

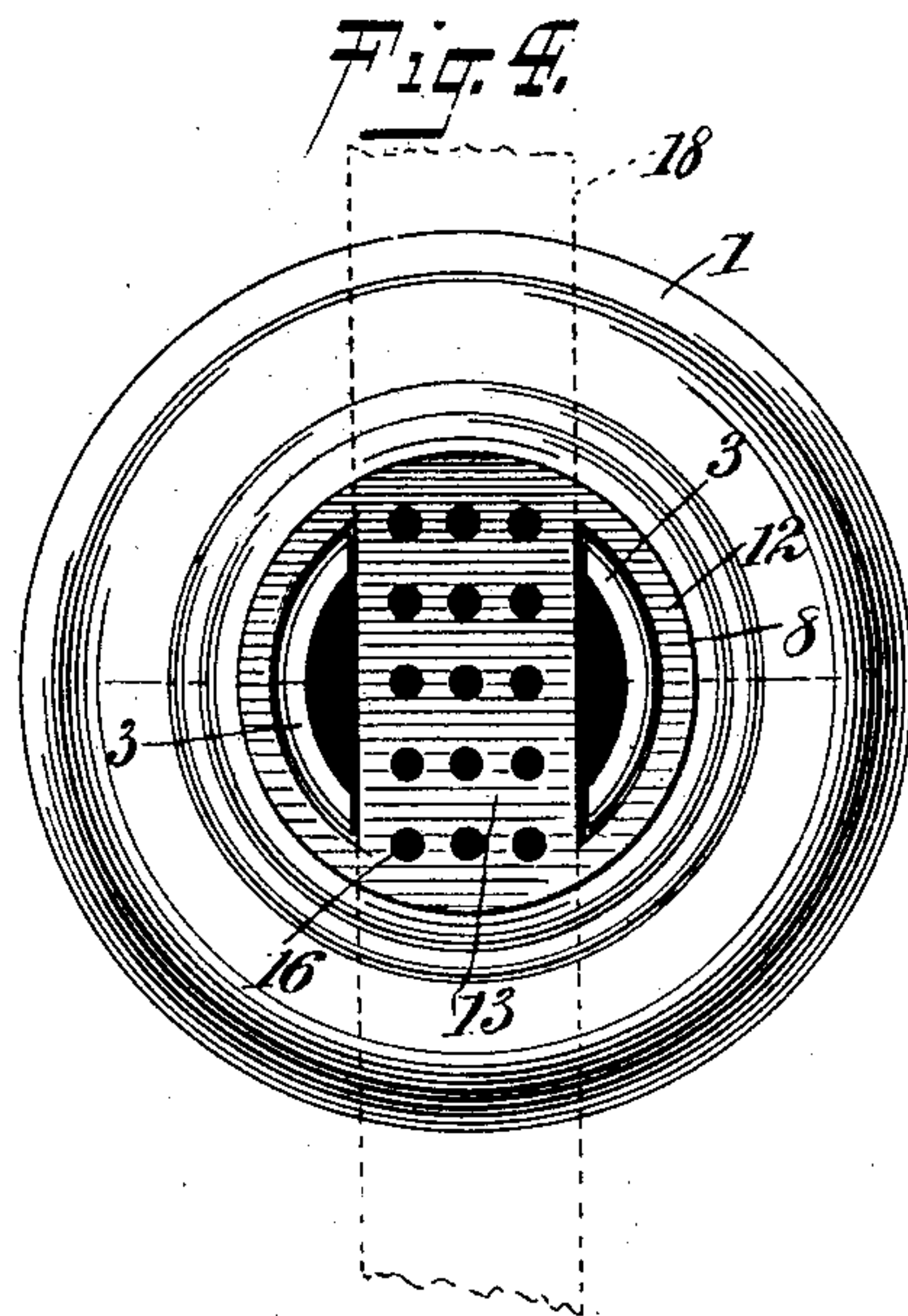
