

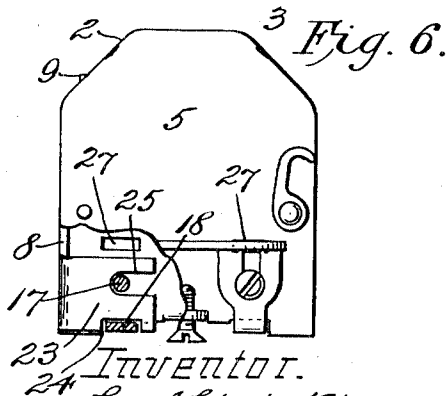
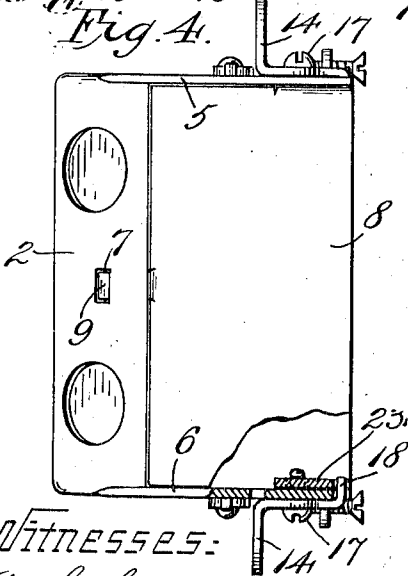
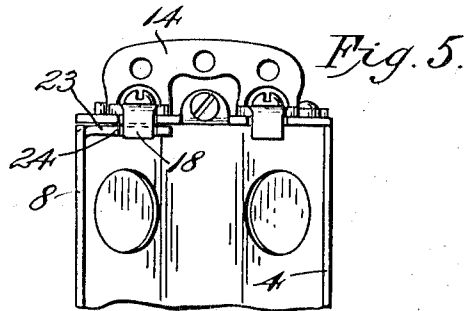
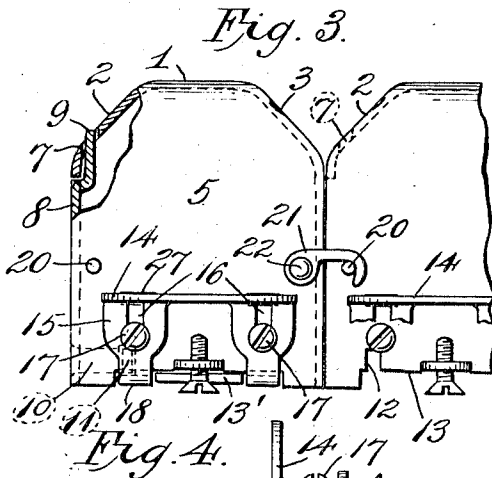
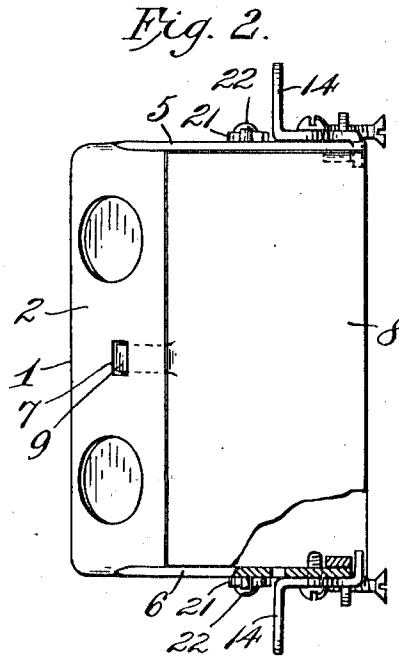
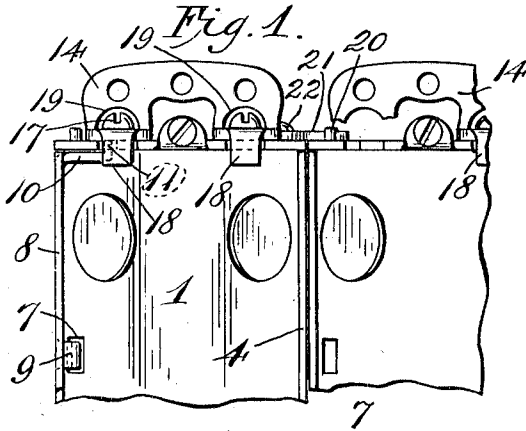
C. C. MAISON.  
SWITCH BOX.

APPLICATION FILED JUNE 17, 1912.

1,096,548.

Patented May 12, 1914.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 7.

