No. 849,731. PATENTED APR. 9, 1907.

S. FEUERSTEIN.

INSULATOR.

APPLICATION FILED AUG. 24, 1906.

Fig. 3.

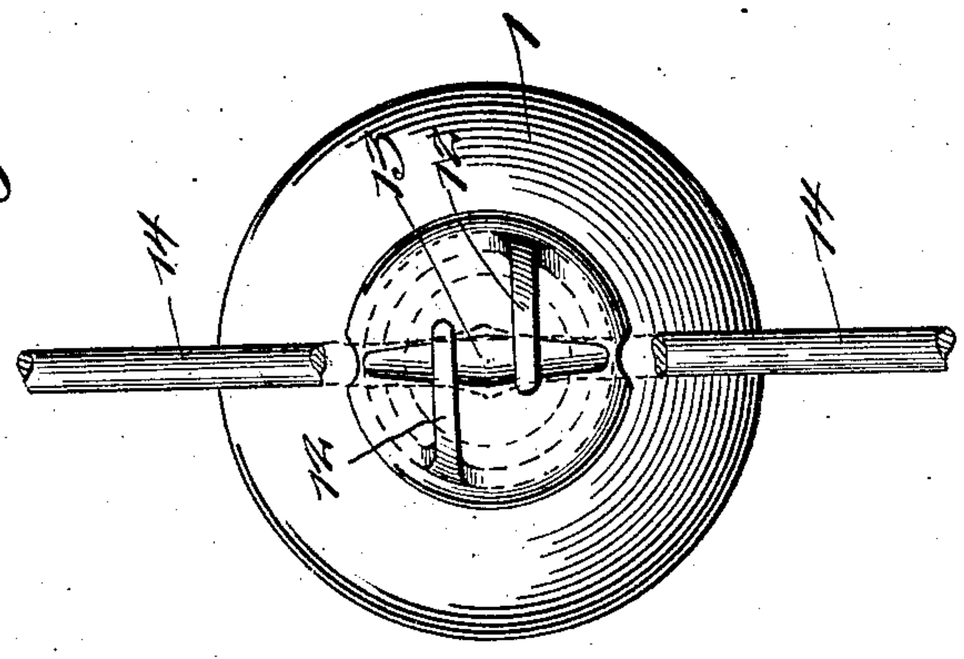


Fig. 2.