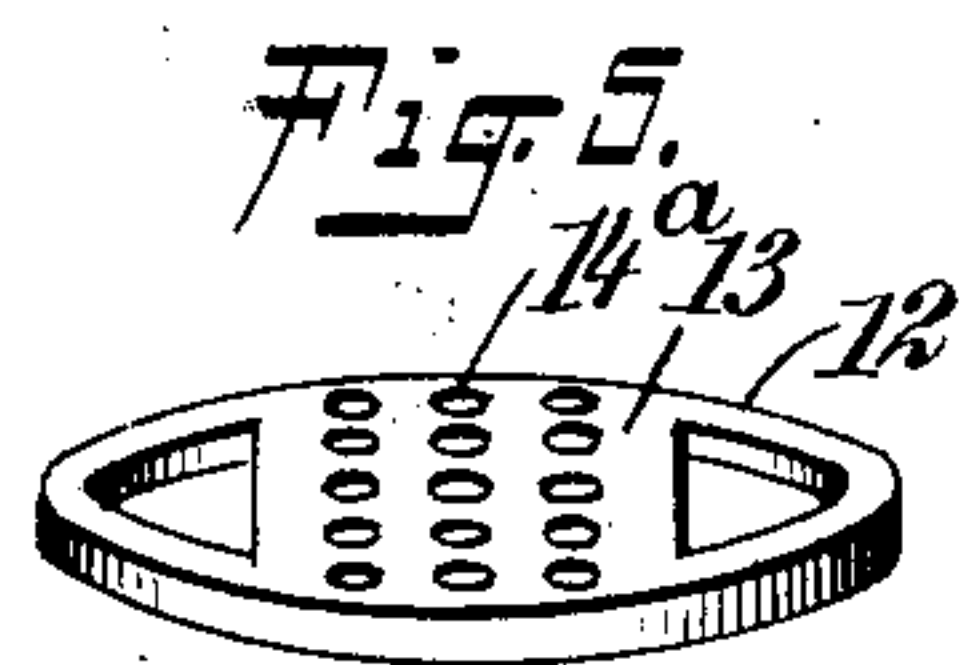
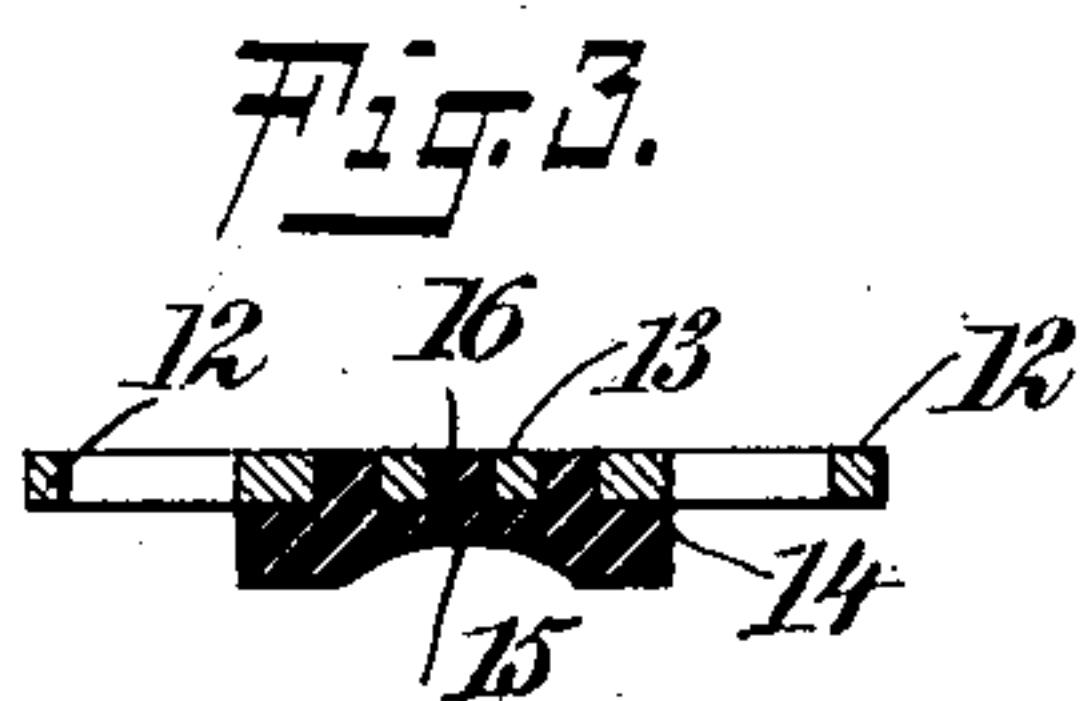
