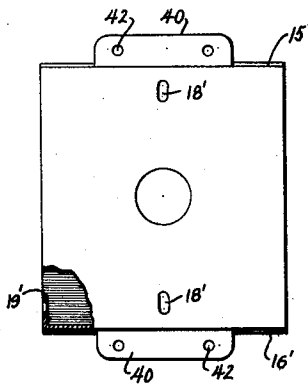


FIG. 8

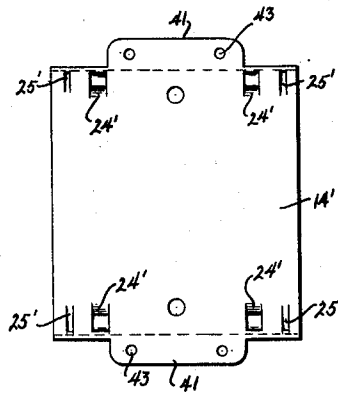


FIG. 16

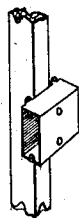


FIG. 9

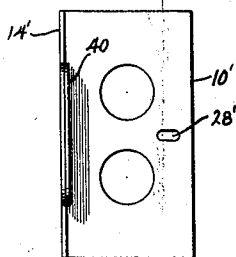


FIG. 10

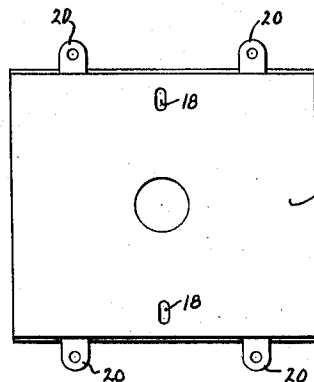


FIG. 17



FIG. 12

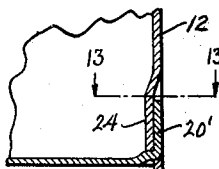


FIG. 11

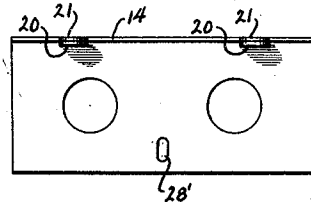


FIG. 13

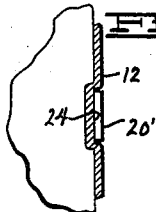


FIG. 15

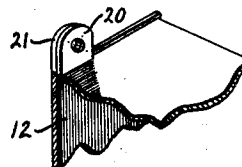
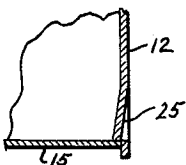


FIG. 14



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DUPLEX SWITCH OR OUTLET BOX

Application filed April 20, 1925. Serial No. 24,494.

This invention relates to duplex switch or outlet box.

The general object of the invention is to provide a rigid and strong outlet box which can be economically manufactured.

One of the specific objects of the invention is to provide an outlet box wherein the body portion of the wall engages a portion having overlapping parts both of which may be secured in position to hold the box.

Another object of the invention is to provide an outlet box wherein a cover of the box is provided with a tongue which engages the box body and wherein another tongue on the box body is secured on the other side of the back of the box.

Other objects of the invention will be apparent from the following description taken in connection with the accompanying drawings wherein Fig. 1 is a perspective view of an outlet box embodying the features of my invention; Fig. 2 is a plan view of the blank from which the body of the box is constructed; Fig. 3 is a plan view of the back of the box; Fig. 4 is a plan view of the modified form of body blank; Fig. 5 is a plan view of a modified form of back; Fig. 6 is a side elevation of a box made from the blank shown in Figs. 4 and 5; Fig. 7 is an elevation partly in section of the box shown in Fig. 6 showing the front thereof; Fig. 8 is a rear view of the box; Fig. 9 is a top plan view of the box shown in Fig. 6; Fig. 10 is a front elevation of the box shown in Fig. 1; Fig. 11 is a top plan view of the box shown in Fig. 10; Fig. 12 is a fragmentary section showing the manner in which the parts of the box are united; Fig. 13 is a section on line 13—13, Fig. 12; Fig. 14 is a view similar to Fig. 12 showing the stop tongue; Fig. 15 is a fragmentary perspective view showing the manner in which the tongue on the body and on the back overlap and Figs. 16 and 17 are perspective views showing alternative methods of securing the outlet box on a joist.

Referring to the drawing by reference characters, I have shown an outlet box embodying the features of my invention at 10. This outlet box comprises, as shown, a body portion 11 and a back 12. The body portion

11 includes an integral front portion 14 which has sides integral therewith.

