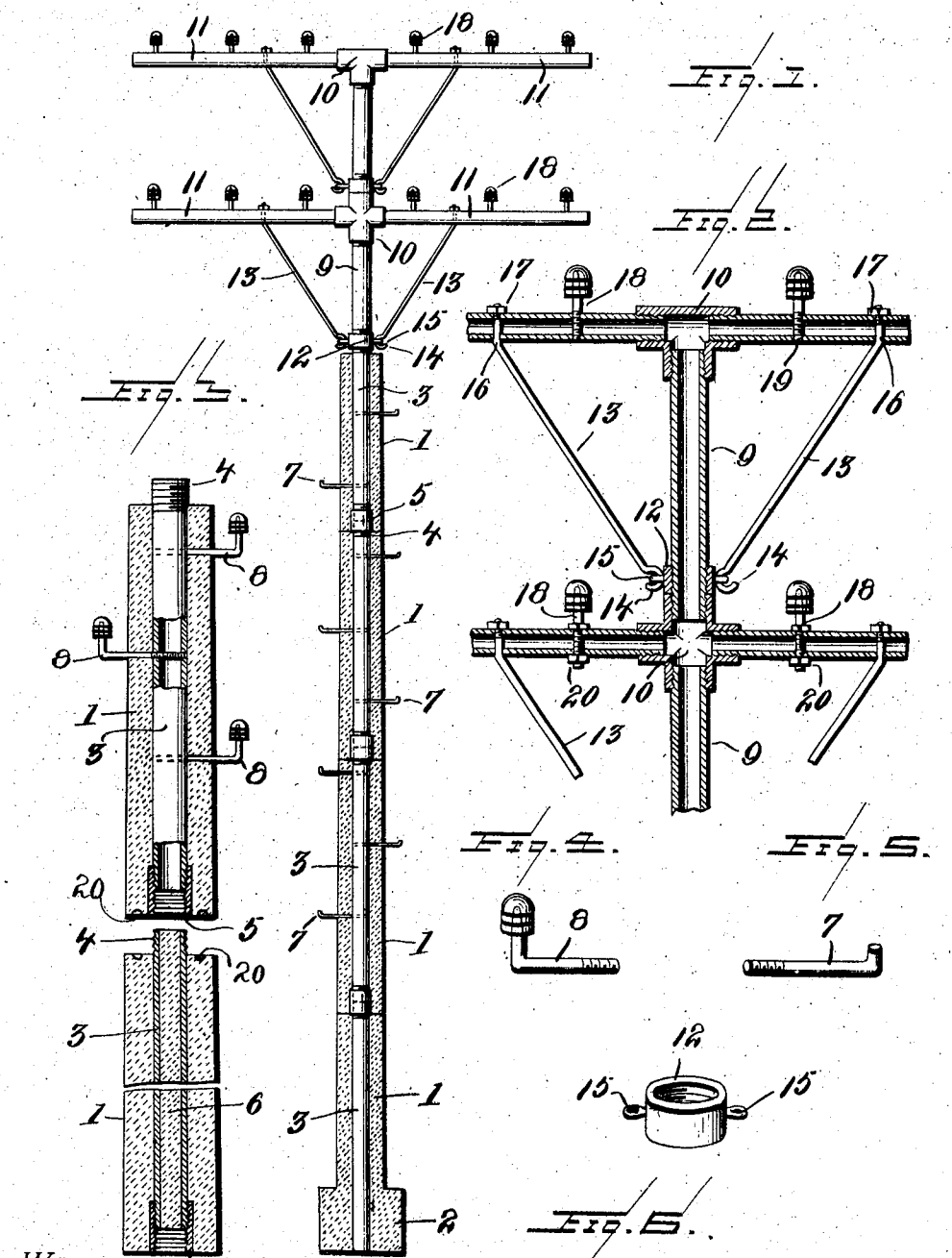


No. 839,272.

PATENTED DEC. 25, 1906.

A. G. CROW.  
CEMENT POLE.

APPLICATION FILED SEPT. 24, 1906.



WITNESSES:

Wm F Douglass.  
Alfred T Gage

*INVENTOR*

*Anderson G. Crow.*

 $By$ 

E. B. Stocking

*Attorney*

# UNITED STATES PATENT OFFICE.

ANDERSON G. CROW, OF MURPHYSBORO, ILLINOIS.

## CEMENT POLE.

No. 839,272.

Specification of Letters Patent.

Patented Dec. 25, 1906.

