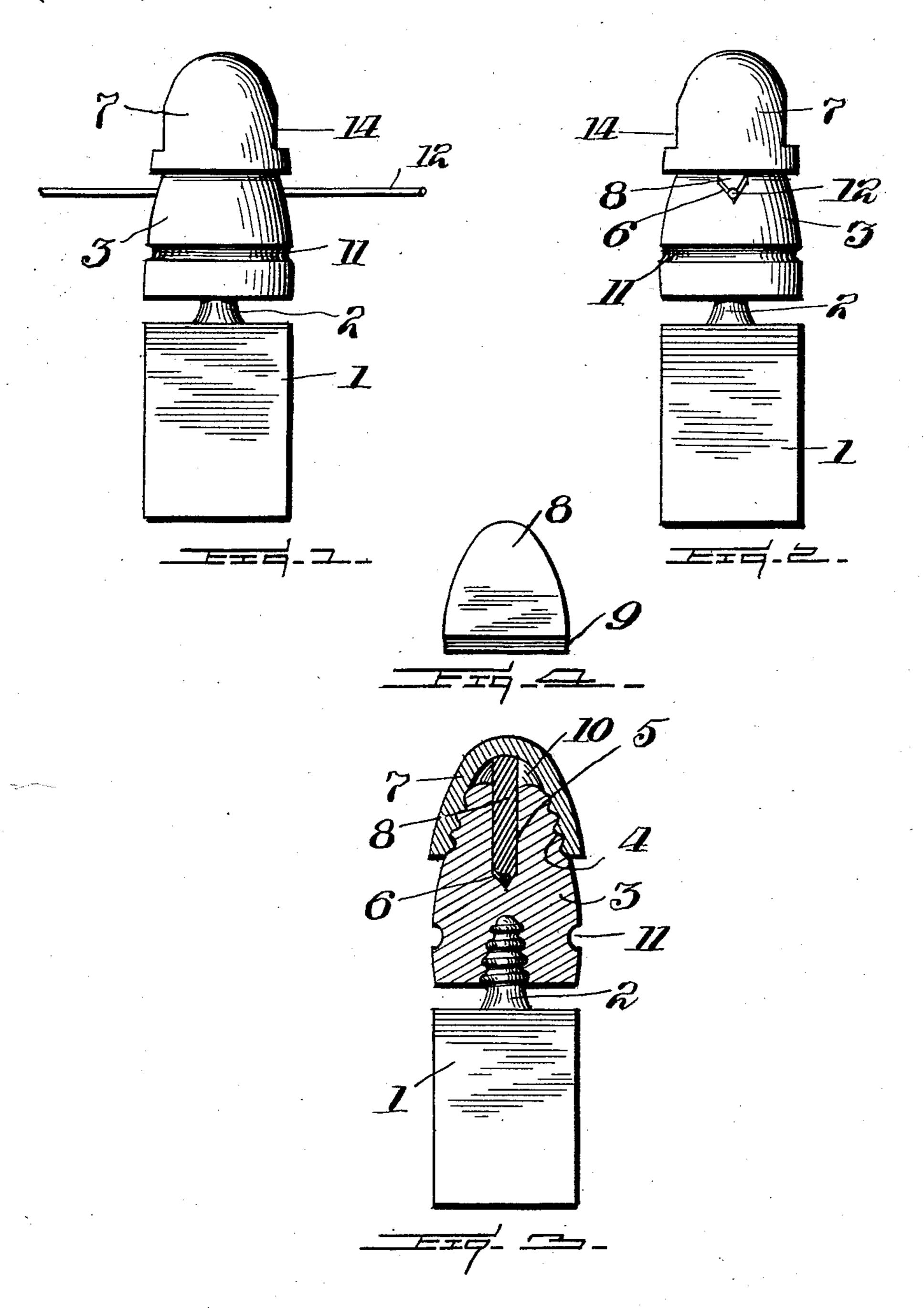
## J. E. MURRAY.

