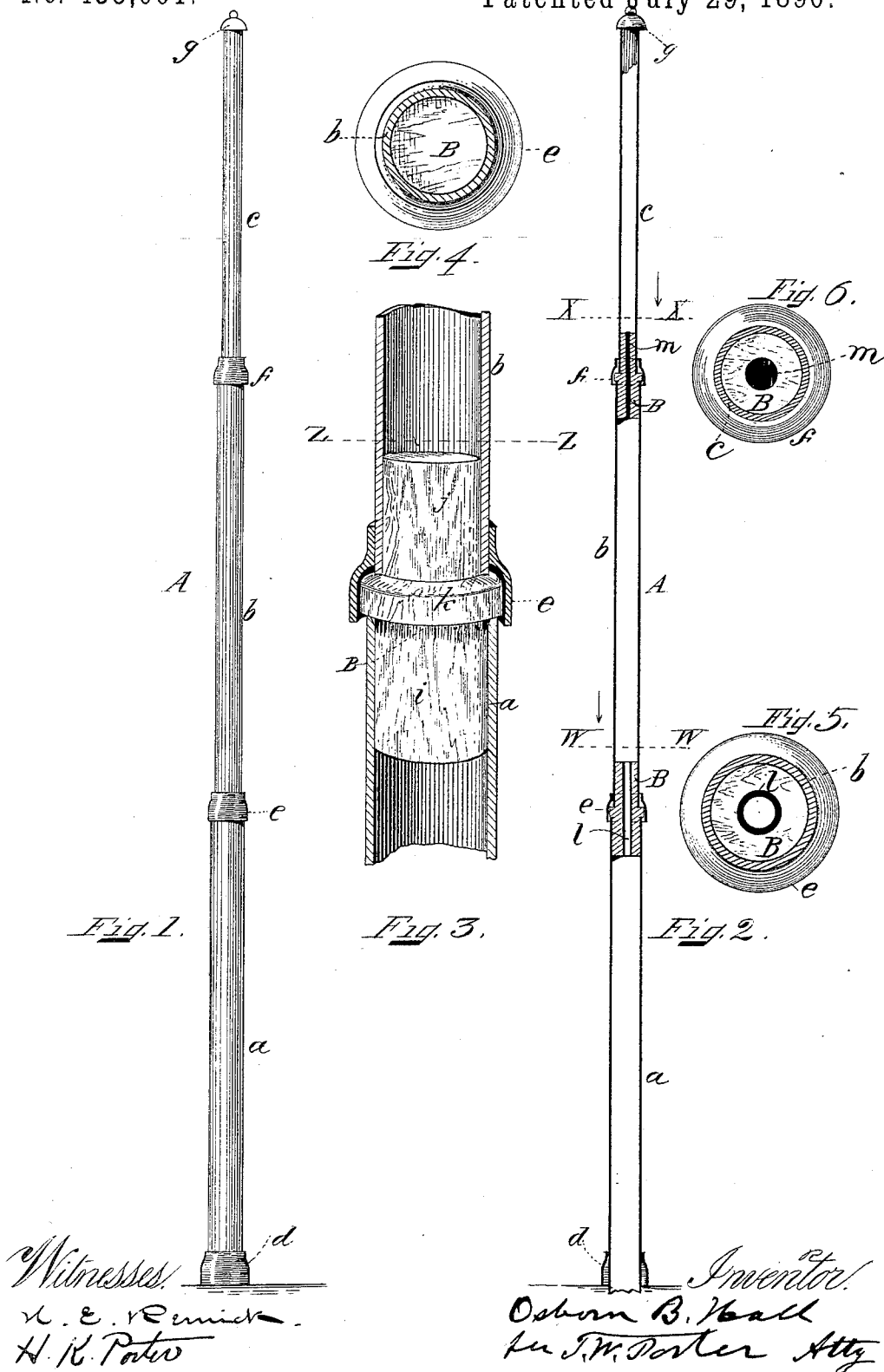


(No Model.)

O. B. HALL.  
METAL POST.

No. 433,001.