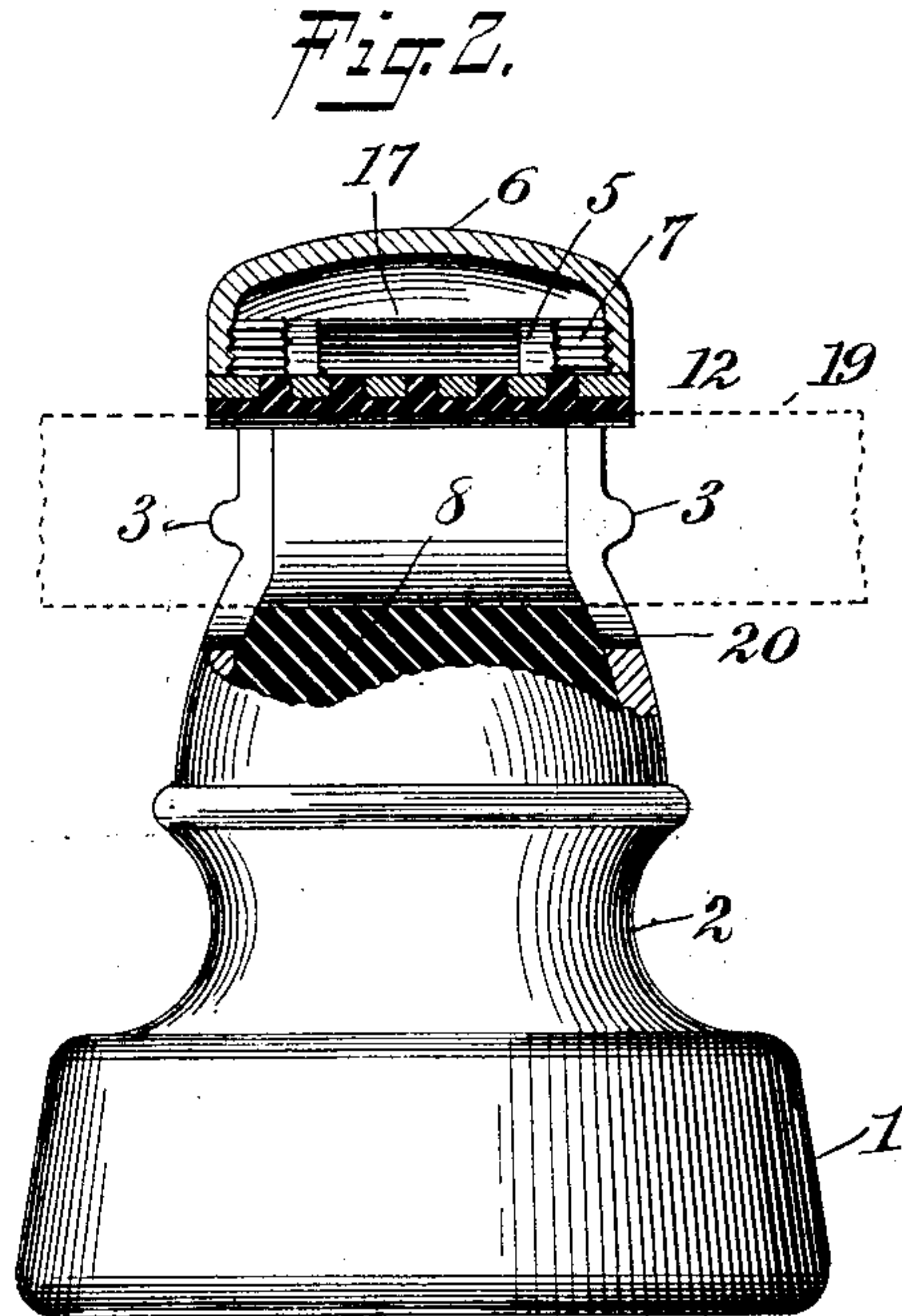