Application filed September 24, 1906. Serial No. 336,033.

*To all whom it may concern:*

Be it known that I, ANDERSON G. CROW, a citizen of the United States, residing at Murphysboro, in the county of Jackson, State of Illinois, have invented certain new and useful Improvements in Cement Poles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a concrete pole, and particularly to a sectional structure of that character adapted to be erected to any desired height.

The invention has for an object to provide a pole composed of sections each provided with a core having at its opposite ends coupling means by which it may be assembled to an abutting section and in this manner a pole of any desired height for any purpose can be erected.

A further object of the invention is to provide means for attaching to the core of such a pole cross-arms for supporting wires and bracing such arms against movement.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features defined by the appended claims.

In the drawings, Figure 1 is an elevation of a pole with the cement or composition portion in section. Fig. 2 is an enlarged vertical section through a portion of the cross-arms. Fig. 3 is a similar section through the pole and core. Fig. 4 is a detail perspective view of an insulator-bracket. Fig. 5 is a similar view of a step carried by the core, and Fig. 6 is a similar view of a collar carrying the arm-braces.

Like numerals of reference indicate like parts throughout the several figures of the drawings.

The numeral 1 designates one of the pole-sections, each of which is substantially similar in construction, although the lowermost section is preferably provided with an enlarged base 2, adapted to be set in the ground for insuring stability thereof. These sections are formed of concrete or cement composition of any desired character and surround a core 3. This core may be solid, but is preferably tubular, as shown in Fig. 3, each end thereof being provided with a coupling device—for instance, a threaded end 4, adapted to fit within a coupling 5, molded within the opposite end of the section. Under some conditions it is desirable to fill this

tubular core with cement composition—for instance, as shown at 6 in Fig. 3. The ends of the sections may be formed with recesses 20, to be filled with cement and render the joints solid when assembled.

When it is desired to attach to the pole steps 7, as shown in Fig. 1, or insulator-brackets 8, as shown in Fig. 3, they may be affixed to the core in any desired manner and the composition molded around the same in the usual way. When the pole is used for supporting wires, the core may be extended at its upper portion, as shown at 9, and supplied with a coupling 10, to which the insulator-arms 11 are connected, and these arms are adapted to be braced against movement by means of collars 12, secured upon the core or the extended end thereof and connected by braces 13 with the arms. These braces are formed with hooks 14 at their lower ends, adapted to engage the eyes 15 of the collar, while the upper portion of the brace is extended through the arm at 16 and there supplied with a nut 17 for tightly adjusting the parts in proper position. The insulator-supports 18 may be secured to the arms in any desired manner—for instance, the threaded ends 19 entering the arms, as shown at the upper portion of Fig. 2, or by means of clamping-nuts 20 applied to these ends to secure the support in position.

From the foregoing it will be seen that the sections of the pole may be conveniently constructed in any desired place and conveyed to the point where they are to be erected and are of such size as to be easily handled and assembled by simply securing the coupling devices together. The pole thus constructed is not easily affected by climatic conditions and may be carried to any desired height or changed in height, as found desirable or convenient, so that it constitutes a permanent means for supporting wires. It will also be obvious that the construction of the cross-arms and braces therefor permits the multiplication thereof as found desirable, and the stability of the pole permits the carrying of a greater number of arms than upon the ordinary pole.

Having now described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. A pole-section formed of composition and having a core embedded therein provided with coupling means at its opposite ends.

2. A pole-section formed of composition and having a core embedded therein with coupling means at its opposite ends, and lateral extensions carried by said core.

5 3. A pole-section formed of composition and having a hollow core embedded therein provided with threaded couplings at its opposite ends.

10 4. A pole-section formed of composition and having a hollow core embedded therein with threaded couplings at its opposite ends, one of said couplings being extended beyond its end of the section.

15 5. A pole-section formed of composition and having a core embedded therein, an arm-coupling carried by said core, and insulator-arms mounted in said coupling.

6. A pole-section composed of composition and having a core embedded therein, an arm-

coupling carried by said core, insulator- 20 arms mounted in said coupling, a collar carried by said core, and braces extending therefrom to said arms.

7. A pole-section formed of composition and having a core embedded therein, an arm- 25 coupling carried by said core, insulator-arms mounted in said coupling, a collar carried by said core, braces extending therefrom to said arms, and adjusting-nuts carried by the ends of said braces and bearing upon said 30 arms.

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

ANDERSON G. CROW.

Witnesses:

A. J. WOODARD,  
J. W. CARICO.