## INSULATOR FOR TELEGRAPH LINES.

(Application filed Apr. 19, 1902.)

(No Model.)



Witnesses: Sullander,

By

Inventor, John F. Murruy, Albert Co. Attorneys.

## United States Patent Office.

JOHN E. MURRAY, OF WASHINGTON, PENNSYLVANIA.

## INSULATOR FOR TELEGRAPH-LINES.

SPECIFICATION forming part of Letters Patent No. 713,904, dated November 18, 1902.

Application filed April 19, 1902. Serial No. 103,778. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. MURRAY, a citizen of the United States of America, residing at Washington, in the county of Washington 5 and State of Pennsylvania, have invented certain new and useful Improvements in Insulators for Telegraph-Lines and the Like, of which the following is a specification, reference being had therein to the accompanying 10 drawings.

This invention relates to certain new and useful improvements in insulators for telegraph-poles and the like, and has for its object to provide an insulator to which the wire 15 may be secured and rigidly held by the same.

Another object of my invention is to provide an insulator which will securely hold the wire in case the same should break and one wherein the means of securing the wire 20 is protected from the atmosphere, which generally causes the same to corrode, hence causing the breakage.

A still further object of my invention is to provide an insulator that will be extremely 25 simple in construction, strong, durable, comparatively inexpensive to manufacture, and one that may be readily placed upon the telegraph-pole.

With the above and other objects in view 30 the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and

specifically pointed out in the claim. In describing the invention in detail ref-35 erence is had to the accompanying drawings, forming a part of this specification, and where-

in like numerals of reference indicate like

parts throughout the several views, in which— Figure 1 is a side elevation of my improved 40 insulator applied to the arm of the telegraphpole. Fig. 2 is a front view of the same. Fig. 3 is a vertical section of the insulator applied

to the arm of a pole. Fig. 4 is a side eleva-

tion of the securing-block.

In the drawings the reference-numeral 1 represents the arm of a pole carrying a screwthreaded shank 2, to which is secured my improved insulator, which consists of a body portion 3, which is preferably cone-shaped, 50 the top of said cone being screw-threaded, as indicated at 4.

Reference-numeral 5 indicates a slot formed in the cone-shaped member 3, the base of said slot having inclined sides 6.

The reference-numeral 7 indicates a cap

which is secured upon the screw-threads 4, said cap conforming in shape to the cone-

shaped portion 3.

The reference-numeral 8 represents a securing-block which has its lower edges bev- 60 eled, as indicated at 9, the sides and top of said block being cone-shaped and conforming to the inner recess 10 of the cap 7. Encircling the insulator 3, near its base, is a groove 11, which is employed to secure the 65 wire 12 in case of an accident and it not being desirable to use a securing-block 8.

The reference-numeral 14 indicates a cutaway portion upon which a wrench may be placed for securing the cap 7 upon the body 70

portion 3.

The manner of securing the wire is as follows: The insulator 3 being secured upon the arm of a pole, the wire is inserted in the slot 6 and the block 8 placed therein, when the 75 cap 7 is screwed upon the cone-shaped portion 4, pressing the block 8 downwardly, firmly securing the wire in the groove 6. It will be noted that a wire may terminate in this insulator by simply securing the end in 80 the groove by means of the securing block and cap and that the wire may be readily removed when desired.

The many advantages obtained by the use of my improved insulator will be readily ap- 85 parent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction with- 90 out departing from the general spirit of my invention.

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

In an insulator, in combination with a wire, a body portion carrying a screw-threaded cap, said cap provided in its opposite sides with cut-away portions, said body portion having a diametrical slot formed therein, the base 100 of said slot having inclined sides, and a securing-block having beveled lower edges carried by said slot, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN E. MURRAY.

Witnesses: EDWARD WINTER, GEO. H. SHANNON.