

H. KRANTZ.
CONDUIT COUPLING.

APPLICATION FILED OCT. 18, 1907.

898,751.

Patented Sept. 15, 1908.

3 SHEETS—SHEET 1.

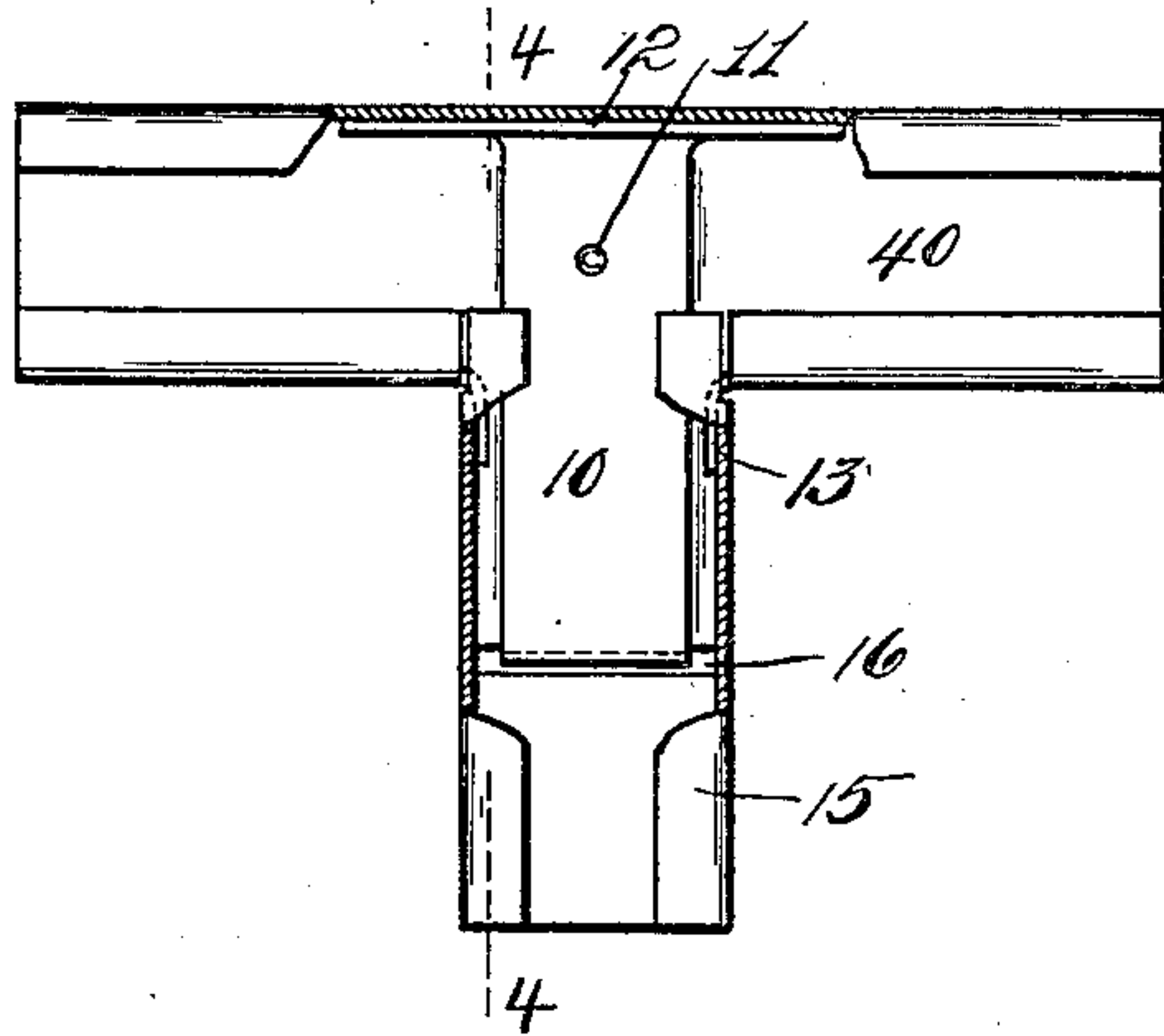


Fig. 5.

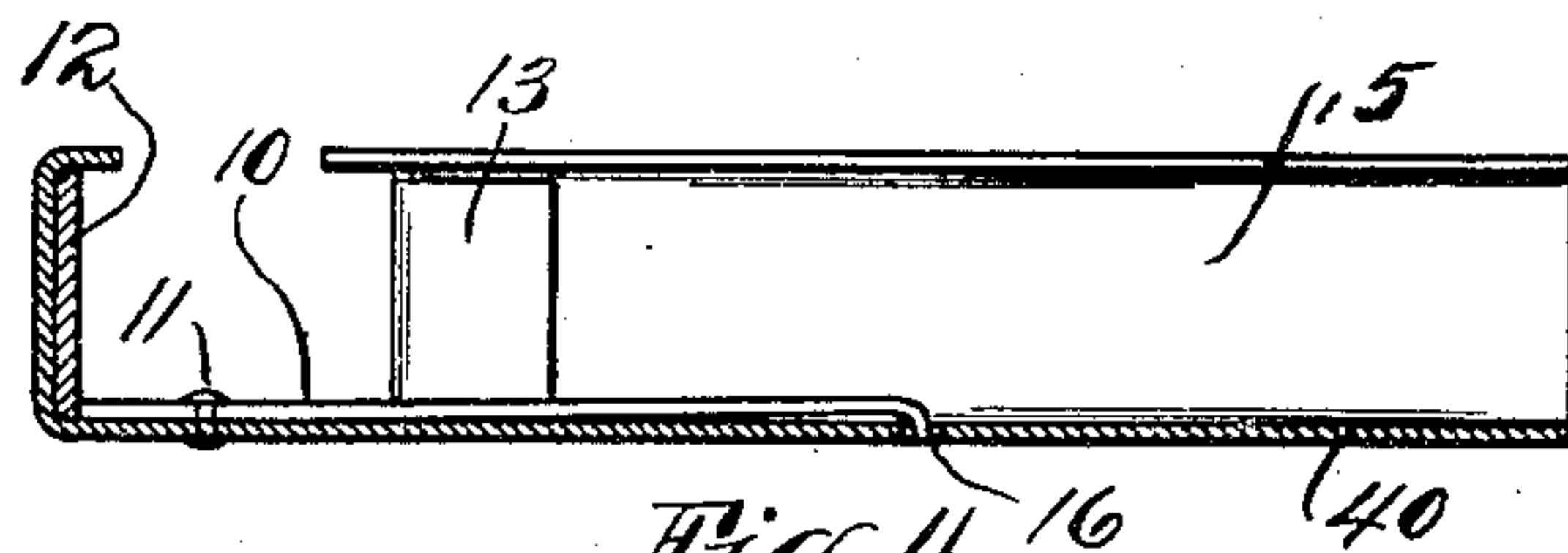


Fig. 4.

