Sept. 17, 1940. J. W. MacMILLEN 2,214,968

SWITCH BOX

Filed June 1, 1937

FIG. 1.

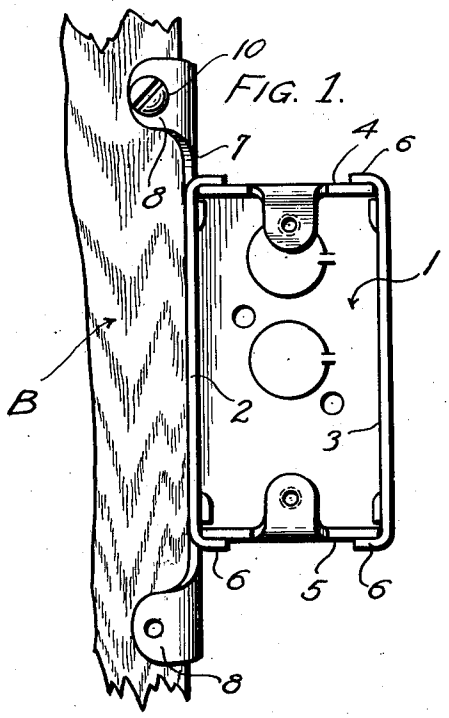


FIG. 2.

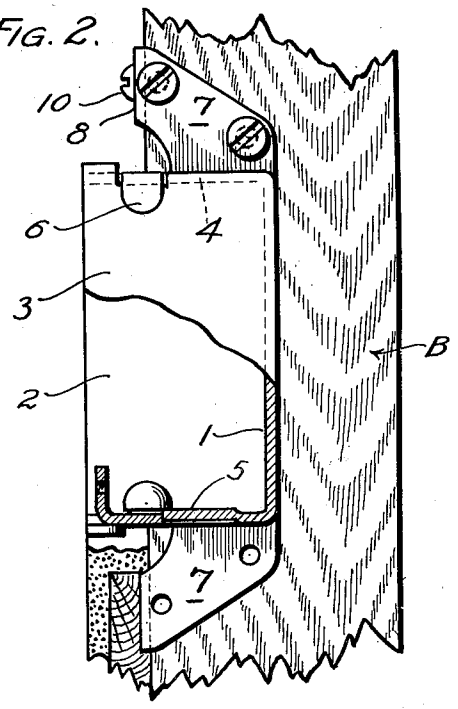


FIG. 3.

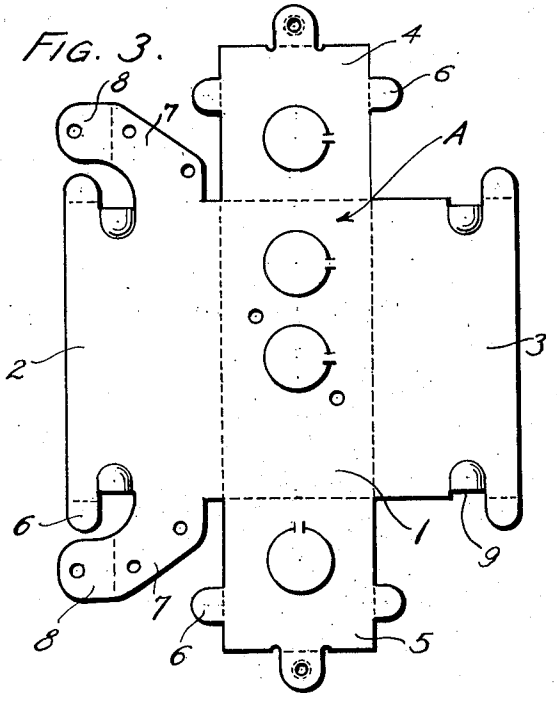
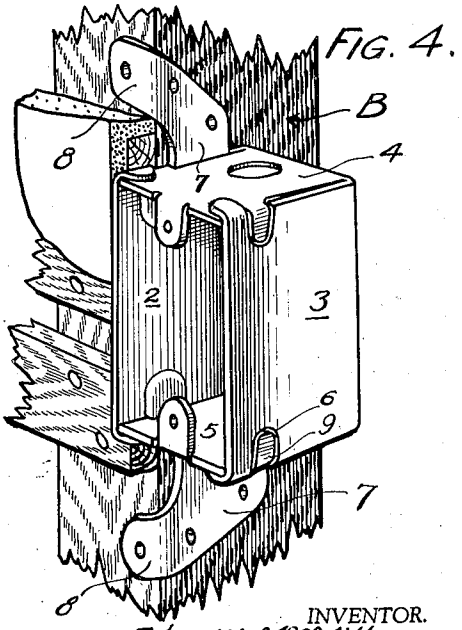


FIG. 4.



