April 2, 1946. A. P. BELL 2,397,637

SWITCH-BOX EAR

Filed July 7, 1944

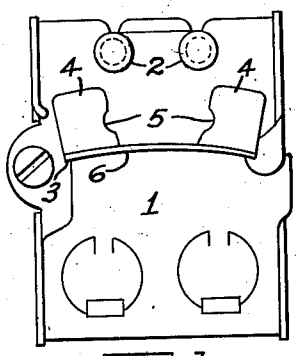


FIG. 1

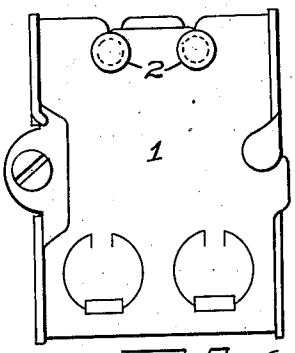


FIG. 2



FIG. 7A

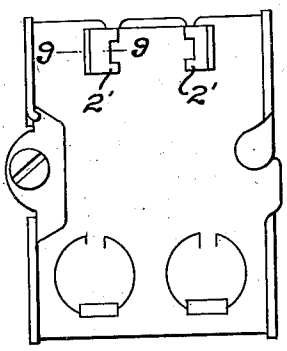


FIG. 7

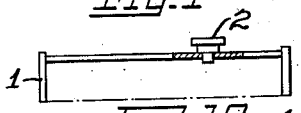


FIG. 10

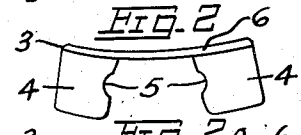


FIG. 2A

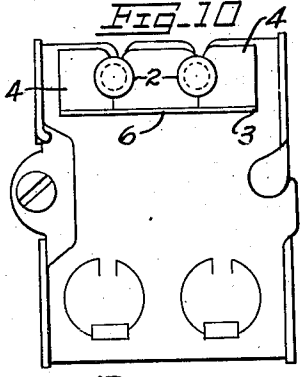


FIG. 3

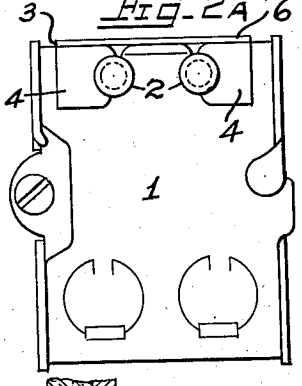


FIG. 4

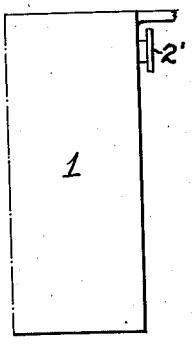


FIG. 8

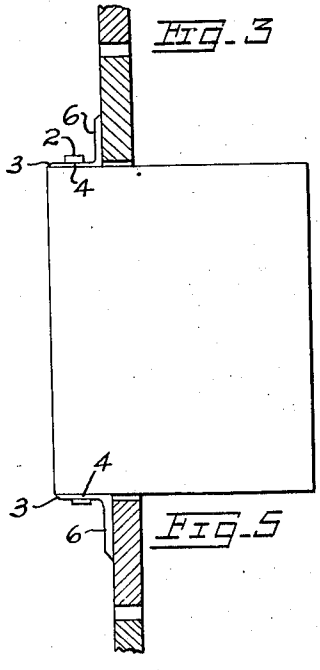


FIG. 5

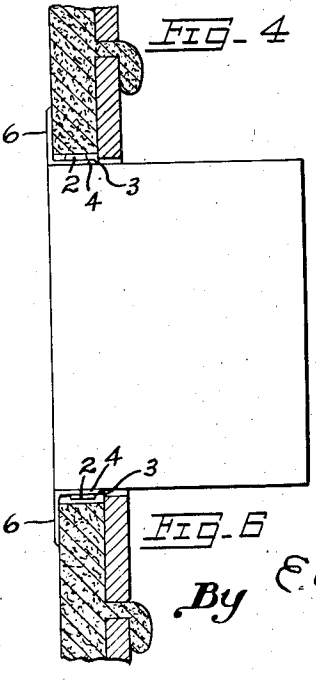


FIG. 6

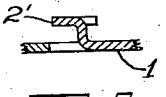


FIG. 9

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SWITCH BOX EAR

Audley P. Bell, Claysville, Pa.

