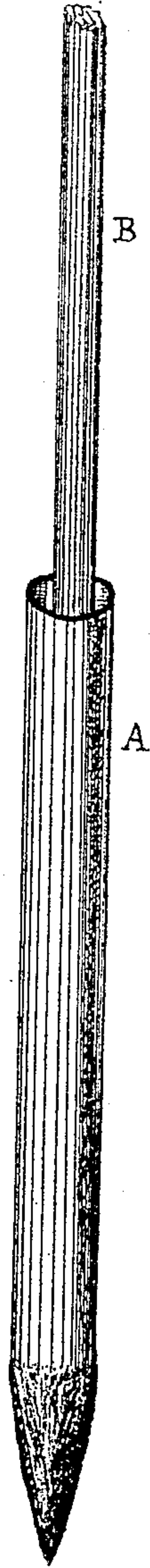


No. 97,496.

PATENTED DEC. 7, 1869.

T. GARLICK.  
LIGHTNING ROD AND CONDUCTOR.



Witness

J. Garlick  
per Burridge & Co  
Attorneys

# United States Patent Office.

THEODOTUS GARLICK, OF CLEVELAND, OHIO.

*Letters Patent No. 97,496, dated December 7, 1869.*

## IMPROVEMENT IN LIGHTNING-RODS AND CONDUCTORS.

The Schedule referred to in these Letters Patent and making part of the same

### *To all whom it may concern:*

Be it known that I, THEODOTUS GARLICK, of the city of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and improved Mode of Conducting and Discharging the Electric Fluid, (lightning, so called,) for the better security of life, buildings, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in providing an attachment to any electrical conductor now in use. I refer to the compound rod or conductor, made of copper and iron wires, and to the simple conductors, whether made of all copper or iron. These three different kinds of rods, I believe, are all that are now in use.

It may be proper to state here the more essential properties of a good electrical conductor:

First, good conducting-power.

Secondly, and of great importance, the property or qualification of discharging the electric fluid as rapidly as the conductor receives it. Indeed, it should be capable of discharging faster than the conductor receives it, in order that there may be no accumulation of fluid on the conductor.

These principles embrace all that renders the electrical conductor of any value for the security of buildings against electricity.

It is well known that copper and iron are among the best conductors; but then it is often we encounter a difficulty in discharging the fluid as fast as the conductor receives it, owing, mainly, to the dryness of the earth at the lower extremity of the conductor.

This imperfection has often been the cause of destruction of life and property, when everything else in the conductor was perfect.

I accomplish this by the use of the following apparatus or attachments:

I take an iron tube, (ordinary gas-pipe,) the calibre of which is about one inch in diameter, or sufficiently large to receive the lower end of the conductor, and of about eight feet, more or less, in length, one end of which is filled with an iron plug, which is to be welded in, and water-tight, and then sharpened to a point.

This tube is then to be driven into the earth at the place where you wish to connect the conductor with the earth, and the tube filled with water, and the conductor to be inserted into the tube. The conductor should reach the lower end of the tube.

I have said the tube should be eight feet long. I do not mean that it must be of that length, precisely, for it would, no doubt, be sufficient, if only six feet long; but eight or ten feet would be ample.

The tube thus prepared is driven into the ground at the place where the lightning-rod is to terminate, and filled with water.

The evaporating-surface is so small, that there never will be an absence of water in the tube, even in the driest seasons.

What I claim as my invention, and desire to secure by Letters Patent, is—

In combination with a lightning-rod, the tube A, as shown and described.

THEODOTUS GARLICK.

Witnesses:

A. R. MILLS,

GEORGE MYGATT.