

No. 629,373.

Patented July 25, 1899.

E. KERN & C. CLAFLIN.
COVER FOR JUNCTION BOXES.

(Application filed Oct. 12, 1898.)

(No Model.)

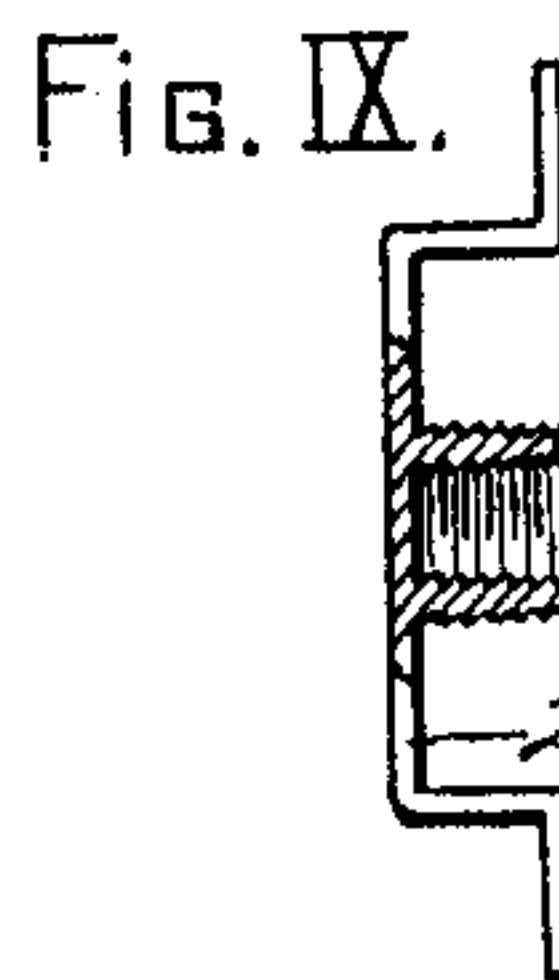
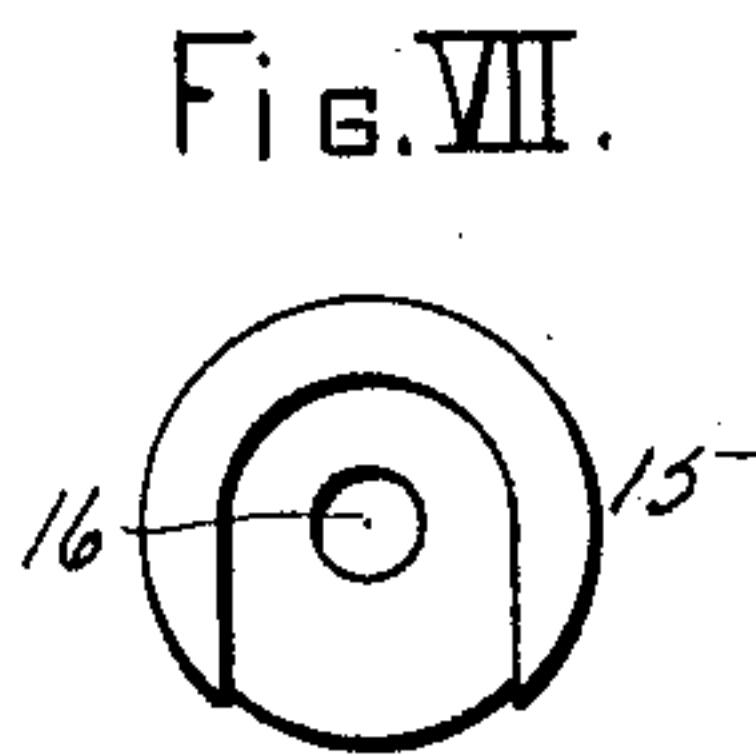
