

J. & J. McDERMOTT.  
Telegraph-Pole.

No. 219,644.

Patented Sept. 16, 1879.

FIG. I.

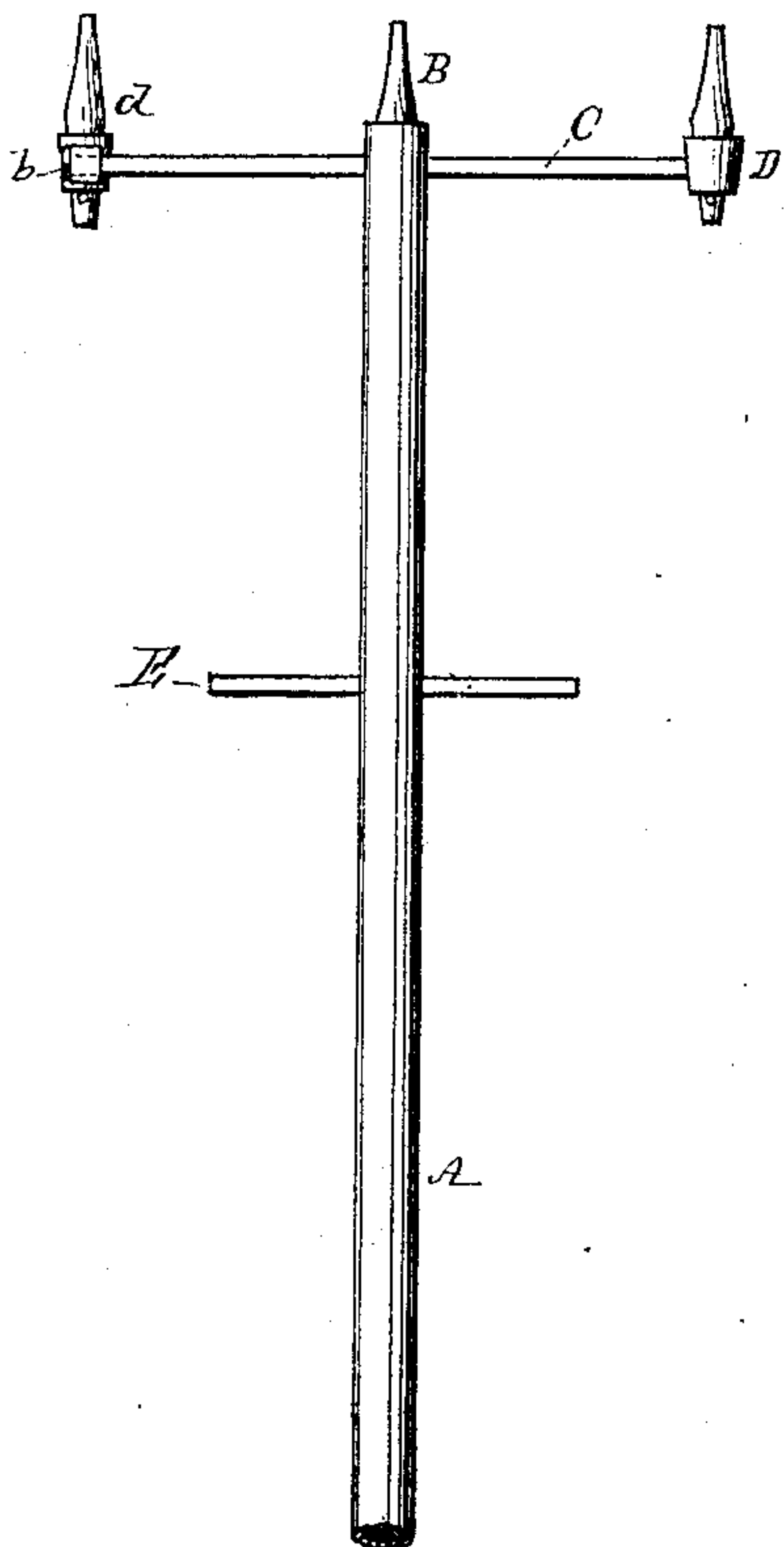


FIG. II.

