

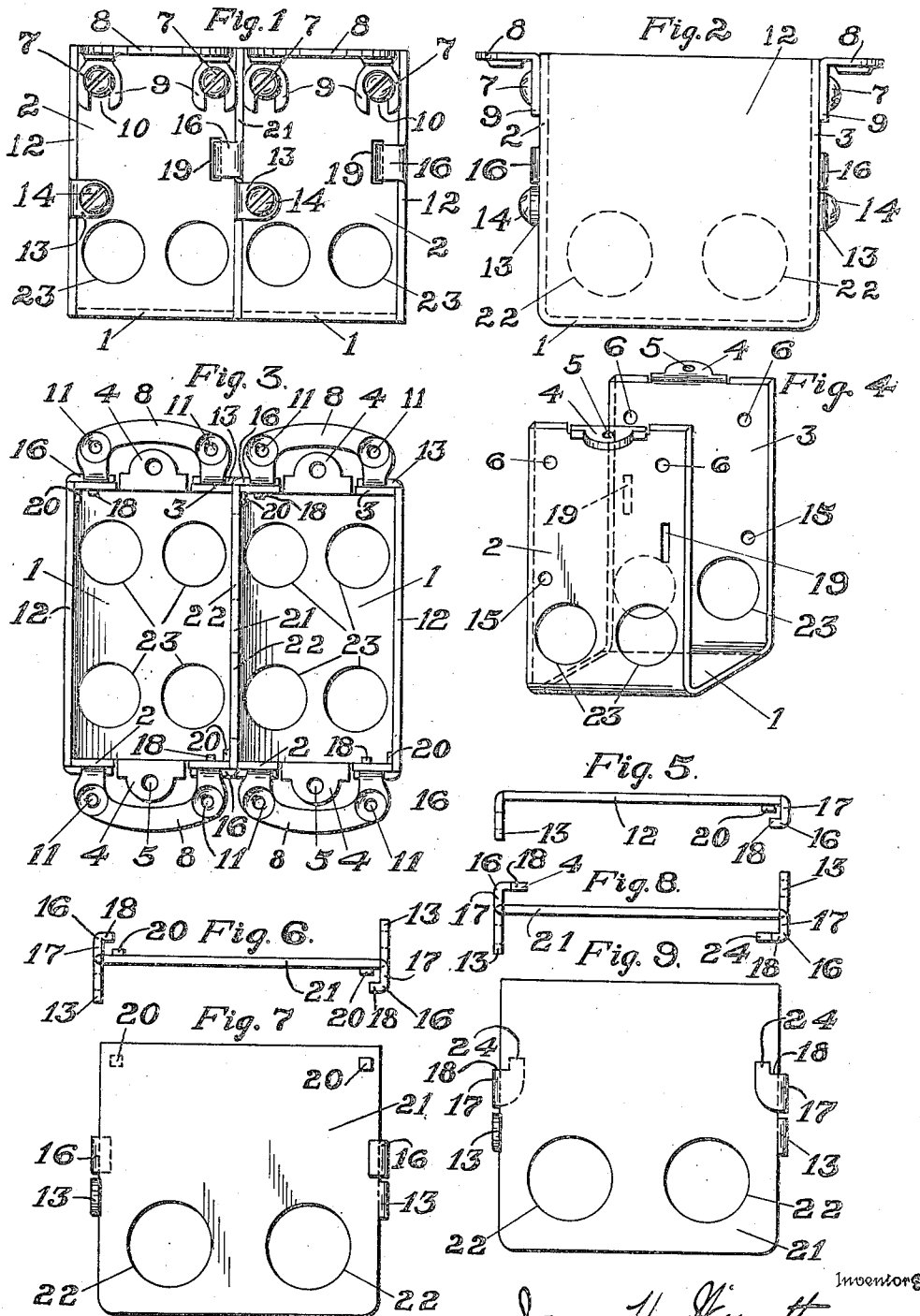
J. H. WYATT & H. C. CAMPION, JR.

OUTLET BOX CONSTRUCTION.

APPLICATION FILED AUG. 23, 1911.

1,041,220.

Patented Oct. 15, 1912.



Witnesses
Gosfry Schmitt
Millard & Eisinger

James H. Wyatt
and
Harry C. Campion Jr
by Cornelius D. Eket Attorney

UNITED STATES PATENT OFFICE.

JAMES H. WYATT AND HARRY CLIFFORD CAMPION, JR., OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO THE CUTTER ELECTRICAL AND MANUFACTURING COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

OUTLET-BOX CONSTRUCTION.