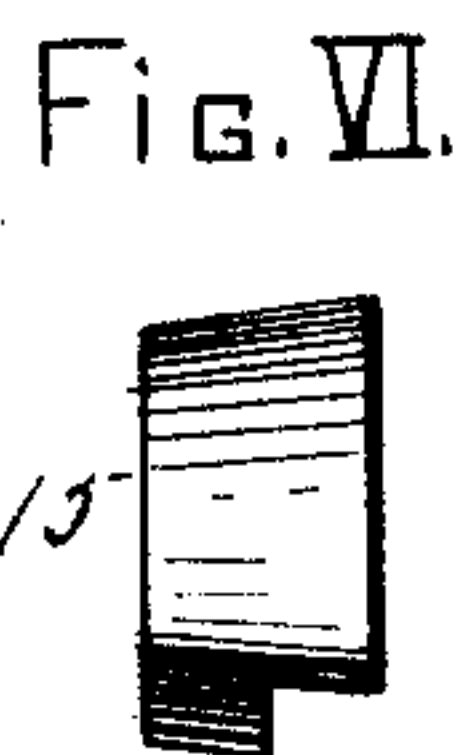
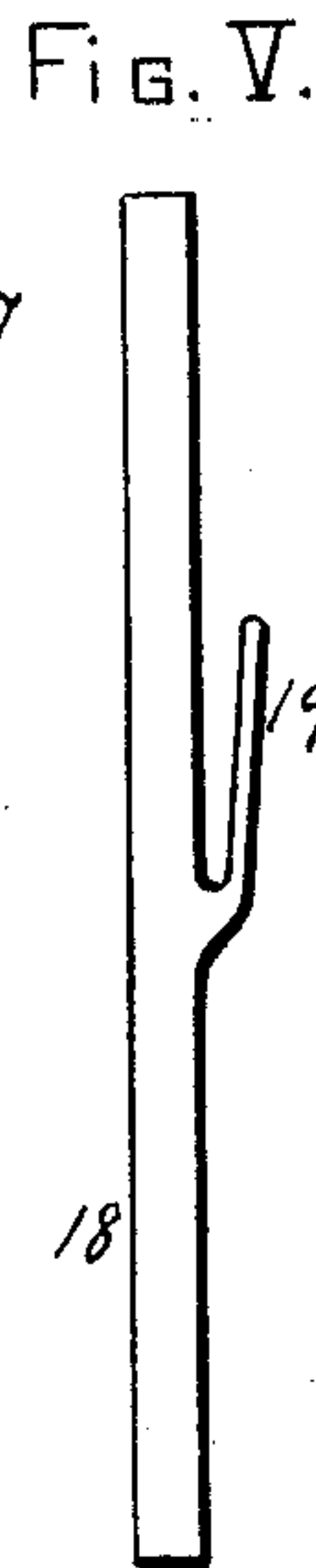