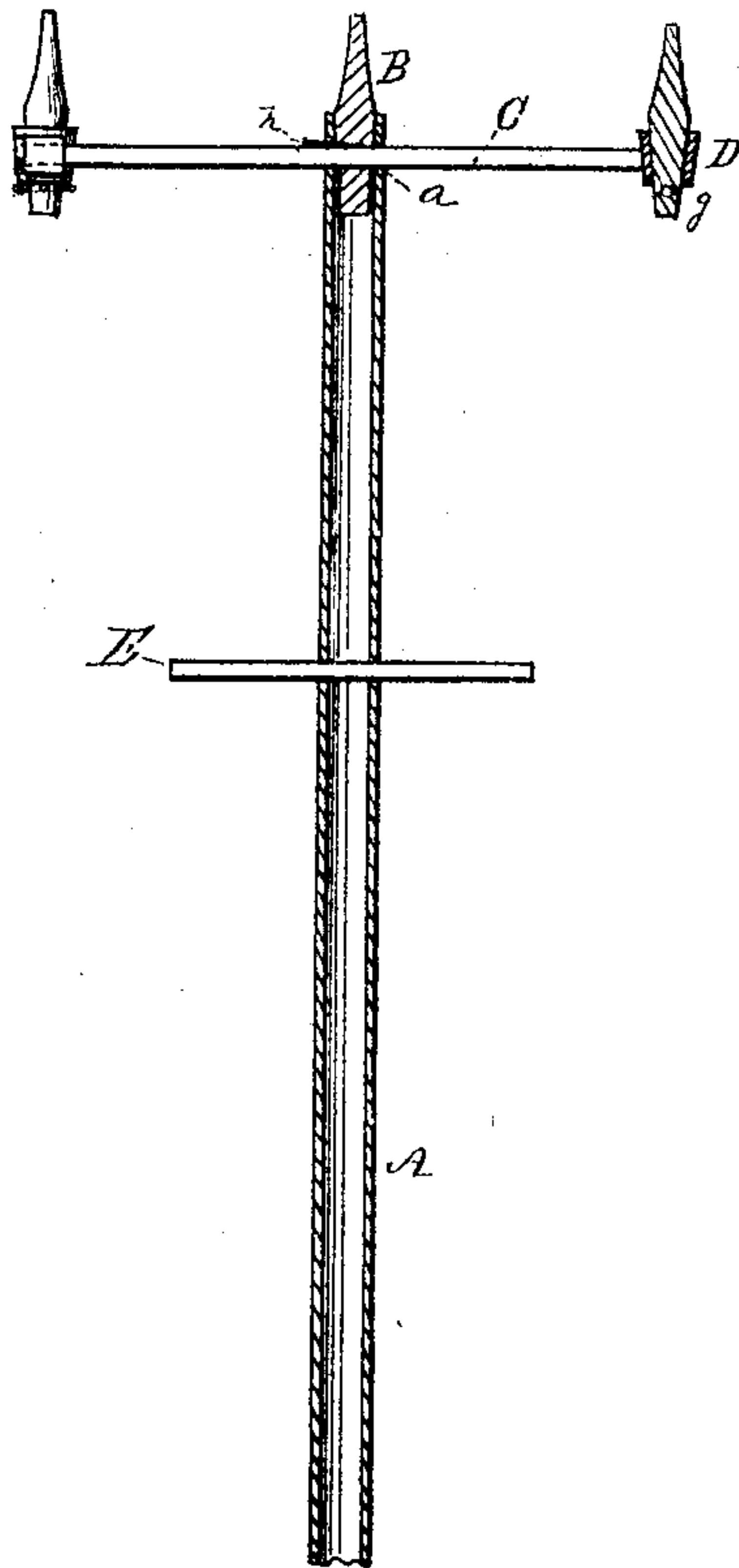


FIG. III.

