

W. F. BOSSERT.
ADJUSTABLE OUTLET BOX FOR INTERIOR CONDUITS.
APPLICATION FILED APR. 26, 1904.

Fig. 1.

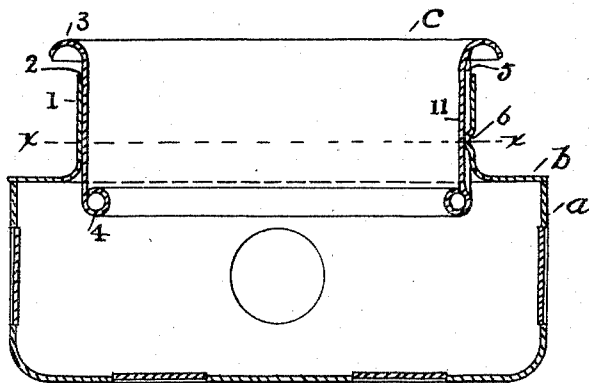


Fig. 4.

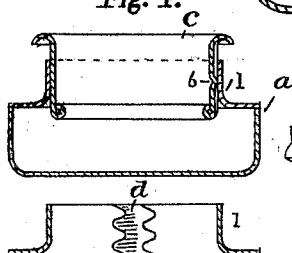


Fig. 5.

Fig. 2.

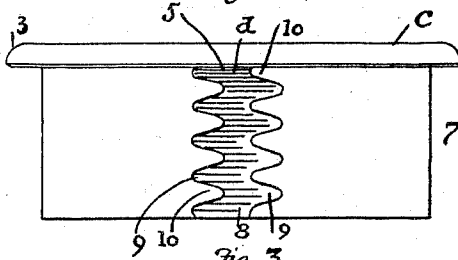
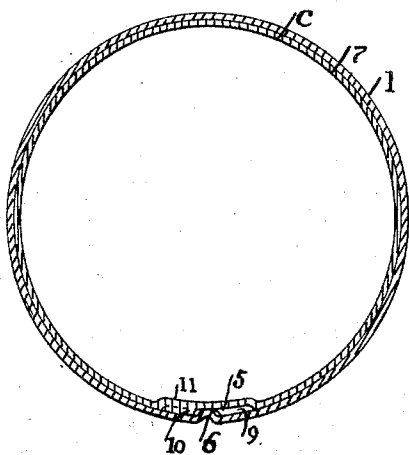


Fig. 3.



Attest.

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UNITED STATES PATENT OFFICE.

WILLIAM F. BOSSERT, OF UTICA, NEW YORK, ASSIGNOR TO THE BOSSERT ELECTRIC CONSTRUCTION COMPANY, OF UTICA, NEW YORK.

ADJUSTABLE OUTLET-BOX FOR INTERIOR CONDUITS.

SPECIFICATION forming part of Letters Patent No. 788,880, dated May 2, 1905.

Application filed April 26, 1904. Serial No. 204,932.

To all whom it may concern:

Be it known that I, WILLIAM F. BOSSERT, residing at Utica, in the county of Oneida and State of New York, have invented certain Improvements in Adjustable Outlet-Boxes for Interior Conduits, of which the following is a specification.

The invention about to be described relates to an improved outlet-box for interior conduits, and refers in particular to the means for adjusting the outer face of the outlet-boxes employed in the distribution systems of electrical conductors in buildings after they have been placed in position in a wall or partition with the surface of the plastering. As the outlet-boxes and their associated connecting-conduits are secured in place before the walls are plastered, it frequently happens, although allowance is made for the usual thickness of the plastering, that it is spread unevenly in the vicinity of the outlet-box, and the outer face of the box is left quite a distance comparatively from the surface of the plaster. I am aware that devices have been employed to obviate this difficulty, but these do not meet all of the objections raised, an important one of which is that as ordinarily constructed openings and spaces are left through which currents of air may convey extraneous matter into the box and through which solid particles of plaster or other matter may be dropped.

Another object of my improved box is to so construct the parts thereof that no abrasion or cutting of the insulation of the electrical conductors can be possible, and it is an improvement on Patent No. 754,414, granted to me March 15, 1904, in these particulars.

Of the drawings which illustrate the invention, Figure 1 is a sectional view of my improved outlet-box. Fig. 2 is a side view of the adjustable sleeve. Fig. 3 is a section on line *xx* of Fig. 1, and Figs. 4 and 5 are sectional views of a modification.