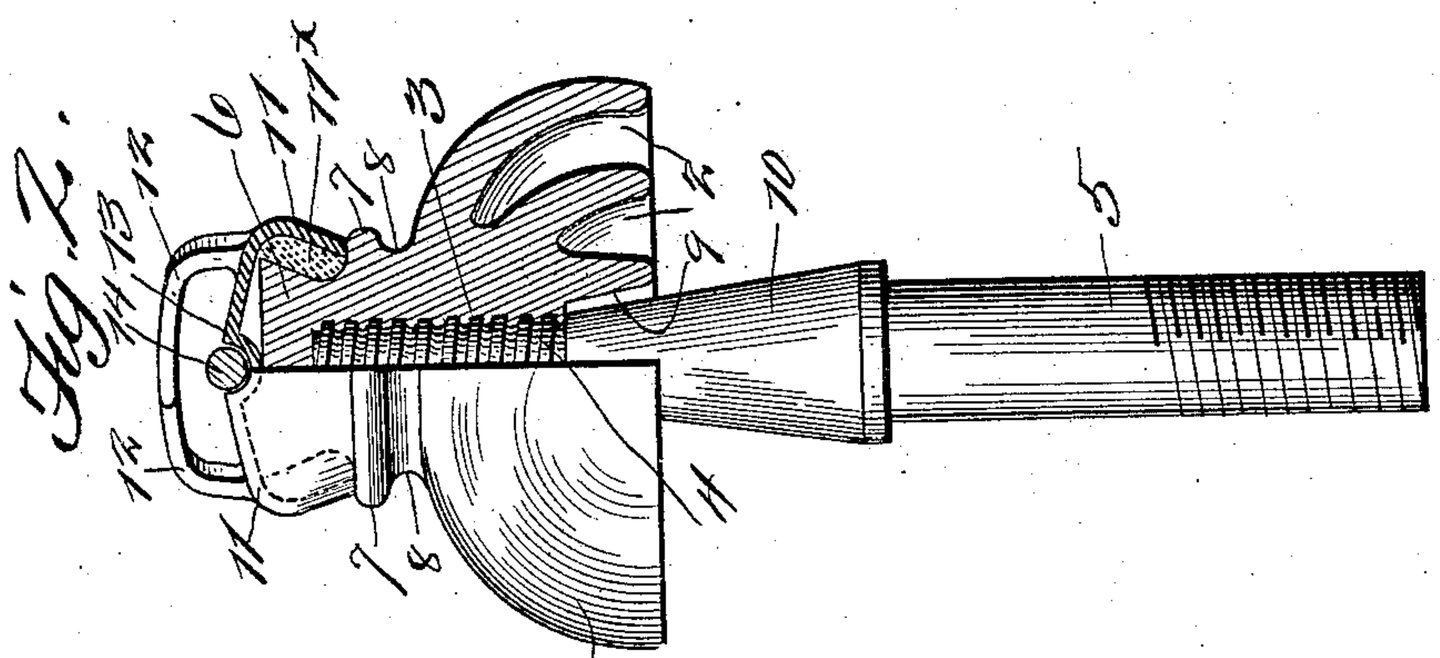
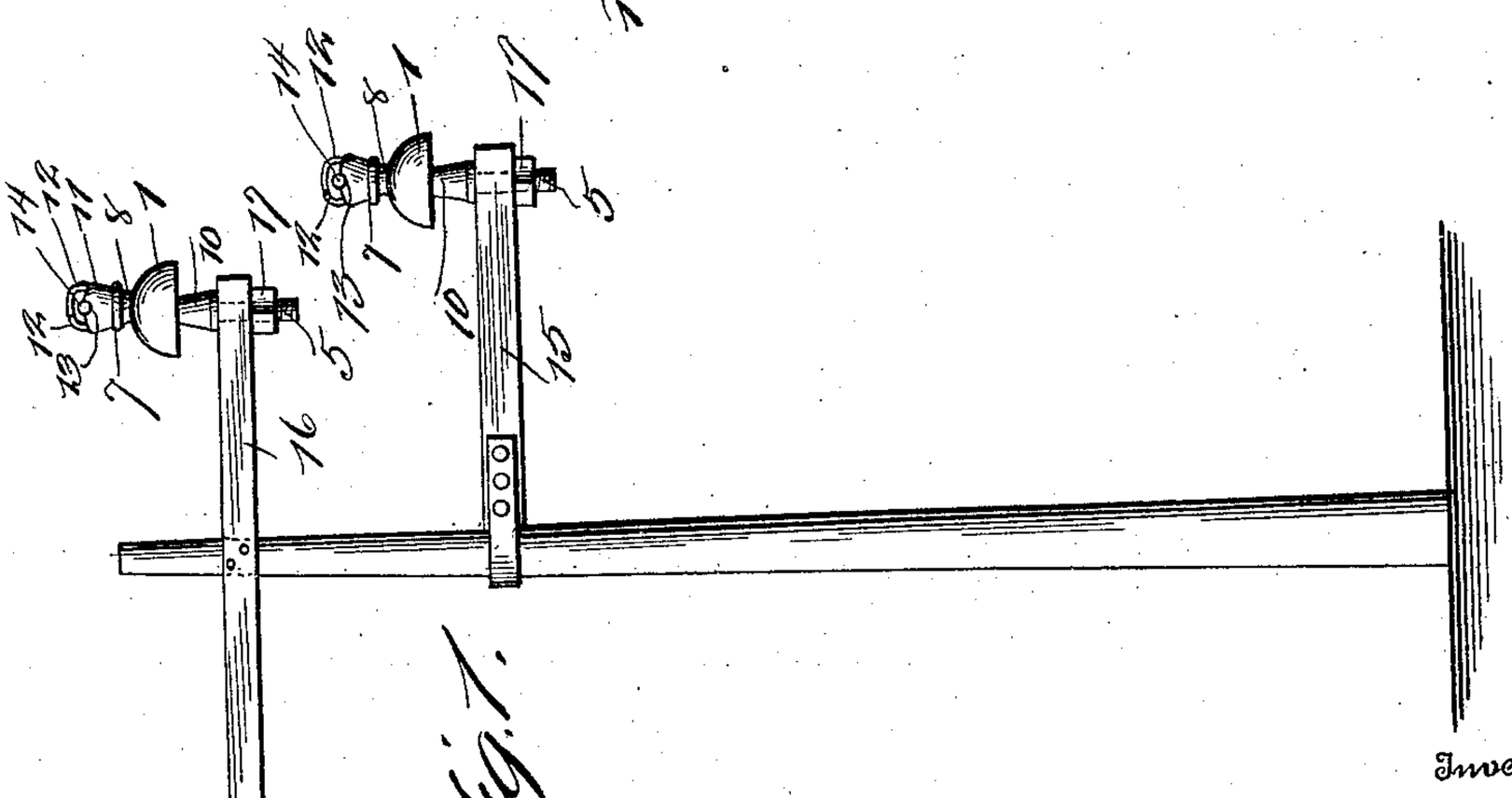


Fig. 1.