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SWITCH BOX

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Application June 1, 1937, Serial No. 145,679

1 Claim. (Cl. 220—3.9)

This invention relates to and has for an object the provision of an improved switch box which can be economically manufactured from a single blank of metal to include novel attaching ears affording a stronger and more secure anchorage directly on a single stud, or the like.

Another object is to provide an outlet box wherein the angular attaching ears at ends thereof position a large portion of one side of the box against a side of the stud, or the like, while the ears are secured to angular faces of said stud, whereby the box will more effectively resist such strains and stresses as would tend to pry the box loose or loosen the ear fastenings, due to the fact that the fulcrum point of the box is located at the rear edge of said side and remote from the points of fastenings of said ears.

I have shown in the accompanying drawing a preferred form of switch box embodying my invention, subject, however, to modification, within the scope of the appended claim, without departing from the spirit of my invention.

In the drawing:

Fig. 1 is a front elevation of a switch box of this invention as when attached to a stud, or the like;

Fig. 2 is a side elevation of the box shown in Fig. 1 with portions broken away and in section, for the sake of clarity of illustration;

Fig. 3 is a plan view of the blank of which the box is formed;

Fig. 4 is a perspective view of the box as when installed.

One form of switch box construction in accordance with this invention, and as shown in detail in the accompanying drawing, is made from a single blank A of suitable metal to include a rear wall 1, side walls 2 and 3, top and bottom walls 4 and 5, cooperating ears or tongues 6 for securing said walls together, and angular attaching ears comprising portions 7 and 8 for attachment to angularly related faces of a stud B, or the like.

Each wall has the tongues 6 and the side walls have recesses 9 in which said tongues engage to form smooth outer surfaces and stronger wall joints.

It will be noted that the attaching ears are integral with the ends of the side wall 2, which wall is adapted, for the greater part thereof, to lie against a side face of the stud B, but these ears may be separated and attached to said wall in any suitable manner. The portions 7 of the attaching ears extend vertically from the ends of said side wall 2 in the place of the latter and lie against said side face of the stud as continuations of said side wall, whereas the portions 8 of said ears extend horizontally outwardly from and at right angles to said portions 7 for engagement with the front face of said stud. Both of these portions are provided with apertures 9 for fastening 10 to secure them and the box in place.

It is important to note that the right angular ear portion will engage with right angular faces of the stud B in such manner that the side wall 2, for the most part, will lie in close engagement with the side face of the stud that is engaged by the portions 7 of said ears. This establishes a fulcrum point along the inner or rear edge of the side wall 2, which is remote from the points of engagement and securing of the ear portions 7 and 8. By this arrangement, the box will effectively resist such strain and stresses as would tend to dislodge it or loosen the fastenings 10, the strains being taken from the attaching ears. Furthermore, the right angular ears or brackets formed integral with said box facilitate the positioning of the latter and render considerably easier the operation of securing the box in place.

It is also important to note that the portions 7 are extended from the ends of the side wall 2 between the front and rear edges of said wall, and that the portions 8 are likewise disposed in a place between the planes of said edges, whereby to reduce the leverage action on said portions incident to twisting or other strains to be transmitted to said box.

It will also be seen that substantially the entire rearmost half of the side wall 2 will lie in close engagement with the side face of the stud, and that the major portions of the attaching ears are disposed "within" this rear half whereby to provide the secure and lasting anchorage having the advantages of this invention.

I claim:

A switch box made from a single metal blank and comprising side walls, top and bottom walls, a rear wall, tongues on said side, top and bottom walls for securing them together, said side walls having recesses therein in which said tongues of other walls are countersunk, one of said side walls being adapted to lie against the side face of a stud, and angular attaching ears formed integral with the ends of said one side wall and having apertured and right angular portions adapted to be respectively engaged with and secured to the front and side faces of a stud while said side wall is held against said side face of said stud, certain of said portions being in the plane of the side wall from which they extend and the other of said portions being disposed in a plane substantially parallel with said rear wall and closer to the front of the box than the rear thereof.

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