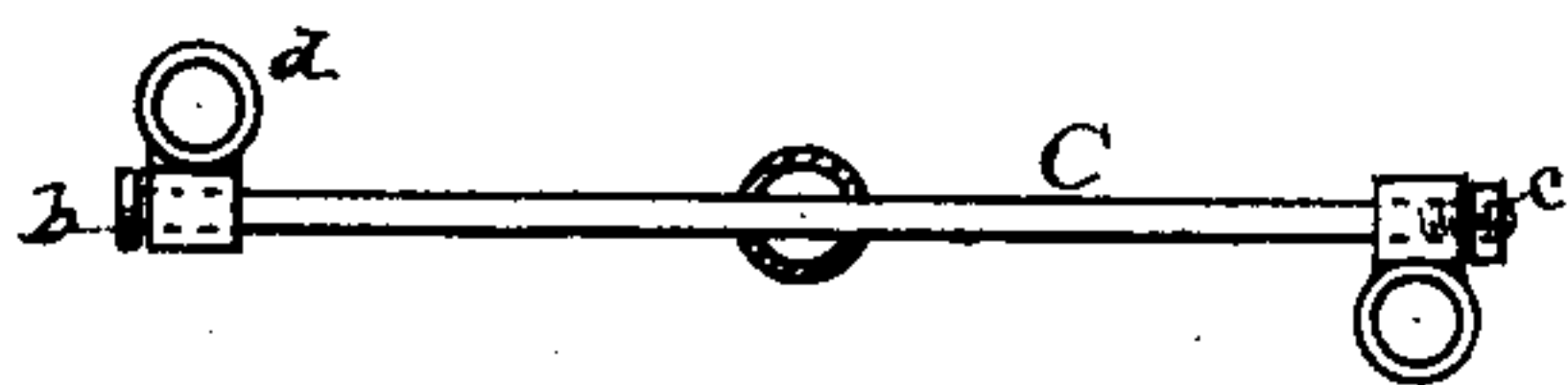
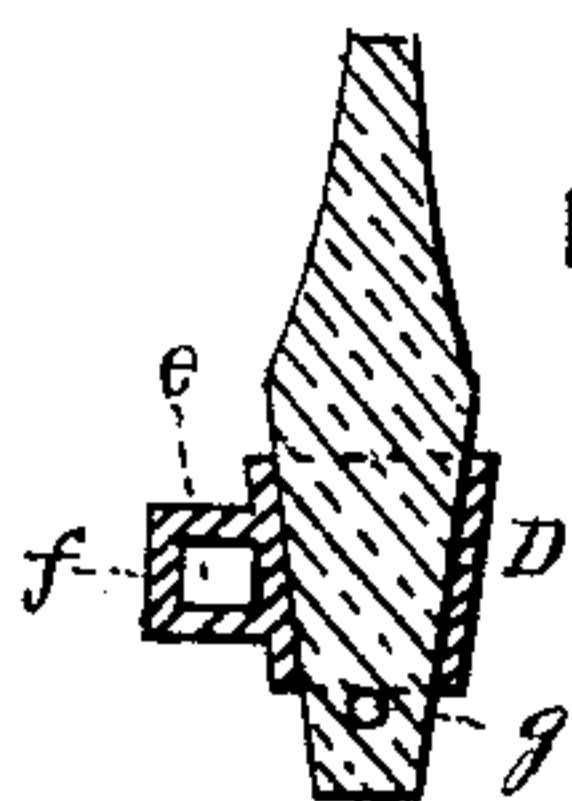


FIG. IV.



ATTEST:

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INVENTORS

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JOHN McDERMOTT AND JAMES McDERMOTT, OF WASHINGTON, D. C.

## IMPROVEMENT IN TELEGRAPH-POLES.

Specification forming part of Letters Patent No. **219,644**, dated September 16, 1879; application filed July 29, 1879.

*To all whom it may concern:*

Be it known that we, JOHN McDERMOTT and JAMES McDERMOTT, of Washington city, and District of Columbia, have invented a new and useful Improvement in Telegraph-Poles, of which the following is a specification.