Witnesses:

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UNITED STATES PATENT OFFICE.

SIEGMUND FEUERSTEIN, OF ROCHESTER, NEW YORK.

INSULATOR.

No. 849,731. Specification of Letters Patent. Patented April 9, 1907.

Application filed August 24, 1906. Serial No. 331,928.

To all whom it may concern:

Be it known that I, SIEGMUND FEUERSTEIN, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Insulators, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

This invention relates to certain new and useful improvements in insulators of that class designed for current-wires or catenary supporting-cables and adapted to be supported in any suitable manner.

The present invention has for its objects, among others, to provide an improved insulator having means permitting of the ready insertion of the wire, yet serving to effectually prevent the same from jumping out or getting away from the cap. As commonly made it comprises an upper part of inverted conical form and a metallic cap or cup inverted over the same and held to place by an annular body of cement or the like, the mouth of the cup being sufficient to pass downward over the upper base of the conical part, the cement being run in afterward. The cap has a diametrical groove in which the wire normally rests, while there are overlying fingers alternated and pointing in opposite directions, the extreme point of each considerably passing or overlapping the point of the other, by which means is formed an inclosure which prevents the wire from getting accidentally displaced. The body of the insulator has an annular groove in which to receive the ordinary tie-wire for the line-wire.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is an elevation showing different modes of attachment of the insulator. Fig. 2 is a side elevation, partly in central longitudinal section through the insulator. Fig. 3 is a top plan of the same.

Like numerals of reference indicate like parts throughout the several views.

Referring now to the details of the drawings, 1 designates the body or base portion, of glass, porcelain, or any suitable material adapted for the purpose, it being formed with annular spaces 2 for the purpose of making the insulation more perfect. The said body portion is provided with a socket 3, which may be interiorly screw-threaded, as shown, or formed plain and without threads to receive the end of the part or member 4, which may be of wood or metal, with or without threads, and having a shank portion 5, as shown. The upper part of this body is conical, inverted, as seen at 6, having the annular flange 7, for a purpose which will soon be made apparent. Below this flange is the annular groove 8, adapted to receive a tie-wire in the usual manner to bind a current-wire in place. The lower face of this body portion also has a tapered space 9 to receive the tapered end of the member 4, such tapered end being shown at 10.

11 is a cap or cup, preferably of metal. It is inverted over the inverted conical part of the body portion, as shown, the mouth of the cap or cup being of a size to pass downward over the upper base portion of the conical part, and then cement, as shown at $11^{\times}$, is run in. When the cement sets, the two parts are securely held together. The cap or cup is formed with a plurality of (in this instance two) overlying fingers 12, alternating, as shown, the extreme point of each considerably passing or overlapping the point of the other, as will be seen best from Fig. 3. These arms may be made bendable, so that they may be bent down as may be required, or they may be permanently made to assume the desired position. They are designed to extend across a groove 13 in the top of the cap, which groove is designed to receive the current-wire or supporting-cable 14, as seen best in Fig. 2.

In practice the insulator may be applied in any suitable manner. In some instances it may be affixed on the top of a pole, and, again, as seen in Fig. 1, it may be applied to a horizontal arm 15, two forms of which are seen in said view. In this case, either on the projecting arm 15 or the cross-arm 16, the shank portion will occupy a vertical hole in the arm and will receive a nut 17 beneath the said arm to hold the insulator in place. This permits of the insulator having a swivel motion in the horizontal arm, so that the fingers on the cap may be easily disposed properly with relation to the wire to receive and hold the same.

Modifications in detail may be resorted to without departing from the spirit of the in-

vention or sacrificing any of its advantages.

What is claimed as new is—

1. An insulator comprising a body portion with an inverted conical part with flange at its lower end, and a cap fitted thereover and resting on said flange and having a wire-receiving groove and cement supported by said flange between the cap and said part and wire-retaining members extended across said groove and confined within the boundary of said conical part.

2. An insulator comprising a body portion with an inverted conical part with a flange at its lower end, and a cap fitted thereover and resting on said flange and having a wire-receiving groove, cement supported by said flange between the cap and said part, and wire-retaining members extended across said groove and confined within the boundary of said conical part, said body portion being formed with an annular groove below and adjacent said flange.

In witness whereof I have hereunto set my hand, this 21st day of August, 1906, in the presence of two subscribing witnesses.

SIEGMUND FEUERSTEIN.

Witnesses:
ENOS B. WHITMORE,
A. M. WHITMORE.