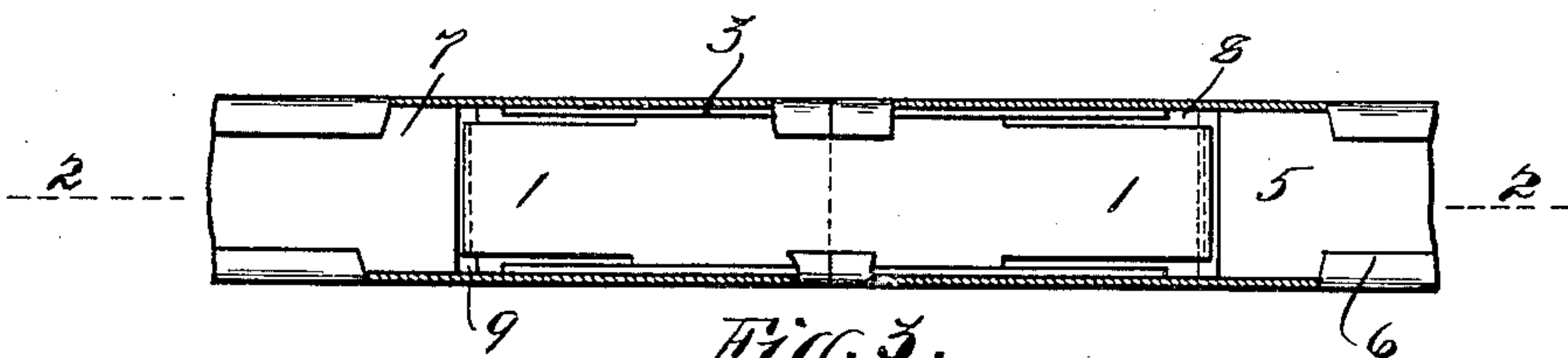


Fig. 3.

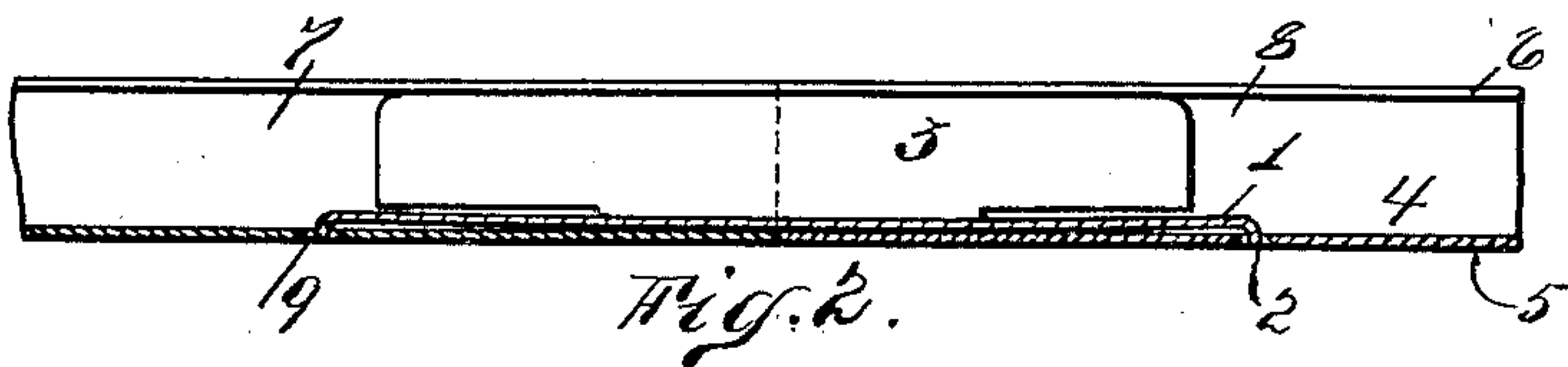


Fig. 2.

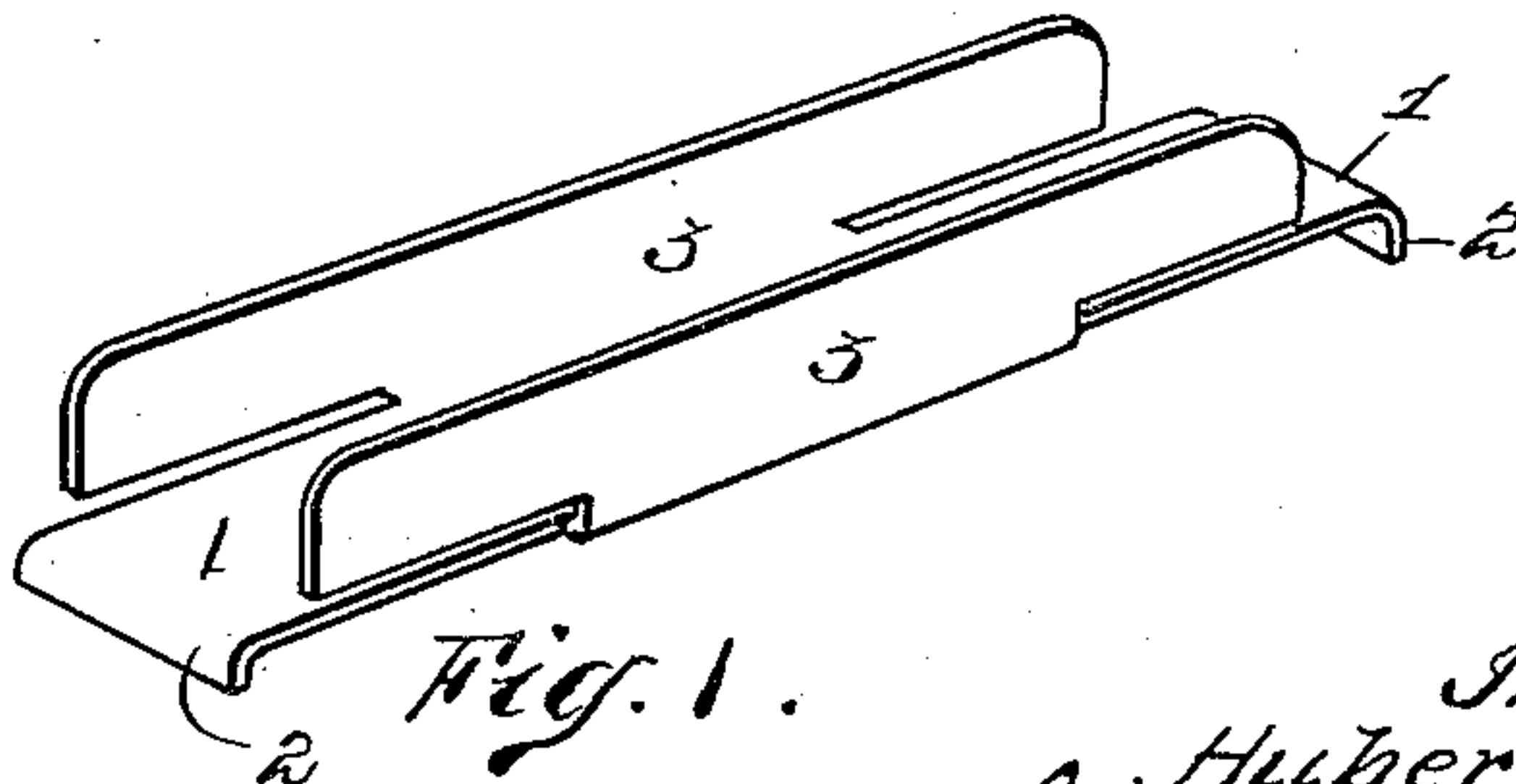


Fig. 1.