1,041,220.

Specification of Letters Patent.

Patented Oct. 15, 1912.

Application filed August 23, 1911. Serial No. 645,572.

To all whom it may concern:

Be it known that we, JAMES H. WYATT and HARRY CLIFFORD CAMPION, JR., citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Outlet-Box Construction, of which the following is a specification.

Our invention relates to the construction of outlet boxes or switch boxes such as used in the electric wiring of buildings, etc., such outlet boxes or switch boxes being adapted to form an inclosure within a wall, partition, or the like, for an electric switch or other electrical apparatus.

Our invention resides in a construction of the nature above referred to, in which the three-sided or U element of an individual box has secured thereto the end plates by a locking connection on one end of such end plate, and a screw or rivet connection on the other end thereof.

Our invention resides also in a construction in which a gang or bank of boxes may easily be constructed and comprising any suitable number of individual boxes by employing between neighboring U-sections a partition plate which, at each end, is locked to one U and screwed or riveted to the neighboring U. Our construction of a gang or bank is such that the neighboring U's are not connected to each other directly, but are attached or secured to the partition plates.

Our invention resides in the features hereinafter described and claimed.

For an illustration of some of the forms our invention may take, reference is to be had to the accompanying drawing, in which:

Figure 1 is a side elevation of a bank or gang of boxes, here shown as consisting of two individual boxes. Fig. 2 is an end elevation of the same. Fig. 3 is a top plan view of the same. Fig. 4 is a perspective view of a U-section. Fig. 5 is a top plan view of an end plate used for either an individual box or a bank or gang of boxes. Fig. 6 is a top plan view of a partition plate used in the formation of a gang or bank of boxes. Fig. 7 is an end elevation of a partition plate, such as shown in Fig. 6. Fig. 8 is a top plan view of a partition plate with modified form of attaching means. Fig. 9 is an end

elevation view of the partition plate shown in Fig. 8.

As illustrated in Fig. 4, a U-section comprises the member having the bottom 1 and sides 2 and 3, which may be made of sheet metal integral with each other or of any other suitable material connected in any suitable manner. These U-sections are the same for both individual boxes or for a gang or bank of boxes. On the top edge of the sides 2 and 3 are provided ears 4 having perforations 5 for the passage of screws or other means for securing to these ears 4 the switch mechanism or other electrical device which is to be inclosed in the box. Holes 6 are provided to receive screws 7, see Fig. 1, by which the members 8 are attached to the box, these members 8 having the parts 9 slotted at 10 and held by the screws 7 to the outer sides of the U-section. The slots 10 are provided so as to allow relative adjustment between the parts 8 and the boxes, the parts 8 being provided with holes 11 by which the boxes are secured to their support in a wall or other suitable relation. When an individual box is to be formed from a U-section, two end plates are secured thereon. These end plates are shown at 12, in Figs. 1 to 5 inclusive. This end plate is provided on one of its side edges with an ear 13 perforated to receive a screw 14 which threads into a hole 15 in the U-section, the ear 13 extending at right angles to the plane of the end plate 12 and extending around the edge of the U-section, as shown in Fig. 1. At its other side edge the end plate 12 is provided with the hook member 16 having the portion 17 extending at right angles to the plane of the plate 12 and the end portion 18 completing the hook and extending backwardly parallel to the plane of the plate 12. This hook 16 is inserted through the slot 19 in the opposite side of the U-section from that provided with the hole 15 for receiving the screw 14. In attaching the end plate to the U-section the hook 16 is first inserted through slot 19 in the U-section, and the lug 20, struck up from the end plate 12 at a considerable distance above or below the hook 16, is brought against the inner side of the side member 2 of the U-section as shown in Fig. 4. The lug 20, as seen more clearly

