

No. 892,220.

PATENTED JUNE 30, 1908.

J. F. BURNS.

JUNCTION BOX FOR ELECTRICAL CONDUCTORS

APPLICATION FILED SEPT. 28, 1907.

FIG. I.

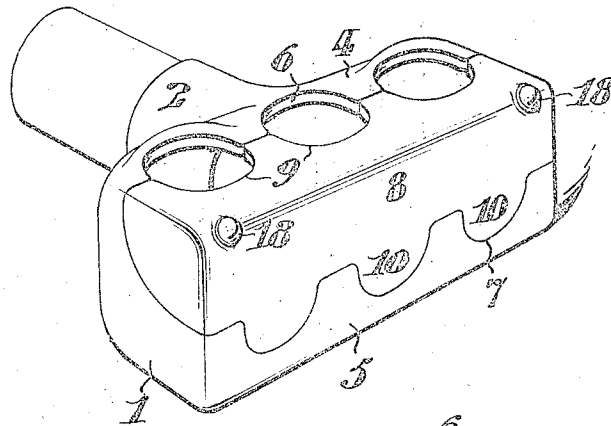


FIG. II.

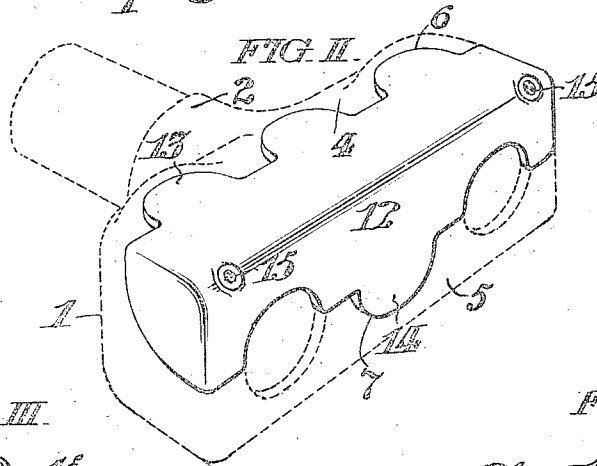


FIG. III.

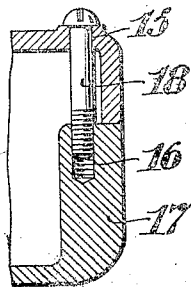
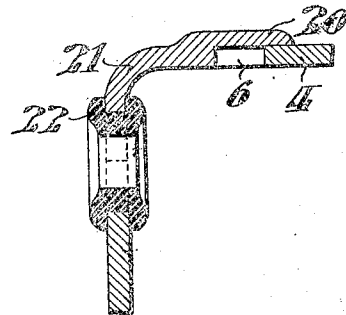


FIG. IV.



WITNESSES:

Clifton C. Hollowell
Thomas W. Kerr

INVENTOR:

JAMES F. BURNS,

By Matthew E. Paige
Att'y

UNITED STATES PATENT OFFICE.

JAMES F. BURNS, OF PHILADELPHIA, PENNSYLVANIA.

JUNCTION-BOX FOR ELECTRICAL CONDUCTORS.

No. 892,220.

Specification of Letters Patent.

Patented June 30, 1908.

Application filed September 22, 1907. Serial No. 594,847.

To all whom it may concern:

Be it known that I, JAMES F. BURNS, of Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Junction-Boxes for Electrical Conductors, whereof the following is a specification, reference being had to the accompanying drawings.

My improvement is particularly applicable to what are known as outlet boxes, and it is the object thereof to provide a box wherein both the number and the direction of the outlets may be variably determined.

My invention is advantageous in that a single form of box may be employed where several different forms were heretofore required.

As hereinafter described my invention comprises a box having walls extending in integral relation in relatively transverse planes, with parallel edges opposed in separated relation and provided with opposed semicircular outlet recesses; a separate removable angle plate, coextensive with the space between said recessed wall edges, provided with projections and recesses at its opposite edges arranged to register with the recesses in the complementary walls of the box, in different positions, to determine both the number and direction of the outlets, and, detachable means removably securing said plate in adjusted position in said box.

My invention comprises the various novel features of construction and arrangement hereinafter more definitely specified.

In the drawings; Figure I, is a perspective view of a box conveniently embodying my improvement. Fig. II, is a perspective view of a removable plate which may be substituted for the plate shown in Fig. I. Fig. III, is a fragmentary sectional view of the removable plate and adjoining box wall indicated in Fig. I, showing the arrangement of the detachable connecting means. Fig. IV, is a fragmentary sectional view, showing a modified form of removable plate.

In said figures; the box 1, is provided with the cylindrical inlet 2, and the outlet walls 4, and 5, of the box, which extend in planes respectively parallel with and transverse to the axis of said inlet, are respectively provided with the semicircular outlet recesses 6, and 7, in alinement at their opposed parallel edges.

