C. C. MAISON & R. H. ROBINSON.

SWITCH BOX.

APPLICATION FILED FEB. 24, 1914.

1,154,576.

Patented Sept. 21, 1915.

Fig. 1.

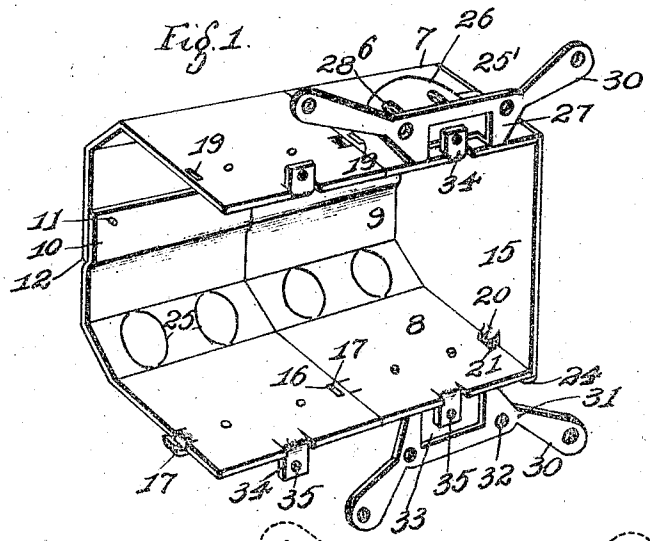


Fig. 3.

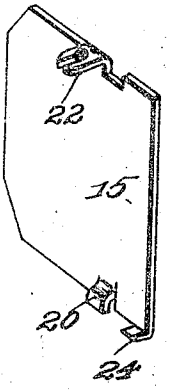


Fig. 2.

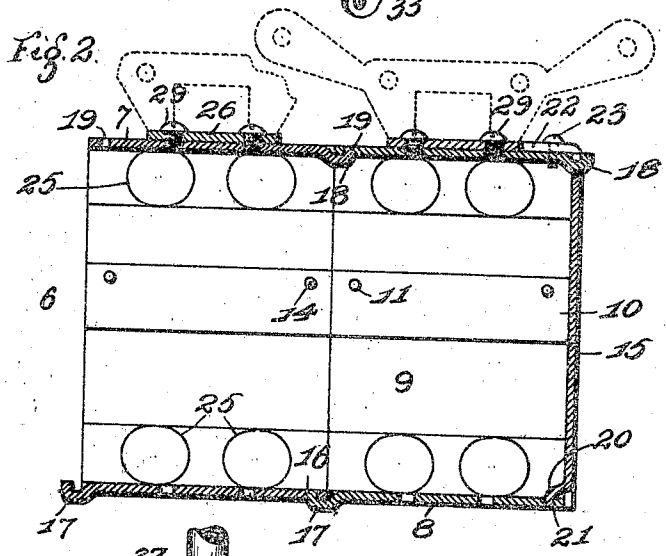


Fig. 4

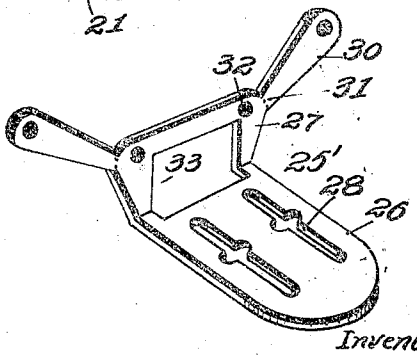
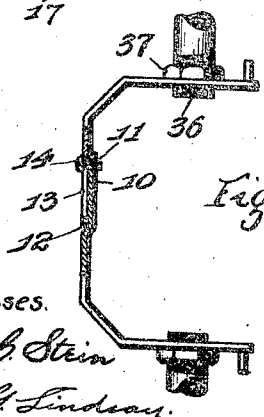


Fig. 5



Witnesses.

O. B. Stein

M. G. Lindsay.

Inventors.

Cyril C. Maison

Roland H. Robinson

by Alfred A. Wiele Atty.

UNITED STATES PATENT OFFICE.

CYRIL C. MAISON AND ROLAND H. ROBINSON, OF ST. LOUIS, MISSOURI, ASSIGNORS TO ALLINO SWITCH BOX MANUFACTURING COMPANY, A CORPORATION OF MISSOURI.

SWITCH-BOX.

1,154,576. Specification of Letters Patent. Patented Sept. 21, 1915.

Application filed February 24, 1914. Serial No. 820,473.

To all whom it may concern:

Be it known that we, CYRIL C. MAISON and ROLAND H. ROBINSON, citizens of the United States, and residents of St. Louis, Missouri, 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 and has for its object a casing so constructed as to be connected one with the other so that any number of electric switches may be properly inserted and that the series of connected boxes may be rigidly connected together and supported in the wall of a building.

A further object of our invention is to construct a switch box which is provided with adjustable ears and fastening devices by which any number of boxes may be connected together and that by the adjustable ears the same can be properly placed in position in new work as well as to accommodate the adjustment for repair work.

The essential feature of our invention is to construct a switch box in sections so as to adjust the same to accommodate the insertion of various sized switches as well as to extend the same to accommodate a series of switches, and to provide means whereby the boxes can be used for new work as well as to be properly adjusted and placed in proper position when used for repair work.

Figure 1 is a perspective view of our invention with one end of the box removed. Fig. 2 is a sectional view of the same showing the fastening device and the adjustable supporting ears in dotted lines. Fig. 3 is a detail perspective view of one end of the casing. Fig. 4 is a detail perspective view of one of the adjustable ears by which the box is supported in position in the wall of the building. Fig. 5 is an edge view of a modified form of box to be used in connection with conduits or the like.

