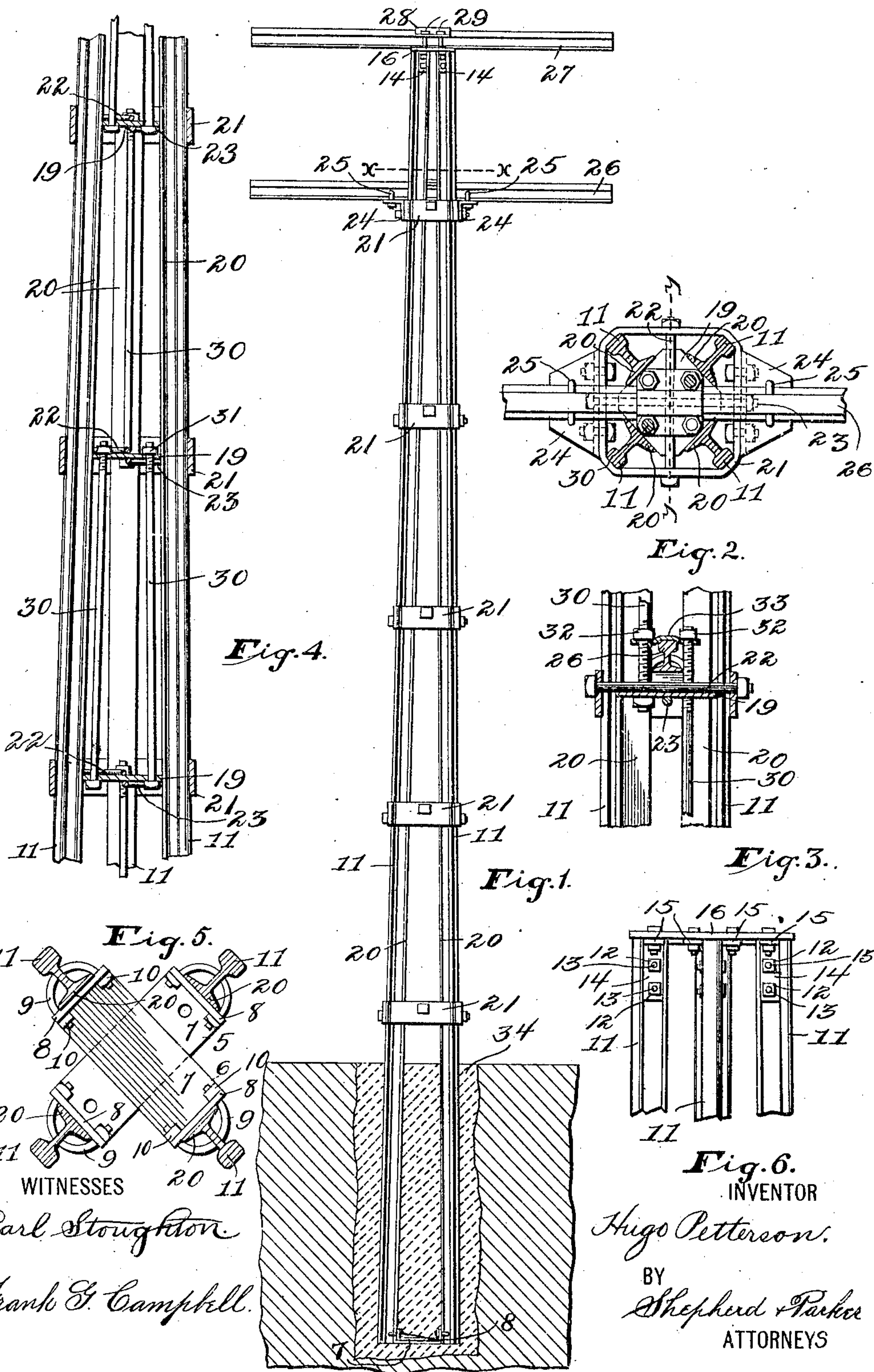


No. 843,171.

PATENTED FEB. 5, 1907.

H. PETTERSON.  
POLE.

APPLICATION FILED MAR. 23, 1906.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

HUGO PETTERSON, OF MOUNT VERNON, OHIO.

## POLE.

No. 843,171.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed March 23, 1906. Serial No. 307,559.

*To all whom it may concern:*

Be it known that I, HUGO PETTERSON, a citizen of the United States, residing at Mount Vernon, in the county of Knox and State of Ohio, have invented certain new and useful Improvements in Poles, of which the following is a specification.

My invention relates to poles for supporting electric wires or lamps, and has for its object the provision of a device of this character which may be cheaply made and which will possess great strength and durability.