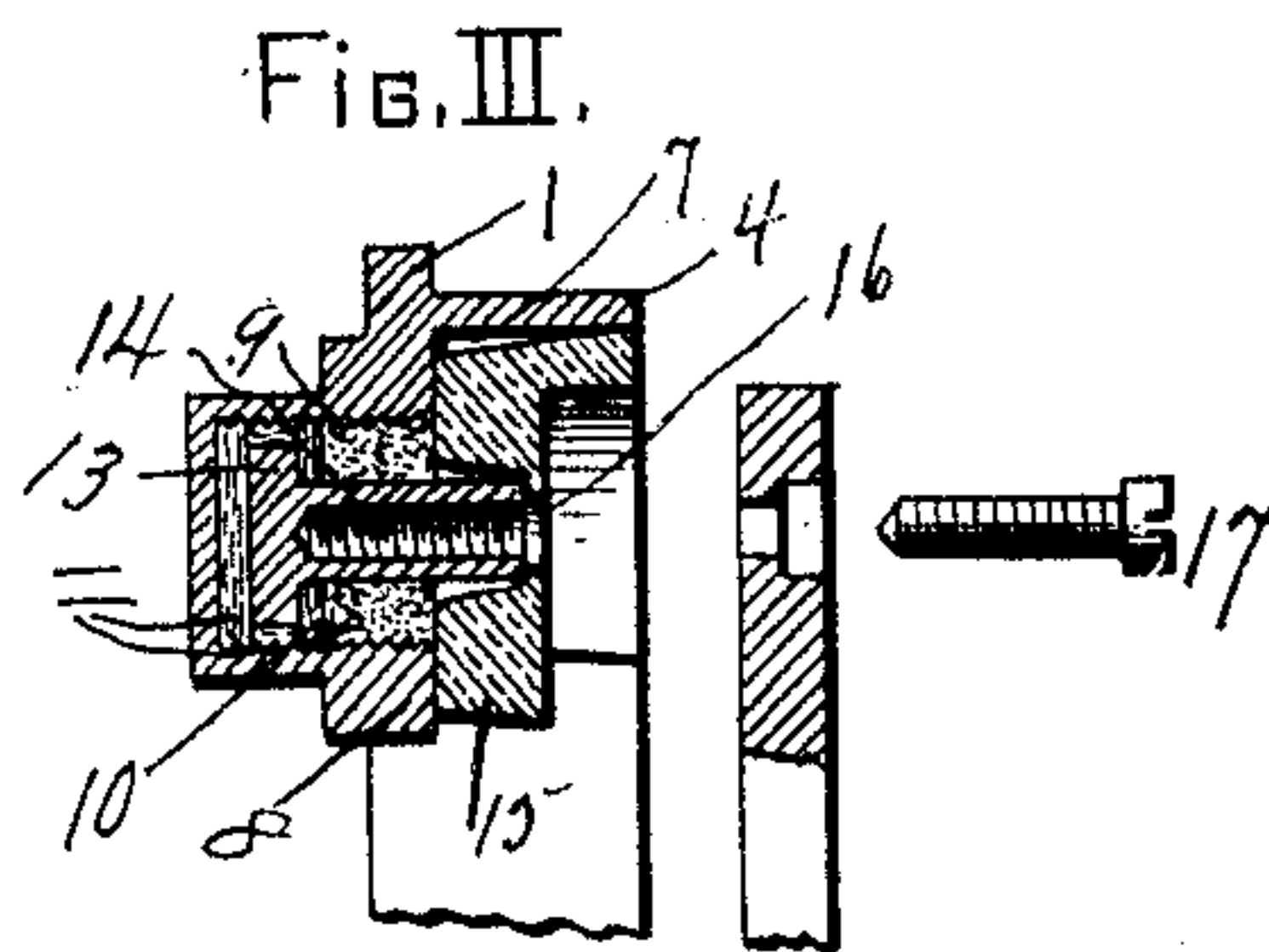
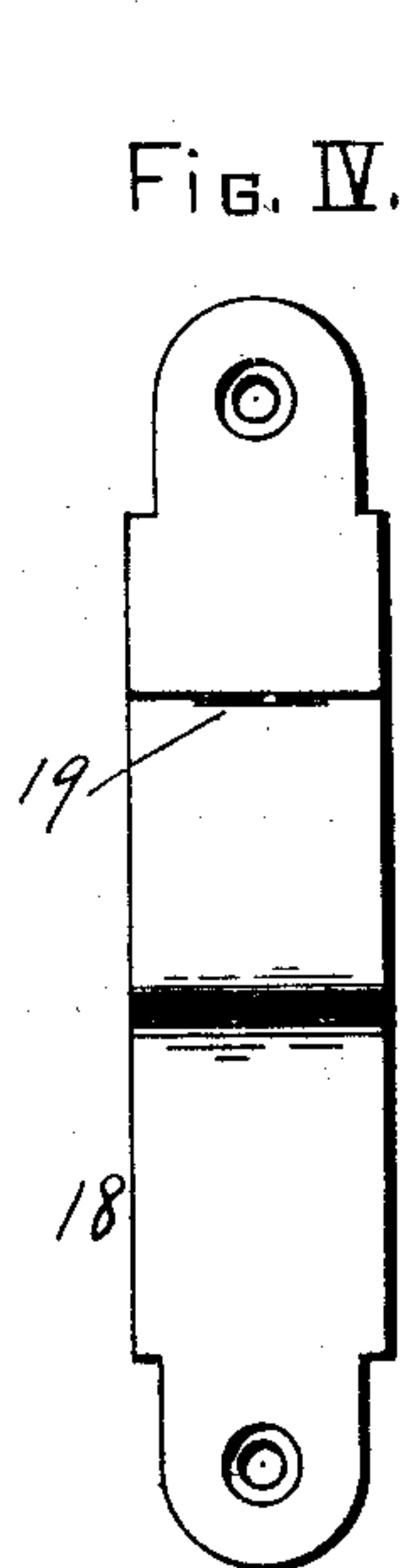
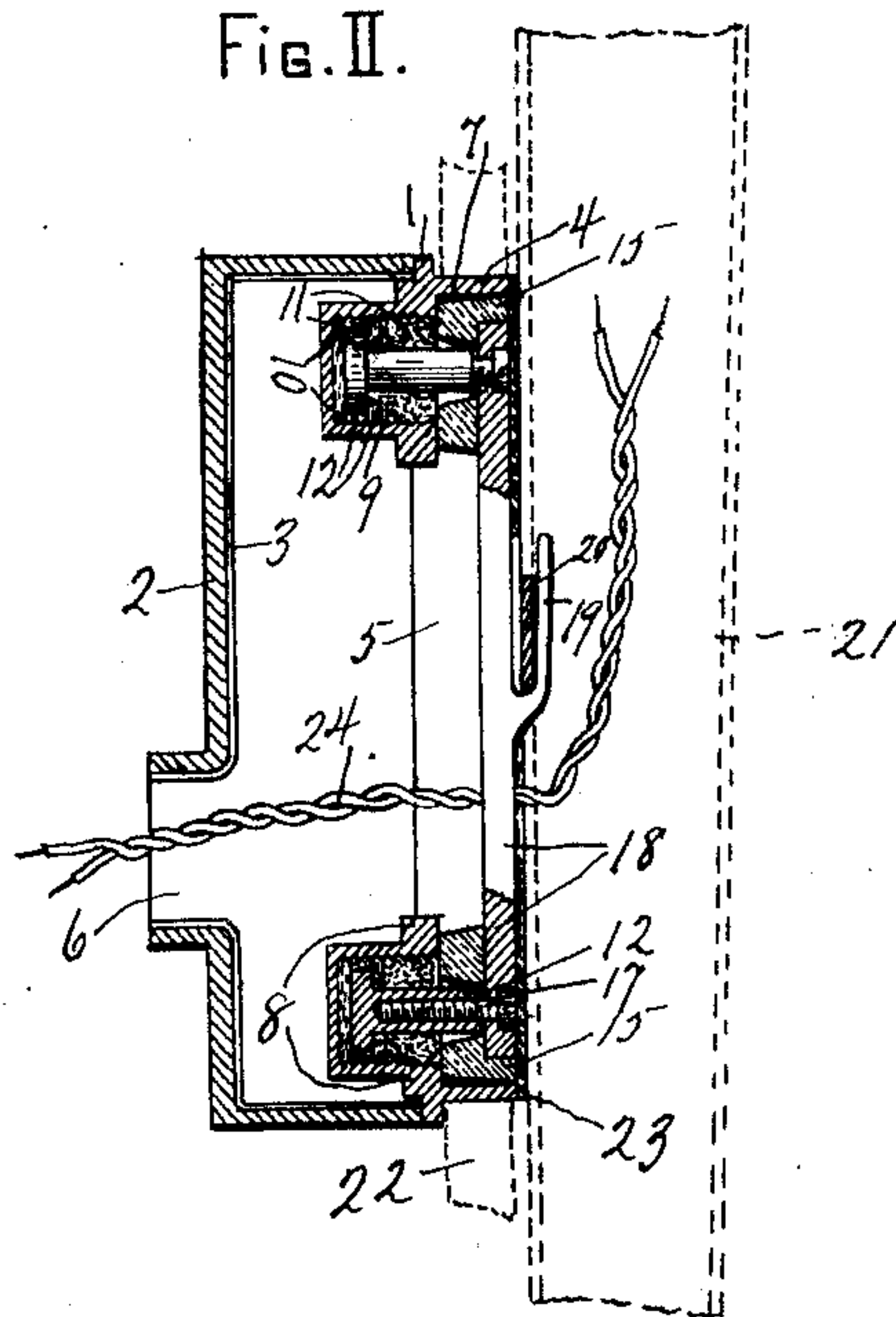
