

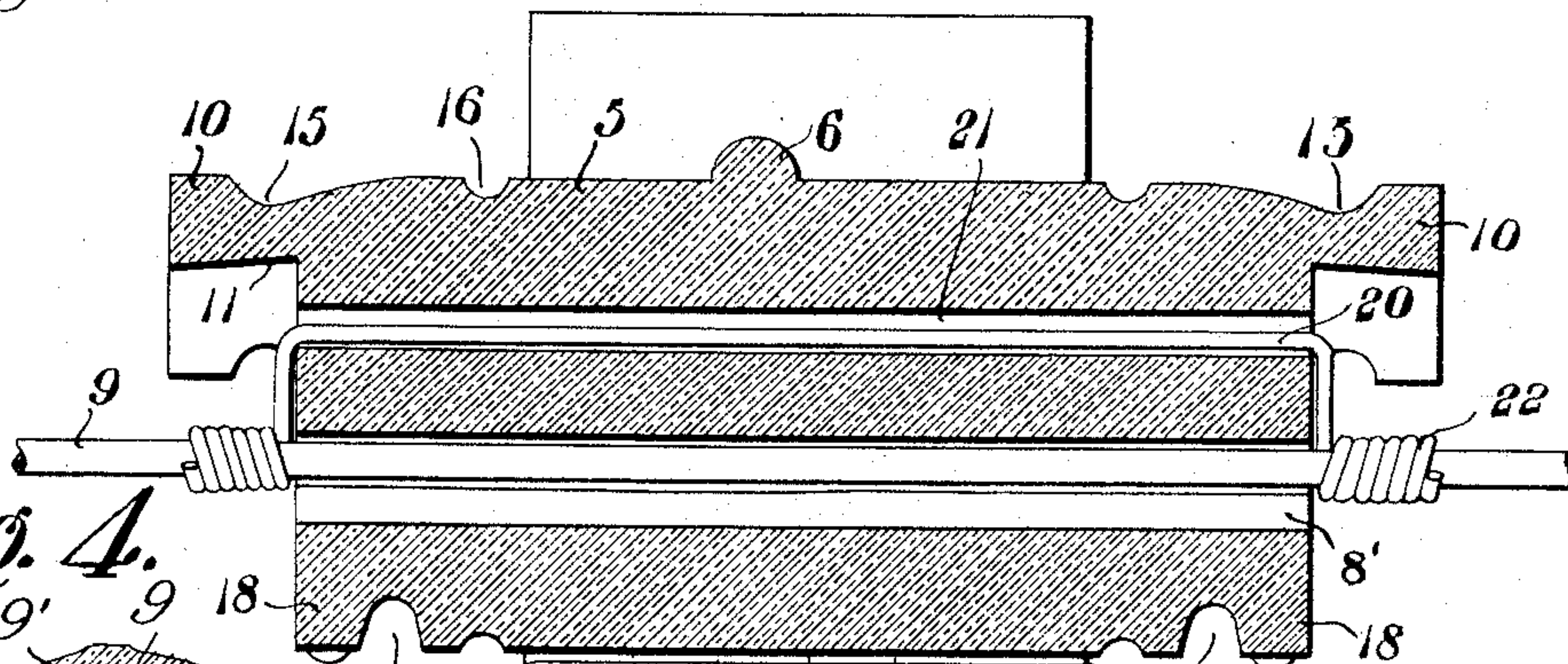
No. 884,142.

PATENTED APR. 7, 1908.