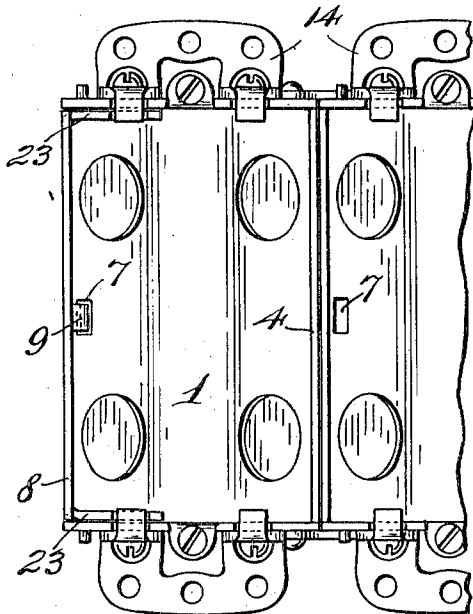


Fig. 8.

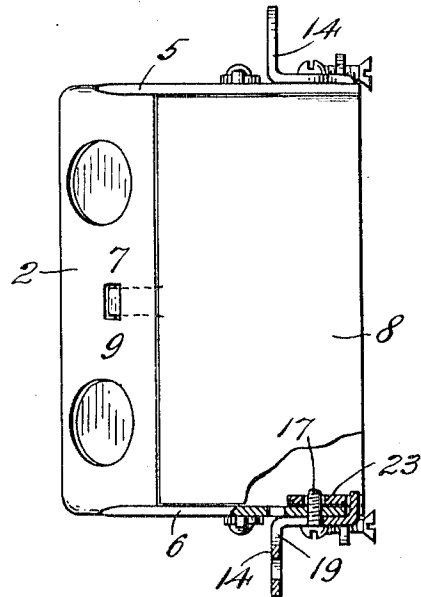


Fig. 9.

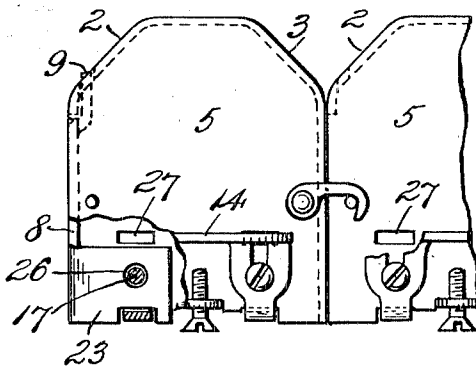
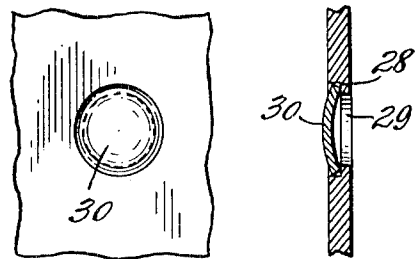


Fig. 10. Fig. 11.



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# UNITED STATES PATENT OFFICE.

CYRIL C. MAISON, OF CLEVELAND, OHIO, ASSIGNOR TO ALLINO SWITCH BOX MANUFACTURING COMPANY, A CORPORATION OF MISSOURI.

## SWITCH-BOX.

1,096,548.

Specification of Letters Patent.

Patented May 12, 1914.

Application filed June 17, 1912. Serial No. 704,117.

*To all whom it may concern:*

Be it known that I, CYRIL C. MAISON, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Switch-Boxes, of which the following is a specification.

This invention relates to improvements in switch boxes used in electrical construction work and has for its object the production of a device of this character wherein the box is useful as a unit and further useful when built up in a gang.

More specifically the invention relates to a knockout box comprising a main body portion made up of a top and bottom, a back and one integral side, together with a removable side held in place by a lug at the center and on the back edge of the removable side and engaging in a suitable opening in the back of the box, together with suitable means at the upper and lower front side corners for securing the side in place.

Invention also resides in certain details of construction in connection with the securing means at the upper side front corners and still further in mechanism for holding the boxes together in a gang.

The invention may be briefly summarized as consisting in the construction and combination of parts hereinafter set forth in the following description, drawings and claims.

Referring to the drawings, Figure 1 is a front elevation of a portion of two boxes secured together; Fig. 2 is a side elevation with portions broken away; Fig. 3 is a top plan view; Fig. 4 is a side elevation of the modified form of securing device for the removable side; Fig. 5 is a front elevation of a portion of a single box; Fig. 6 is a top plan view with parts broken away; Fig. 7 is a front elevation of a complete box and a portion of another box connected together in a gang and showing still another modified form of coupling device; Fig. 8 is a side elevation of a box, a construction similar to that shown in Fig. 7; Fig. 9 is a top plan view of the complete box and portion shown in Fig. 7; Fig. 10 is a front elevation of the knockout; and Fig. 11 is a sectional view of the knockout.

