

(No Model.)

T. H. PATEE.
LIGHTNING ROD.

No. 282,562.

Patented Aug. 7, 1883.

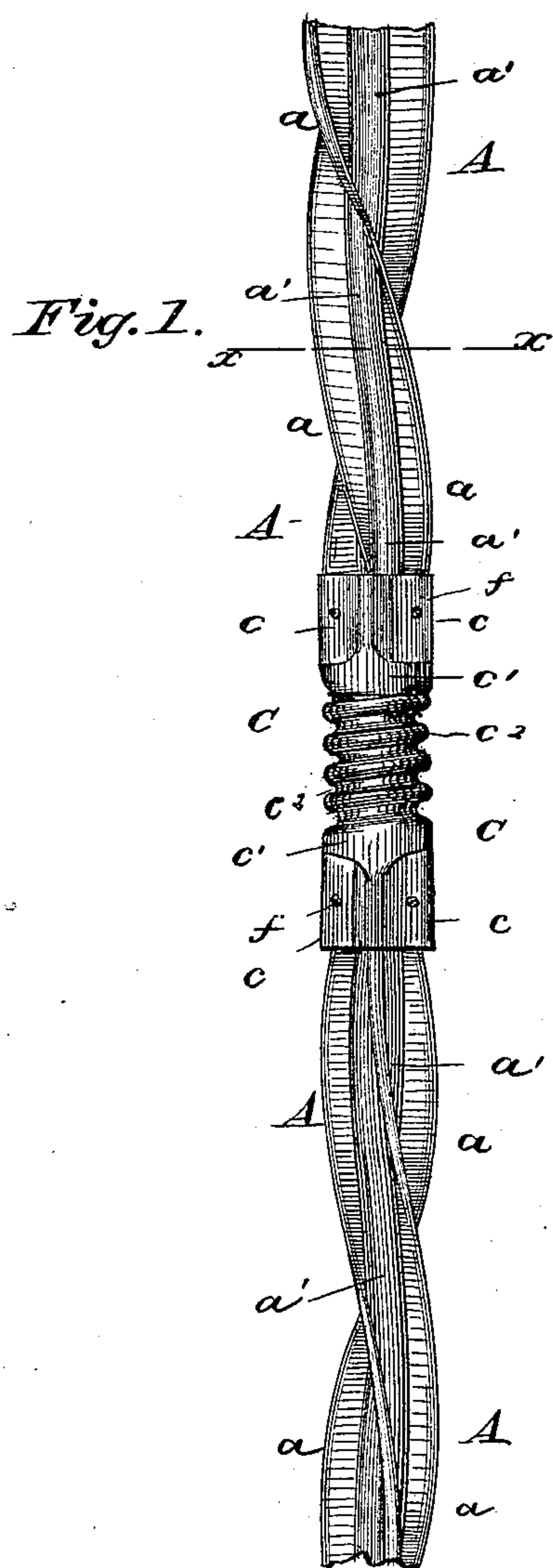
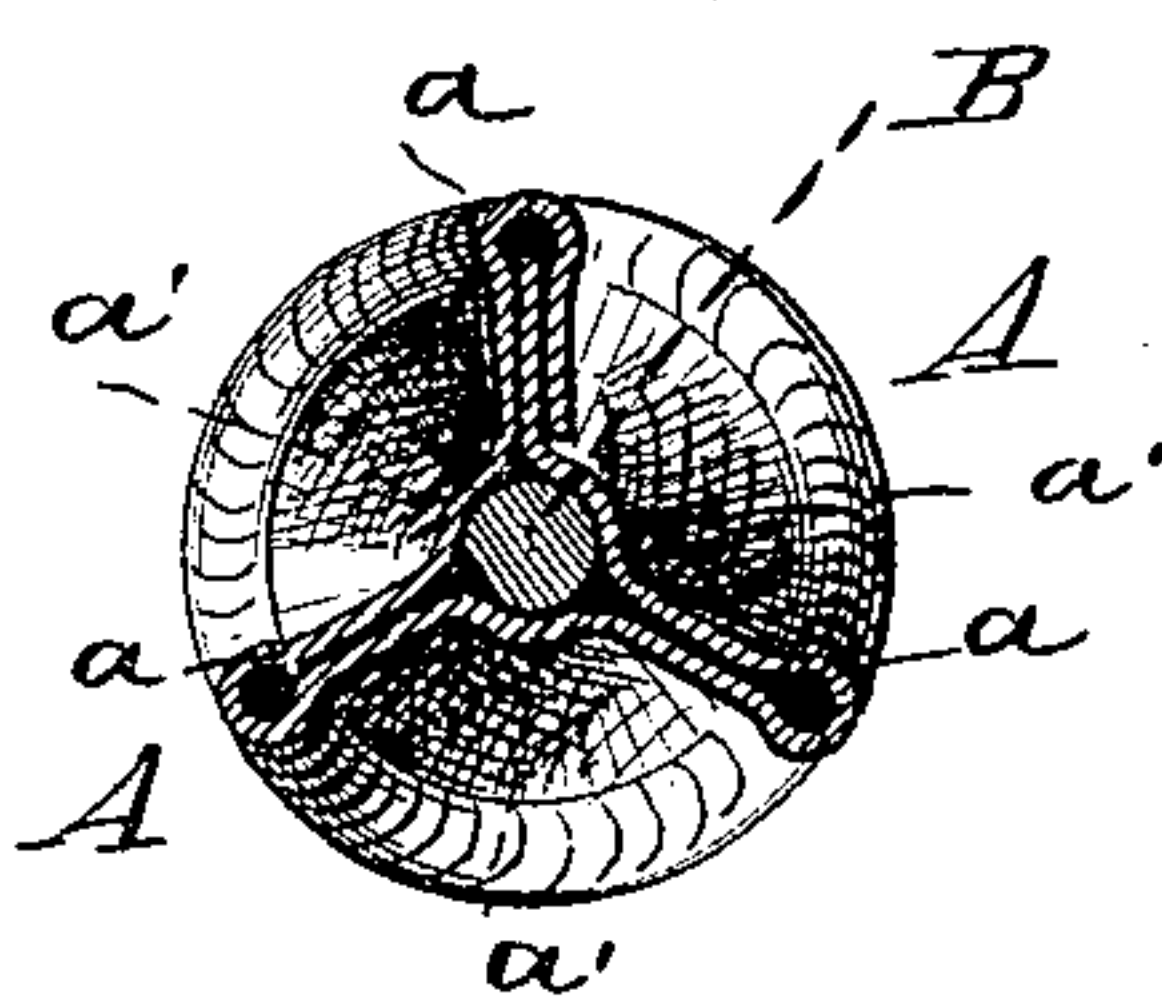