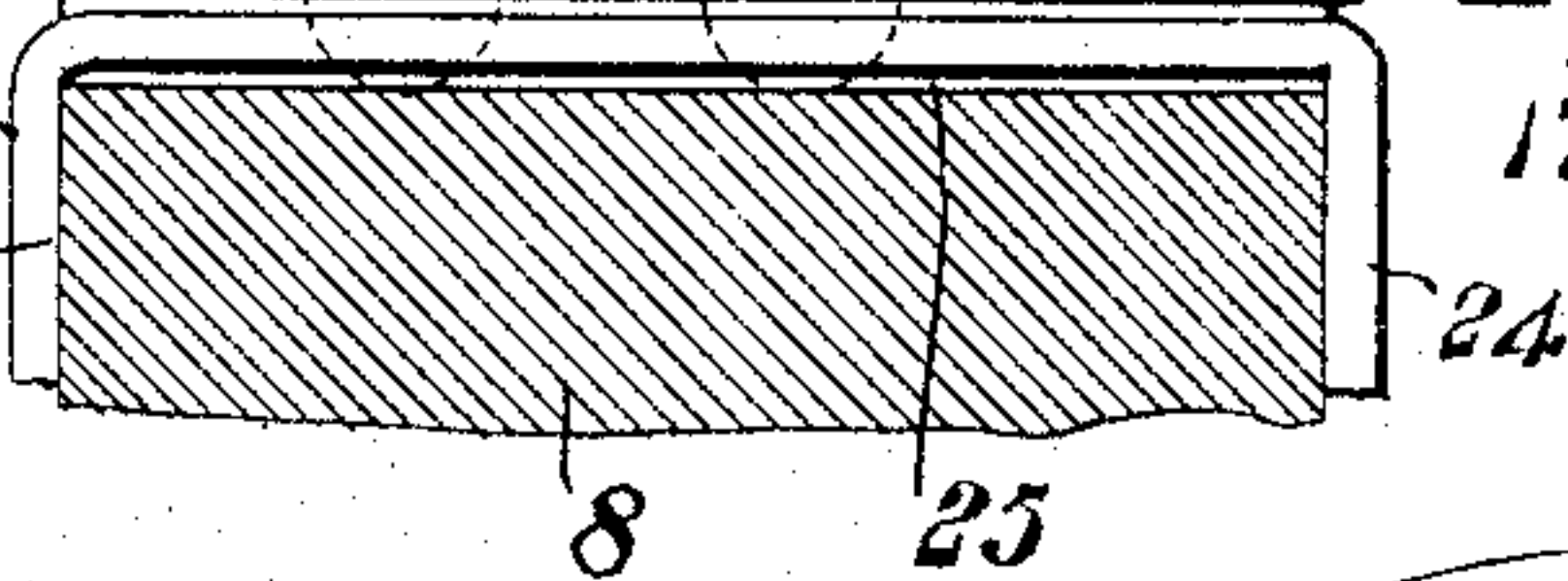