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Fig. 6.

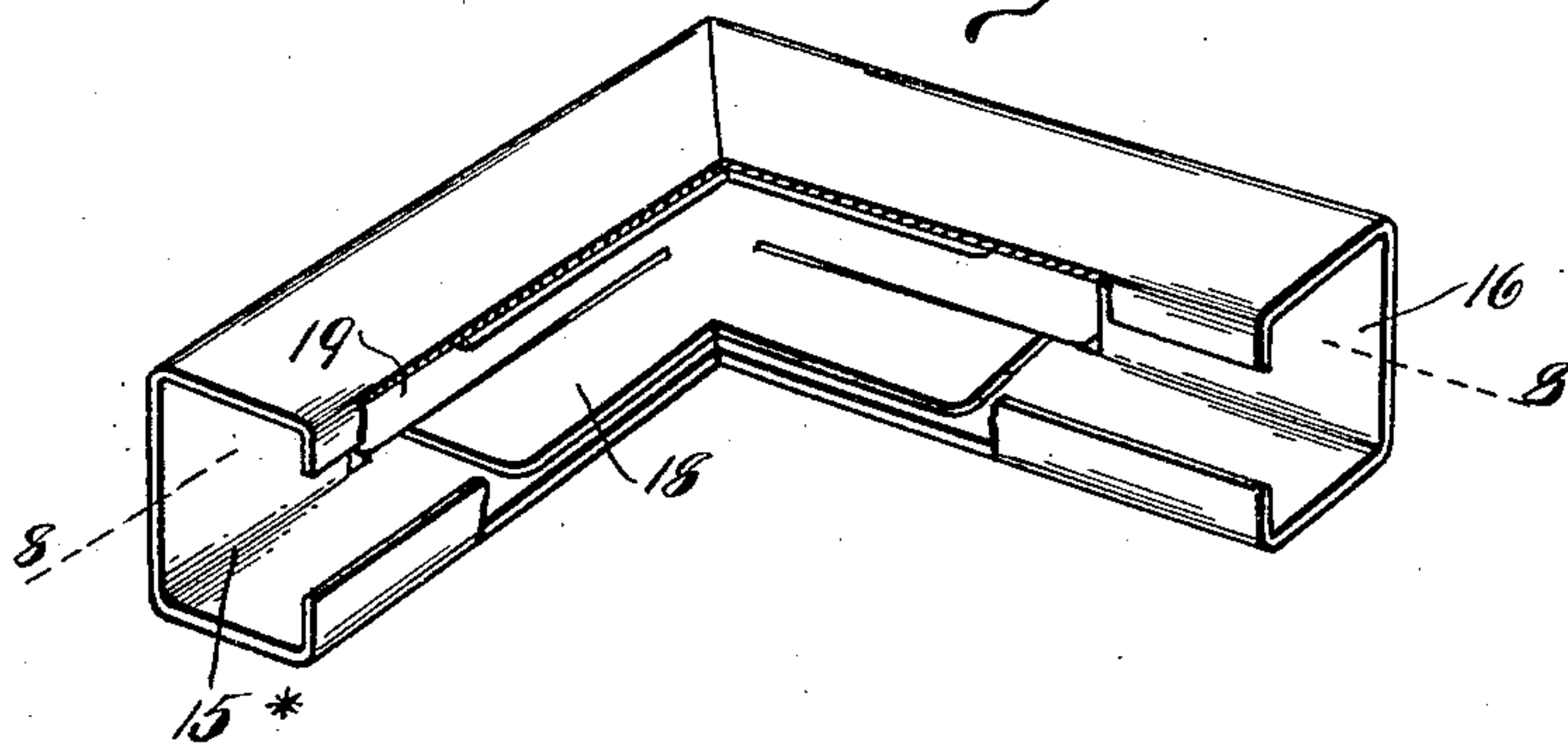


Fig. 7.

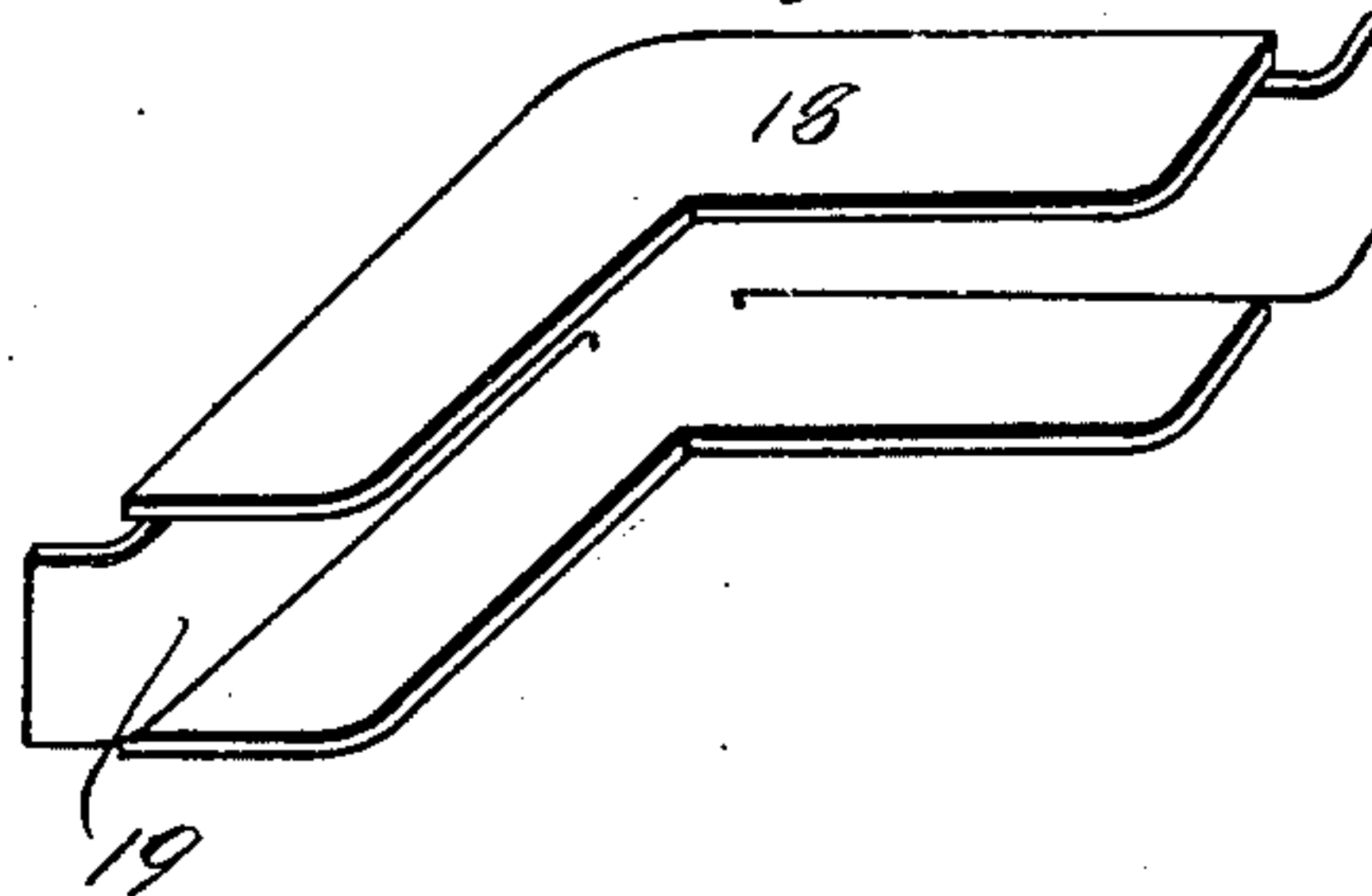


Fig. 8.

