No. 698,424. Patented Apr. 22, 1902.

I. M. WARNER.

TELEGRAPH POLE OR FENCE POST.

(Application filed Aug. 27, 1901.)

(No Model.)

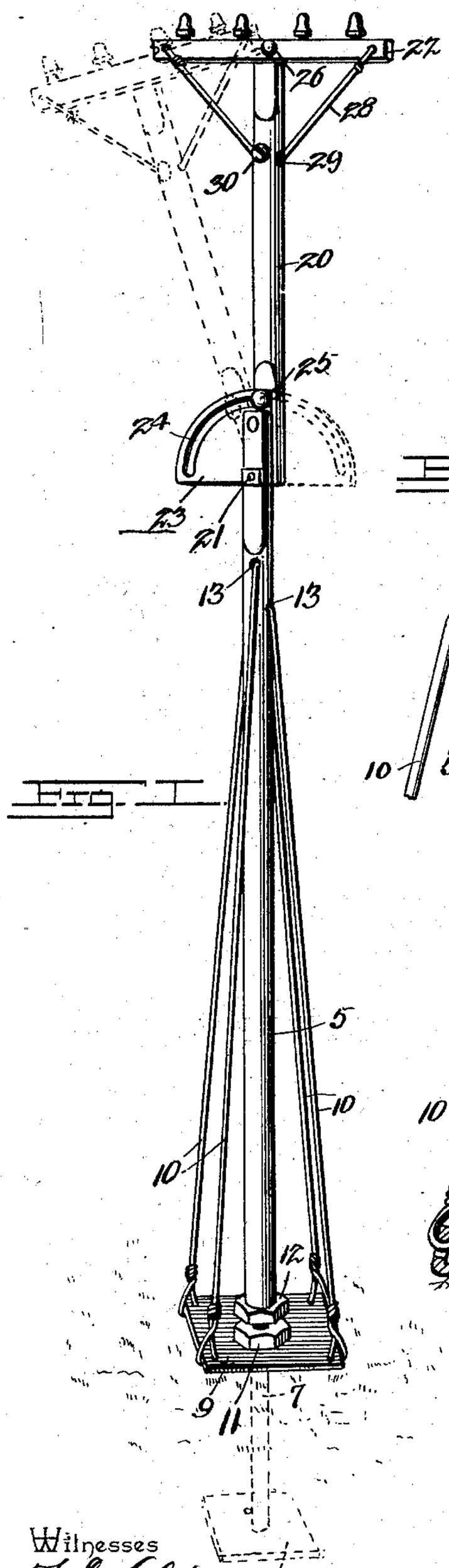

Fig. 1.

Fig. 2.

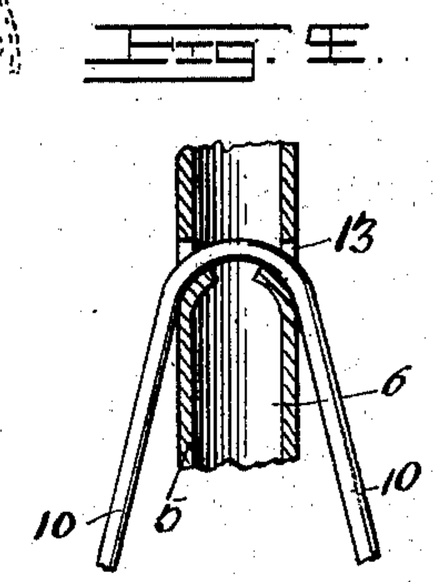

Fig. 4.