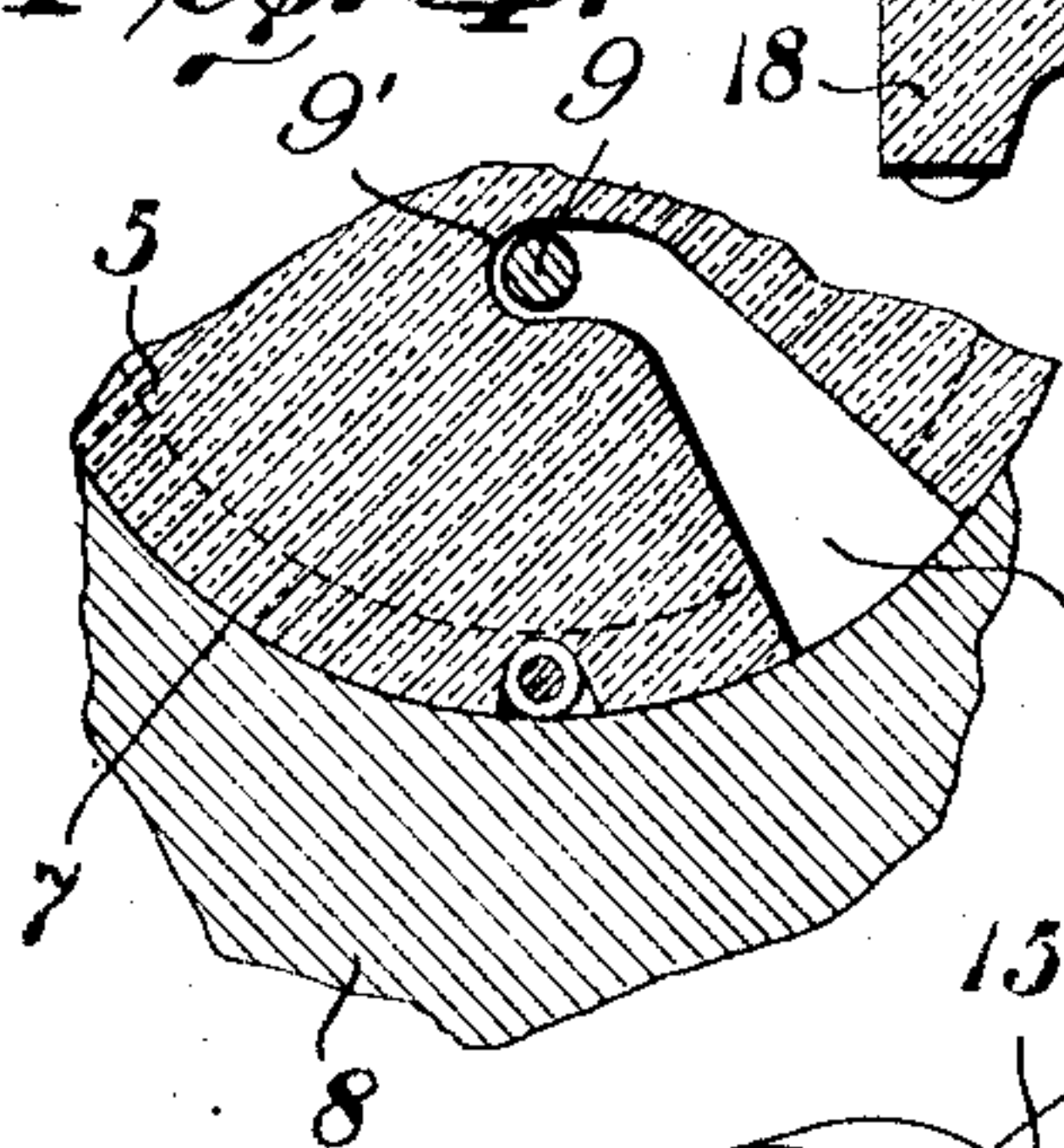
E. J. FOREMAN,  
INSULATOR.

