

J. W. HANKENSON.
Improvement in Lightning Rods.

No. 128,617.

Patented July 2, 1872.

Fig. 1.

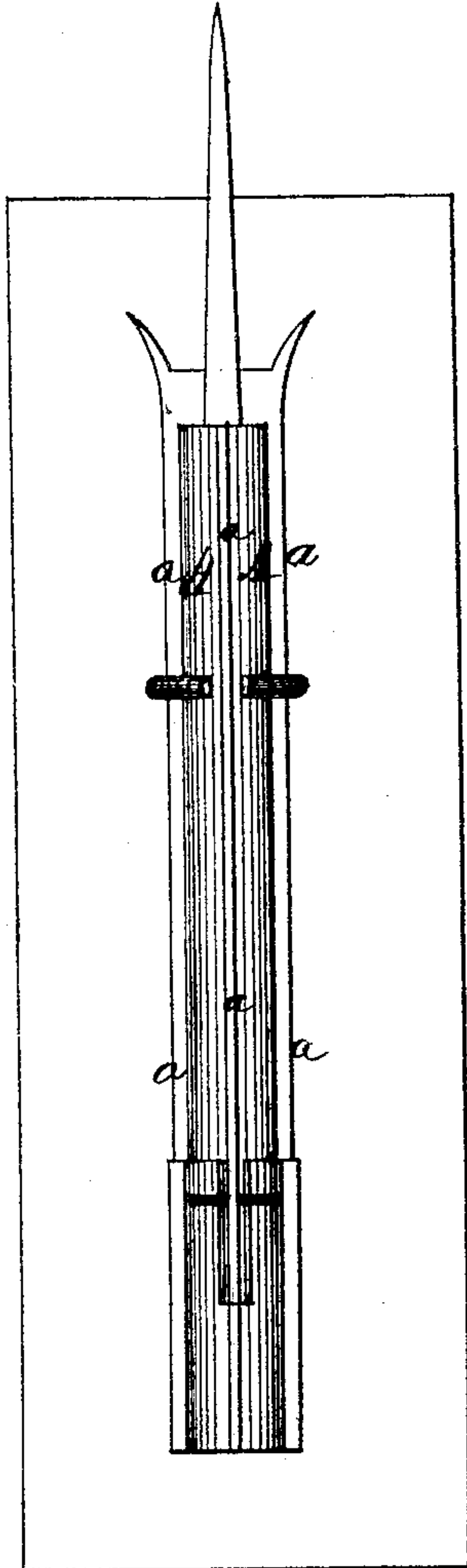


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES W. HANKENSON, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO HIMSELF AND MOHOLA BRAWLEY, OF SAME PLACE.

IMPROVEMENT IN LIGHTNING-RODS.

Specification forming part of Letters Patent No. 128,617, dated July 2, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, J. W. HANKENSON, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Lightning-Rods; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in a copper lightning-rod made of four strips, forming an inner and an outer shell, and the inner shell provided with a center or core of zinc, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 represents a side elevation, and Fig. 2 a cross-section of my lightning-rod.

My lightning-rod is composed of four strips, A A and B B, of copper, the two strips A A forming an outer shell, pressed or otherwise united together so as to form projecting flanges *a a*, running longitudinally with the rod. The

two strips B B form an oval inner shell, as shown, its edges being held in two opposite flanges, *a*, of the outer shell. These pieces B B add to the conductive surface of the rod, and still in a compact form. Through the inner shell B is passed a center or core, C, of zinc, forming with the copper a combination which produces galvanic action, thereby protecting the inside of the rod from verdigris or corrosion, which destroys the metal and conductive power of the rod. A center or core of zinc may be used with any copper lightning-rod for the same purpose.

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

A lightning-rod, made of an interior and an exterior copper shell, and provided with a zinc center or core, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES W. HANKENSON.

Witnesses:

H. W. McNAIR,
MARTIN V. PRATT.