The removable angle plate 8, as shown in Fig. I, is coextensive with the space between

the parallel recessed edges of said walls 4, and 5, and is provided with the outlet recesses 9, and the projections 10, at its opposite edges, respectively registered with the outlet recesses 6, and 7, in said walls 4, and 5. In the position shown in Fig. I, the semicircular recesses 9, in the edge of the angle plate 8, register with the semicircular recesses 6, in the wall 4, of said box and form three adjoining circular outlet openings, whose axes extend at right angles with the axis of said inlet 2; and, the semicircular projections 10, on the wall of the angle plate 8, register with the semicircular recesses 7, in the wall 5, of said box 1, and close the latter. It is to be understood that said plate may be reversed in position so that said projections 10 close the recesses 6, in the wall 4, of the angle plate 8, and the recesses 9 in said plate register with the recesses 7, in the wall of the box.

As shown in Fig. II, the plate 12, which may be substituted for the plate 8, in connection with said box 1, is provided with projections 13 at one edge adapted to close all of the recesses 6, in the corresponding edge of the box wall 4, and at its opposite edge said plate is provided with a single projection 14, adapted to close the central recess 7, in the corresponding box wall 5, and said plate 12 may be reversed as above described. Therefore, it may be observed that the plate 8, shown in Fig. I, is adapted to variably determine the direction of the outlets from the box, and, the plate 12, shown in Fig. II, is adapted to variably determine both the number and direction of the outlets from the box. Said plates 8 and 12, are provided with apertures 15, in alinement with screw threaded sockets 16, in the corresponding end walls 17, of the box, and, the screws 18, which extend through said apertures in engagement with said sockets serve to removably retain said plates in rigid relation with the box in either position.

Although as shown in Figs. I, II, and III; the projections on the removable plates which are adapted to close the corresponding outlet recesses in the edges of the box walls fit within said recesses, it is to be understood that they may be otherwise disposed, for instance, as shown in Fig. IV, the projection 20, on the removable plate 21, overlaps the recess 6, in the corresponding box wall 4.

The outlet openings in the box are conveniently provided with bushings 22, of por-

celain or other insulating material which fit within the divided openings formed by the contiguous edges of the box and plate and afford a continuous smooth margin for contact with the conductors.

Although I have shown the cylindrical inlet 2, of the box extending at right angles with the separated edges of the outlet walls 4, and 5, it is to be understood that said inlet may be otherwise disposed.

I do not desire to limit myself to the precise details of construction and arrangement herein set forth, as it is obvious that various modifications may be made therein without departing from the essential features of my invention, as defined in the appended claims.

I claim:—

1. A junction box comprising a cylindrical inlet; a wall extending parallel with the axis of said inlet, having semicircular recesses in its edge; a wall extending at right angles to the axis of said inlet, having semicircular recesses in its edge; the edges of said walls being opposed in parallel relation; a removable and reversible plate having recesses and projections complementary to the recesses in said box walls, arranged to fit the latter in different positions; and, means arranged to detachably secure said plate in said box, substantially as set forth.

2. A junction box comprising a cylindrical inlet; a wall having outlet recesses disposed with their axes parallel with the axis of said inlet; a wall having outlet recesses disposed with their axes transverse with respect to said inlet; and, a removable and reversible plate provided with recesses and projections complementary to the recesses in said box walls, arranged to fit the latter in different positions, substantially as set forth.

3. A junction box comprising walls in integral relation extending at right angles to each other and provided with recesses in opposed parallel edges; a removable and reversible plate, coextensive with the space between said walls and provided with projections and recesses at its opposite edges arranged to register with the recesses in said walls, in different positions, substantially as set forth.

4. A junction box comprising walls in integral relation extending in relatively transverse planes and having corresponding recesses at their proximal edges; and, a separate removable and reversible angle plate

coextensive with the space between said walls, having projections arranged to extend into selected recesses in said walls and recesses at its opposite edges arranged to selectively register with the other recesses in said walls, substantially as set forth.

5. A junction box comprising walls extending in planes at right angles to each other, having corresponding recesses in alignment at their opposed edges; and, a separate removable and reversible plate comprising walls extending in planes at right angles to each other, having recesses arranged to register with selected recesses in said walls and projections in alignment at its opposite edges, arranged to selectively register with the other recesses in said walls, substantially as set forth.

6. A junction box comprising walls extending in relatively transverse planes and having marginal recesses in alignment at their opposed edges; and a separate removable and reversible angle plate coextensive with the space between said walls, provided with projections and recesses at its opposite edges, one edge having both a recess and a projection respectively arranged to selectively register with separate recesses in said box walls, substantially as set forth.

7. A junction box, having outlet recesses opposed in alignment in parallel edges of its walls; and, a removable and reversible plate fitted to the space between said edges, comprising complementary recesses and projections arranged to variably determine the direction of the outlets, substantially as set forth.

8. A junction box plate having walls extending in relatively transverse planes, and having recesses and projections in respectively opposite parallel edges, substantially as set forth.

9. A junction box plate having walls extending in relatively transverse planes, and having recesses and projections in respectively opposite parallel edges, one edge having both a recess and a projection, substantially as set forth.

In testimony whereof, I have hereunto signed my name at Philadelphia, Pennsylvania, this 26th day of September, 1907.

JAMES F. BURNS.

Witnesses:

H. L. CARPENTER,
ELMER D. ATHERHOLT.