in Fig. 7, is at a distance from the hook 16 but near the same edge of the plate 21 or plate 12. In entering the hook 16 into the slot 19 the plates 12 and 21 do not have their edges registering as in their final positions, but the plates 12 and 21 when first brought together with the part 18 in the slot 19 are in such position that the lug 20 is at some distance from the wall 2; then the plate 12 or 21 is rotated until the lug 20 comes to the final position shown. Then, the ear 13 with its perforation registers with the screw hole 15 on the other side of the U-section, whereupon the screw 14 is put in place and the ear 13 drawn up against the side of the U. With the parts in this position, with the use of only the one screw, the hook 16 and the lug 20 lock the other edge of the end plate firmly in position. Another end plate is then attached in like manner to the other end of the U-section, thus forming a complete individual box. Inasmuch as the U-sections are also to be used for the production of gangs or banks of boxes, there is on each side of the U one screw hole 15 and one slot 19, all the slots 19 being at the same height in the sides of the U-section and also the screw holes 15 being at the same height in the sides, but the screw holes 15 and the slots 19 being at different heights because the hook and ear are both provided on the same edge of a partition plate, being preferably struck up from the material of the partition plate, must be at different heights on the edge of the partition plate. When a gang or bank of boxes is to be made, the standard U-sections of suitable number are employed and a partition plate used between neighboring U-sections and an end plate applied on each end of the gang or bank.

The partition plate is shown at 21 in Figs. 1, 3, 6 and 7. A single partition plate 21 is employed between neighboring U-sections and the U-sections are not connected to each other but are connected to the partition plate by means similar to that by which the end plate is secured to a U-section. The partition plate 21 has at each edge a hook 16 and an ear 13. But the hooks 16 are disposed on opposite sides of the plate 21 and the ears 13 at the two edges are similarly disposed upon opposite sides of the plate 21, as seen from Fig. 6. Similarly, the plate 21 is provided with a lug 20, near each hook, and they are, therefore, also on opposite sides of the plate 21. The partition plate is attached to one U-section by first hooking the hook 16 into a slot 19 in the U-section and then securing the ear 13 on the opposite edge of the partition plate to the same U-section by a screw 14. The second U-section is then attached to the same partition plate 21 by first hooking the other hook 16 at the other end of the plate into a slot 19 in the second U-section, and then se-

curing the second ear 13 to the second U-section by a screw 14. Here, again, the lugs 20 keep the hook end of the partition plate locked to the U-section, the partition plate being held firmly in place with respect to either U by the use of one screw only when a hook and lug as 16 and 20 are employed. The partition plates may have, preferably near their bottoms, the perforations 22, so that the service wires may enter in one box and be extended through the perforations 22 in the partition plates to connect to the switches or other devices in the other boxes of the gang or bank. The U-sections also have perforations 23, either in their bottoms or sides, or both, or these may be simply knock-out holes such as are commonly provided in junction boxes, outlet boxes, or the like.

In Figs. 8 and 9 a modified form of partition or end plate is illustrated. Here, the lug 20 is omitted, but the hook 16 has not only the portions 17 and 18, of Figs. 5 and 6, but has also the upwardly turned portion 24 which takes the place of the lug 20 of Figs. 5 and 6. In this case, the end 24 is inserted through a slot 19 in the U-section and the partition plate 21', of Figs. 8 and 9, having such modified hook, is rotated with respect to the U-section until the part 24 extends upwardly inside of the U-section above the end of the slot 19, the part 18 being in the slot 19 and the part 17 lying along the side of the U-section. When this construction is used for an end plate, the arrangement is the same as shown in Figs. 8 and 9, except that only one hook and one ear on opposite edges of the plate are employed.

What we claim is:

1. In a device of the character described, the combination with a U-section, of a plate, an ear on one edge of said plate secured to a side of said U-section; a hook on an opposite edge of said plate, a side of said U-section having a slot adapted to receive said hook, and a lug on said plate at a distance from the edge thereof approximately equal to the thickness of the side of said U-section.

2. In a device of the character described, the combination with a U-section, of a plate, an ear on one edge of said plate secured to a side of said U-section, a hook on an opposite edge of said plate, a side of said U-section having a slot adapted to receive said hook, and a projection on said plate remote from said hook but adjacent the same edge upon which said hook is disposed.

3. In a gang box of the character described, a U-section, a partition plate, said U-section having a slot, a hook on one edge of said partition plate adapted to engage in said slot, an ear on the opposite edge of said plate secured to another side of said U-section, a second U-section, a slot in said second U-section, a second hook on said parti-

tion plate adapted to engage in said slot, and a second ear on said partition plate secured to another side of said second U-section.

5 4. In a gang box of the character described, a U-section, a partition plate, said U-section having a slot, a hook on one edge of said partition plate adapted to engage in said slot, an ear on the opposite edge of said
10 plate secured to another side of said U-section, a second U-section, a slot in said second U-section, a second hook on said partition plate adapted to engage in said slot, a second ear on said partition plate secured to another
15 side of said second U-section, and a lug for each of said hooks on said partition plate.