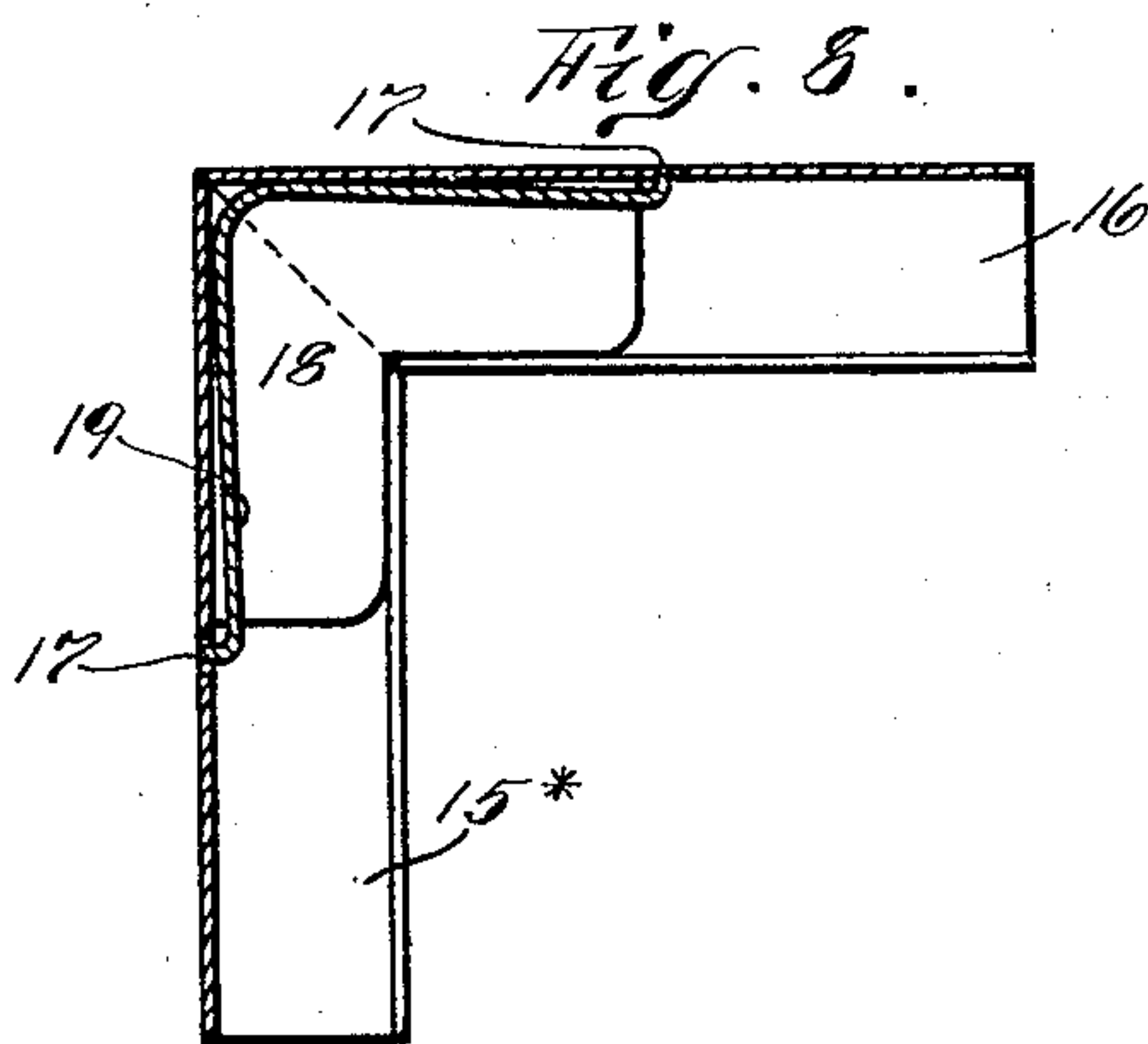


Fig. 9.

