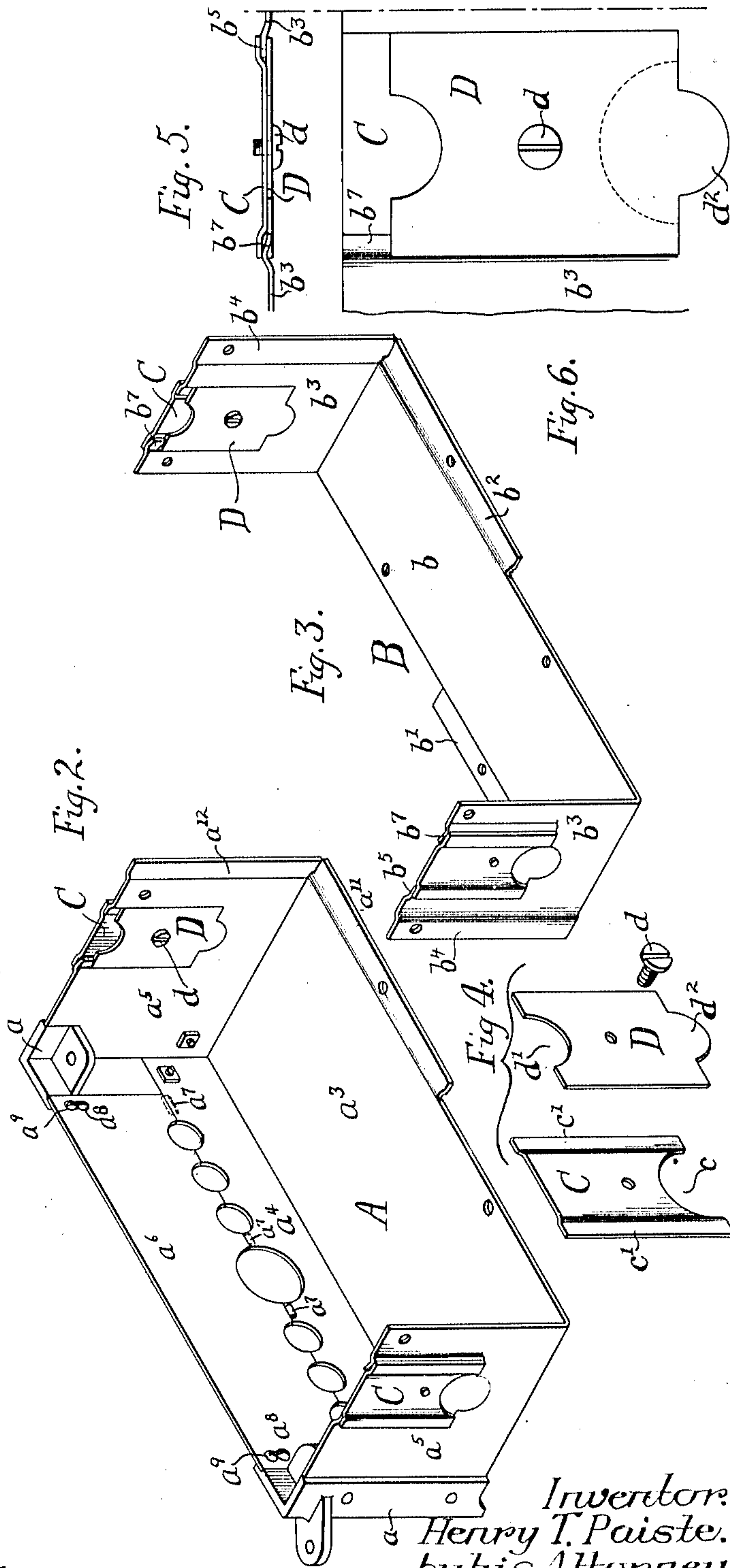


990,161.

Fig. 1.



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# UNITED STATES PATENT OFFICE.

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## CLOSURE FOR OPENINGS OF OUTLET-BOXES.

990,161.

Specification of Letters Patent.

Patented Apr. 18, 1911.

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*To all whom it may concern:*

Be it known that I, HENRY T. PAISTE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Closures for Openings for Outlet-Boxes, (being a Division of my application for patent filed March 24, 1908, Serial No. 422,894,) of which the following is a specification.