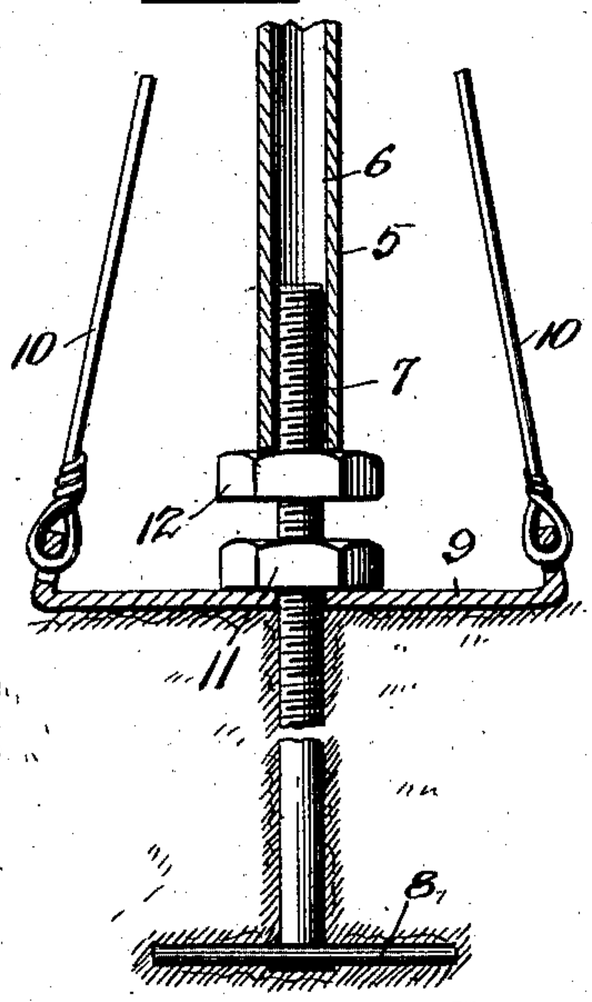

Fig. 3.

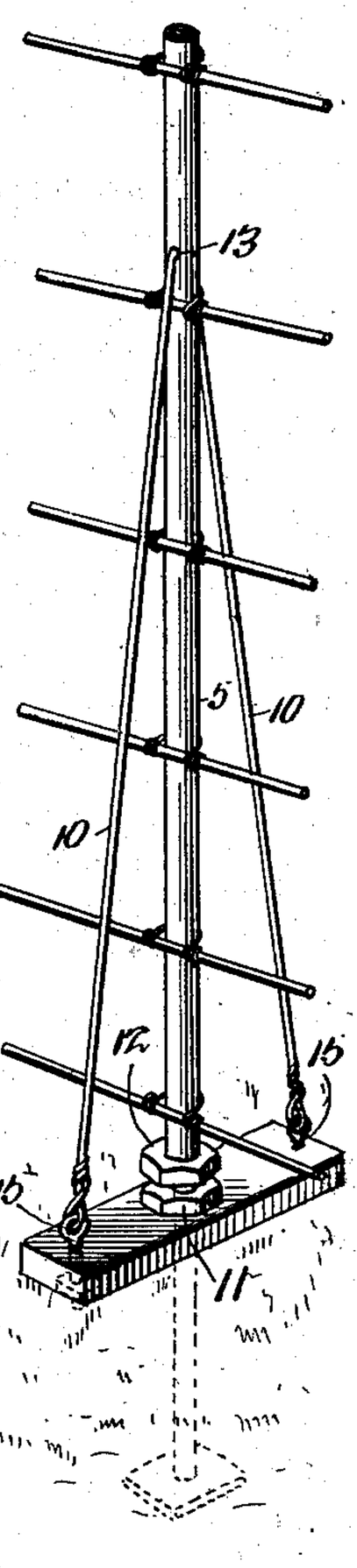

Fig. 5.

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UNITED STATES PATENT OFFICE.

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TELEGRAPH-POLE OR FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 698,424, dated April 22, 1902.

Application filed August 27, 1901. Serial No. 73,490. (No model.)

To all whom it may concern:

Be it known that I, ISAAC M. WARNER, a citizen of the United States, residing at Union City, in the county of Branch and State of Michigan, have invented a new and useful Telegraph-Pole or Fence-Post, of which the following is a specification.

My invention relates to certain improvements in the construction of telegraph-poles, fence-posts, and devices of the like character; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

One object of the invention is to provide an improved means of guying or bracing a post or pole to maintain the same against lateral stress in a vertical position.

A further object is to provide means for firmly gripping the anchor to the pole support or base.

A still further object is to provide for the adjustment of the pole and of its cross-arms to permit of the moving of a line or lines of wire from contact with a tree or other objects.

With these and other objects in view the invention consists in the novel construction and combination of parts hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a pole constructed in accordance with my invention and adapted for the support of an electric wire of any character. Fig. 2 is a vertical sectional view of the upper portion of the pole. Fig. 3 is a similar view of the lower portion of the pole, illustrating relative positions of the base and anchor. Fig. 4 is a detail sectional view illustrating the manner of attaching the guy to the pole. Fig. 5 is a perspective view illustrating a modification of the invention as applied to the support of a fence-post.

Similar numerals of reference indicate corresponding parts throughout the various figures of the drawings.

The main body 5 of the pole is preferably formed of a metallic tube, but may be of any other suitable material, its lower portion in all cases being provided with a bore 6, in which extends the upper end of a threaded rod 7. The lower end of rod 7 is firmly secured to an anchor-plate 8 of any suitable shape and dimensions and located beneath the surface of the ground a distance proportionate to the height of the pole to which it is to be attached. At the surface of the ground is a broad base-plate 9, which may be formed of any suitable material and may be provided with points of attachment for two or more guys 10. The threaded rod 7 extends up through a central opening in the base-plate and is provided with two adjusting-nuts 11 and 12, the former bearing against the upper surface of the base-plate and when tightened up serves to clamp the earth between the base-plate and anchor or to draw the base-plate into close contact with the ground and at the same time to a measurable degree tightening the guys 10. The nut 12 forms a support for the base of the pole and by turning it in an upward direction the guys may be tightened to any desired degree.