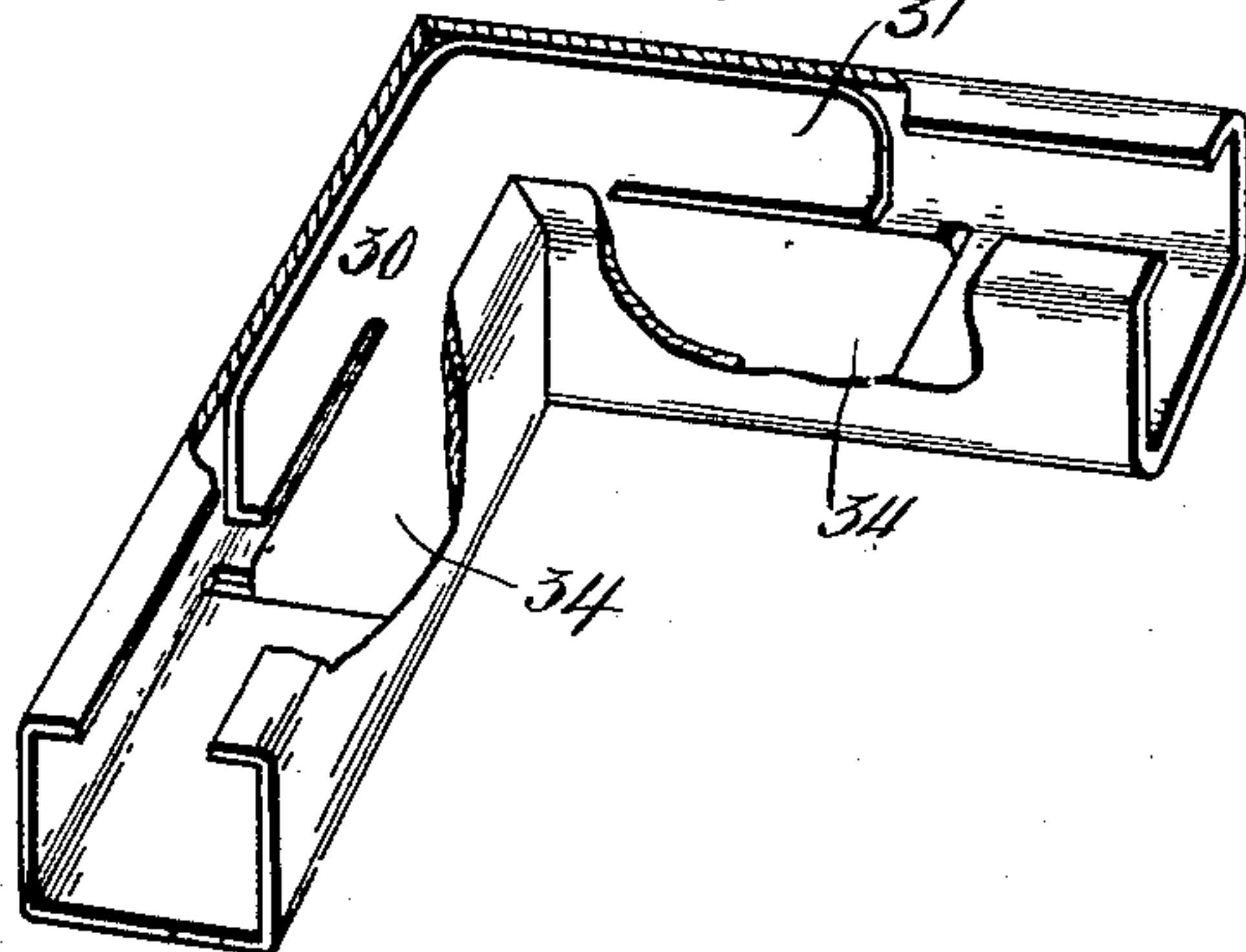
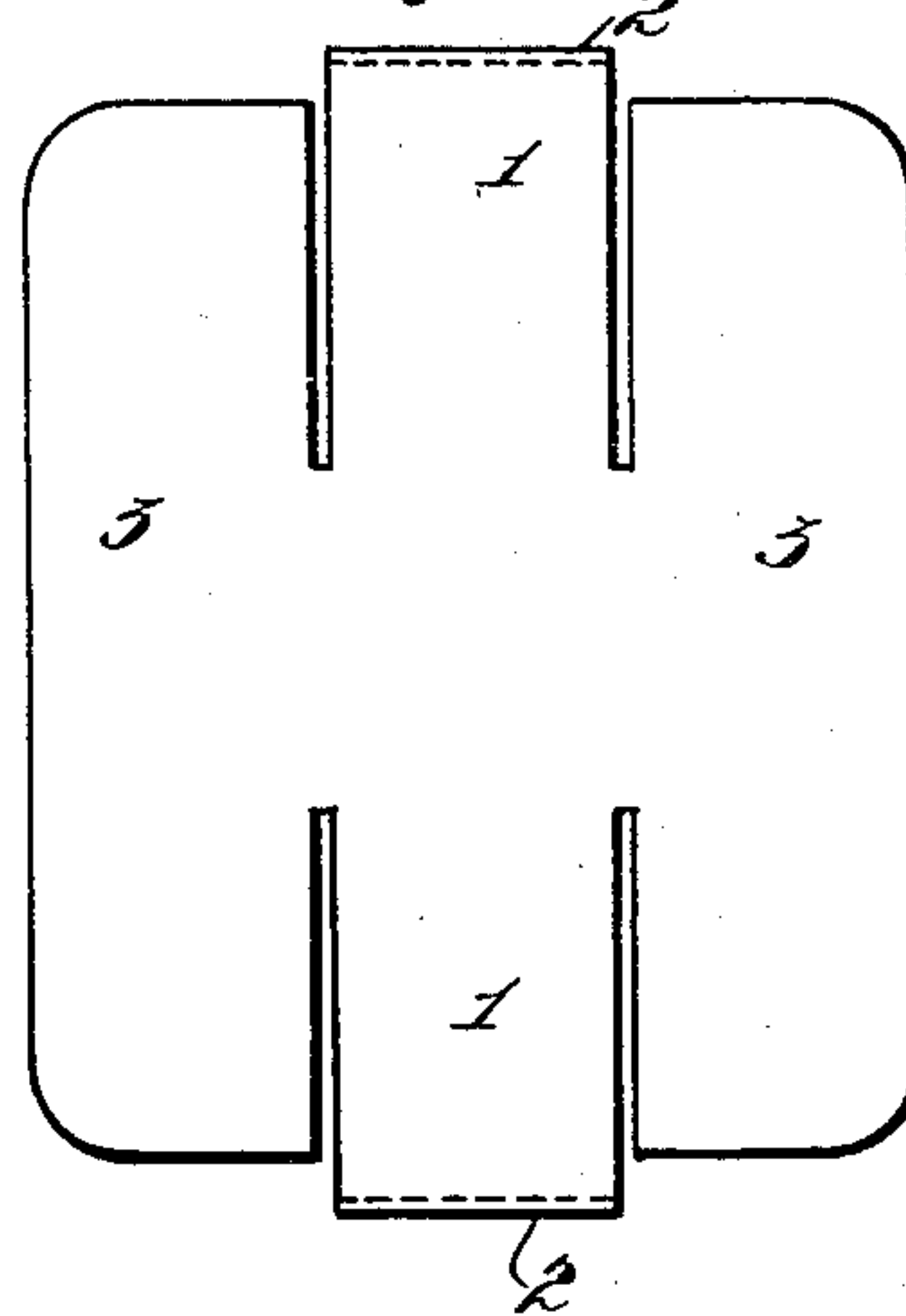


Fig. 10.



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3 SHEETS—SHEET 3.