Application July 7, 1944, Serial No. 543,811

1 Claim. (Cl. 248—27)

The invention relates to junction or switch boxes used in electrical work, and particularly to the fastening plates or ears of such boxes with perforations of which attachment screws are engaged to secure the switch box in place.

An object of the invention is to provide an improved fastening plate or switch box ear adapted to facilitate attachment thereof to and detachment from the switch box with saving of time over the common or known means of attachment. Another object is to provide an improved switch box ear having attachment means forming alignment means for the ears of a single switch box or of a gang of switch boxes. Other objects and advantages will appear hereinafter or will be obvious.

The invention consists in the novel construction and combinations of parts as hereinafter set forth in the claims.

In the accompanying drawing,

Figure 1 is a front view of a switch box, with an attachment ear shown flexed and in position taken just prior to being moved upwardly and snapped or sprung into engagement with the headed studs of said box, this being for new work.

Figure 2 is a view similar to Figure 1 of the switch box alone.

Figure 2*a* is a detail front view of an attachment ear flexed and in position reversed from that shown in Figure 1, this being for old work.

Figure 3 is a view similar to Figure 1, with the attachment ear engaged with the headed studs of the box, this being for new work.

Figure 4 is a view similar to Figure 3 with the attachment ear reversed from the position shown therein, this being for old work.

Figure 5 is a side view of the invention applied to new work, the laths of the side wall being shown in section.

Figure 6 is a side view of the invention applied to old work, the plaster and laths of the side wall being shown in section.

Figure 7 is a front view of a switch box having modified headed studs struck outwardly from the metal of the box.

Figure 7*a* is a detail front view of an attachment ear flexed and in position to be moved downwardly and snapped or sprung into engagement with the headed studs of the box of Figure 7.

Figure 8 is a fragmentary side view of the box of Figure 7.

Figure 9 is a detail section on the line 9—9, Figure 7.

Figure 10 is a fragmentary side view of a switch box showing the preferred form of headed stud, a side wall of said box being shown as partly in section.

In the drawing, the numeral 1 designates the switch box, which is provided at each of opposite top and bottom ends thereof with two spaced headed studs 2, permanently fixed in position.

The switch box ears 3, of which there are two for each box, one upper and one lower, the two aligned with each other, are formed of resilient sheet metal preferably spring steel, and provided each with two parallel right angle bent legs 4, located at opposite ends of the ear and spaced from each other, and with a cross bar 6 connecting said legs. Each of said legs has in its inner edge a shallow notch 5, located opposite to and opening towards the notch of the other leg, the notched portions of said legs being normally incapable of engaging the stems and beneath the heads of said studs. Said cross bar is capable of being flexed against the spring of the metal to temporarily move said legs farther apart into diverging relation to each other, whereupon the notched portions of said legs may be sprung or snapped into engagement with the stems and beneath the heads of said studs.

Figures 1, 3 and 5 of the drawing show the invention applied to new work, wherein the switch box projects from the face of the lathing of the side wall sufficiently to be brought flush with the finished surface of the side wall after the plastering has been attended to. Figures 4 and 6 of the drawing show the invention as applied to old work, the attachment ears being reversed in order that the switch box may be brought flush with the finished surface of the old plaster.

Figures 7, 8 and 9 of the drawing show a modification of the headed studs wherein the metal of a side wall of the box may be struck outwardly by a die to form said studs integrally with said side wall.

It is to be understood that the invention is not limited to the precise details of construction disclosed, as obvious modifications will occur to a person skilled in the art.

I claim:

Means for securing switch boxes in place forming alignment means for the attachment ears of a single switch box or of a gang of switch boxes, comprising the combination with a switch box having at each of opposite ends thereof two spaced permanently fixed headed studs, of upper and lower attachment ears of resilient sheet metal, each having two right angle bent parallel legs located at opposite ends of the ear and

spaced from each other, and a cross bar connecting said legs, each of said legs having in its inner edge a shallow notch located opposite to and opening towards the notch of the other leg, the notched portions of said legs being normally incapable of engaging said studs, said cross bar being capable of being flexed against the spring of the metal to temporarily move said legs farther apart into diverging relation to each other to snap the notched portions of said legs into engagement with the stems and beneath the heads of said studs.

AUDLEY P. BELL.