In carrying out our invention we provide a box consisting of a casing 6 constructed of a single piece of material comprising a top 7, a bottom 8 and a rear portion 9, the rear portion 9 of the casing arranged with an offset so that one edge may overlap the other, a portion of one section being depressed as indicated by the numeral 10 and is provided with internally screw-threaded bores 11; the edge 12 of the overlapping section is provided with elongated slots 13 through which screws or the like 14 are inserted; fitting into the internally screw-threaded bores 11 and by means of the screws and the elongated slots the box can be readily adjusted vertically to accommodate various heights of switches to be inserted.

The box is constructed in sections and so arranged that one section may be readily connected to the other and firmly held thereto, and when doing so the side portions 15 are removed so that the connecting edge of the adjacent section may be inserted in position in its place.

By placing a number of the sections together and in locked alinement the same can be built up to any length and any number of switches inserted side by side as is found desirable and necessary.

In order to properly fasten or lock one section to the other, the casings are constructed with elongated slots 16 formed on one edge and projecting hooks 17 formed on the other and so arranged that one will cooperate with the other and by slightly depressing one section, the hooks 17 will seat themselves in the elongated slots 16 and hold both sections in locked position; the upper edges of the casings are likewise constructed having hooks 18 so shaped and bent as to seat themselves in elongated slots 19 formed in the upper edge of the communicating section; after a number of sections have been placed together the ends 15 are placed together to complete the casing, these ends being provided with hooks 20 arranged to be inserted in elongated slots 21, and in addition to the hooks, a slotted ear 22 is provided which overlaps the upper edge of the casing and which is held in position by a screw 23, and in order to provide rigidity to the casing and to prevent the same from spreading we provide on one edge of the sides a projecting flange or hook 24 which contacts with the outer edge of the casing holding the same in a rigid position.

The corners of the switch boxes are suitably stamped cutting into the material forming circular indentations 25 still keeping the material intact, but so arranged that the said material may be removed by punching out the circles and said circles being of such size as to permit the insertion of insulated tubing through which the wires are led into the switch casing.

On the upper and lower surface of the

switch box we provide adjustable ears 25' consisting of an approximate right angular strip of material having a horizontal portion 26 and a vertical portion 27, the horizontal portion being provided with one or a number of elongated slots 28 through which screws 29 are inserted for holding the same in locked adjustable position on the casing; the vertical portion is provided with elongated ears 30 which are suitably perforated and by which the same are firmly secured to the studding of the wall for retaining the casing in proper position; these ears as shown in Fig. 4 are especially designed to be used in new work, but the same are so arranged and tapered that when the device is to be used in connection with repair work the ears can be readily broken off at the point indicated by the numeral 31 assuming a position as shown by dotted lines at the left in Fig. 2; the body portion to which the ears are connected is also perforated as indicated by the numeral 32 so that said ears can be firmly attached to the studding by screws when the ears 30 are disconnected.

The vertical portion 27 has a portion of itself cut away as indicated by the numeral 33 which provides for the projecting lug 34 formed on the edges of the top 7 and bottom 8, and which are provided with internally screw-threaded bores 35 to which is attached the switch which is inserted in the box.

In Fig. 5 we show a modified form of box which in general construction is identical with that previously described with the exception that the ears are elongated and openings are formed in the top and bottom so that conduits 36 can be inserted and the box, or the sections forming the same held in position by the lock nuts 37 and bushings located on the inner side of the conduit if so desired; through these conduits are passed the electric wires and boxes of this construction are embedded in the wall where the application of such devices is found desirable and applicable.

The essential feature of our invention is the construction of a switch box that by removing the end sections the box can be readily connected together and extended to form any length desired and also arranged adjustable to extend the height thereof a reasonable distance.

Another feature is that by means of the adjustable ears the boxes can be used for new work as well as repair work and can be readily adjusted so that the front edge is in proper position with the plaster line of the wall so that the face plate of the switch when attached to the device will be in proper position on the wall.

Having fully described our invention what we claim is:

1. A switch box comprising a body portion consisting of two sections the contacting edges arranged to overlap, the edges of the sides of said sections provided with hooks and slots whereby one body portion may be attached to the other; adjustable detachable fastening devices whereby the box is secured in position against the wall, and elongated projecting ears radiating from the fastening member, substantially as specified.

2. A device of the class described comprising a switch box composed of two sections, the contacting edge of each arranged to overlap, integral perforated lugs formed on the face of each section, a hook formed on the side edge of one section and a slot on the side edge of the companion section, an adjustable detachable fastening member provided with elongated slots and a pair of radiating integral elongated ears which ears are adapted to be broken off as desired depending on the position in which the box is to be located, substantially as specified.

3. An article of the class described comprising a switch box consisting of a body portion composed of two sections the contacting edges arranged to overlap, hooks and slots arranged in the sections whereby said sections may be ganged together, detachable sides provided with hooks and ears by which the sides are held in place against the box in combination with detachable adjustable fastening members having angular extending ears for holding the box in position in the wall, the side ears being arranged to be broken off when not desired yet keeping the fastening member intact, substantially as specified.

4. A switch box comprising a body portion consisting of two members the contact edges arranged to overlap, a pair of adjustable detachable fastening members located on the upper and lower sides of the body portion, said fastening members having a pair of elongated fastening slots by which the same is adjusted in position and right angular section forming a part of the fastening member; and a pair of elongated projecting ears formed on the angular extension, substantially as specified.

In testimony whereof, we have signed our names to this specification, in presence of two subscribing witnesses.

CYRIL C. MAISON.
ROLAND H. ROBINSON.

Witnesses:
ALFRED A. EICKS,
WALTER C. STEIN.