Patented July 29, 1890.



# UNITED STATES PATENT OFFICE.

OSBORN B. HALL, OF MALDEN, MASSACHUSETTS.

## METAL POST.

SPECIFICATION forming part of Letters Patent No. 483,001, dated July 29, 1890.

Application filed May 15, 1890. Serial No. 351,955. (No model.)

*to all whom it may concern:*

Be it known that I, OSBORN B. HALL, of Malden, in the county of Middlesex and State of Massachusetts, have invented a new and useful improvement in Metal Posts, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

In said drawings, Figure 1 is a side elevation of an erected post embodying my invention. Fig. 2 is a longitudinal section of the post shown in Fig. 1. Fig. 3 is an enlarged detached sectional elevation, showing one of the couplings with coacting parts, as in Fig. 2. Fig. 4 is a sectional plan view showing the post in section and the coupling and collar in plan. Fig. 5 is an enlarged sectional plan view, the section being taken as on line W and the view being from above. Fig. 6 is a view like Fig. 5, the section being taken as on line X.

This invention relates to that class or kind of posts that are usually employed for the support of the system of wires employed with electric railroads; and its object is to provide an inexpensive means of securing together the adjacent sections of metal tubing whereof such posts are formed, and by the same means to insulate said sections one from the other, the invention consisting in the devices and combinations thereof hereinafter described and claimed.

Referring again to said drawings, A represents the post as an entirety, which, as is usual, is formed with a lower and larger section *a*, to be inserted in the earth, as shown, a second diminished section *b* being arranged next above *a*, while a still further diminished section *c* is arranged next above *b*. For the purpose of coupling section *b* to sections *a* *c* at its respective ends, and at the same time by the same means to insulate the sections, so that an electric current will not pass from one to the other, I employ the coupling shown at B, formed of wood of a hard, strong, and tenacious kind and quality—such as oak, hickory, or other woods having a high breaking strength—or equivalent non-electric, conducting material. These couplings are

prepared by thorough seasoning and drying, and are turned or molded to the requisite respective diameters in their parts or members *i*, the enlarged band or collar *k* being at the same time integrally formed to serve as an abutting shoulder to receive the respective end faces of the tubular metal sections.

The couplings B and the tubular sections of the post are forced together by being subjected to requisite endwise pressure in a hydraulic or other adequate press, and when thus connected will resist without injury any usual strain to which such posts are necessarily subjected.

At the base of the post is shown a base-collar *d*, which is for ornament rather than use, and which rests upon the sidewalk or earth, as shown; but at *e* and *f* are shown collars that fit as closely as is practical upon the smaller section of pipe and extend outside of and below band *k*, in order to protect the same from rain or other moisture that would tend to destroy the non-electric-conducting quality of the coupling, a cap *g* being arranged upon the top of the post to prevent rain or snow from there entering and passing into the absorbent coupling. Instead of forming coupling B of wood or equivalent non-conducting material only, as shown in Fig. 3, a central longitudinal metallic re-enforce may be inserted therein under requisite pressure, said re-enforce being a metal tube, as shown at *l* in Fig. 5, as also at the connection of *a* *b* in Fig. 2; or it may be a solid bar of metal, as shown at *m* in Fig. 6, and also at the connection of *b* *c* in Fig. 2, said metallic re-enforce being employed where the post is to be subjected to a high degree of strain or force.

As hereinbefore stated, other material—such as wood pulp, rubber, hardened paper, &c.—may be employed in lieu of wood, if duly non-conducting; but I prefer wood, on account of its strength, cheapness, and other qualities.

Having thus described my invention, what I claim is—

1. A post of the class described formed with a series of sections of tubing secured in

proper relative positions by couplings of wood forced into such tubes and having an abutting collar or shoulder to insulate the tubes, substantially as specified.

- 5 2. The combination, with the sections of pipe of a post of the class specified, and a wood coupling uniting said sections, of a me-

tallic re-enforce inserted in said coupling, substantially as specified.

OSBORN B. HALL.

Witnesses:

T. W. PORTER,  
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