J. S. ZIEGLER & C. T. WOODBURN.

SWITCH BOX OR CASING.

APPLICATION FILED JULY 15, 1907.

948,438.

Patented Feb. 8, 1910.

3 SHEETS—SHEET 1.

Fig_1

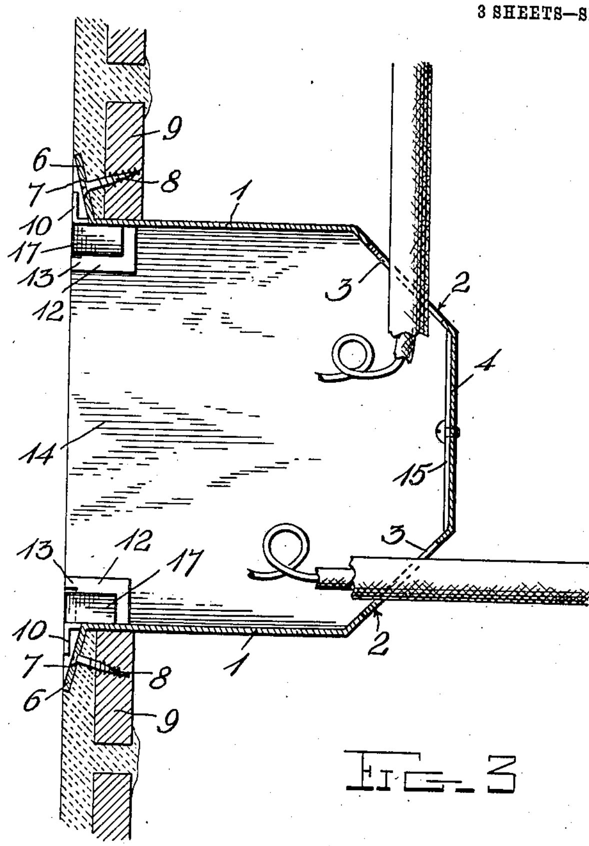


Fig_2

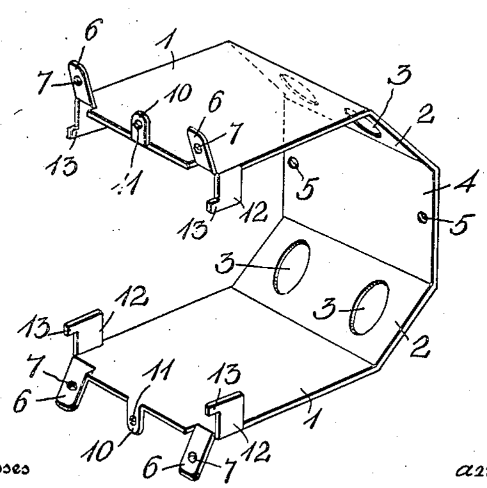
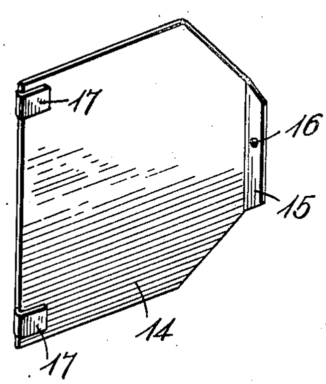


Fig_3



Witnesses

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3 SHEETS—SHEET 2.