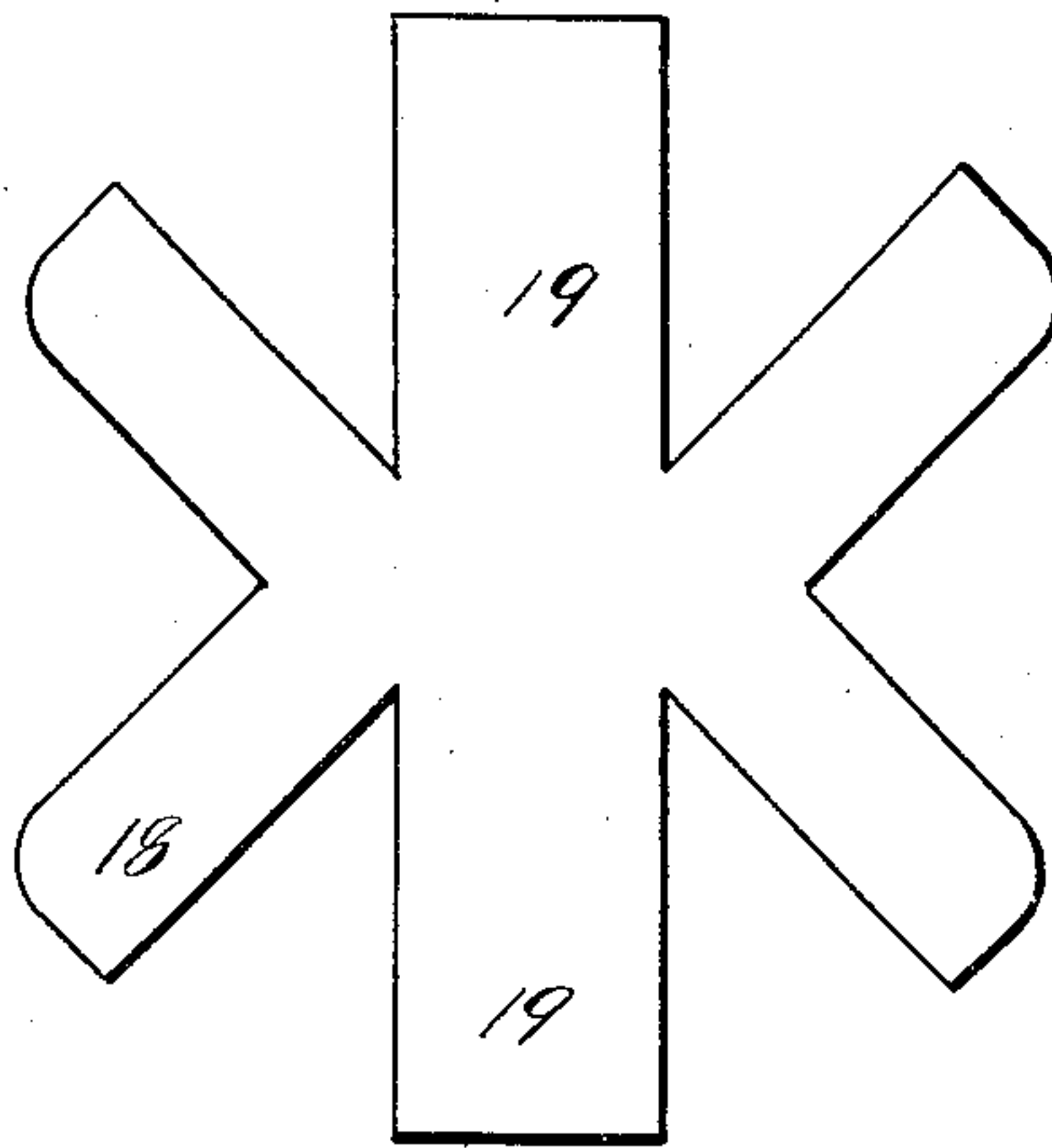


Fig. 11.

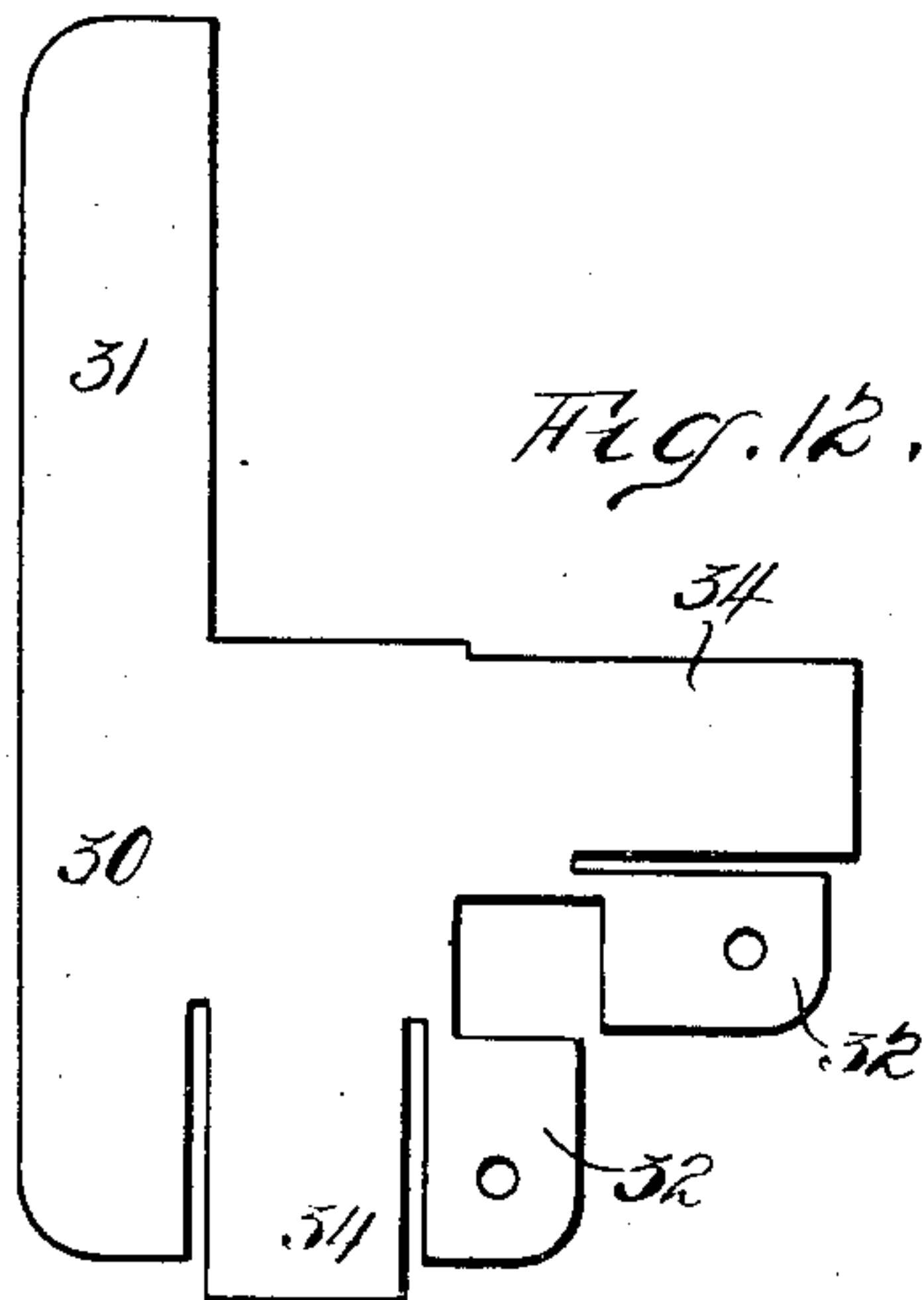


Fig. 12.

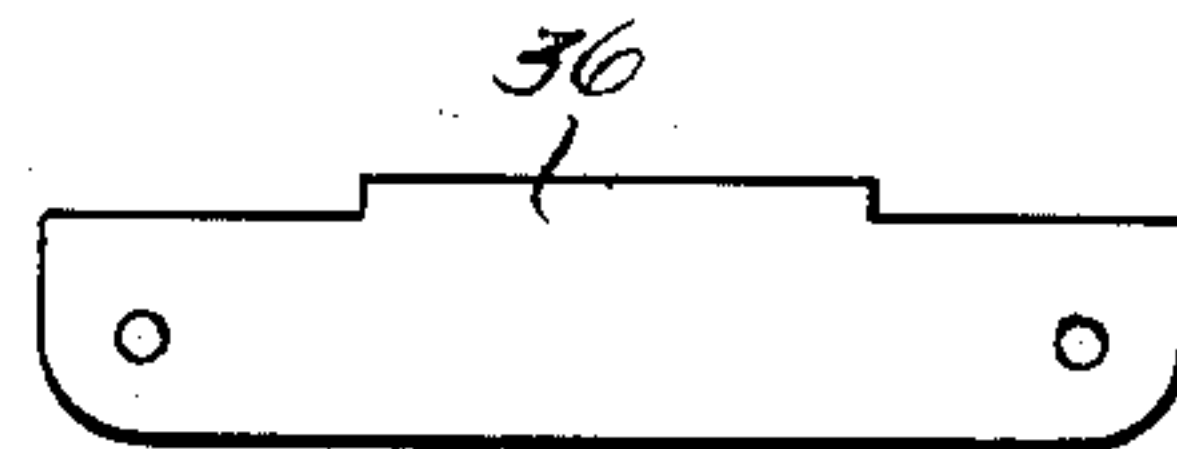


Fig. 15.

