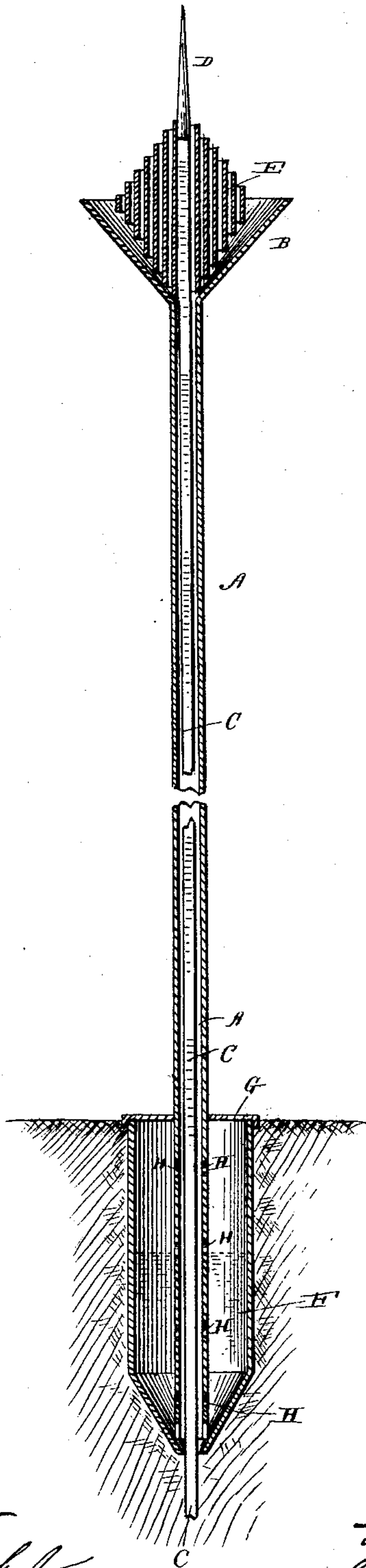


(No Model.)

W. BROWN.
LIGHTNING CONDUCTOR.

No. 369,915.

Patented Sept. 13, 1887.



Witnesses

C. H. Davis -
John S. Finch Jr.

Inventor

William Brown

By *his* Attorney

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UNITED STATES PATENT OFFICE.

WILLIAM BROWN, OF DUNCANNON, PENNSYLVANIA.

LIGHTNING-CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 369,915, dated September 13, 1887.

Application filed February 17, 1887. Serial No. 227,945. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BROWN, a citizen of the United States, residing at Duncannon, in the county of Perry and State of Pennsylvania, have invented certain new and useful Improvements in Lightning-Conductors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters and figures of reference marked thereon, which forms a part of this specification.

This invention relates to certain improvements in lightning-conductors; and it has for its objects to provide a succession of attractive points or surfaces at the upper end of the same and to insure the necessary moist ground contact, as more fully hereinafter specified. These objects I attain by the means illustrated in the accompanying drawing, in which is represented a vertical sectional view of my improved conductor.

Referring to the drawing, the letter A indicates a tubular conductor which at its upper end is provided with an inverted frustum or funnel, B, the object of which is to collect the rain-fall in wet weather. Through the said tubular conductor extends a flat conductor, C, preferably composed of a flat strip of copper, which has a pointed extension, D, at its upper end and projects into the earth at the base of the conductor. To the said conductor near its upper end is secured a convolute, E, which gradually lessens in width from its center to its periphery, so as to fit the funnel or frustum below and form a series of step-like conducting or attracting edges above, the upper edges of which serve to conduct the electricity quietly from the surrounding atmosphere, the lower edges conforming to the shape of the funnel, so that the convolute may be conveniently located therein.

The letter F indicates the base of the conductor. This consists of a hollow reservoir

constructed of suitable material and provided with a removable cover, G. The lower end of this chamber or reservoir is contracted, as indicated, and through the contracted portion passes the lower end of the flat conductor before mentioned. The tubular conductor within the reservoir or chamber is perforated at intervals, as indicated by the letter H, to permit the passage of water from the tubular conductor to said chamber, wherein it collects.

The operation of my invention is as follows: During rainy weather the funnel or frustum receives water, which finds its way through the tubular conductor to the reservoir, where it collects and is stored. The lower end of the reservoir, being contracted, permits the water to slowly escape and keep the earth in the vicinity of the base of the conductor saturated during dry weather, so as to insure the passage of the electric current from the conductor to the earth.

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

1. The tubular conductor having a funnel or inverted frustum at its upper end, in combination with the central conductor having a pointed extension at its upper end and a convolute sheet below said pointed end, substantially as specified.

2. The combination, with the tubular conductor, the conductor extending through the same, and the funnel or frustum, of the reservoir or chamber through which the conductors extend, the tubular conductor being provided with apertures and the reservoir with a contracted opening at its bottom, whereby the collected water is supplied around the conductor to form an effective ground-connection, substantially as specified.

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

WILLIAM BROWN.

Witnesses:

RALPH G. CROMLEIGH,
JOS. M. WILSON.