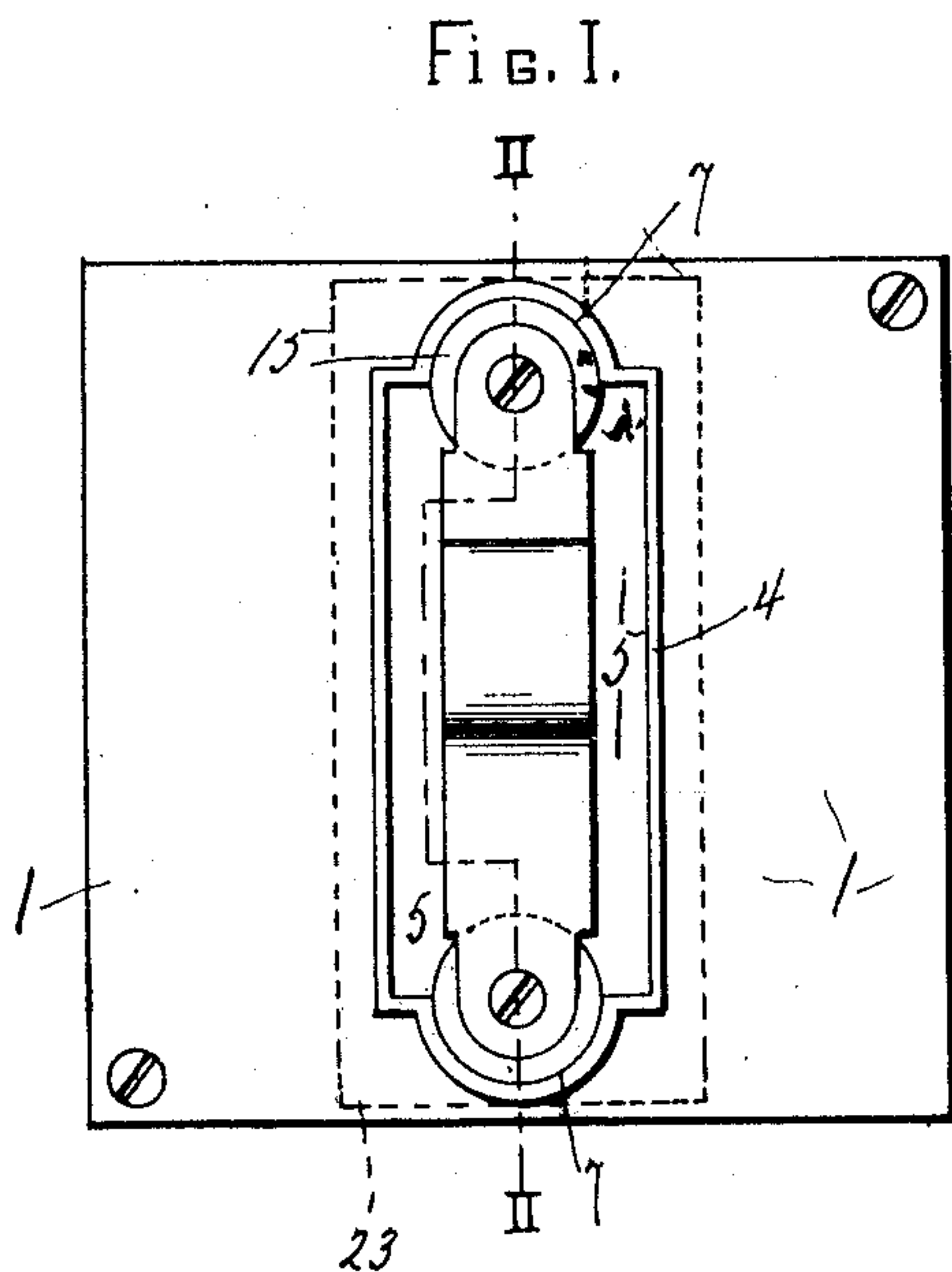
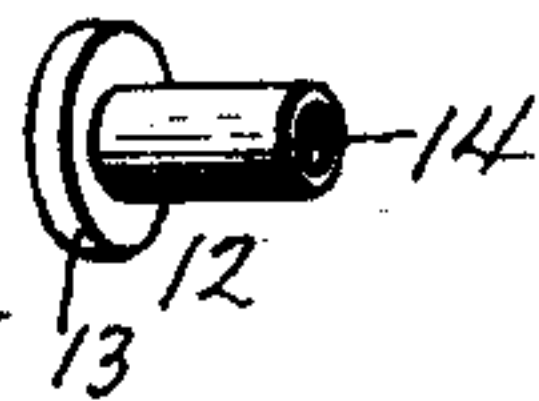


