

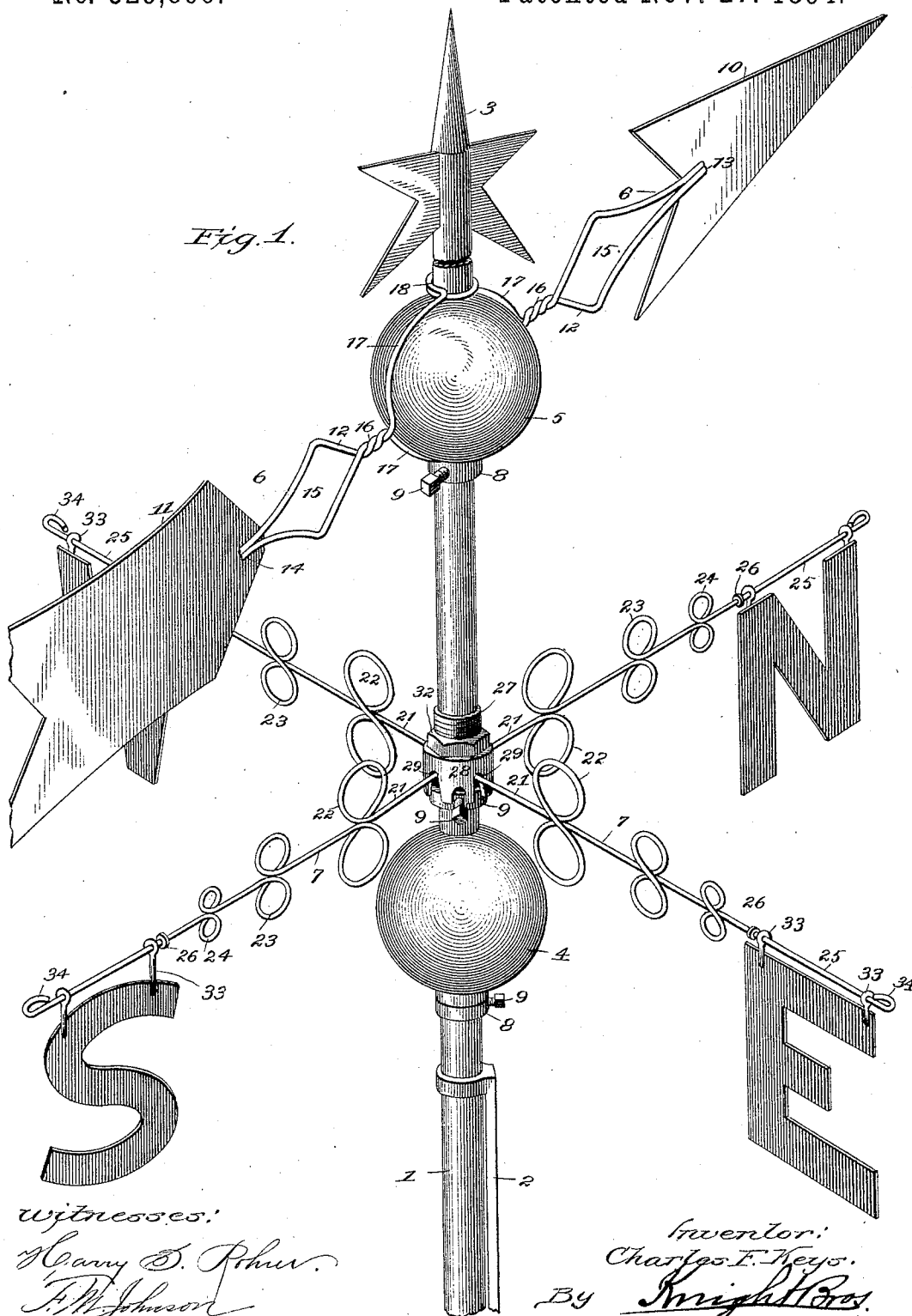
(No Model.)

2 Sheets—Sheet 1.

C. F. KEYS.
ORNAMENT FOR LIGHTNING RODS.

No. 529,866.