A further object of the invention is the provision of a pole for the purpose described constructed in such manner that ordinary railroad-rails may be employed as a part thereof.

Further objects and advantages of the invention will be set forth in the detailed description which now follows.

In the accompanying drawings, Figure 1 is a side elevation of a telegraph or telephone pole constructed in accordance with the invention. Fig. 2 is a horizontal section upon line *x x* of Fig. 1. Fig. 3 is a partial transverse vertical section upon line *y y* of Fig. 2. Fig. 4 is a transverse vertical section of a portion of a pole constructed in accordance with the invention. Fig. 5 is a horizontal section taken through the pole near the base thereof, and Fig. 6 is a side elevation of the upper portion of the pole with the upper cross-arm removed.

Like reference-numerals designate corresponding parts in all of the figures of the drawings.

Referring to the drawings, the numerals 5 and 6 designate a pair of U-shaped base-plates. These plates comprise the body portions 7 and the upturned ends 8. Secured to these ends 8 by U-bolts 9 and nuts 10 are rails 11, said U-bolts passing through the webs of said rails to firmly bind the lower portions thereof against the upturned ends 8 of the base-plates 5 and 6. The pole is preferably a tapering one, the upper ends of the rails 11 being closer together than the lower ends thereof. Secured by nuts 12 and bolts 13 to the upper ends of the rails (see Fig. 6) are angle-plates 14, the outturned ends 15 of which are secured to a cap-plate 16 by bolts 17 and nuts 18. Spacing-plates 19 are arranged between the rails in such manner that the base portions 20 of said rails bear against the edges of said spacing-plates and are separated thereby. A plurality of

bands 21 surround the body portion of the pole and are held in position partly by frictional engagement with the outer faces of the rails 11 and partly by bolts 22 and 23. These bolts are arranged at right angles to each other. The bolts 22 span the space between the side walls of the bands 21 and lie above the spacing-plates 19, while the bolts 23 span the space between the side walls of the bands 21 and lie below the spacing-plates 19. Angle-plates 24 are secured to the uppermost of the bands 21. U-bolts 25, which pass through these angle-plates and through the web portions of a short section of rail 26, serve to bind said short section of rail firmly in position. A second short section of rail 27 is clamped firmly upon the cap-plate 16 by a U-shaped clamping-plate 28 and bolts 29. The sections 26 and 27 comprise the cross-arms of the pole and serve to support telegraph or telephone wires in the usual and well-known manner.

Vertically-disposed tie-rods 30 extend between the spacing-plates 19 and are held in position by nuts 31, which are threaded upon the ends thereof. Nuts 32, threaded upon two of the tie-rods 30, engage a clamping-plate 33 and bind said clamping-plate firmly upon the top of the section of rail 26. This forms an additional means for binding this section of rail in position. In using the herein-described pole the lower end thereof is placed in an opening formed in the ground, which is then filled with concrete, (indicated at 34.) The open structure provided by this pole permits the concrete to surround the rails and the lowermost tie-rods, thereby forming a firm and stable foundation for the pole. This method of setting the base of a skeleton pole in concrete causes the large block of concrete to become practically an integral mass with the pole, thereby providing an enlarged base which firmly supports said pole. The base of the pole is likewise rendered impervious to air and water, which increases the life of the pole to a considerable extent.

From the foregoing description it will be seen that simple and efficient means are herein provided for accomplishing the objects of the invention; but while the elements shown and described are well adapted to serve the purposes for which they are intended it is to be understood that the invention is not limited to the precise construction set forth, but includes within its purview such changes as



may be made within the scope of the appended claims.

What I claim is—

1. In a device of the character described,  
5 the combination with a plurality of rails, of a plurality of spacing-plates located between said rails, a plurality of bands surrounding said rails for binding said rails together, and vertically-disposed tie-rods which extend  
10 between the spacing-plates.

2. In a device of the character described, the combination with a plurality of rails and a plurality of spacing-plates located between said rails, bands surrounding said rails, ver-  
15 tically-disposed tie-rods extending between the spacing-plates, and horizontally-disposed

tie-rods which lie upon each side of the spacing-plates.

3. In a device of the character described, the combination with base members, of rails 20 secured to said base members, spacing-plates located between said rails, bands which surround said rails, tie-rods extending between the adjacent spacing-plates, transversely-disposed cross-arms, and means for securing 25 said cross-arms in position.

In testimony whereof I affix my signature in presence of two witnesses.

HUGO PETTERSON.

Witnesses:

A. L. BYRNS,

ANA C. HANCOCK.