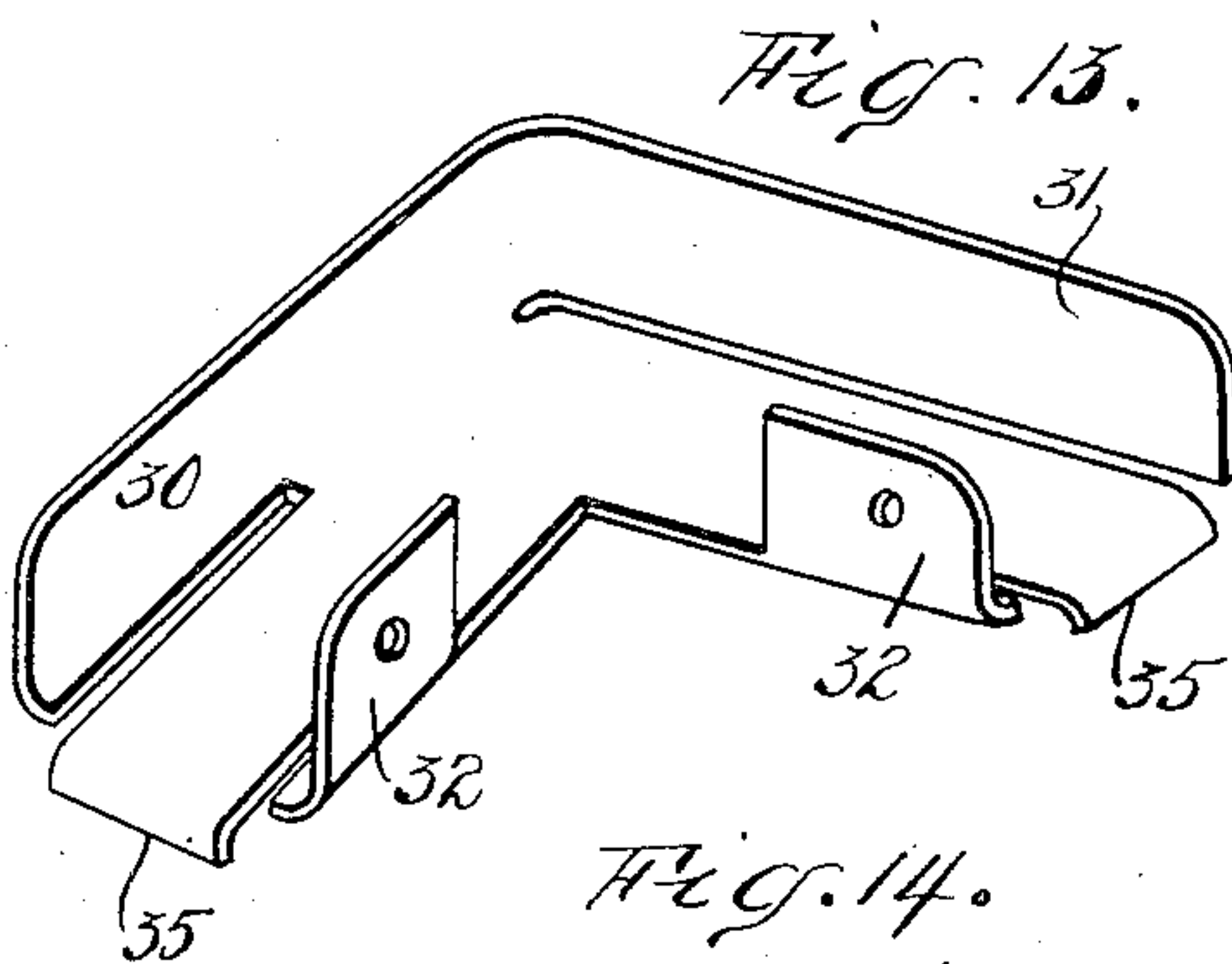


Fig. 13.

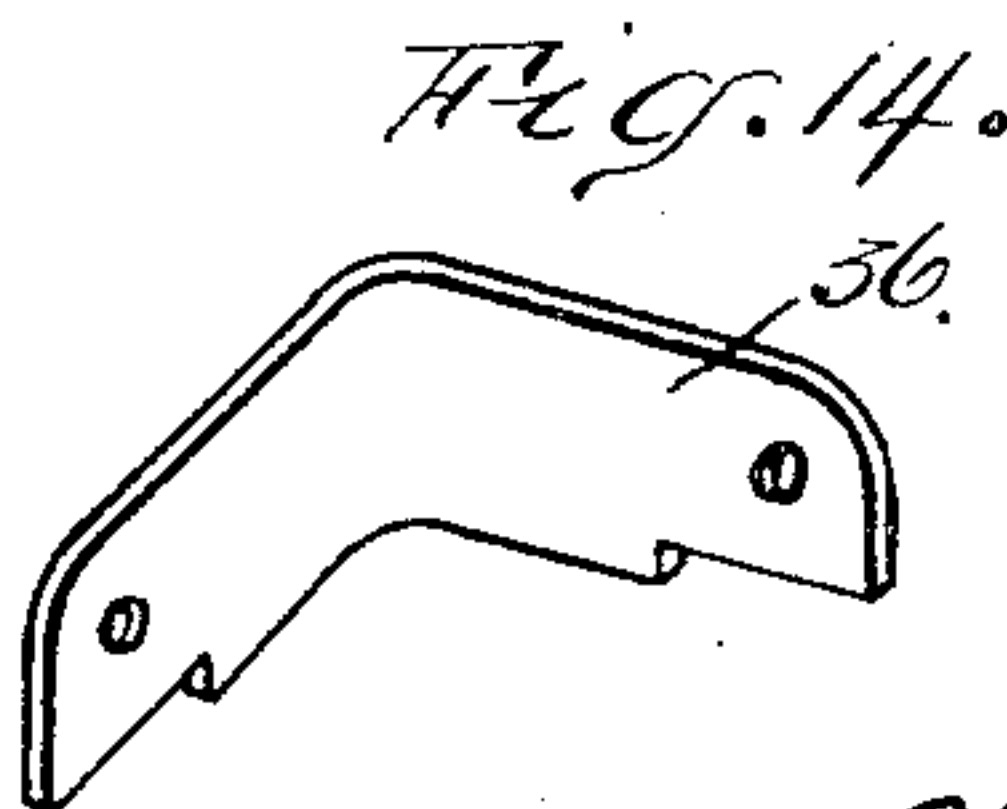


Fig. 14.

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UNITED STATES PATENT OFFICE.

HUBERT KRANTZ, OF NEW YORK, N. Y.

CONDUIT-COUPLING.

