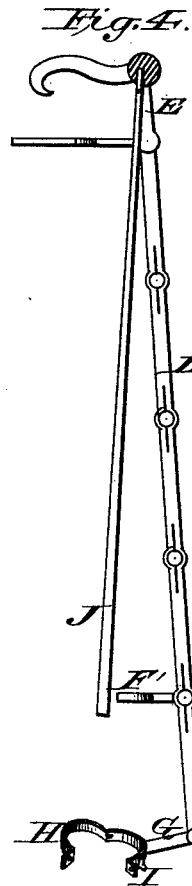
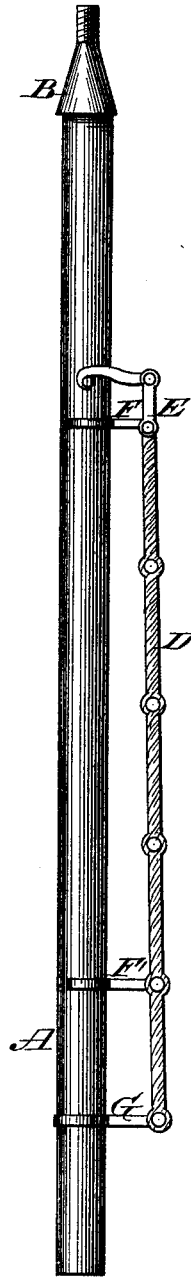
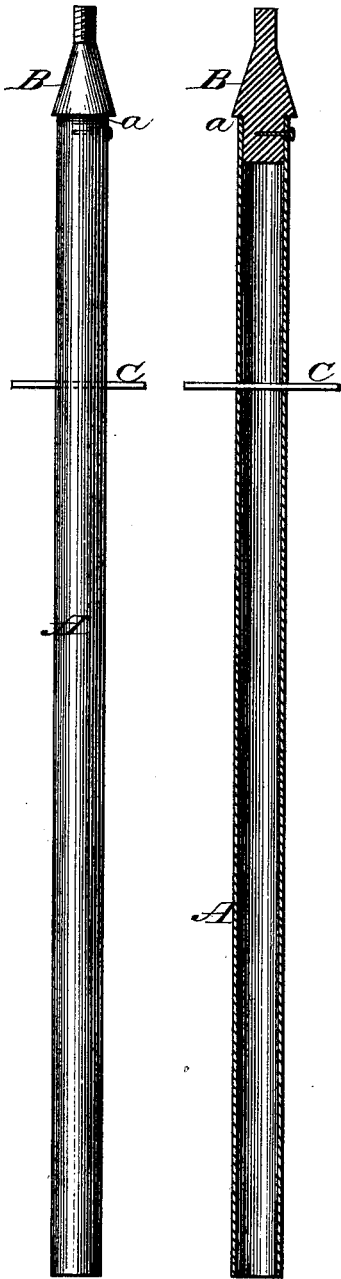


J. & J. McDERMOTT.
Telegraph Pole.

No. 220,029.

Patented Sept. 30, 1879.

Fig. 1. *Fig. 2.* *Fig. 3.*



Witnesses:

D. P. Fowl
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Inventors:

John M. McDermott
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UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN TELEGRAPH-POLES.

Specification forming part of Letters Patent No. **220,029**, dated September 30, 1879; application filed October 10, 1878.

To all whom it may concern:

Be it known that we, JOHN McDERMOTT and JAMES McDERMOTT, of the city of Washington and District of Columbia, have invented a new and useful Improvement in Tubular Metallic Telegraph-Poles, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a view in perspective. Fig. 2 is a vertical longitudinal section. Fig. 3 is a view showing the ladder attached. Fig. 4 is a view of our portable flexible ladder with pole attached, for placing the hooks of the ladder over the round or cross-piece near the top of the pole.

The object of our invention is to construct a telegraph-pole in a cheap and durable manner; and it consists in making the poles of iron tubes, provided with a shouldered wooden plug inserted in the upper end of the tube, which extends a short distance above the top of the tube, and the upper end of which is screw-threaded, so as to readily receive the ordinary glass insulator.

It further consists in placing a short iron bar through the tube a short distance from its top, for the purpose of affording a foot-support for parties in attaching the wire to the insulator or repairing the same, and to support the ladder.

It further consists of a flexible ladder having segmental braces to hold the ladder out from the pole, and for securing the same, and a rigid or sectional pole for lifting and placing the hooks of the ladder onto the round or cross-piece, to allow constructing and repairing parties to ascend and descend the pole.

Referring to the drawings, A is an iron tube of any desired length. B is the wooden plug, to which the ordinary insulator is attached. This plug B is inserted in the top end of the pole to the extent of about six inches, where it is secured by a galvanized-iron nail, which is inserted through a perforation in the tube A. A shoulder, *a*, on the wooden plug allows it to enter the tube just so far, and the shoulder or projecting edge prevents the entrance of rain and protects that portion of the plug in the tube. The upper portion of the wooden plug is tapered off, and is provided with a

screw-thread, by which means the ordinary glass insulator is attached.

About four feet from the top of the pole or tube we make a hole from one-half to three-fourths of an inch in diameter. This perforation passes directly through the tube at right angles to its length, and into it is placed a short iron bar, C, which serves as a rest or support for the constructor or repairer, and for the ladder.

D is a flexible ladder, the sides of which may be made of wire or hemp rope, and capable of being folded up compactly and carried conveniently from place to place. The upper portion of the ladder consists of a rigid framework, E, the upper bent or jointed sides of which terminate in hooks, which are designed to engage with the cross-bar C. To the lower central portion of the framework E a short bifurcated segmental brace or support, F, is secured, which is designed to partly embrace the pole and hold the upper portion of the ladder away from it. A brace, F', similar to brace F, is attached to the second round from the bottom for the same purpose. To the central portion of the lower round of the ladder is attached a brace or support, G, which differs from the brace F in that its outer end terminates in a hinged band or ring, H, which embraces the pole, and is provided with a thumb-screw, I, by which it is firmly secured to the pole.

J is a rigid or sectional pole, made square at the top to enter a square hole in the frame E, and by the use of which the operator places the hooks of the ladder on or over the iron bar C. When the hooks of the ladder have been placed over the iron bar and the brace or support F has partially embraced the pole, the hinged ring on the brace G is caused to encircle the pole. The ladder is then made taut by pressure from the foot of the operator, and by means of the thumb-screw it is made fast. By this means we have a rigid, reliable, and substantial ladder.

The pole or tube A is set in the ground about three feet; and in order to protect the same from rust, we dip the lower end of the tube in coal-tar or asphaltum, which forms a protecting coat, excluding all moisture.

We are aware that telegraph-poles have been made of tubular iron of tapering form; also, that they have been made in sections of larger and smaller diameters, the smaller sections fitting into the larger ones telescopically.

We are also aware that fence-posts have been made of plain iron tubes, perforated to receive the rods which form the bars or rails of the fence; but such we do not claim.

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

In combination with the pole A, provided with the cross-bar C, the flexible ladder D, having the frame E, stays or supports F, hinged stay G, and thumb-screw I, when constructed and arranged in the manner set forth, and for the purpose specified.

JOHN McDERMOTT.
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Witnesses:

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