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

THEODORUS H. PATEE, OF GREENCASTLE, INDIANA.

LIGHTNING-ROD.

SPECIFICATION forming part of Letters Patent No. 282,562, dated August 7, 1883.

Application filed August 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, THEODORUS H. PATEE, of Greencastle, in the county of Putnam and State of Indiana, 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 of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to lightning-rods; and the novelty consists in the construction, arrangement, and adaptation of parts, as will be more fully hereinafter set forth, and specifically pointed out in the claim.

The object of the invention is to provide a novel and efficient lightning-rod, combining simplicity, usefulness, and ease of manufacture, and a cheap and efficient coupling for the sections thereof, formed of sheet-copper.

To these ends the invention consists, essentially, in a single sheet of metal (copper preferred) of such proper dimensions that when formed as described the said metal will present three external ribs, and a central cylinder or tube which is adapted to closely embrace the rod, as illustrated. The ribs are formed by folding or bending the metal upon itself until the sides approximate the same, and the plane portion of the metal blank, between each two of the ribs, is curved longitudinally, so as to describe an arc of a circle corresponding to the circumference of the center rod. This construction not only affords great strength to the rod with a minimum quantity of metal, but the cylindrical or tubular portion of the sheath so closely embraces the center rod that the friction between them greatly enhances its power to resist. The sections of the rod thus constructed are coupled together by the following means: Two plates of sheet copper are by any proper and well-known method or means formed into coupling-sections each having a three-ribbed shank, a body, and a worm-grooved engaging portion, the said portion of one being slightly smaller than that of the other, and adapted to operate therein. The ribs of the coupling-section readily receive the ribs of the rod, and the two series of the ribs thus connected afford convenient means for securing the parts together.

This invention is designed as an improvement upon the patent granted to myself May 16, 1882, and numbered 257,891, the improvement, in simplicity of construction and cheapness of manufacture, being apparent. I have discovered that in constructions where coupling is effected by the spiral projections of one section operating within the other in the manner of a quick-screw connection are not reliable, and a slight irregularity renders the ready manipulation of the parts difficult if not impossible; and this objection arises from the fact of there being but a slight leverage. In this invention the worm-grooves describe, essentially, a screw-thread pitch affording many times the holding-surface to the same longitudinal area.

In the drawings, Figure 1 represents a longitudinal elevation, and Fig. 2 a cross-section through the line *x x* of Fig. 1, of a lightning-rod and coupling constructed in accordance with my improvements.

A represents the blank of sheet copper bent upon itself and shaped to form spiral ribs *a*, and a central cylindrical or tubular portion, *a'*, which closely embraces and holds by friction the center rod, B.

C represents the section-coupling having ribbed shanks *c*, body *c'*, and grooves *c''*, the latter portion of one section operating in the manner of a screw-thread within the corresponding portion of the other, and the ribs of the shank *c* receiving ribs *a* of the rod A and secured together at *f*.

Having thus described my invention, what I claim is—

A sectional lightning-rod, each section being constructed of a single piece of metal having spiral ribs *a*, and central tubular portion, *a'*, the central rod, B, and the coupling C, for coupling the sections together, each coupling-section having at one end a ribbed shank, *c'*, adapted to receive and hold the ribs *a*, and at its opposite end a worm-groove, *c''*, the grooves *c''* being adapted to engage together, substantially as and for the purpose set forth.

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

THEODORUS H. PATEE.

Witnesses:

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