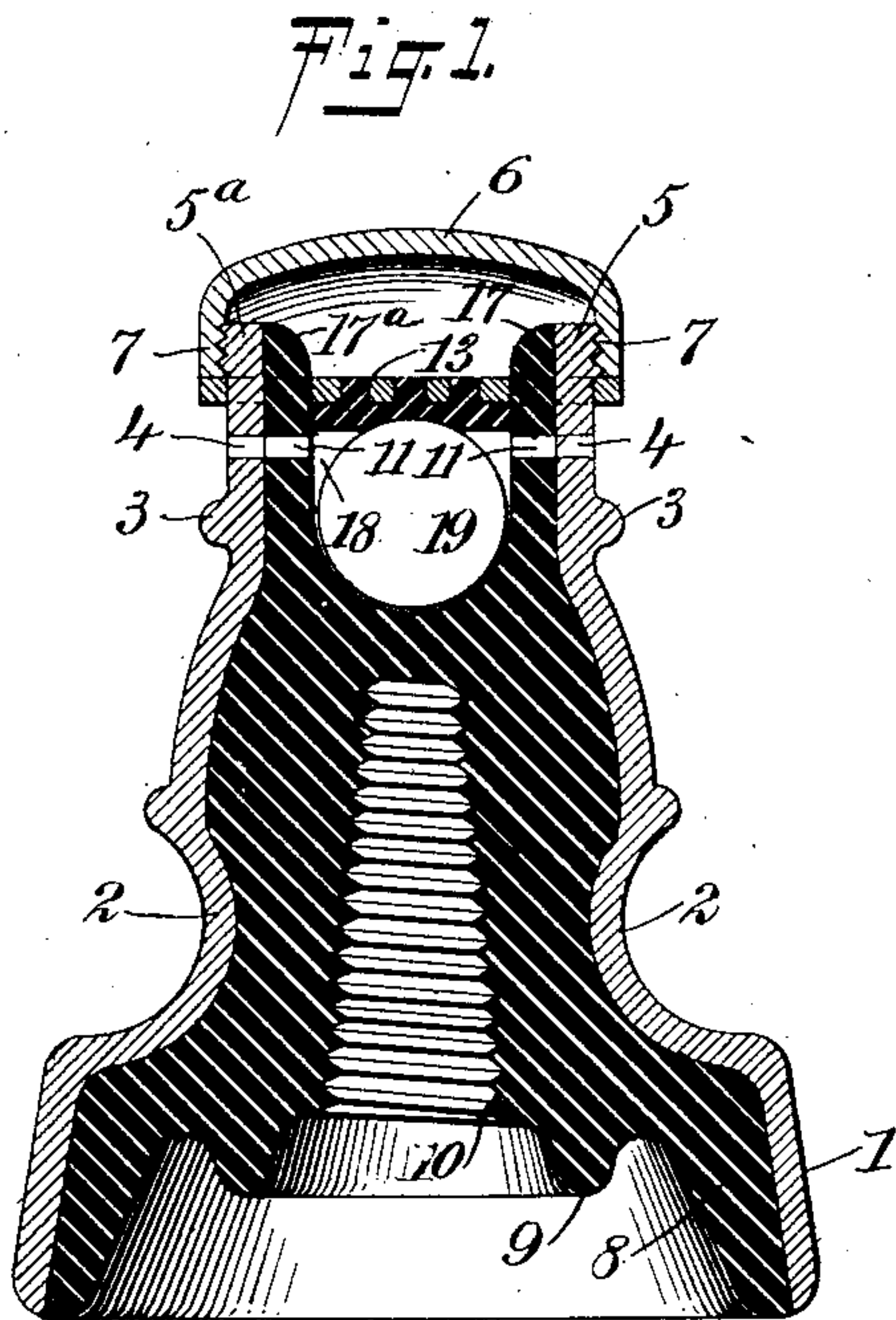
No. 750,722.