FIG. VIII.



WITNESSES:

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EDWIN KERN AND CHARLES CLAFLIN, OF NEW YORK, N. Y., ASSIGNORS
TO EDWARD F. CALDWELL, OF SAME PLACE.

COVER FOR JUNCTION-BOXES.

SPECIFICATION forming part of Letters Patent No. 629,373, dated July 25, 1899.

Application filed October 12, 1898. Serial No. 693,291. (No model.)

To all whom it may concern:

Be it known that we, EDWIN KERN and CHARLES CLAFLIN, of New York city, in the county of New York, in the State of New York, have invented new and useful Improvements in Covers for Junction-Boxes, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

What we have invented is a cover for the junction or outlet boxes such as have been in common use, the cover itself being essentially a new article and involving new ideas and advantages.

It consists, essentially, of a metallic plate or cover to be secured to the junction-box, and a bar or supporting-piece firmly secured to said cover and at the same time carefully insulated therefrom, and integral with said bar a hook or other desirable means on which the bracket or fixture may be hung and supported, said supporting-piece being so arranged that the hook alone protrudes from the surface of the wall and the bracket may be hung in close contact therewith. The cover must be formed with an opening through which the wires may be arranged and connected and through which they extend to the lamps on the bracket. A good construction is to surround this opening with a marginal wall, within which is set and secured the supporting-piece, the hook only extending beyond the wall, so that when the fuse box and cover are set in position the plaster may be floated over the cover and extend up to the edge of the marginal wall. The opening need not be made excessively large, as has heretofore been necessary where large insulating-joints have been used, and should be of such a size and form as to be covered entirely by the bracket when set in position without the use of a large escutcheon or a projecting and unsightly canopy.

Heretofore junction-boxes have been used fitted with covers having a large round central opening almost as large in diameter as the cover itself. This, however, is something entirely different from our cover, as it does not have the peculiar construction and advantages of ours just referred to, and which we

will describe in detail, nor does it protect the interior of the box, with the wires contained therein, as ours does. To the back of these old boxes is secured a "drop L," which is a short L-shaped piece of gas-pipe having a screw-threaded tip, to which is screwed the insulating-joint extending outwardly through the opening, which must therefore be of the large and objectionable size just referred to to receive this joint, which is commonly a large clumsy article with wide thick flanges. As by the underwriters' rules the insulating-joint must be arranged substantially outside of the plaster-line, the bracket secured to its outer end is sustained some distance from the wall. Therefore to fill the space between the bracket and the wall and to conceal the large opening in the cover a canopy must be used, which is not only ugly and clumsy in itself, but often so out of harmony with the design of the bracket and the decorations of the room as entirely to destroy the whole scheme of decoration, for in the best work to-day the apartment is treated as a whole and the brackets and other fixtures are designed to harmonize therewith.

Our invention will be better understood by reference to the accompanying drawings, in which the same numerals of reference indicate the same parts in all the figures.

Figure I is a front plan view of our invention. Fig. II is a vertical section thereof on line II II of Fig. I, the plaster and the bracket being indicated by dotted lines. Fig. III is an enlarged section of one of the insulating-joints shown in Fig. II. Figs. IV and V are respectively front and side elevations of the supporting piece or bar provided with a hook. Figs. VI and VII are respectively a side elevation and a top plan of the insulating-bush fitted to receive the end of the supporting-piece. Fig. VIII is an isometric view of the female screw. Fig. IX is a smaller side elevation, partly in section, of a modified form of supporting-piece.

In the figures, 1 indicates the cover or plate, provided with screws or other means for securing it to the junction-box 2, which may be lined with insulating material 3, as here indicated. The cover is formed with a mar-

ginal wall 4, surrounding an opening 5, which is made of the shape here shown or of any other desirable form to be covered by the bracket, but no larger in size than is necessary for convenience in arranging and connecting the wires which are brought into the junction-box through one or more openings, as 6, from the various conduits. The cover may be formed with semicircular recesses 7 7 in the ends of the marginal wall and with circular projections 8 8, in which are formed cavities 9 9 with rough or irregular inner walls 10 the better to retain the insulating material 11, by which is secured in position in the cavities the female screws 12, having heads 13 and internal screw-threaded sockets 14. Any suitable insulating material may be used, either hard and forced in and around the screw by power or a melted or soft material hardened or vulcanized to hold. One screw being arranged above the other, the supporting-piece is held strongly and may sustain a considerable weight.

In the recesses 7 7 are fitted insulating-bushings 15 15, provided with holes 16 for screws 17 to engage with the ends of the supporting piece or bar 18, holding it firmly in position. This bar is preferably provided with an integral hook 19, with which engages a strap 20 on the bracket 21. This arrangement is clearly shown in Fig. II, where the plaster 22 is indicated extending to the outer edge of the marginal wall and a mica plate 23 laid over said wall entirely to prevent contact with the bracket. 24 indicates the wires. By this arrangement only the hook 19 extends outwardly from the wall, and that just far enough to receive the strap by which the bracket, in this case supposed to be long and narrow, is brought flush against the wall, entirely concealing the opening in the cover without the addition of an objectionable escutcheon, canopy, &c.