APPLICATION FILED NOV. 2, 1906.

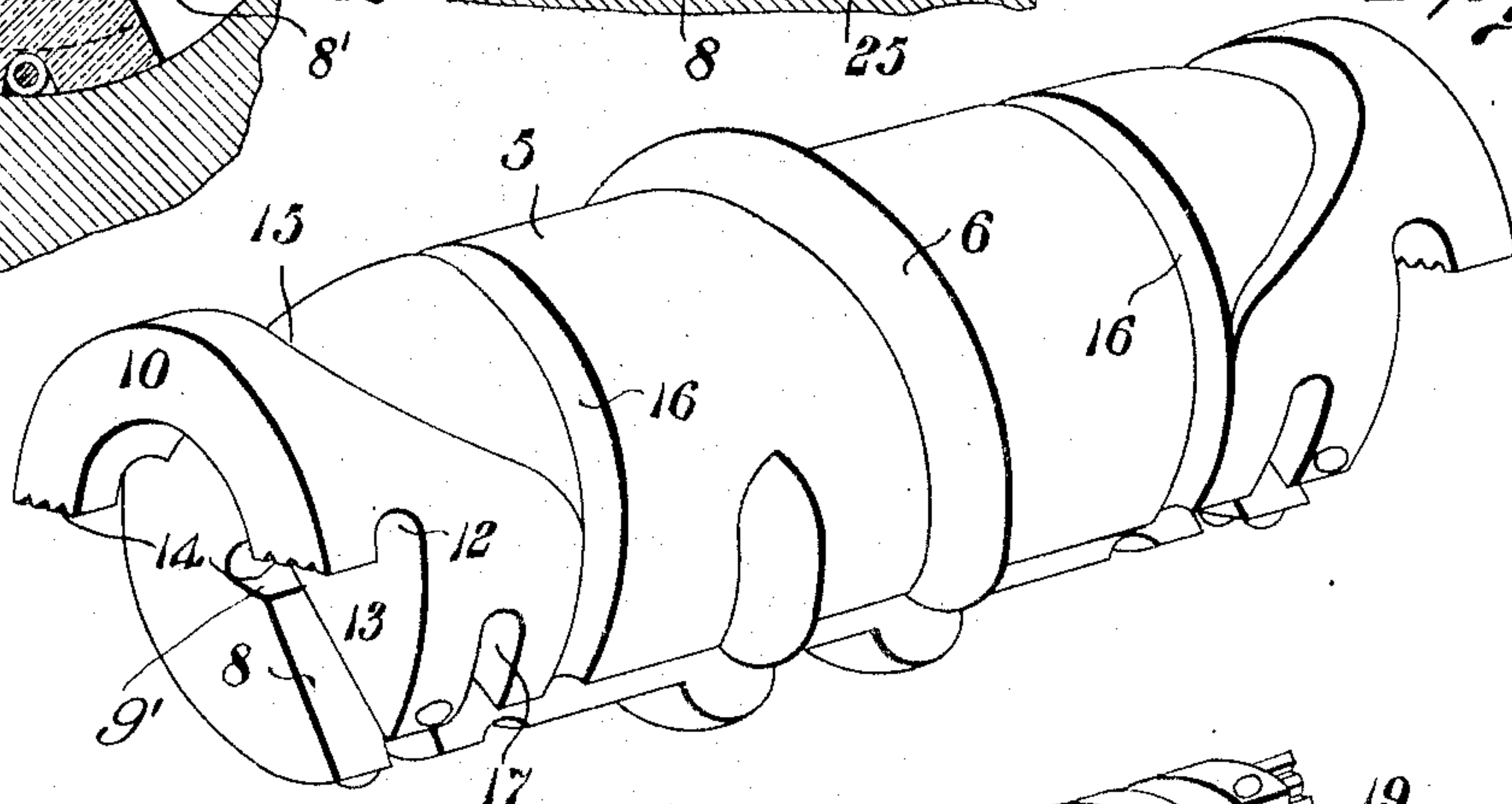
*Fig. 1.*



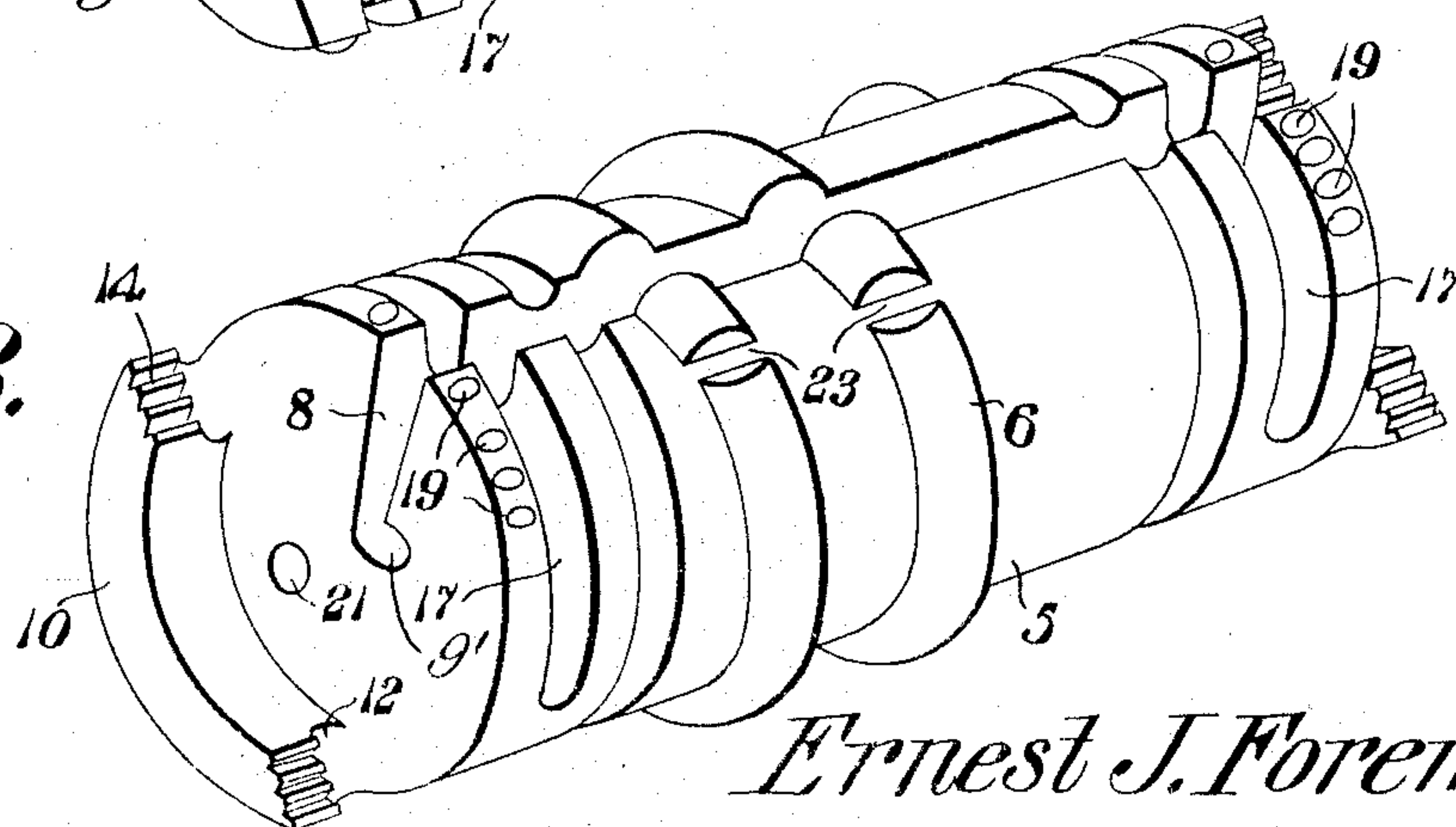
*Fig. 4.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*E. J. Foreman*

*L. J. Tucker*

*Ernest J. Foreman,*  
INVENTOR.

By *C. A. Snow & Co.*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

ERNEST JAY FOREMAN, OF TRINIDAD, COLORADO.

## INSULATOR.

No. 884,142.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed November 2, 1906. Serial No. 341,756.

*To all whom it may concern:*

Be it known that I, ERNEST J. FOREMAN, a citizen of the United States, residing at Trinidad, in the county of Las Animas and State of Colorado, have invented a new and useful Insulator, of which the following is a specification.

This invention relates to insulators for electric conductors and has for its object to provide a comparatively simple and inexpensive device of this character capable of being readily placed in position on the cross-arm of a telegraph or telephone pole or other suitable support by means of which the line wire may be supported in elevated position and thoroughly insulated from its support.

A further object of the invention is to provide means for locking the insulator on the cross-arm or support, and means for preventing the accumulation of water between the insulator and said support.

A further object is to provide an insulator having circumferential grooves or recesses formed in the exterior walls thereof for deflecting the water or moisture on each side of the wire-receiving opening, and having spurs or projections depending from the bottom of the insulator to assist in-retarding the flow of water.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a longitudinal sectional view of an insulator constructed in accordance with my invention showing the same in position on the cross-arm of a telegraph pole. Fig. 2 is a perspective view of the insulator detached. Fig. 3 is a similar view of the insulator looking at the bottom of the latter. Fig. 4 is a fragmentary transverse sectional view taken on the line 4—4 of Fig. 1.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The insulator comprises a substantially cylindrical body portion 5 formed of por-

celain, glass or other suitable insulating material and having its exterior walls provided with one or more circumferential threads 6 adapted to engage correspondingly shaped grooves 7 formed in the cross-arm or support 8. Extending longitudinally of the body portion 5 is a wire-receiving slot or opening 8' adapted to receive the line-wire 9, said slot being disposed at an angle to the vertical axis of the body portion and opening through the side walls thereof, as best shown in Fig. 4 of the drawings. The inner or closed end of the slot 8' is preferably extended laterally, as indicated at 9' thereby to form a rest or support for the conductor or wire 9.