PATENTED JAN. 26, 1904.

L. STEINBERGER.
INSULATOR.

APPLICATION FILED MAY 25, 1903.

NO MODEL.



WITNESSES:

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LOUIS STEINBERGER, OF NEW YORK, N. Y.

INSULATOR.

SPECIFICATION forming part of Letters Patent No. 750,722, dated January 26, 1904.

Application filed May 25, 1903. Serial No. 158,674. (No model.)

To all whom it may concern:

Be it known that I, LOUIS STEINBERGER, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Insulator, of which the following is a full, clear, and exact description.

My invention relates to insulators permitting of general use, and more particularly for use in outdoor wiring for supporting cables.

The several objects of my invention are to produce a neat, simple, efficient, and cheap construction admitting of a cable being secured thereto in more than one manner and having advantages of strength and thorough insulation, safety connection with the cable, perfect adhesion between the portions made of metal and insulating material, together with divers others hereinafter mentioned.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a central vertical section through the insulator, taken in a direction crossing the general direction of the cable. Fig. 2 is a side elevation, partly in section, showing the insulator as viewed from one side of the cable. Fig. 3 is a central section through the clamping-ring and insulation mounted therein for securing the cable in place. Fig. 4 is a plan view of the insulator with the cap removed, and Fig. 5 is a perspective view of the clamping-ring.

An outer casing 1 of substantially frusto-conical shape is provided with an annular constriction 2, encircling the casing about its middle, and with a pair of lugs 3, each of approximately semiring shape, for facilitating the work of the tie-wire in securing the cable in position. The casing 1 is further provided with tie-holes 4 and with threaded portions 5 5^a. These threaded portions 5 5^a are engaged by a thread 7 of a cap 6, which is screwed downwardly into position, as indicated in Figs. 1 and 2. Mounted within the casing 1 is a body of insulating material 8, provided with a petticoat 9 and with a screw-thread 10, as indicated more particularly in Fig. 1. This body of insulating material is further pro-

vided with holes 11, adapted to mate the tie-holes 4 and through which the tie-wire may be passed in order to secure the cable. A clamping-ring 12, of metal, is integrally provided with a bridge 13, having holes 14^a through the same, as indicated more particularly in Fig. 5. A saddle 14, of insulating material, is provided with a concave surface 15 of like curvature as that of the cable, this portion being adapted to fit snugly upon the top of the cable. The saddle 14, of insulating material, is applied while in plastic condition to the clamping-ring 12, so that portions 16 of the insulation extend through the holes 14^a, and thereby cause the insulating member 14 to adhere firmly upon the under side of the bridge 13 of the ring. The upper portion of the insulating-body 8 is provided with a slot 18 of the shape shown in Figs. 1 and 2. The formation of this slot leaves the two members 17 17^a, which are free to straddle the cable, these two members virtually giving the top of the insulating portion 8 its bifurcated form. A cable 19 rests in the slot or mutilation between the members 17 17^a and is forced downwardly and held rigidly in position by the pressure of the clamping-ring 12 with its accompanying parts, as above described. The cap 6 of course forces the clamping-ring downwardly, causing the insulation 14 to bind upon the upper surface of the cable.

It will be noted that the constriction 2 in the outer casing prevents the removal of the body 8 of insulating material, which is preferably forced while in plastic condition into the casing 1, so as to partake of the conformity of the inner surface thereof. The upper portion of the casing 1 is provided with indentations 20 somewhat larger than the slot 18, as indicated more particularly in Fig. 2. By this constriction the cable 19 is held upon the insulating material and out of contact with the metallic casing 1.

The constriction 2 further serves as an auxiliary surface against which a cable may be tied, if desired. This constriction may prove of great service in cases where the upper portion of the insulator is damaged or for any reason is unavailable for holding the cable. The portion 2 also is especially advantageous for carrying the cable around corners. By

aid of the lugs 3 or tie-holes 4 serving to hold a tie-wire the cable may be secured in position independently of the pressure of the cap.