No. 898,751.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed October 18, 1907. Serial No. 398,086.

To all whom it may concern:

Be it known that I, HUBERT KRANTZ, a citizen of the United States, residing at borough of Brooklyn, city and State of New York, have invented certain new and useful Improvements in Conduit - Couplings, of which the following is a clear, full, and exact description.

The object of this invention is to provide an improved coupling for electrical conduit sections which will occupy the minimum space, be hidden from view in the completed installation and which may be efficiently and readily caused to perform its coupling function by mere insertion of the coupling into a conduit section.

In carrying out this invention I provide on the coupling body at one end at least, a resilient extension carrying a hook, and on the conduit section for engagement with the hook I provide a recessed portion, preferably in the form of a slot cut entirely through the body of the casing. I also prefer to provide means either in the coupling or on one of the conduit sections to maintain the parts when coupled, in rigid position relative to each other. I prefer that such coupling be made of a single piece of sheet metal stamping, or mainly of a single piece.

My improved coupling may serve to connect straight sections or sections at any angle to each other, where the conduit is to be coupled at an angle with its open face toward the room or towards ceiling or floor, in fact any location of connection may be availed of in using the coupling of my invention.

The scope of my invention will be pointed out in the claims.

In the accompanying drawings Figure 1 is a perspective view of a coupling according to this invention, adapted for connecting two straight conduit sections. Fig. 2 is a section on line 2—2 Fig. 3 showing two sections joined by the coupling of Fig. 1. Fig. 3 is a plan view partly broken away of Fig. 2. Fig. 4 is a section on line 4—4 Fig. 5. Fig. 5 is a plan view partly broken away showing one form of T connection. Fig. 6 is a perspective view partly broken away showing the coupling of two sections at right angles to each other. Fig. 7 is a perspective view of the coupling of Fig. 6. Fig. 8 is a section on line 8—8 Fig. 6. Fig. 9 is a perspective view partly broken away of two angle con-

nections where the location of the open face is at right angles to that of Fig. 6. Fig. 10 is a plan of the blank from which the coupling of Fig. 1 may be formed. Fig. 11 is a plan of the blank from which the coupling of Fig. 7 may be formed. Fig. 12 is a plan of the blank from which the coupling of Fig. 9 may be formed. Fig. 13 is a perspective view of the blank of Fig. 12 when formed into shape. Fig. 14 is a perspective view of a finishing piece which may or may not be used in conjunction with the shaped coupling of Fig. 13 and Fig. 15 is a plan of the blank from which said finishing piece may be made.

As shown in the drawings Figs. 1 to 3 inclusive, the coupling comprises a body formed of a single sheet metal stamping shown in plan in Fig. 10 and shown bent into shape in Fig. 1. It consists of two oppositely extending extensions 1 each provided with a depending hook 2 at its extreme end. Side plates 3 stand up at right angles to the extensions 1 preferably being joined centrally with the extensions 1 but extending for some distance as detached wings free from said extensions. The height of the side plates 3 should be equal to the inside measurements of the conduits 4 between their bottom 5 and the overturned ledges 6. In coupling the sections 7 and 8 together, the coupling may first be inserted into section 7 until the left hand hook 2 comes opposite to the slot 9 formed across the bottom 5 of such section when it will spring into place due to its resiliency which may be increased if desired by slightly bending the extension down between the hook and the junction of the extension with the body part. When once sprung into place, unless the hook be raised the coupling and section will be rigidly connected for the upstanding plates 3 and extensions 1 form a trough like structure, snugly fitting the interior of the conduit. The second section 8 may now be inserted over the free end of the coupling until the hook 2 of the right hand end engages the slot of the section 8, then, as will be obvious, both sections will be joined firmly together and held against longitudinal or side-wise pull.

In the modification shown in Figs. 4 and 5 where connection is desired at an angle to a straight length of conduit section, coupling may be made by riveting a T coupling 10, as by a rivet 11, to the conduit 40, after cutting

through its wall and turning outwardly the lugs 13 formed out of the side of the conduit 40. The T coupling 10 may carry a side plate 12 to give rigidity to the same. The lugs or wings 13 as shown in Fig. 4 may extend from the bottom to top of conduit section 15 to give rigidity thereto. Section 15 is provided with a slot 16 to be engaged by the hook of the coupling in like manner to the connections before described. Where a conduit meets at a corner of a room and it is desired to have the open face of the same face outwards a coupling such as shown in Figs. 6, 7, 8 and 11 may be made use of. The sections 15 and 16 may be cut to fit the angle and provided with slots 17 such as before described. The coupling consists of side plates 18 struck out of the metal at right angles and extensions 19 with the usual hooks so bent into right angled position as shown graphically in Fig. 7. The coupling will be effected by first inserting the coupling in one section and then forcing the second section at right angles thereto over that half of the coupling which extends freely in that direction.

The modification illustrated in Fig. 9 and in Figs. 12 to 14 is for joining two sections for instance, where one runs vertically in a room and the other horizontally where it is desired to have the open face of the conduit face the room. In this case the coupling may be struck up from a blank shown in Fig. 12 where the side wall 30 is one long strip bent up as shown in Fig. 13 and its free end 31 brought around into the position shown. Lugs 32 to form opposite side plates are also bent up as shown. The extensions 34 and their hooks 35 are substantially like those before described but are cut out at right angles to each other in the blank as shown in Fig. 12.

The device of Fig. 13 may be used as shown in that figure if desired and good service secured. If desired however and in order to get a more finished appearance with greater strength, an angle plate 36 may be riveted to the lug side plates 32.

I claim as my invention

1. In combination, two conduit sections having an open face and turned over edges, having their ends in substantial contact, a coupling of approximately the cross sectional shape of the conduit within the con-

duit sections and means for securing said coupling to each conduit section.

2. In combination, two conduit sections having an open face and turned over edges, having their ends in substantial contact, a coupling of approximately the cross sectional shape of the conduit within the conduit sections and means for securing said coupling to each conduit section, said means comprising a hooked member on the coupling, and a recess into which said hooked member may enter in the conduit.

3. In combination, two conduit sections having an open face and turned over edges, having their ends in substantial contact, a coupling of approximately the cross sectional shape of the conduit within the conduit sections and means for securing said coupling to each conduit section, said means comprising a hooked member on the coupling and a recess into which said hooked member may enter in the conduit, said hooked member extending as a plain sheet from that portion of the coupling which is of the approximate cross section of the conduit.

4. In combination, two conduit sections in substantial contact one with the other so as to provide a continuous trough throughout the two, a coupling entirely within the two sections and spring means adapted to lock said coupling in place, said coupling lying against the inner wall of the conduit sections, whereby an open trough is preserved.

5. In combination, two conduit sections in substantial contact one with the other so as to provide a continuous trough throughout the two, a coupling entirely within the two sections and spring means adapted to lock said coupling in place, said coupling lying against the inner wall of the conduit sections, whereby an open trough is preserved, the conduit having turned over edges and an open face, the coupling having a flat bottom plate of the width of the conduit and upstanding sides of the height of the conduit.

Signed at Brooklyn New York this 16th day of October 1907.

HUBERT KRANTZ.

Witnesses:

GEO. W. ECKERSON.
J. A. NEWTON.