One object of my invention is to provide a sectional or other form of wall cabinet with means whereby its outlet openings, when not desired for use, may be tightly closed, and yet at any time be conveniently and quickly opened for the insertion of insulating bushings or conductor-carrying conduits.

I further desire to provide a closure having the above noted characteristics which may be conveniently applied and adjusted to an opening so as to shut this off or to place it in condition for the reception of a conduit or bushing.

These objects and other advantageous ends I secure as hereinafter set forth, reference being had to the accompanying drawings, in which:—

Figure 1, is a side elevation of a sectional wall cabinet to which my invention may be applied; Figs. 2 and 3 are perspective views of one of the end units and an intermediate unit, of the box shown in Fig. 1, illustrating my invention in detail. Fig. 4, is a detached perspective view of the parts constituting the movable and adjustable sections for closing the outlet openings; Figs. 5 and 6 are respectively a plan and a front elevation of a portion of one side of the cabinet illustrated in Fig. 1; the outlet closing plate being shown in position to cover the opening.

In the above drawings A and A' represent two substantially similar end units and B—B two intermediate units, also similar to each other and capable of being utilized in any desired number to form a box of any required length. Each end unit is made of pressed sheet metal, having a bottom section  $a^3$ , an upwardly extending end section  $a^4$ , and two side sections  $a^5$ ; the whole being held together and properly stiffened by a pair of corner pieces  $a$ . While the side sections  $a^5$  extend to the full height of the box or cabinet, the end section  $a^4$  is of considerably less height and its upper edge as shown in Fig. 2, is provided with a number of

semi-circular openings, which, with semi-circular openings of the same size formed in a removable end piece  $a^6$ , are designed to receive the insulating bushings or conduit ends through which electrical conductors enter the box.

In the present instance there are seven of the above mentioned openings at each end of the box and it will be noted that the section  $a^6$  is conveniently removable, though capable of being rigidly held in place when desired. With this object in view, each of the corner pieces  $a$  is recessed along the upper portion of its edge nearest the section  $a^6$  to an extent sufficient to permit the inner surface of said section to lie in substantially the same plane as the inner surface of the end section  $a^4$ , and the lower edge of said section  $a^6$  is provided with a number of struck up lugs  $a^7$  designed to engage the inner and outer faces of the end section  $a^4$  in order to assist in preventing the section  $a^6$  from being forced in or pulled outwardly beyond its proper position.

Each of the upper corners of the section  $a^6$  is provided with a key hole slot  $a^8$  for the reception of a screw  $a^9$  mounted in the corner piece  $a$ ; it being thus possible to remove the said section by loosening these screws and after raising it a distance equal to the length of the slots, moving it inwardly until it is free of the screws.

The edge of the bottom section  $a^3$  nearest the intermediate unit B has, for one-half of its length, a projecting offset portion  $a^{11}$  designed to fit under the bottom portion  $b$  of said unit so as to permit its upper face to lie flush with the upper face of the bottom section  $a^3$  of the end unit. Similarly, from Fig. 3, it will be seen that each intermediate unit has for half the length of one of the edges of its bottom section an offset extension  $b'$ , and on its other bottom edge a second extension  $b^2$  along the opposite half thereof; the construction being such that the extension  $b'$  fits under the body section  $a^3$  and with the extension  $a^{11}$  very completely covers the joint between the two parts  $b$  and  $a^3$  of said two sections.

The free vertical edge of one of the side sections  $a^5$  of the end unit A has an offset extension  $a^{12}$  and is designed to fit outside of the adjacent edge of the side section  $b^3$  of the intermediate unit; each of said intermediate parts thus having one edge of each of



its vertical sections plane and the other offset as indicated at  $b^4$ . Said offsets occur on opposite edges of the two side sections, so that each intermediate unit matches or fits not only with the end units of the box but also with other intermediate units to make a complete, strongly braced container. The joints between these units are almost completely covered by the offset extensions, and in each instance bolts or screws are provided whereby the various units are connected to each other.

In order to provide suitable outlets for bushings or conduits in the side sections of the units A, B and A', I provide in each of them any desired number of relatively wide vertical slots or recesses, the vertical sides of which are offset or shouldered, as indicated at  $b^5$ , while the bottom of each recess has a semi-circular outlet of greater or less diameter, as may be desired. For closing each of the recesses in these end sections I provide two plates C and D adjustably held together by a screw  $d$ . The first of these plates C has a semi-circular recess or indentation  $c$  at one end and has its longitudinal edges offset as indicated at  $c'$ . The plate D has a semi-circular recess  $d'$  at one end and a semi-circular projection  $d^2$  at the opposite end, said recess  $d'$  being of the same diameter as the recess in the bottom of the slot in each of the side sections of the units B, A, etc.