The operation of my device is as follows:

5 The insulator is mounted by means of the thread 10 in the usual manner, the cable is raised above the insulator and lowered into the slot 18, so as to rest upon the insulation 8, and the clamping-ring and cap are placed in
10 position, as above described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An insulator, comprising an outer casing
15 of metal, and a body of insulating material disposed therein and provided with means for supporting the same, said casing and said body of insulating material being provided with tie-holes and with a portion through which a cable may be threaded.
20

2. An insulator, comprising an outer casing provided with lugs for engaging a tie-wire and with tie-holes for engaging said tie-wire, and a body of insulating material disposed
25 within said casing and provided with means for supporting itself and for supporting a cable, said body of insulating material being further provided with holes mating said tie-holes of said casing.

3. An insulator, comprising an outer casing provided with a constricted portion, and also provided with indentations, and a body of insulating material, disposed within said casing and provided with a portion mating said constricted portion of said casing, said body of
35 insulating material being provided with an indentation mating those of said casing but smaller than the same for the purpose of supporting the cable out of contact with said casing.
40

4. An insulator, comprising an outer casing provided with indentations through which a cable may be threaded and also provided with a constriction presenting a concave surface external to said outer casing, and a body of insulating material disposed within said casing and having a portion of such conformity as to mate said constriction of said casing, the arrangement being such that said cable may
45 at will be threaded through said indentations, or free to engage said constriction.
50

5. An insulator, comprising an outer casing of metal provided with a constriction and with indentations, and a body of insulating material
55 molded within said outer casing and prevented from removal therefrom by said constriction, said body of insulating material being provided with an indentation for the purpose of supporting a cable out of contact with said casing.

6. An insulator, comprising an outer casing
60 of metal, a body of insulating material disposed within said casing, said body of insulating material being provided with indentations for engaging a cable, and also with tie-holes for securing a wire thereto, and clamping mechan-

ism independent of said tie-holes for securing a cable in position.

7. An insulator, comprising an outer casing of metal, a body of insulating material disposed within said casing, said casing and said body
70 of insulating material being provided with indentations and with tie-holes for securing a wire thereto, said body of insulating material being free to support a cable within said indentations.
75

8. An insulator, comprising a longitudinal casing provided with an opening extending throughout its entire length and also provided with a constriction, and a body of insulating material disposed within said casing and extending substantially throughout the length thereof, said body of insulating material being provided with means for supporting a conductor.
80

9. An insulator, comprising a casing having
85 an outer portion provided with indentations through which a cable may be threaded and with lugs disposed adjacent to said indentations, said lugs serving the double purpose of strengthening the casing and of affording
90 means whereby a tie-wire may be secured to said casing and to said cable, and a mass of insulating material disposed within said casing.

10. An insulator, comprising a casing of substantially frusto-conical form and encircled
95 about its middle with a constriction of annular form affecting both the internal and external conformity of said casing, said casing being provided with a screw-thread, a body of insulating material disposed within said casing and provided about its middle with a groove
100 mating said constriction, and a cap provided with a screw-thread for engaging said screw-thread of said casing.

11. An insulator, comprising a body member of insulating material provided at its top
105 with upright arms and with a channel, and a metallic casing engaging the exterior of said body member and also engaging said arms, said metallic casing being provided with indentations and with semiring-shaped lugs disposed intermediate of said indentations.
110

12. An insulator, comprising a casing provided with a constriction, and also provided at its top with upright arms, and a body of
115 insulating material also provided with a constriction, said body of insulating material engaging said casing and also said upright arms, said body member of insulating material having a channel free to support a conductor, and
120 said upright arms being provided with semiring-shaped lugs for the purpose of affording a grip for a tie-wire.

In testimony whereof I have signed my name to this specification in the presence of two
125 scribing witnesses.

LOUIS STEINBERGER.

Witnesses:

F. W. HANAFORD,
EVERARD BOLTON MARSHALL.