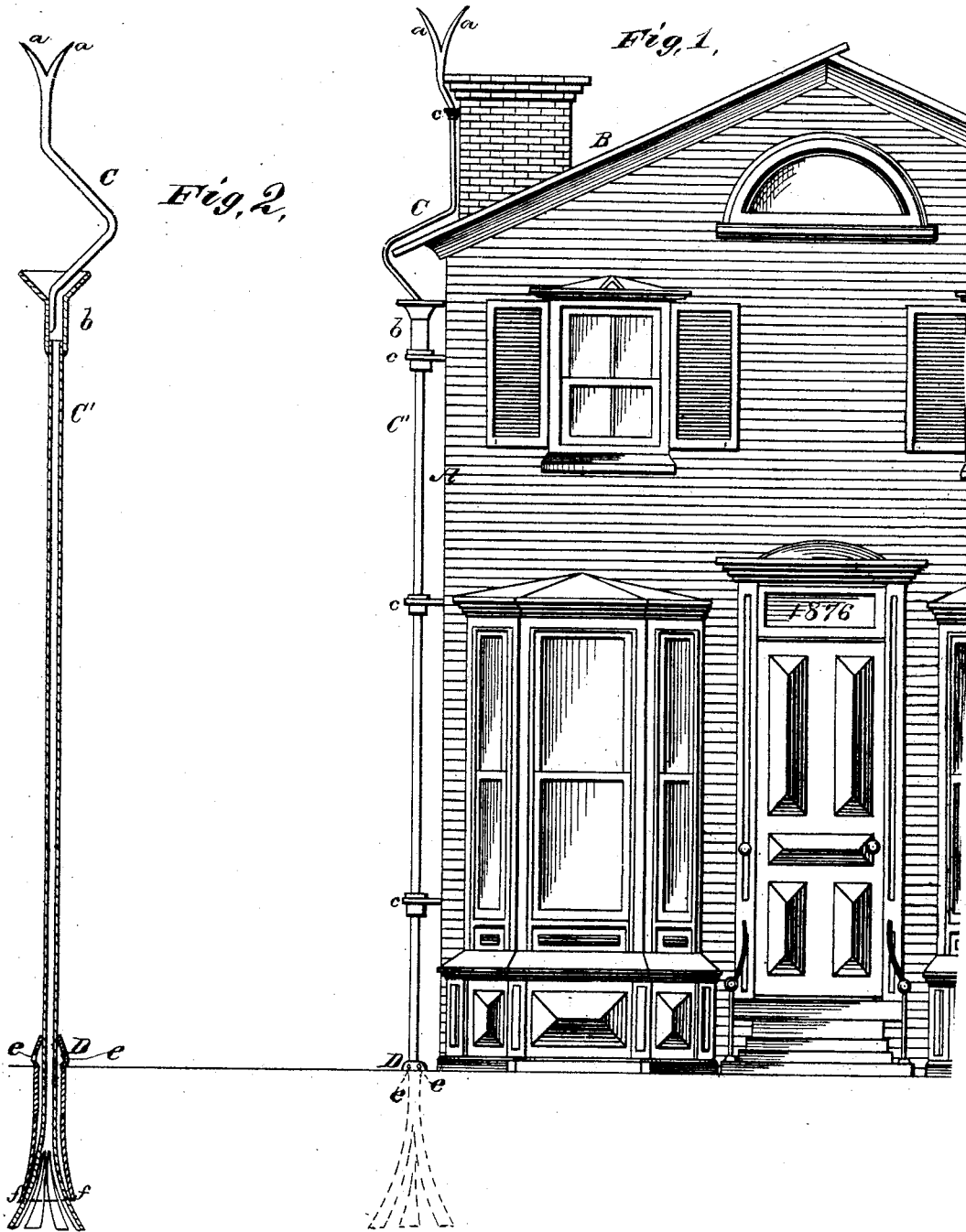


W BROWN.
Lightning Conductors.

No. 196,518.

Patented Oct. 30, 1877.



WITNESSES
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WILLIAM BROWN, OF DUNCANNON, PENNSYLVANIA.

IMPROVEMENT IN LIGHTNING-CONDUCTORS.

Specification forming part of Letters Patent No. **196,518**, dated October 30, 1877; application filed May 27, 1876.

To all whom it may concern:

Be it known that I, WILLIAM BROWN, of Duncannon, in the county of Perry and State of Pennsylvania, have invented a new and valuable Improvement in Lightning-Conductors; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my lightning-rod attached to a dwelling, and Fig. 2 is a central vertical sectional view of my lightning-rod.

This invention consists in lightning-rods wherein a water-conducting tube is used in combination with a spurred rod-section; and the nature of my invention consists in a spurred or tipped section of a rod for the upper section of the conductor, in combination with a metallic tubular rod leading down into the earth, and terminated by a number of flaring points or arms for distributing the electricity, as will be hereinafter more fully set forth.

In the annexed drawings, A designates the wall of a building, and B the roof thereof. C is a rod, which is provided with any number of attracting spurs or points *a* on its upper end, tipped by any suitable metal which is not easily corrodible. This rod is electrically connected to the interior side of the upper section of a tubular conductor, C', of copper or any other conductor of electricity.

Any suitable means may be adopted for connecting the tubular sections together to form a rod of any desired length.

At the upper end of the tubular rod is a funnel, *b*, for catching the drippings of water, and at suitable points retainers for the tubular rod are employed, which may be insulators, one of which latter is designated by the letter *c*, and is simply a flanged tube of a vitreous material.

The lower end of the lower section of the tubular conductor is split at different points, forming fingers *f*, which are spread out, so as to scatter the electricity and direct it downward into the earth.

D designates a tube, which is applied around the slitted portion of the tubular conductor, and perforated at *e e*, for the purpose of allowing the air in the said tubular conductor to escape at proper times.

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

The improved lightning-rod, consisting of the rod C, having a number of attracting-points, *a*, tubular conductor C', having at its upper end the funnel *b*, and at its lower end the fingers *f*, and the tube D, having perforations *e*, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM BROWN.

Witnesses:

N. VAN FASSEN,
G. R. WENGER.