The opposite ends of the insulator are formed with longitudinal extensions or hoods 10 preferably semi-circular in shape, as shown and having their curved interior walls inclined inwardly and upwardly, as indicated at 11.

Formed in the opposite ends of the hoods 10 are recesses 12 which serve to prevent the water from flowing over the side walls of the insulator and thence downwardly over the adjacent ends 13 of the insulator in engagement with the line wire, there being teeth or serrations 14 formed on the opposite ends of the hoods so as to collect the water and cause the latter to fall drop by drop to the ground. The exterior walls of the insulator at the hoods 10 are curved downwardly to form troughs 15 which communicate with circumferential grooves 16 whereby water or moisture deposited on the exterior walls of the insulator may flow down the sides of the latter, as will be readily understood.

Extending transversely across the bottom of the insulator at the opposite ends thereof are segmental grooves or recesses 17 which intersect the wire-receiving slot 8 and form a terminal rib or segmental flange 18 at each end of said insulator.

Depending from the ribs or flanges 18 are spaced projections or spurs 19 which serve the same function as the serrations 14, namely; to collect the water flowing over the side walls of the insulator and cause the latter to fall drop by drop to the ground in the manner before stated.

Attention is here called to the fact that the grooves 17 assist in preventing the water adhering to the projections 19 from flowing longitudinally of the insulator and accumu-



lating between said insulator and the support 8.

As a means for locking the line wire 9 within the slot or groove 8 there is provided a binding wire 20 an intermediate portion of which extends through a longitudinal recess 21 formed in the insulator above the slot 8' while its opposite ends are coiled or otherwise twisted around the line wire, as indicated at 22.

The threads 6 at the bottom of the insulator are provided with transverse notches or locking recesses 23 adapted to receive a locking key or rod 24 which extends through a groove or recess 25 in the insulator support 8 and is bent downwardly in engagement with said support, as indicated at 26. The diameter of the wire or locking rod 24 is preferably less than that of the groove 25 so that any water or moisture that may accumulate between the insulator and said support may be guided by the wire through the opposite ends of the slot and thus drain to the ground. It will here be noted that the wire or rod 24 by engagement with the walls of the recess 25 and the walls of the notches or recesses 23 will lock the insulator against twisting or rotary movement within the support 8.

In using the insulator the line wire 9 is inserted within the slot or opening 8' and the insulator threaded within the opening in the support 8 after which the locking rod 24 is passed through the slot 25 and notches 23 and its opposite ends bent downwardly in engagement with adjacent sides of the support 8 thus locking the insulator against lateral, longitudinal and rotary movement. The binding wire 20 is then threaded through the opening 21 and the opposite ends thereof

twisted or coiled around the line wire, in the manner before stated.

It will of course be understood that the insulator may be made in different sizes and shapes and that any number of openings for the reception of the tie wires may be employed when the insulator is designed for special purposes.

Having thus described the invention what is claimed is:

1. An insulator having a longitudinal wire-receiving slot and provided with oppositely disposed over-hanging hoods and circumferential draining grooves, there being depressions formed in the exterior walls of the insulator at the hoods and communicating with said grooves.

2. An insulator provided with a longitudinal wire-receiving slot, hoods extending laterally from the opposite ends of the insulator and having their free ends serrated, there being transverse grooves formed in the bottom of the insulator and intersecting the wire-receiving slot.

3. An insulator provided with a longitudinal slot adapted to receive a line wire and having its opposite ends extended longitudinally to form over-hanging hoods, there being spaced grooves formed in the exterior walls of the insulator, and troughs formed in the exterior walls of the over-hanging hoods and communicating with the adjacent grooves.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ERNEST JAY FOREMAN.

Witnesses:

E. P. LINSKEY,  
E. O. WILLSON.