Patented Nov. 27. 1894.



Witnesses:

Harry D. Pomeroy.
F. M. Johnson

Inventor:
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By Smith Bros.
Att'y

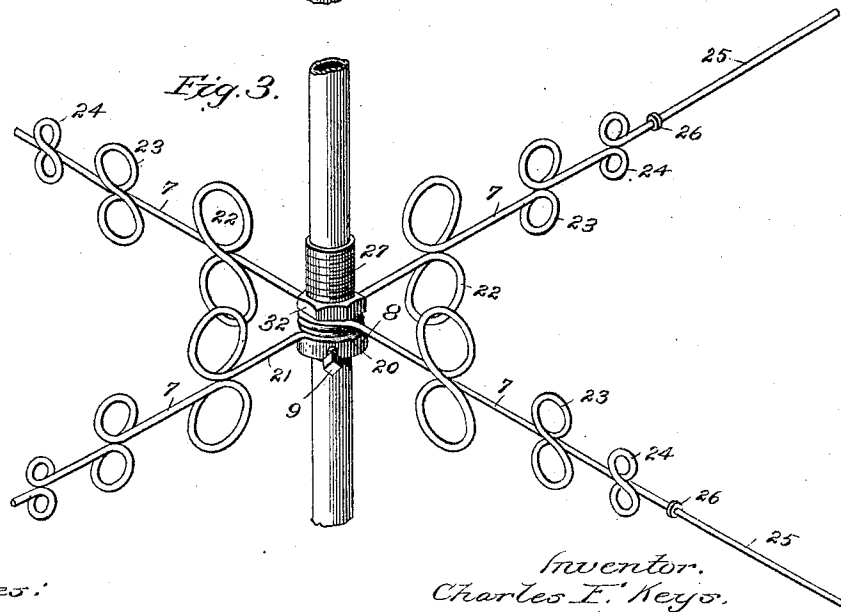
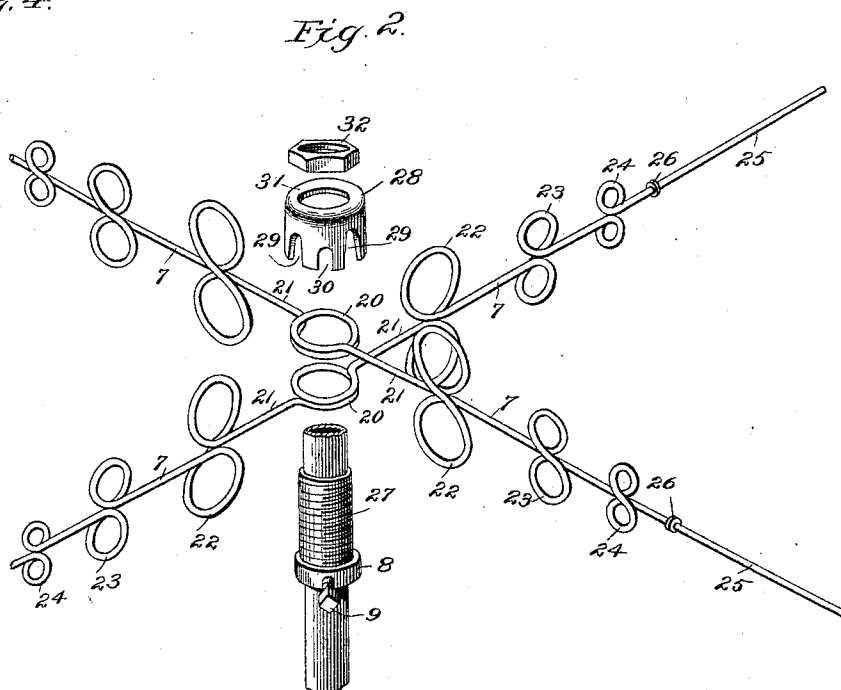
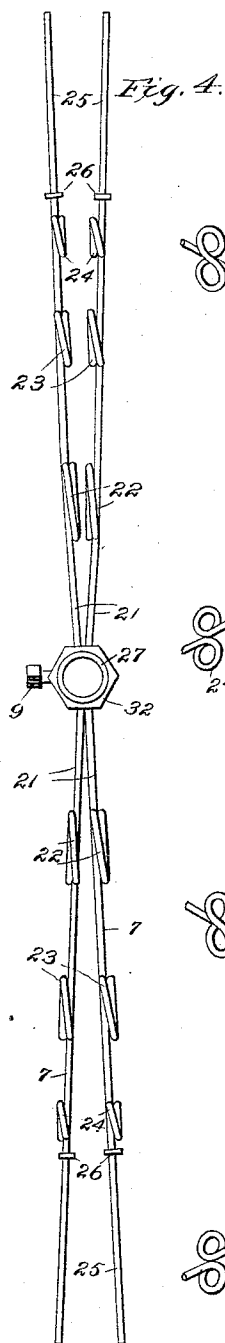
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2 Sheets—Sheet 2.