It will of course be understood that there may be a simple reversal of the parts, the strap or loop being on the supporting-piece and the hook on the bracket, or the supporting-piece may be formed, as shown in Fig. IX, with its central portion 25 depressed to fit within the box and a screw-stud 26 extending outwardly for supporting the bracket. We have shown this screw-stud both internally and externally threaded to fit either of the reverse styles of studs on the bracket. This style of connection may be used where desired; but we prefer the hook, on which the bracket is more easily set in position and from which removed. In fact, in many places and with many styles of brackets it would be quite impossible to rotate it to engage with a screw-threaded stud. We have seen this difficulty overcome by making the bracket in two parts, the back which is split and secured in position with the stud protruding from it, or with an opening between those pieces to receive the screw-stud of the insulating-joint, to which the arms or outwardly-extending part of the

bracket is then secured—much more troublesome than our hook, on which the bracket as a whole is easily hung.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In combination, a junction-box adapted to be set into the wall, having an opening or openings for the connection of the conduits and the entrance of the wires, a cover therefor having an opening for the passage of the wires leading to the lamps sustained on the fixture, and a fixture-supporting piece secured to the cover and insulated therefrom.

2. In combination, a junction-box adapted to be set into the wall, having an opening or openings for the connection of the conduits and the entrance of the wires, a cover therefor having an opening for the passage of the wires leading to the fixture-lamps, a bar secured to the cover and insulated therefrom, and a fixture-supporting hook integral with said bar.

3. In combination, a junction-box adapted to be set into the wall, having an opening or openings for the connection of the conduits and entrance of the wires, a cover therefor formed with a contracted opening for the passage of the wires to the fixture-lamps, and a fixture-supporting piece insulated from the cover and secured thereto, bridging said cover-opening.

4. As a new article of manufacture, a cover for a junction-box for electric fixtures formed with a contracted opening for the wires, an outwardly-extending marginal wall around said opening, a supporting piece or bar secured to said cover within the marginal wall by an insulating connection or connections, and a hook integral with said supporting-piece for attaching the bracket thereto.

5. As a new article of manufacture, a cover for a junction-box for electric fixtures formed with a contracted opening for the passage of the wires and the arrangement thereof, an integral, outwardly-extending, marginal wall surrounding said opening, a supporting-piece bridging said opening and secured to the cover within said marginal wall by insulating-joints, by which it is insulated from said cover, leaving a space on each side of the supporting-piece for the passage of the wires, and a hook or equivalent device integral with said piece, to which is attached the fixture.

6. As a new article of manufacture, a cover for a junction-box formed with a contracted opening, a marginal wall surrounding said opening, hollow projections within said marginal wall, female screws secured in said hollow projections by insulating material, a supporting bar or piece secured to said screws so as to be insulated from the cover, and integral with said supporting-piece a hook or equivalent device for the attachment and support of a bracket or fixture.

7. As a new article of manufacture, a cover for a junction-box having an opening for the

passage and arrangement of the wires, an outwardly-extending marginal wall surrounding said opening, integral projections within said wall, cavities formed in said projections, 5 female screws having screw-threaded sockets secured in said cavities by insulating material, insulating-bushings set over said screws, a supporting-piece fitted to said bushings and secured to said screws so as to be carefully in- 10 sulated from the cover, and a hook or similar means integral with said bar for supporting the fixture thereon.

8. As a new article of manufacture, a cover for a junction-box having a contracted open- 15 ing for the passage and arrangement of the wires, an outwardly-extending, continuous, marginal wall surrounding said opening, integral projections within said marginal wall formed with cavities having roughened or 20 irregularly-formed inner walls, female screws

having screw-threaded sockets and enlarged heads secured in said cavities by plates of insulating material or an insulating plastic compound, insulating-bushings supported on said projections and provided with openings 25 for receiving the upper ends of said female screws, a supporting-piece or metallic bar fitted to said insulating-bushings and secured by screws to said female screws so as to be well insulated from the cover, and a hook in- 30 tegral with said bar for supporting the fixture thereon.

In testimony whereof we have hereunto signed our names.

EDWIN KERN. [L. S.]
CHAS. CLAFLIN. [L. S.]

Witnesses:

R. MEYER,
E. H. MOORE.