

J. H. WESTON.

COUPLINGS FOR APPLYING WEATHER-VANE POINTERS TO
LIGHTNING-RODS, &c.

No. 185,272.

Patented Dec. 12, 1876.

FIG. 1.

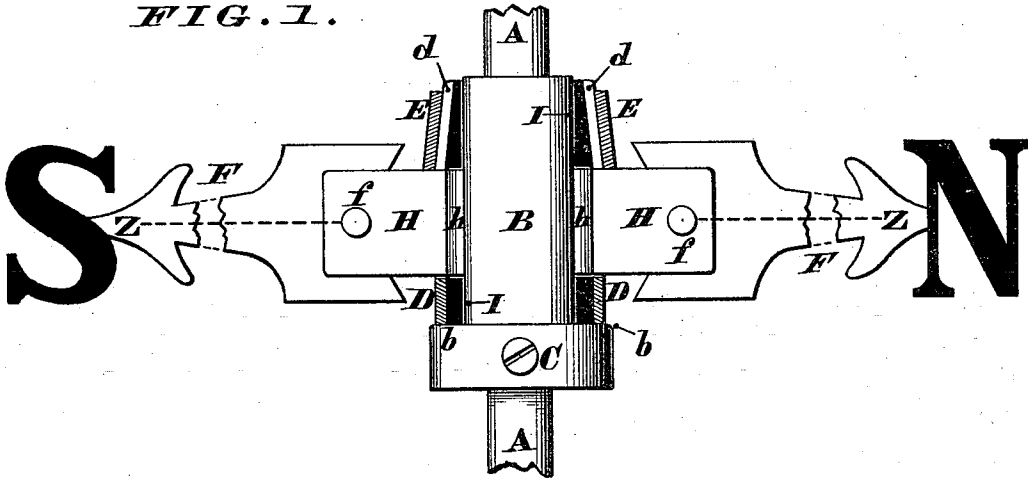


FIG. 2.

FIG. 3.

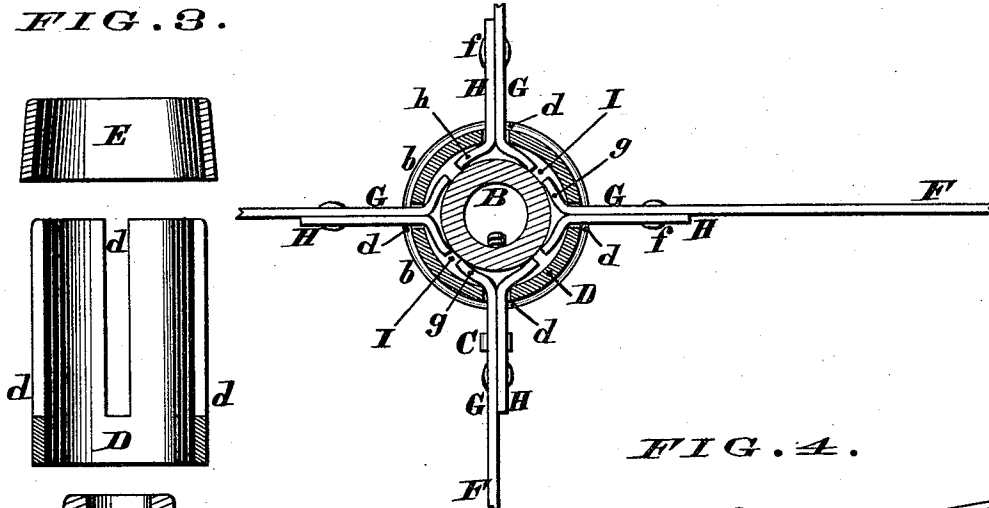
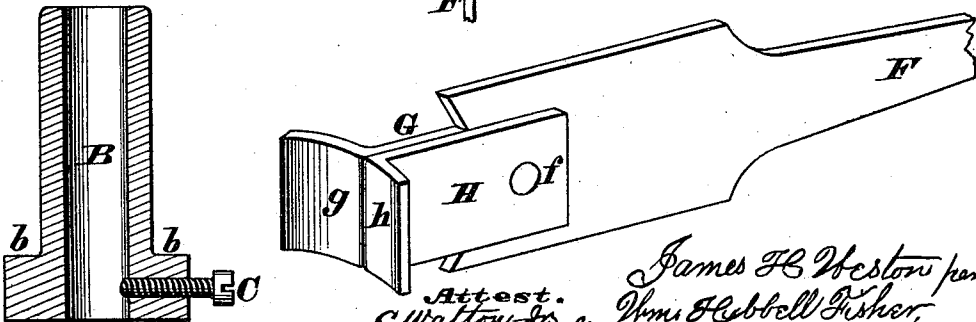


FIG. 4.