C. F. KEYS.
ORNAMENT FOR LIGHTNING RODS.

No. 529,866.

Patented Nov. 27, 1894.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES F. KEYS, OF WASHINGTON, DISTRICT OF COLUMBIA.

ORNAMENT FOR LIGHTNING-RODS.

SPECIFICATION forming part of Letters Patent No. 529,866, dated November 27, 1894.

Application filed March 22, 1894. Serial No. 504,657. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. KEYS, a citizen of the United States, residing at Washington, District of Columbia, have invented certain Improvements in Ornaments for Lightning-Rods, of which the following is a specification.

My invention relates to the construction of weather vanes or ornaments for lightning rods, and has for its objects to simplify and cheapen the construction and at the same time to render the structure more durable, and of a form which offers less opportunity for destruction by wind or shocks of lightning and also to render the device convenient for shipment without subjecting it to liability of breakage.

The invention consists in mounting the vertical shaft or rod in any suitable way, providing it with a suitable point or end, supporting thereon by means of adjustable collars spheres preferably of wood, and forming the frame or shaft of the arrow of wire bent and twisted to form a socket through which the rod passes and which surrounds one of the spheres and in forming the index of cardinal points also of wire bent into ornamental shape and having the initial letters suspended at the ends of the index frame by means of eye bars through which the ends of the frame pass so that the letters will swing freely and offer little or no resistance to the wind.

My invention further consists in forming the four index arms of two crossed wires having formed at the center sockets for the reception of the rod and the two being held in proper relation by means of a specially formed clamp which may be loosened at will to permit the two parts to be folded into parallel position to avoid breaking.

My invention consists in other details of construction as will be hereinafter particularly pointed out in the claims, being first fully described with reference to the accompanying drawings, in which—

Figure 1 represents in perspective a lightning rod ornament in the form of a complete weather vane and ornamental accessories constructed in accordance with the preferred form of my invention. Figs. 2 and 3 represent by similar views the preferred and a

modified construction of index clamp, and Fig. 4 represents the parts shown in Figs. 2 and 3 removed from the rod and folded in position for shipment.

1 represents a rod which may be supported in any suitable way as for instance by a brace 2, and 3 represents the upper distributing point on the rod. The rod is provided with spheres 4, 5, which I prefer to make of wood rendered impervious to moisture by a suitable coating and at the upper sphere 5 is secured an arrow or pointer 6 while above the lower sphere is secured the index 7. The spheres 5, 6 are supported by collars 8 fixed upon the rod by set screws 9.

10 represents the head of the arrow and 11 the tail which are carried by the shaft 12, which is attached to the parts 10 and 11 by soldering or otherwise, at the points 13 and 14. The shaft 12 is preferably constructed substantially as shown of two wires which may be bent to form the ornamental swells 15, twisted at 16 and forming a band 17 surrounding the sphere 5 and sockets 18 (the lower one of which is obscured by the sphere) through which the rod 1 passes, the arrow, by this means being swiveled upon the rod.

The arms of the index 7 are formed of two single wires bent to form the sockets 20 and radiating arms 21 with ornamental scrolls 22, 23 and 24 and terminating in ends 25. The ends 25 have collars 26 for keeping in place the letters N, S, E, and W which are mounted in the manner to be described.

