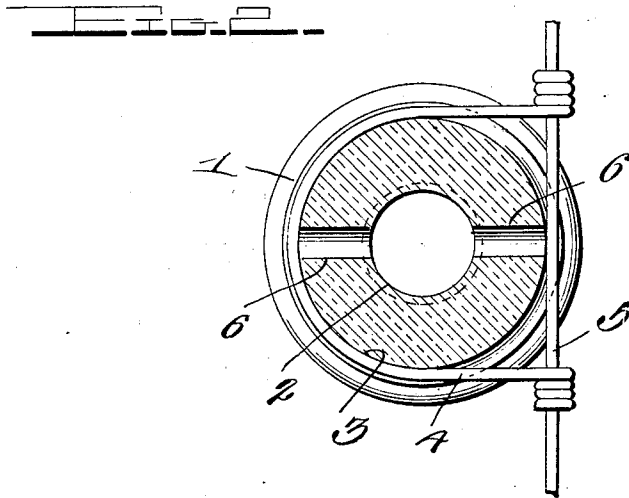
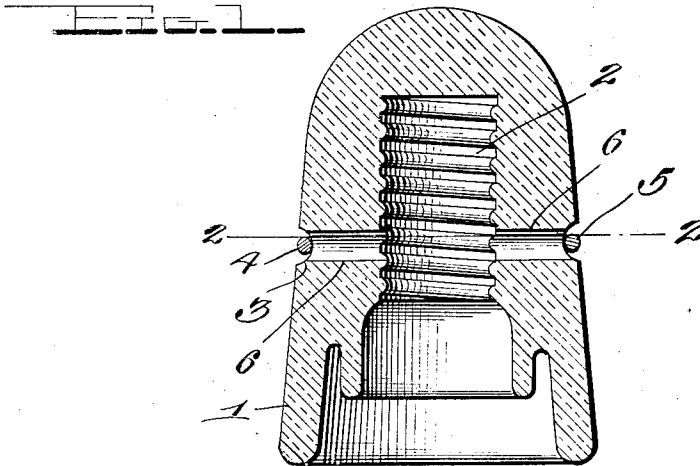


H. A. DE LONG
INSULATOR.
APPLICATION FILED AUG 15, 1912

1,055,322.

Patented Mar. 11, 1913.



Inventor

H. A. De Long,

Witnesses

Chas. L. Grubbauer.
A. B. Norton.

By

Watson E. Coleman.
Attorney

UNITED STATES PATENT OFFICE.

HARRY A. DE LONG, OF EPHRATA, PENNSYLVANIA.

INSULATOR.

1,055,322.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed August 15, 1912. Serial No. 715,249

To all whom it may concern:

Be it known that I, HARRY A. DE LONG, a citizen of the United States, residing at Ephrata, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Insulators, of which the following is a specification, reference being had to the accompanying drawings.

This invention comprehends certain new and useful improvements in insulators designed to support electric conductors such as telegraph or telephone wires, and the invention has for its primary object an improved construction of insulator of this character which is so formed that it will protect the line, whatever the same may be, from the effects of lightning. And the invention also aims to generally improve devices of this class and to render them more useful and commercially desirable.

With these and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions of the parts that I shall hereinafter more fully describe and claim.

For a full understanding of the invention reference is to be had to the following description and accompanying drawing in which,

Figure 1 is a vertical transverse sectional view of my improved insulator, and, Fig. 2 is a horizontal section thereof on the line 2—2, of Fig. 1.

Corresponding and like parts are referred to in the following description and designated in the accompanying drawing by like reference characters.

It is to be understood that my improved insulator may be of any desired shape and construction, except as hereinafter noted, and that it may be used to carry or support wires for any purpose whatever. For the purpose of illustration, it is shown as of the ordinary conical type, formed of porcelain or glass or some similar insulating substance, the insulator being designated 1 in the drawing and being formed with the usual threaded opening or socket 2 whereby it is adapted to be secured on a metallic bracket or cross arm pin (not shown). It is also illustrated as formed with the usual groove 3 for the tie wire 4 which is de-

signed to encircle the insulator and be coiled around the line wire 5 so as to secure the latter to the insulator.

In carrying out my invention I form the insulator 1, preferably at diametrically opposite points with openings 6 extending through the walls of the insulator and establishing communication between the threaded opening 2 and the exterior wall of the insulator at the groove 3. In practice, the insulator as shown adjusted with these openings 6 will register at their outer ends with the tie wire 4 and line wire 5 respectively.

From the foregoing taken in connection with the accompanying drawing, the operation of my improved insulator will be apparent. Should lightning strike the line or be directed toward the pole equipped with insulators constructed in accordance with my invention, it is clear that the current will flow from the tie wire 4 or line wire 5 through one of the openings 6 and thence to the pin or other support upon which the insulator is mounted, the line being thereby protected.

While the accompanying drawing illustrates what I believe to be the preferred modification of my invention, it is to be understood that the invention is not limited thereto, but that various changes may be made in the construction, arrangements and proportions of the parts without departing from the scope of the invention as defined in the appended claims.

What I claim is:—

1. As a new article of manufacture, the hereindescribed insulator formed with a socket, and with diametrically disposed apertures extending from the exterior wall of the insulator into the socket.

2. As a new article of manufacture, the hereindescribed insulator formed with a threaded socket and with a peripheral groove and with diametrically disposed openings leading from said groove into the socket.

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

HARRY A. DE LONG.

Witnesses:

LAURA B. ENGLE,
F. E. ENGLE.