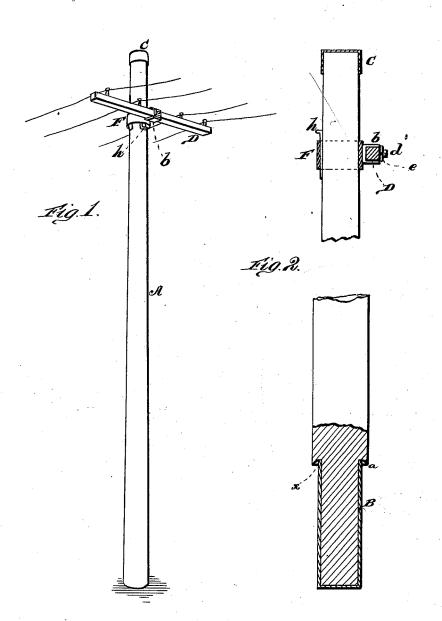
E. D. WITHERS. Telegraph-Pole.

No. 208,004.

Patented Sept. 10, 1878.



James J. Shrehy

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## UNITED STATES PATENT OFFICE.

EDWIN D. WITHERS, OF BENTLY SPRINGS, MARYLAND.

## IMPROVEMENT IN TELEGRAPH-POLES.

Specification forming part of Letters Patent No. **208,004**, dated September 10, 1878; application filed April 13, 1878.

To all whom it may concern:

Be it known that I, EDWIN D. WITHERS, of Bently Springs, in the county of Baltimore and State of Maryland, have invented a new and valuable Improvement in Telegraph-Poles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my telegraph-pole, and Fig. 2 is a detail sectional view thereof.

This invention relates to telegraph-poles; and the novelty consists in the construction of such poles, as will be hereinafter more fully set forth, and pointed out in the claim.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the wooden pole, of any suitble dimensions. The lower end of the pole A is cut down, say, one-half or three-fourths of an inch, with a saw and drawing-knife, leaving a shoulder at a around the pole. Then with a half-round chisel a bevel-groove, x, is cut upward from under the shoulder, so that a metallic shoe or tube, B, placed upon the lower end of the pole, will fit tightly with its upper edge into said groove. It should run up at least half an inch, so as as to form, as it were, an overhanging rim around the upper end of the shoe, to prevent the water or moisture from getting into the shoe.

The shoe B must be made water-tight, and closed at the bottom. It is made of sheet metal, preferably copper, as that will last much longer in the ground.

The length of the shoe will depend on the size of the pole, as larger poles will have to be put deeper in the ground than smaller ones; but my object is to do away with large poles, and make or preserve small ones that will last four times as long as the large ones, and save time and money.

On the upper end of the pole A is placed a

sheet-metal cap, C, fastened by one or more nails. This cap need not extend down very far, as the pole is to be painted, say, about every five years, to preserve that part of the wood which is above ground.

D is the cross-bar for supporting the insulators, to which the wires are attached. This cross-bar is held in a clip, b, attached to a ring or band, F, the ends of the clip lying against the top and bottom of the cross-bar.

From the center of the clip extends a bolt, d, through a hole in the cross-bar, and a nut, e, screwed on the end of the bolt confines and holds the cross-bar firmly in its place, the clip preventing any sagging down of either arm of the cross-bar.

The ring or band F is made a little larger than the circumference of the pole, and is fastened at any point desired on the pole by driving wedges h h from top and bottom, as shown, so as to be held tight. This mode of fastening obviates the necessity of cutting the pole above the shoe. Any desired number of bands and cross-bars may be used as required.

A telegraph-pole constructed in this manner will cost less originally than the old style of pole, as they can be made considerably smaller, and they will last much longer.

What I claim as new, and desire to secure

by Letters Patent, is—
The improved telegraph-pole herein described, consisting of the pole A, having at its lower end the shoulder a and beveled groove x, with shoe B, and at its upper end the cap C, the adjustable ring or band F, having clip b, bolt d, with cross-bar D, and nut e, said band being fastened to the pole by means of wedges.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EDWIN D. WITHERS.

Witnesses:

JOEL HOUSTEN, J. C. WHITE.