5. In a gang box of the character described, a U-section, a partition plate, said U-section having a slot, a hook on one edge
20 of said partition plate adapted to engage in said slot, an ear on the opposite edge of said plate secured to another side of said U-section, a second U-section, a slot in said second U-section, a second hook on said partition
25 plate adapted to engage in said slot, said hooks on said partition plate being on opposite sides thereof and on opposite edges, and said ears on opposite sides of said partition plate and on opposite edges.

30 6. In a gang box of the character described, a U-section, a partition plate, said U-section having a slot, a hook on one edge of said partition plate adapted to engage in said slot, an ear on the opposite edge of said
35 plate secured to another side of said U-section, a second U-section, a slot in said second U-section, a second hook on said partition plate adapted to engage in said slot, said hooks on said partition plate being on oppo-
40 site sides thereof and on opposite edges, and said ears on opposite sides of said partition plate and on opposite edges, the hook and ear on each edge of said plate being on opposite sides of said plate.

45 7. In a gang box of the character described, a U-section, a partition plate, said U-section having a slot, a hook on one edge of said partition plate adapted to engage in said slot, an ear on the opposite edge of said
50 plate secured to another side of said U-section, a second U-section, a slot in said second U-section, a second hook on said partition plate adapted to engage in said slot, said hooks on said partition plate being on oppo-
55 site sides thereof and on opposite edges, said ears on opposite sides of said partition plate and on opposite edges, and a lug for each hook on said partition plate, said lugs being on opposite sides of said partition plate.

60 8. In a device of the character described, a plate, a hook on one edge of said plate, said hook comprising a portion extending at right angles to said plate and an end portion of said hook extending parallel with
65 said plate, a projection on said plate, and

a second plate confined against said projection and having an aperture receiving said hook, said projection offset from the hook carrying edge of said first named plate a distance substantially equal to the thick-
70 ness of said second plate.

9. In a device of the character described, a plate, a hook on one edge of said plate, said hook comprising a portion extending at right angles to said plate and an end
75 portion extending parallel with said plate, a projection on said plate near said edge of said plate, and a second plate having an aperture receiving said hook and confined between said hook and said projec-
80 tion, said projection offset from the hook carrying edge of said first named plate a distance substantially equal to the thickness of said second plate.

10. In a device of the character described, 85 a U-section, a side of said U-section having a slot, a plate, a hook on one edge of said plate having a portion extending at right angles to said plate, and a portion extending parallel with said plate, said hook adapted
90 to engage in said slot, and a projection on said plate between which and said hook said U-section is confined, said projection offset from the hook carrying edge of said plate a distance substantially equal to the
95 thickness of said U section.

11. In a device of the character described, a U section having sides and bottom, a side of said U section having a slot, a plate against the edge of said U section, a hook
100 on one edge of said plate engaging in said slot, and a projection on said plate offset from the hook carrying edge of said plate a distance substantially equal to the thickness of the side of said U section and dis-
105 posed at a distance from said hook.

12. In a device of the character described, a U section having sides and bottom, a side of said U section having a slot, a plate, a hook on one edge of said plate engaging in
110 said slot, said slot disposed at substantially the middle of the length of said side of said U section, and a projection on said plate near one end of said side of said U section offset from the hook carrying edge of said
115 plate a distance substantially equal to the thickness of said side of said U section.

13. In a device of the character described, a U section having sides and bottom, a side of said U section having a slot, a plate, a
120 hook on one edge of said plate engaging in said slot, said slot disposed at substantially the middle of the length of said side of said U section, a projection on said plate near one end of said side of said U section offset
125 from the hook carrying edge of said plate a distance substantially equal to the thickness of said side of said U section, and an ear on the opposite edge of said plate secured to the other side of said U-section.
130

14. In a device of the character described,
a U section having sides and bottom, a side
of said U section having a slot, a plate, a
hook on one edge of said plate engaging in
5 said slot, said slot disposed at substantially
the middle of the length of said side of said
U section, a projection on said plate near
one end of said side of said U section offset
from the hook carrying edge of said plate
10 a distance substantially equal to the thick-
ness of said side of said U section, and an
ear on the opposite edge of said plate se-

cured to the other side of said U section,
said ear disposed at substantially the mid-
dle of the length of said other side of said U 15
section.

In testimony whereof we have hereunto
affixed our signatures in the presence of the
two subscribing witnesses.

JAMES H. WYATT.

HARRY CLIFFORD CAMPION, JR.

Witnesses:

ELEANOR T. McCALL,

LEO O'BRIEN.