In placing outlet boxes in service position there has always been more or less difficulty due to the fact that the sides and the back have not been rigidly connected. As a result, the workers frequently collapse the box by striking it and moving the front relative to the back. Moreover when the box is in use light blows upon it frequently cause it to become weak or to collapse. My invention has been made to overcome these difficulties and at the same time to provide an outlet box which can be economically manufactured.

My outlet box is preferably adapted to be made as a box for accommodating two switches, although it may be made to accommodate one switch if desired.

The blanks from which the box shown in Fig. 1 is made, are shown in Figs. 2 and 3 where it will be noted that the front 14 has sides 15 and 16 integral therewith. The front is provided with knockout holes 17 which may be arranged in any desired manner. The front 14 is also provided with elongated slots 18 for a purpose to be presently described.

The sides of the blank shown in Fig. 2 which form the ends of the completed box are provided near each end with apertured ears 19 while the ends of the blank shown in this figure are provided with other apertured ears 20. Adjacent these apertured ears 20, tongues 20' are provided for a purpose to be presently described.

The blank from which the back of the box (shown in Fig. 1) is constructed is shown in Fig. 3 and it will be noted that the blank is provided with apertured ears 21 and with elongated slots 22. Adjacent the ears 21 the back 12 is provided with transverse slots 23. These slots are arranged at the end of the counter sunk portions 24 for a purpose to be presently described.

Adjacent each end of the box, I show small upstanding tongues 25. These tongues as shown in Fig. 14 are punched up a sufficient distance to engage the coacting end members.

The blanks shown in Figs. 2 and 3 it will be understood, are merely typical of the blanks

from which my outlet box may be constructed and if desired, other arrangements of knock-outs, tongues, and slots may be made if desired.

5 In assembling the box made from the blanks shown in Figs. 2 and 3 the sides 15 and 16 of the body are first bent at right angles to the front 14. The ears 20 are then bent at right angles to the sides so that their
10 outer faces will be adjacent to the edge 26 of the ends 15 and 16. The tongues 20' are then passed through the slots 23 and are bent over to fit within the depressions 24. Before this is done the sides 15 and 16 are fitted upon
15 the ends of the tongues 25 as shown in Fig. 14. When the tongues 20' are bent into the slots 24 the front and back will be firmly and rigidly secured together and the ears 20 will overlap the ears 21 as shown in Figs. 1 and 15.
20 In placing the outlet box upon a joist or other support, nails will be driven through the apertures in the ears 20 and 21 to hold the box in place. The nails, it will be seen, pass through both ears and hold not only the
25 back of the box, but also the front thereof so that any blows striking the box will be taken up by the ears on both the body and the back. The ears 19 will engage the switch members and will hold them in position.

30 In the completed box the apertures 18 and 22 will align so that nails can be driven through these apertures for use on joists in certain locations. The sides 15 and 16 are provided with elongated slots 28 which are
35 arranged adjacent the slots 18 already described. In certain locations it will be desired to toenail through the slots 18 and 28 in securing the outlet box in position. The manner of securing the outlet box with nails
40 has been illustrated in Figs. 16 and 17.

45 The box shown in Figs. 7, 8, and 9, made from the blanks shown in Figs. 4 and 5 is similar to the box already described and includes front 10', ends 15' and 16', and a front 14'.

50 The blanks are provided with slots 23' which are arranged adjacent the depressions 24 and the back is provided with tongues 25' similar to the tongues 25 previously described. The blank shown in Fig. 4 is provided with elongated apertures 18' and 28' and with apertured ears 19'.

55 In the blanks shown in Figs. 4 and 5 the ends of the blank are provided with tongues 40 on the body and tongues 41 on the back. These tongues are provided with aligned apertures 42 and 43. The tongues 41 are folded in the manner in which the ears 20 and 21 are folded and in the completed box
60 they form overlapping depressions as shown in Fig. 9.

65 In securing the box in position nails are passed through the aligned apertures 42 and 43 thus securing the box in service position. In this form, which is preferably used on

narrow boxes the tongues 40 and 41 overlap and perform the same function as do the ears 20 and 21 previously described.

Having thus described my invention, I claim:

70 An outlet box comprising a back having a pair of apertures therein, a front portion including a substantially rectangular part and apertured top and bottom members projecting from opposite edges of said rectangular
75 part and at an angle thereto, said rectangular part having a pair of elongated apertures in alignment with the apertures in the back and adjacent the apertures in the top and bottom members, whereby a single fastening means
80 may be inserted through an aperture in the rectangular part and the related aperture in the top, bottom or back.

In testimony whereof, I hereunto affix my signature.

JOHN W. MacMILLEN.

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