FIG. 4

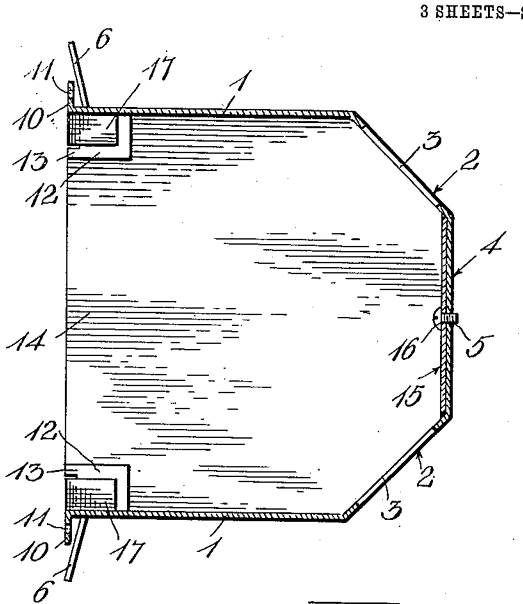


FIG. 5

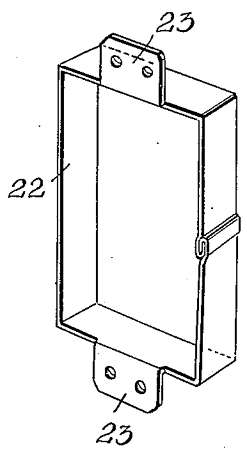


FIG. 6

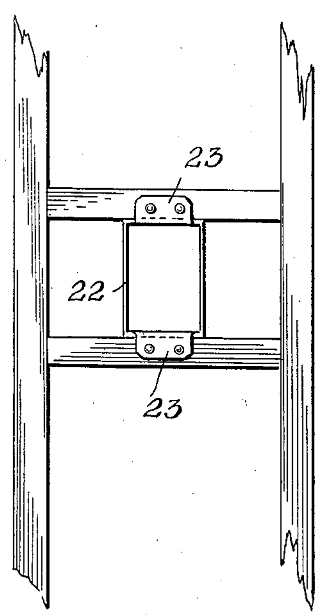
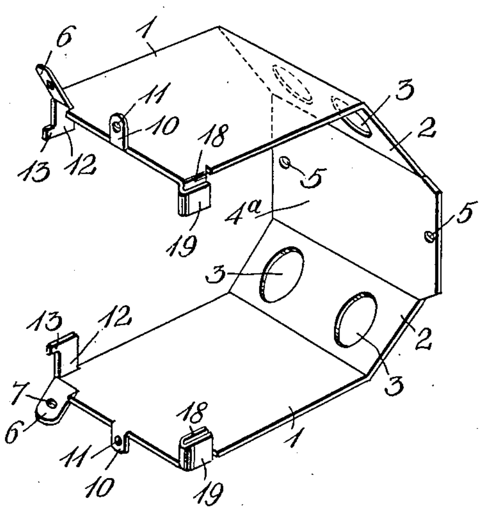


FIG. 7



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3 SHEETS—SHEET 3.

Fig. 8.

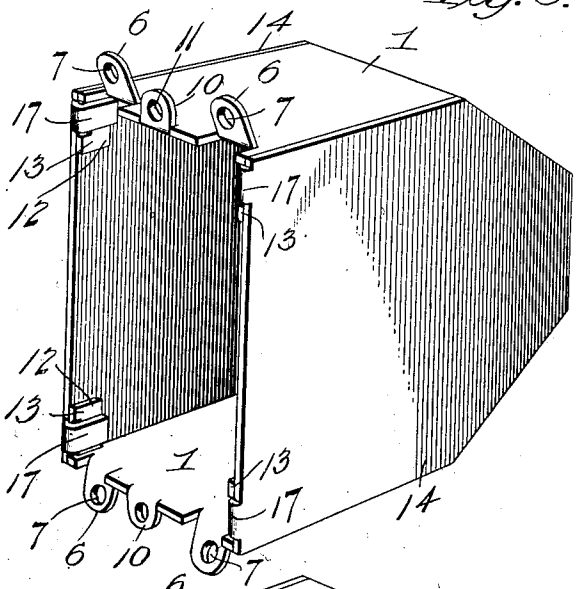
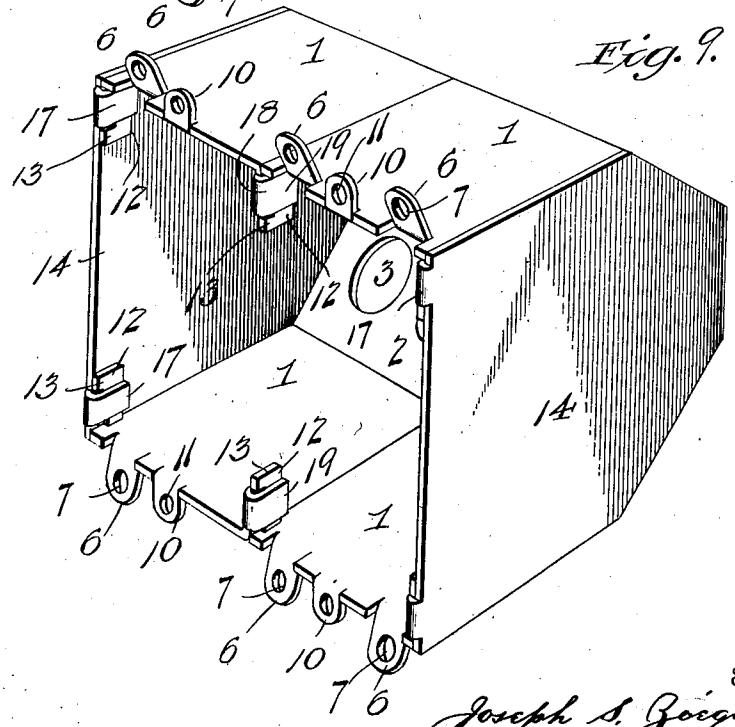


Fig. 9.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH S. ZIEGLER AND CHARLES T. WOODBURN, OF ALTOONA, PENNSYLVANIA.

SWITCH BOX OR CASING.

948,438. Specification of Letters Patent. Patented Feb. 8, 1910.

Application filed July 15, 1907. Serial No. 383,899.

To all whom it may concern:

Be it known that we, JOSEPH S. ZIEGLER and CHARLES T. WOODBURN, citizens of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Switch Boxes or Casings, of which the following is a specification.

This invention relates to electrical switch boxes, and one of the principal objects of said invention is to provide a switch box to be made of a single piece of metal or other suitable material and provided with integral attaching lugs by means of which the box may be firmly secured in place.

Another object of the invention is to provide a one piece switch box having diagonal or inclined inner walls and oval openings therein for the conductors, thus permitting the tubing to be inserted without bending the same.