In carrying out the invention any preferred form and construction of box may be arranged according to my invention, so long

as it possesses the necessary characteristics, but I have shown a box of the rectangular type in the drawings, and in such embodiment, 1 represents the back which is provided with diagonally disposed sides 2 and 3, the latter being formed integral with the side 4. The back is also integrally connected to a suitable top 5 and a suitable bottom 6. The diagonal side 2 of the box, as shown in Fig. 2, is provided with an opening 7 for a purpose to be described. This diagonal portion 2 stops where the plane of the portion meets the plane of the side, as is clearly shown in Fig. 3, and the remaining side of the box is filled by a removable side 8 provided with a lug 9, shown in Figs. 2 and 3, which is offset from the plane of the side so as to engage in the opening 7, as clearly shown in Figs. 1, 2 and 3. The side of the box is provided at its upper front corners with inwardly extending lugs 10, one of which is shown in dotted lines in the plan of Fig. 3, and each of these lugs is provided with an outwardly turned projection 11 shown in dotted lines in Figs. 1, 2 and 3. These lugs are adapted to engage a suitable slot, shown in full lines in Fig. 3, and this slot extends from the rear edge of a recess 13 formed in both top and bottom of the box. This recess is to receive the lug of the switch shown in full lines at 13' in Fig. 3. In order to hold the removable side 8 in place the box is provided with a suitable supporting ear 14 having a flat portion 15 provided with a slot 16 for receiving the shank of a screw 17 which is threaded into the box. The flat portions 15 are provided with downwardly extending lugs or projections 18 which are adapted to lap over and extend down in front of the lugs 11 at the removable side whereby when the screw is secured in place, the lugs are held in the slots 12 and the removable side is securely fastened in place. The heads of the screws 17 pass through a suitable opening 19 formed in the supporting ear 14.

In order to secure the boxes together in a gang, each box is provided, preferably near its removable side, with an upwardly extending pin 20 which is adapted to be engaged by a hook 21 secured by a rivet 22 to the top of the opposite side.

In the modification shown in Figs. 4, 5 and 6, the removable side 8 is provided with a broad lug 23 having a recess 24 for re-

ceiving the projection or lug 18 of the supporting ear, and further provided with a slot 25 which receives the shank of the screw 17. It will be seen from this modification that when the lug 9 is placed in the opening 7 the side may be shifted into place very readily and the slot 25 will receive the shank of the screw 17 and will be held in place when the lug of the ear is brought down into the recess 24.

In the modification shown in Figs. 7, 8 and 9, the removable side 8 has its lug provided with an opening 26 for receiving the screw 17. It is also preferable in using the box to reverse the supporting ears for use in wiring old houses or as termed in the trade "old work", and in reversing the supporting ears 14, it is necessary to accommodate the downwardly extending lugs 18 and to provide for this the top and the bottom of each box is provided with a slot or opening 27 to receive the projection 18, and these openings are so positioned that they are covered by the ear when it is properly adjusted. A suitable knockout is provided for the box and it comprises a shoulder 28 formed about the opening 29 receiving the edge of a convex disk 30 which is adapted to be placed in the recess above the shoulder 28 and flattened so as to wedge the edge of the disk into the side wall above the shoulder. There is a great advantage in providing beveled corners at the back and sides for the reason

that communication may be established very readily between the boxes when they are arranged in a gang, and further it is often necessary in thin walls to run the cable, such as the metal covered cable, directly into the box from the side and it is impossible to get room for the turn in the ordinary box but by using beveled corners at the side back edge, the cable can be run directly into the opening which is formed in this portion of the box.

Having described my invention, I claim:—

1. In a switch box, a back, a top, a bottom, a side, a removable side, a lug extending from each edge of the side at the top and bottom of the box near the front thereof, and supporting ears having means engaging the lug at the side to hold the same in place.

2. In a switch box, a back, a top, a bottom, an integral side, a removable side provided with securing means engaging the back, a lug extending inward from the side of the box, a projection on said lug engaging a slot in the corresponding part of the box, and a supporting ear having a projection for engaging the projection carried by said lug secured to the side.

In testimony whereof I affix my signature in presence of two witnesses as follows.

CYRIL C. MAISON.

Witnesses:

G. O. FARQUHARSON,  
C. H. TRESCH.