In the accompanying drawings similar letters of reference indicate like parts.

Figure 1 is a view in perspective. Fig. 2 is a vertical section. Fig. 3 is a top view on the line *x x*, Fig. 1. Fig. 4 is a sectional view of the sockets for holding the insulators.

The object of this invention is to provide a cheap, strong, and durable telegraph-pole; and it consists in making said pole of plain tubular wrought or cast iron, having the cross-arm or insulator-supporting bar to pass through said tube.

It further consists in the construction of tapering sockets, either round or square, in which the insulator pins or holders are securely seated and held in their places.

It further consists in certain devices whereby the tapering sockets are secured to the cross-arm or insulator-supporting bar.

Heretofore in the construction of telegraph-poles of this character they have been made tapering in form, and with rings or projections cast thereon, on which the cross-bars or insulator-supporting bars are supported. They have also been made of iron tubes of large and small diameters, the smaller sections fitting into the larger ones telescopically; but such devices are necessarily expensive in their construction, and impractical on that account.

Referring to the drawings, A designates the iron tube or pole, which may be either cast or wrought, in diameter from two to four inches; but for ordinary purposes we prefer to make them of tubes about from two and a half to three inches in diameter, and of any convenient and desired length.

The tube is sunk or set into the ground about two feet, and the end which enters the ground may be coated with bitumen, both inside and out, by dipping the same into a kettle containing the melted bitumen. This effectually protects the pole where it enters the ground from rust.

In the top of the pole an insulator pin or holder, B, is inserted, and is held in place by

the cross-bar or insulator-holder C, which passes through a hole in the lower end of it, and also through a hole, *a*, in the tube or pole.

The hole *a* may be round or square; but the cross-bar or insulator-holder must be square in cross-section in its central portion, so as to prevent its turning in the hole *a*.

The cross-bar or insulator-holder is made square in cross-section at both of its ends, so as to receive and hold the insulator-sockets firmly in a vertical position. The cross-bar C may be made from round iron bars squared in cross-section at the points above named; but in practice we may make them of square iron bars, and by so doing will be able to place any number of insulators, of the form hereinafter named, by simply sliding them on one after the other and fastening them with wedge-keys.

The bar C is provided at one end with a head, *b*, the other end having a screw-thread cut thereon to receive a nut, *c*.

By this construction the insulator socket and pin *d*, or any number of them, are placed on the bar C, and the bar then passed through a hole in the bottom of the insulator pin or holder B, and through the hole *a* in the top of the pole. The insulators, of any desired number, are then put on the other end of the cross-bar, and the nut *c* screwed on. *h* is a key for holding the cross-bar C firmly in position.

D are the sockets for the reception of the insulator-pins, and have formed therein tapering holes, which may be round or square in cross-section, to receive the tapering ends of the insulator-pins, which are of a cross-section to correspond to the cross-section of the sockets.

The sockets D are provided with an arm or projection, *f*, in which are formed square holes or perforations *e*, to receive the cross-bar C, and by which they are held in their proper position. The insulator-pins, which are held in the sockets D, and supported by the cross-bars C, are provided with holes *g* near their lower ends, through which are inserted draw-bore pins *h*, which serve to draw the insulators down into the socket D and hold them firmly in place.

E is a short iron bar, which passes through a perforation in the pole, on which a flexible ladder is secured to enable the workmen to

ascend the pole, and serves also as a support to the workmen while attaching the wires to the insulators, or for repairing purposes.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The removable socket herein described, consisting of the two open sockets *D* and *f*, carrying the insulator pin or holder, as set forth.

2. A telegraph-pole having one or more

cross-bars, *C*, provided with end and intermediate sockets, *D* and *f*, as set forth.

3. A telegraph-pole having a cross-bar, *C*, provided with a head, *b*, and screw and nut *c*, in combination with one or more removable sockets, *D* and *f*, as shown and described.

JOHN McDERMOTT.

JAMES McDERMOTT.

Witnesses:

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L. BACON.