When it is not desired to utilize the openings in the side sections, the two plates C and D are put together in the positions indicated in Figs. 4 and 5; that is to say, with the semi-circular recess  $c$  of the plate C down and the semi-circular projection  $d^2$  of the plate D fitting into the similarly shaped recess in the bottom of the slot; the plate D being on the inside. In order to retain the plates rigidly in position, the screw  $d$  may be tightly set up, and to further prevent their dislodgment I make the plate D slightly shorter in length than the plate C so that its upper edge falls below the upper edge of the box. I also press inwardly a short length  $b^7$  of one of the offset edges  $b^5$  of the slot so that when the two plates are tightly held together by their screw  $d$  they cannot be moved upwardly owing to the engagement of the top of plate D with this small lug.

When it is desired to run an electrical conductor into the box through one of the side sections thereof, the screw  $d$  of the removable closure belonging to the suitable slot is loosened and the plates C and D constituting such closure are removed. After the conduit or bushing for the conductor has been properly mounted in the bottom of the slot the plates C and D are replaced, although in this case the plate D is turned on the screw  $d$  as a pivot through an angle of  $180^\circ$ , so that the two recesses  $c$  and  $d'$  co-incide with

one another, and the bushing, being of the proper diameter, is rigidly held in place after the screw  $d$  is again set up.

Much trouble has hitherto been experienced in structures of the general type to which my invention belongs owing to the fact that the openings in the sides or ends were not so arranged or designed as to permit of the ready insertion and removal of the bushings or conduits, and this objection was particularly noticeable when it was endeavored to provide such openings in the end sections of the intermediate units of the box or cabinet. By my invention any such objection is obviated, and it will be seen that the cabinet as a whole is of a most convenient, substantial and inexpensive construction.

I claim:

1. An outlet box having an opening for an electrical conductor, a pair of plates adjustable to wholly or partially close said opening, with a pivot adjustably and directly connecting the plates together and capable of being set up to rigidly hold them in their adjusted positions.

2. A box for electrical apparatus having a slot formed in a side, with two adjustably connected plates removably fitting the slot, and means for holding said plates together in any of a plurality of positions so as to either completely close the slot or permit of the mounting of a bushing therein.

3. A box having a slot formed with a recessed portion; and two adjustably connected plates for the slot, one of said plates having a projection and a recess, and the other also having a recess; with means for holding said plates either with the projection entering the recessed portion of the slot to close the same, or with its recess adjacent said recessed portion of the slot to provide an opening.

4. A box for electrical apparatus having a slotted opening provided with offset edges, two removable plates for the slot having means whereby they are adjustably connected, one of said plates having a recess and a projection and being movable into either of two positions, in one of which its projection serves to close the slot and in the other its recess provides an opening for the reception of a bushing or conduit.

5. A box for electrical apparatus having an opening, two plates, and a connecting screw whereby said plates may be held in positions to partially or wholly close said opening, one of said plates having a recess, and also being provided with a projection formed to fit a portion of the opening in the box.

6. A box for electrical apparatus having a slot formed with a portion of its edges offset, two plates, and adjustable connecting means for the plates whereby they may be



held in position to partially or wholly close said slot, one of the plates being constructed to engage said offset portion at the edge of the slot so as to be retained in position thereby when said connecting means is set up.

7. The combination of a box having an opening; with a plate adjustably fitted to said opening and having a recess and a projection capable of respectively cooperating with the opening in the box either to form a hole for the reception of an electrical conductor, or to close the opening; the projection of said plate being formed to fit into a portion of the opening in the box.

8. The combination of a box having an opening; a plate adjustably mounted adjacent said opening and having an opening capable of cooperating with the opening in

the box to admit an electrical conductor; said plate being formed to be capable of fitting into and closing the opening in the box.

9. The combination with a box having an opening; a plate movably mounted adjacent said opening and provided with a substantially U-shaped recess capable of being brought into position to co-act with the opening in the box; and said plate also having a portion capable of closing said latter opening.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

HENRY T. PAISTE.

Witnesses:

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JOS. H. KLEIN.