27 represents a sleeve which is preferably formed integral with one of the collars 8 so as to be secured in place by the set-screw 9 of said collar, and this sleeve is constructed to receive the sockets 20 of the indexes 7 which indexes after being placed upon the sleeve 27 are held in proper angular relation by means of a spacing collar 28 having notches 29 which receive the radial arms 21 of the indexes 7 and with a socket 30 which engages with the set-screw 9 and positively fixes with relation to the rod 1, the direction of the radial indexes 7. The collar 28 has an inturned flange 31 which bears upon the sockets 20 to force them down upon the supporting collar 8 and after the parts are assembled they are firmly locked in position by means of a nut 32 which screws upon the sleeve 27.

In securing the initial letters N, S, E, and W upon the spindle ends 25 of the index arm 7, each letter is provided with a pair of suspending eyelets 33 which fit upon the spindle end 5 25 and the letter is secured in place thereon by turning up the end as at 34. It will be observed that with this method of swinging the letters a neat and durable structure is secured and the letters are free to swing with the wind 10 in order to offer little or no resistance.

As indicated by the modification in Fig. 3, the spacing collar 28 may be dispensed with if desired and the arms 7 of the index, locked in position by screwing down upon them the 15 nut 32. This will be found in most cases sufficient, but the advantage of using the spacing collar will be appreciated from the fact that its notches are accurately located for the purpose of setting the arms 7 at right angles, 20 while in the form shown in Fig. 3 the arms must be adjusted and their angle measured when the device is being set up.

Aside from the obvious advantages of cheapness and durability in structure, without detracting from its ornamentation, the form of 25 index above described has another very important advantage in that it may be folded as indicated in Fig. 4, for convenience and safety in shipment. In this form the index 30 takes up very little room and the liability to breakage is reduced to a minimum. This has been found to be a serious difficulty with indexes having their arms cast integral and in the proper angular relation at the time of 35 manufacture.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In a device of the character specified the 40 combination of the vertical rod and the arrow formed substantially as described with the head and tail and the connecting shaft of wire bent to form the sockets 18 for the reception of the shaft as and for the purpose 45 set forth.

2. In a device of the character specified the combination of the vertical rod 1 and the arrow 6 having the head 10 and the tail 11 connected by the shaft 12 formed of bent wire as

explained with the sockets 18 and the band 50 17 for spacing the sockets apart as explained.

3. In combination with the rod 1 and the sphere 5 the arrow 6 having the shaft 12 constructed of wire as explained bent to form the band 17 surrounding the sphere 5 and the 55 sockets 18 at top and bottom of said sphere substantially for the purpose explained.

4. The combination of the rod 1 and the index 7 constructed of the two crossed arms each formed of an integral piece with the central socket and having a suitable clamp for holding them upon the rod as explained. 60

5. In combination with the rod 1, the index consisting of the crossed integral rods 7 formed with the central sockets, the sleeve 65 for attachment to the rod and upon which the sockets fit and the clamp for holding the said sockets on the sleeve as explained.

6. The combination of the rod 1, the sleeve 27, the crossed index rods having sockets fitting said sleeve, and the notched spacing collar 28 having means for securing it in place as explained. 70

7. The combination of the rod 1, the collar 8, having set-screw 9 and sleeve 27, the crossed 75 arms having sockets fitting said sleeve, and the spacing collar 28 having notches for receiving the crossed arms and holding them in proper relation and also having a notch for receiving the set-screw 9 for keeping the index 80 from turning on the sleeve 27 substantially as explained.

8. The combination of the rod 1, and the index formed of two crossed integral wire arms bent to form the central sockets and terminating in the spindle ends 25 for the reception of the letters as explained. 85

9. An index for weather vanes consisting of the crossed integral wire arms having the spindle ends 25, and the letters provided with 90 eyelets through which said spindle ends pass and said ends 25 being turned up as at 24 to retain the letters in place as explained.

CHARLES F. KEYS.

Witnesses:

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