Still another object of the invention is to provide a one-piece switch box with a detachable end piece for one or both sides which can be readily slipped into place when the box is placed in a recess in the wall.

Another object of the invention is to provide for the instalment of a gang or series of switch boxes, connected together to form receptacles for a series of switches.

Provision is also made for making a recess in new walls for the reception of the box by utilizing a frame to be located at the required point in the wall before it is completed, thus making it easy to insert and secure the boxes in place.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings in which—

Figure 1 is a vertical section of a switch box made in accordance with our invention and set into a wall also shown in section. Fig. 2 is a perspective view of the body portion of the switch box with the end piece omitted. Fig. 3 is a perspective view of one of the detachable end pieces disconnected from the box body. Fig. 4 is a vertical section taken through the box with one of the end pieces secured thereto. Fig. 5 is a perspective view of the frame to be set into new walls for providing a recess for the switch box or a series of the same. Fig. 6 is a front elevation showing the frame in place in the wall before the latter is finished. Fig. 7 is a perspective view of one of the boxes to be used when a gang or series of the same are to be inserted in a recess in the wall. Fig. 8 is a perspective view of a box embodying the invention with detachable end pieces secured thereto, and Fig. 9 is a similar view of two boxes embodying the invention connected together.

Referring to the drawings for a more particular description of our invention, the numeral 1 designates the sides of the switch box, and 2 are the connected diagonal walls, each provided with an oval opening 3 extending through the same. The diagonal walls 2 are connected by the back wall, 4, which is provided with screw holes 5. At the outer ends of the sides 1, inclined lugs 6 are provided, said lugs having screw holes 7 therein to receive screws 8 which extend diagonally through the lath 9, as shown in Fig. 1. Small lugs 10 extend outwardly at right angles from the sides 1, and said lugs are provided with holes 11 for suitable fastenings to be driven into the lath or header board. Extending inwardly from the sides 1 are supporting lugs 12 for the end pieces, said lugs 12 having stops 13, for a purpose which will presently appear.

Each end piece 14 is provided with a lug 15 having a screw hole 16 therein which registers with the screw hole 5 in the back wall 4. The end pieces are of the same general contour as the box body, and at the outer edges the end pieces are provided with ears 17 which are designed to engage the supporting lugs 12, the stops 13 serving to hold the ears in position, as will be understood.

Referring to Fig. 7 it will be seen that the box body here shown is provided at one edge of the sides 1 with inwardly extending lugs 18 having backwardly projecting ears 19, designed for the purpose of engaging the supporting lugs 12 of an adjacent box when a series or gang of boxes are required to be set into the wall. In this instance a hole 5 in the back wall 4^a is adapted to register with one of the holes 5 in the back wall of the adjacent box. Thus any required number of boxes may be used and connected together in the manner described with side pieces, such as hereinbefore described connected to end boxes.

To facilitate the instalment of the switch boxes, in cases where new walls are to be provided with recesses for the boxes, we have illustrated in Figs. 5 and 6 a rectangular frame 22 designed to be set into the un-

finished wall to provide a permanent housing for the boxes, and it will be understood that this frame may be of any size or shape required for the purpose designed, depending upon the number and character of the boxes to be included. This frame may be provided with fastening lugs 23 having holes therein for securing the frame in place in the wall.

From the foregoing it will be obvious that a switch box made in accordance with our invention is simple in construction, being made of a single piece, can be quickly placed in position and firmly secured in place. Any suitable number of boxes may be connected up to provide room for a series of switches; and provision is made for making a recess in new walls for any required number of switch boxes.

Our invention, considered as an entirety, has many advantages over the devices at present in use for the same purpose, and these advantages may be briefly referred to as simplicity, economy of space and saving of labor in instalment, and slight cost of production.

Having thus described our invention what we claim and desire to secure by Letters Patent is:—

1. A switch box having outwardly projecting attaching lugs, and inwardly projecting lugs formed with stops, in combination with an end-piece provided with ears to engage said inwardly projecting lugs, and a projection for attaching said end-piece to the back wall of the box.

2. A switch box comprising a body portion having outwardly projecting attaching lugs and provided at one side with inwardly projecting lugs formed with stops, and at its opposite sides with inwardly projecting lugs having ears extending therefrom, in combination with an end-piece provided with means for engaging said inwardly projecting lugs, and means for attaching said end-piece to the back of the box.

3. A switch box comprising a body portion having diagonal walls formed with apertures, said body portion being provided with outwardly projecting attaching lugs, and inwardly projecting lugs formed with stops, of end-pieces formed with ears to engage said inwardly projecting lugs above and below said stops.

4. The combination with a switch box comprising a body portion having diagonal walls formed with apertures, outwardly projecting attaching lugs, and inwardly projecting lugs formed with stops, of a second box body provided with attaching lugs, and at one side with inwardly projecting lugs formed with stops, and at its opposite side with ears, and removable end-pieces serving as closures for said box bodies, provided with ears to engage said inwardly extending lugs.

JOSEPH S. ZIEGLER.
CHARLES THOMAS WOODBURN.

In presence of—
A. E. EICHELBERGER,
THOS. J. LYNCH.