In the arrangement shown in Fig. 1 the guy-wires 10 are arranged in pairs, the wires passing through suitable openings 13 in the upper portion of the pole and their opposite ends being attached to the base-plate 9, as shown. Owing to this arrangement separate adjusting devices for each of the guy-wires may be dispensed with, although in some cases turnbuckles or similar tightening devices may be employed on each wire.

In order to effect an independent adjustment of the guy-wires, I may employ on the base-plate 9 eyebolts 15, such as are illustrated in Fig. 5, the bolts extending through the base-plate and having adjusting-nuts on their lower ends. In some cases where it is desirable to keep the guy-wires from contact with the ground the corners of the plate may bend upwardly, as shown in Fig. 3, the guy-wire-attaching openings being formed in the vertical portion of the plate.

To the upper end of the main portion of the pole is secured an adjustable section 20, fulcrumed by a bolt 21 at its lower end to the upper portion of the pole proper and adjustable on its pivot-point to any desired angle in order to move the cross-arms 22 to an extent sufficient to permit the wires to pass a tree or other obstructions, or they may be

bent down to a point at a right angle to the main body of the pole to form a support for the trolley-wire of an electric railway or for such other purposes as may be desired. In order to hold the upper section in its adjusted position, there is provided a quadrant-plate 23, secured to the upper end of the pole and having a segmental slot 24 for the reception of an adjustable locking-bolt 25, carried by the upper adjustable section, the bolt being tightened after the pole-section has been moved to the desired position. The adjustment may be made at one side of the pole only, as shown by full lines in Fig. 1, or the locking-plate may be continued on the opposite side of the pole, as shown by dotted lines in said figure, to permit of adjustment on both sides of the pole.

To permit the adjustment of the cross-arm 23 to maintain said arm in a horizontal position after an angular adjustment of the upper pole-section, I fulcrum the cross-arm on a central pivot pin or bolt 26, so that the arm may be moved to any desired position. In order to maintain the cross-arm in its adjusted position, I employ a continuous brace 28, connected at its opposite ends to points near the ends of the cross-arms, the brace extending through an opening 29 in the adjustable section and being locked in any desired position by a set-screw 30.

In the modified structure illustrated in Fig. 5 the construction is precisely the same as that already described, the contour of the base-plate being altered, and only a single set of guys are employed.

It will be understood that in connecting the guys to the base-plate any of the constructions illustrated may be employed and that turnbuckles or other separate adjusting devices may be employed when deemed necessary.

The modifications necessary in the upper portion of the pole to adapt the same for the support of trolley-wire may be of any character, and the pole may be provided with any of the usual hangers or supports common to trolley-wire supports without departing from my invention.

Having thus described my invention, what I claim is—

1. The combination with an anchor, of a threaded rod carried by said anchor, a pole or post having in its lower end a bore adapted for the reception of said threaded rod, a base-plate through which the rod extends, guys extending from the base-plate to an upper portion of the pole or post, and adjusting-nuts on said threaded rod, said nuts bearing against the upper surface of the base-plate and the bottom of the pole respectively.

2. The combination with an anchor, of a base, a threaded rod carried by the anchor and extending through an opening in the base-plate, a nut on said threaded rod bearing against the upper surface of the base-plate, a pole or post supported by said threaded rod, and guys extending from the base-plate to an upper portion of said pole or post.

3. The combination with a base-plate, of a pole, means for adjusting said pole vertically, and guys passing centrally through openings in the pole and having their lower ends attached to the base-plate.

4. The combination of the base-plate, a pole or post vertically adjustable with respect thereto, and guys having their central portions attached to an upper portion of the pole or post, the lower ends of said guys being arranged on opposite sides of the post and secured to said base-plate.

5. The combination with a pole or post, of an upper wire-carrying section adjustable at an angle with respect to said pole or post, and means for locking said wire-carrying section in any position to which it may be adjusted.

6. The combination with a pole or post, of an upper wire-carrying section fulcrumed thereto, a segmentally-slotted plate carried by the pole or post and a locking-bolt carried by the adjustable section and adapted to said slot.

7. The combination, in a device of the class specified, of a cross-arm fulcrumed to the pole or post, a continuous brace secured at its opposite ends to the cross-arm, and means for locking said brace in an adjusted position.

8. In a device of the class specified, a cross-arm centrally fulcrumed to the pole or post, a continuous flexible brace passing through an opening in said pole and having its opposite ends secured to the cross-arm, and a set-screw for locking said brace in position.

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

ISAAC M. WARNER.

Witnesses:
H. T. CARPENTER,
M. A. MERRIFIELD.