In Fig. 1, *a* represents the lower portion of the outlet-box, provided with plugged openings in its sides and bottom, through which the conduits enter and at which they are secured, and *b* is the cover, which is fastened to

the lower box portion in any suitable manner, and it has a central opening 2, surrounded by the outwardly-projecting collar 1, and the edge of the collar is chamfered on its inner side. An adjustable cylinder or sleeve *c* fits snugly but easily in the opening 2 of the cover *b*, and the chamfered edge of its collar readily admits the insertion of the sleeve, so that it will not bind therein. Provision is made in the sleeve to prevent the abrasion of the insulation of the conductors, which are drawn into and out from the conduits by way of the sleeve *c*, first by rolling the bottom edge inward, as shown by the tubular edge 4, and also by rolling the upper edge 3 outward, thus forming smooth circular surfaces at both ends of the sleeve. In the drawings I have represented the sleeve *c* as a closed ring; but it may be made as described of Fig. 6 in said patent—*i. e.*, of a sheet of metal with its ends lapping over each other. The means for adjusting the sleeve relatively to the collar 1 of the box-cover *b* and for supporting the same in any position consists of forming in the sides of the sleeve one or more tapered indentations or depressions 4, into which extends a supporting member 6, which may be formed in the collar by forcing a portion thereof of the proper size and shape inward, or the member may be, as will be readily comprehended, a set-screw or any other suitable device attached to or held in the collar. The indentations or depressions are formed by means of dies, and the substance of the collar is pressed inward. The essential feature of the indentations or depressions is the formation of a straight passage 8 lengthwise of the sleeve, from which, preferably on each side thereof, are laterally-extended tapered toothed extensions 9 in the same plane with the passage 8, and whose points 10 are in line with each other and form the bounds or limits of the passage 8. The opposite toothed extensions are preferably "staggered" relatively to each other—*i. e.*, the points 10 on one side are opposite the extensions 9 on the opposite side. The indented portions 8 and 9 continue to the lower edge of the sleeve, so that when it is inserted into the collar 1 the supporting

member 6 passes directly into the indentation and is kept in the central passage 8 thereof until the edge 3 is on a level with the face of the plastering, when the sleeve is turned to the right or left, as the case may be, to secure the sleeve at the selected position, and it is thus held firmly in the position and by what may be termed a "bayonet-joint." The teeth can be made as near together or as far apart as desired, and an exact level made of the outer edge 3 of the sleeve with the surface of the plastering. I have referred to the central passage as straight. This in a sense is true. At the same time by following the configuration of teeth from side to side it is also true that there is a sinusoidal curve.

Figs. 4 and 5 are respectively sections of boxes showing the invention applied reversely—that is to say, the indentation *d* is made in the side of the collar of the box-cover 1 and the stud 6 is made in the sleeve *c*. It will be understood that the adjustment can be made as readily as with the construction previously described.

I claim as my invention—

1. A device of the character described comprising a box or member having an opening surrounded by a collar, and a metal tube or member adjustably mounted in said collar, one of said members being provided with a longitudinal depression or indentation having relatively staggered, laterally-arranged tapered extensions, the other member being provided with a protuberance adapted to fit within said depression or indentation and engage the tapered extension thereof.

2. A device of the character described comprising

a box or member having an opening surrounded by a collar, and a metal tube or member adjustably mounted in said collar, one of said members being provided with laterally-arranged relatively staggered tapered depressions or indentations, the other member being provided with a protuberance adapted to engage said depressions or indentations.

3. A device of the character described comprising a box or member having an opening surrounded by a collar, and a metal tube or member having rolled top and bottom edges and adjustably mounted in said collar, one of said members being provided with a longitudinal depression or indentation having relatively staggered laterally-arranged tapered extensions, the other member being provided with a protuberance adapted to fit within said depression or indentation and engage the tapered extensions thereof.

4. A device of the character described comprising a box having an opening surrounded by a collar, and a metal tube adjustably mounted in said collar and having its exterior face provided with a longitudinal depression or indentation having relatively staggered laterally-arranged tapered extensions, said collar being provided with a protuberance adapted to fit within said depression or indentation and engage the tapered extensions thereof.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 23d day of April, 1904.

WILLIAM F. BOSSERT.

Witnesses:

FREDERICK T. FOXENBERGER,
EUGENE RYAN.