June 26, 1934. C. E. BOWERS 1,963,951

SWITCH BOX

Filed March 29, 1932

Fig. 1.

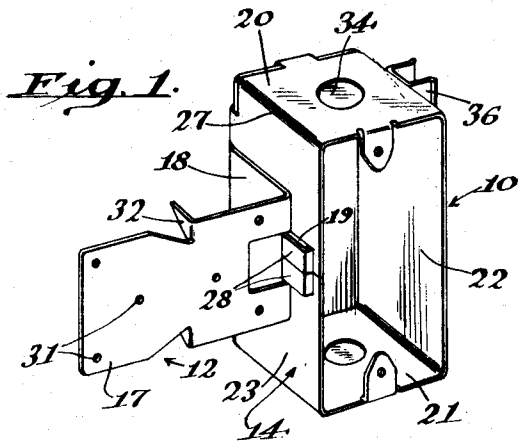


Fig. 2.

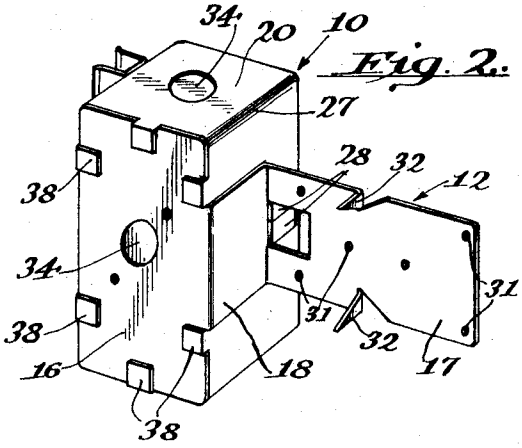


Fig. 3.

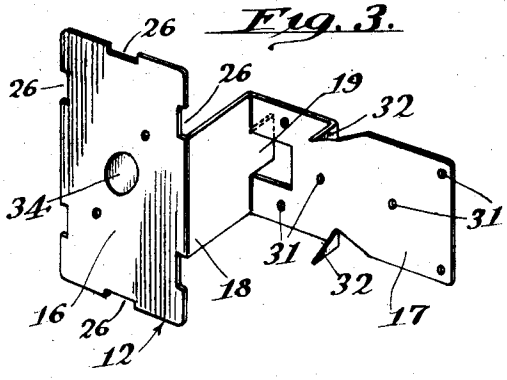


Fig. 4.

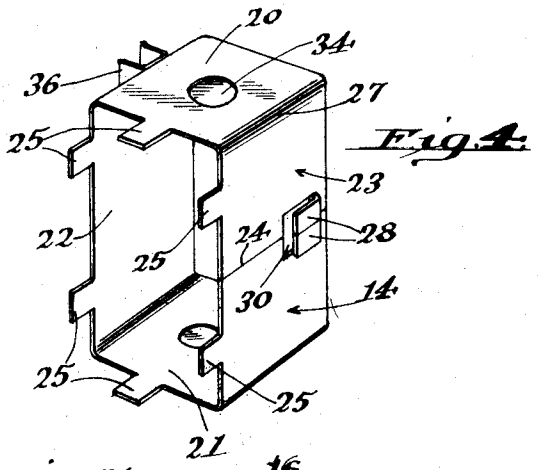
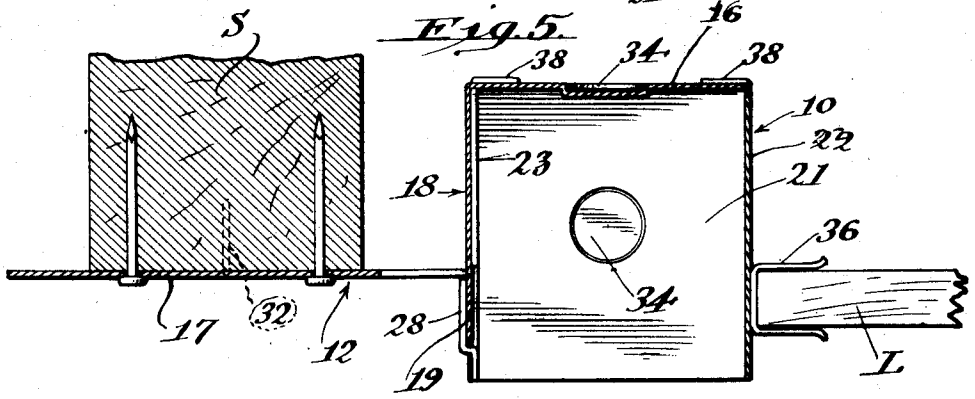


Fig. 5.



Inventor
Claude E. Bowers.
Edmund A. Strauss.
Attorney.

Patented June 26, 1934 1,963,951

UNITED STATES PATENT OFFICE

1,963,951

SWITCH BOX

Claude E. Bowers, Los Angeles, Calif.

Application March 29, 1932, Serial No. 601,806

3 Claims. (Cl. 247—21)

This invention relates generally to boxes for the reception and mounting of electric switch mechanisms such as the usual push button type.