Attest.
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UNITED STATES PATENT OFFICE.

JAMES H. WESTON, OF CINCINNATI, OHIO.

IMPROVEMENT IN COUPLINGS FOR APPLYING WEATHER-VANE POINTERS TO LIGHTNING-RODS, &c.

Specification forming part of Letters Patent No. **185,272**, dated December 12, 1876; application filed November 6, 1876.

To all whom it may concern:

Be it known that I, JAMES H. WESTON of Cincinnati, State of Ohio, have invented a new and useful Coupling for Applying Pointers to Lightning-Rods and other terminals, of which the following is a specification:

The object of my invention is to provide a simple and efficient coupling wherewith the indicators that designate the four cardinal points of the compass may be secured to a lightning-rod in a few minutes without employing any solder or using any complicated device for attaching said coupling. Said coupling consists, essentially, of a tube or cylinder, having at its lower end an annular ledge or shoulder that supports a thimble provided with four vertical or longitudinal slots disposed at right angles with reference to each other. These slots receive the shanks of the arrows or other appropriate devices employed for indicating the four cardinal points of the compass; and said shanks are provided at their inner ends with segmental wings that occupy the annular space between the cylinder and the thimble. This slotted thimble, being made of comparatively thin metal, is slightly elastic, and, as soon as a ferrule is driven down around the upper end of the same, said thimble is compressed, thereby clamping the wings so tightly between the thimble and cylinder as to effectually prevent any rotation of the pointers around the cylinder, which latter device is secured to the lightning-rod or other support by means of a set-screw or its equivalent device.

Figure 1 is a vertical section of my improved pointer-coupling applied to a lightning-rod, the tube or cylinder of said coupling being shown in elevation. Fig. 2 is a horizontal section through the coupling at the line *z z*, Fig. 1, the device being shown detached from the rod. Fig. 3 is an axial section of the cylinder, thimble, and ferrule separated from each other; and Fig. 4 is an enlarged perspective view of the inner end of one of the pointers.

A represents a lightning-rod or other terminal or supporting member, and B represents a cylinder or tube that is secured to said rod with a set-screw, C, or its equivalent device. This cylinder is furnished with an an-

nnular ledge or shoulder, *b*, upon which is seated a thimble, D, having four vertical or longitudinal slots, *d*, that are situated at right angles with reference to each other. These slots are open at top and closed at bottom, as more clearly seen in Fig. 3. Adapted to fit snugly on the upper end of this slotted thimble is a tapering band, ring, or ferrule, E, although this ferrule may be omitted and its function be performed by means of a coil of wire wrapped tightly around the upper portion of said thimble.

The indicators that designate the four cardinal points of the compass may have the customary arrow shape, as shown at F, or said pointers may be of any other appropriate form.

The inner end of each pointer has a flat shank, G, terminating with a curved wing, *g*. Secured to this shank with rivet *f*, or otherwise, is another flat shank, H, having a curved wing, *h*, extending in an opposite direction to the one *g*. The shanks G H are adapted to enter the vertical slots *d* of the thimble, while the wings of the various shanks occupy the annular space I between said thimble and the cylinder B, as more clearly shown in Fig. 2. To fit the device together the thimble D is first placed upon the tube B and supported on shoulder *b*, after which the various pointers F are applied to said thimble by simply inserting their shanks G H in the appropriate slots *d* of the thimble, the wings *g h* of the pointers being housed within the annular recess I between the thimble and tube. The ferrule E is now driven down firmly around the upper portion of thimble D, thereby compressing the latter and clamping the wings so firmly in position as to effectually prevent any rotation of the pointers F around the cylinder B. The latter is then suitably attached to the rod A with set-screw C, and the coupling is at once immovably secured in its proper position.

It will be seen that no solder is employed with my coupling; neither are there any screw-joints to be engaged with each other, and, as the component parts are light and easily handled, the entire device may be fitted together on a church-spire or other elevated structure with the utmost ease and certainty.

A modification of my invention may be made by dispensing with the supplementary shank H *h* and splitting the shank G horizontally, so as to form two wings, which can be bent in opposite directions.

I claim as my invention—

1. The supporting-cylinder B *b* and vertically-slotted thimble D *d*, having an annular space, I, between them for the reception of the wings of pointers F, whose shanks traverse said slots *d*, and are secured in position with

the ferrule E, or its equivalent device, substantially as herein described and set forth.

2. The pointers F, having shanks G H secured together with rivets *f*, and provided at their inner ends with oppositely-projecting wings *g* and *h*, substantially as herein described and set forth.

JAMES H. WESTON.

Attest:

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