The object of the present invention is to provide a box of the character referred to made up of but two parts formed of sheet metal stampings so constructed that they may be secured together without the use of rivets, bolts, spot welding or other extraneous fastening means.

Further objects are to provide an improved switch box of substantial construction in which the stamping and assembling operations are reduced to a minimum whereby the same may be produced in large quantities at a nominal cost of manufacture.

Other objects and advantages will be apparent from the following description, reference being had to the accompanying drawing, in which:

Fig. 1 is a perspective view of the switch box constructed according to the present invention looking toward the front thereof.

Fig. 2 is a view similar to Fig. 1 but looking towards the back, or rear end.

Fig. 3 is a perspective view of that part of the box forming the bottom wall and attaching arm or bracket.

Fig. 4 is a perspective view of the part forming the side walls of the box.

Fig. 5 is a horizontal section taken through the switch box positioned in a wall during course of construction.

Referring more specifically to the drawing, 10 generally designates the improved switch box which consists of two parts or members generally designated 12 and 14 respectively formed from sheet metal stampings.

Part 12 forms the bottom wall and an attaching arm or bracket while part 14 forms the side walls of the box.

Referring more specifically to Fig. 3, the bottom wall designated at 16 is of substantially rectangular shape in elevation and is connected to the attaching arm or bracket 17 by a portion 18 disposed at right angles thereto, the portion of part 12 forming the bracket being stamped or otherwise cut in such a manner that when it is bent a tongue or the like 19 will project beyond or form a continuation of portion 18.

Member or part 14 is formed from a single strip of sheet metal bent on a plurality of planes disposed at right angles to each other and forms the side walls designated at 20, 21, 22 and 23, the strip being so bent that its free or opposite ends meet at a point midway between the ends of side wall 23 as indicated at 24, and is die stamped in such a manner that a plurality of tongues 25 will project from the rear edges of said walls. The tongues 25 coact with notches or recesses 26 formed in the edges of the bottom wall 16 to center the two parts during assembling.

It will be noted that due to part 14 being formed of a single piece the corners may be curved or round, as indicated at 27, thus strengthening the same and at the same time eliminating any sharp or projecting edges.

A pair of lugs or tongues 28 struck out of the side wall 23 on each side of the abutting edges form a pocket 30 adapted to receive the tongue 19 of part 12.

Formed in the arm or bracket 17 is a plurality of nail holes 31 and stamped or otherwise struck out therefrom is a pair of tines or prongs 32 adapted to be driven into the stud indicated at S (see Fig. 5), the prongs serving to hold the box in place while nailing the bracket to the stud.

Usual knock outs indicated at 34 are formed in the walls of the box, while a channel 36 which serves to receive and support free ends of the lath indicated at L may be secured to side wall 22 if desired.

In assembling; the two members are positioned so that the portion 18 and tongue 19 of part 12 will engage the side wall 23 of part 14 and are then moved together. The tongue 19 then projects into the pocket 30 while tongues 25 extend into the recesses 26. The tongues 25 are then bent into engagement with the back as indicated at 38, the action of which secures the two parts together.

From the foregoing it will be seen that the improved switch box is of substantial construction, consisting of but two parts which may be easily and quickly assembled, without the use of bolts, rivets or welding operations.

I claim:

1. A switch box comprising a two part structure, one of said parts being bent to form the side walls of the box, one of said side walls having a pocket formed therein, and a second part forming the bottom of the box, said second part having an attaching bracket and connected to the bottom by a right angled portion, said connecting portion being provided with a tongue projecting therefrom and engaging the pocket formed in the wall of the first named part.

2. An outlet box consisting of two unitary members, one of said members being bent to form the side walls of the box, one of the side walls having a pocket formed therein and the other of said members forming the bottom wall

of the box, an attaching tongue formed integral with the bottom member, a portion of the attaching tongue being at right angles to the back and engaging the adjacent side wall of the box and having a tongue projecting therefrom and engaging the pocket formed in the adjacent side wall of the box, whereby to increase the rigidity of said side wall and to strengthen the attaching tongue, and means formed integral with one of said members for rigidly securing the two members together.

3. An outlet box formed of two unitary metal members, one of said members consisting of an elongated strip of sheet metal die stamped transversely to form the side walls of the outlet box, the ends of said strip abuting intermediate the ends of one of the side walls, a pocket formed in said side wall at the juncture of the ends of the elongated metal strip, and the other unitary member forming the bottom wall of the box, one of the edges of the bottom wall having an attaching tongue projecting therefrom and being bent at substantially right angles to said bottom wall, said tongue provided with a tongue formed integral therewith and engaging the pocket formed in the side wall of the first mentioned member, whereby to strengthen the said side wall and hold the abutting ends of the strip member forming one of the side walls of the box in rigid relation, and attaching means formed integral with one of said members for engaging the other of said members to hold the two members in rigid relation to each other.

CLAUDE E. BOWERS.