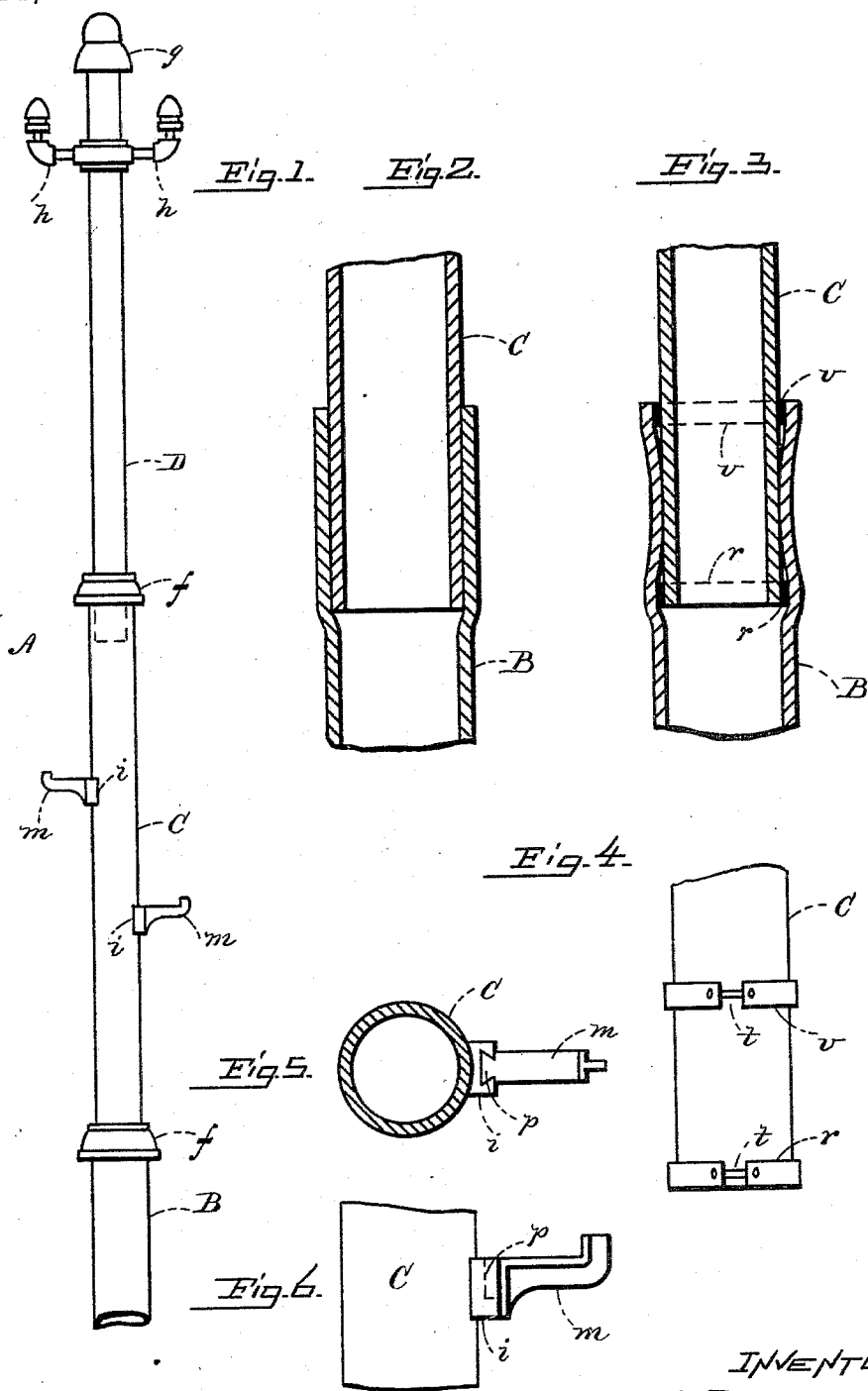


(No Model.)

P. J. DINN.
ELECTRIC LIGHT POST.

No. 414,686.

Patented Nov. 12, 1889.



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PATRICK J. DINN, OF BOSTON, MASSACHUSETTS.

ELECTRIC-LIGHT POST.

SPECIFICATION forming part of Letters Patent No. 414,686, dated November 12, 1889.

Application filed March 22, 1889. Serial No. 304,328. (No model.)

To all whom it may concern:

Be it known that I, PATRICK J. DINN, of Boston, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Electric-Light Posts, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of my improved post in position for use; Fig. 2, a vertical transverse section enlarged of one of the joints; Fig. 3, a like view showing a modification in the formation of the joint; Fig. 4, an elevation of a portion of one of the tubes removed; and Figs. 5 and 6, views illustrating certain details of construction.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to metallic posts for supporting electric-light wires; and it consists in certain novel features, as hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the post, which is constructed from a series of metallic pipes or tubing B C D joined together. In forming the joints of the post the end of a tube B, which is slightly less in inside diameter than the outside diameter of the tube C, is heated, causing the metal to expand. The tube C is then inserted while cold into the heated end of the tube B, as shown in Fig. 2. As the tube B cools, it contracts or shrinks tightly onto the tube C, thus firmly jointing said tubes together. Should the tube B be too large to contract onto the tube C, as described, I swage or compress the heated end by the usual methods until it is of the proper size to closely hug said tube C when it cools, in a manner that will be readily understood without a more explicit description. An or-

namental sleeve or collar *f* is disposed around the joint thus formed. The end of the upper tube D of the series is provided with a cap *g* and insulator-arms *h* in the usual manner.

Secured alternately on opposite sides of the post are blocks *i*, provided with a vertical dovetail groove, in which metallic steps *m* are detachably secured by means of a dovetail end *p*, adapted to enter said grooves. By thus constructing the steps they may be readily removed to prevent them from accidentally being broken during transportation.

It will be seen that by jointing the tubes together in the manner described a great saving in expense of construction is made over the ordinary methods of bolting, screwing, or strapping the sections together, and a stronger and more durable post is thereby produced. Cheaper material may also be employed without affecting the rigidity of the post or strength of the joints.

As it is sometimes difficult to obtain tubing of the proper diameter for forming the post in the manner set forth without especially manufacturing it for this purpose, I make use of means illustrated in Figs. 3 and 4, whereby a tube C, equal or less in outside diameter than the inside diameter of the tube B, may be employed and yet permit the tube B to be tightly shrunk upon it. To accomplish this, I secure a metallic strap *r* around the tube C by riveting its ends together, a space *t* being left between the strap ends to allow for expansion of the metal. A similar strap *v* is secured around the tube C in such position that it will be disposed at the mouth of the tube B when the tube C is inserted therein. The tube B, being heated and allowed to cool around the tube C, as before, will hug said tube between the straps *r* *v*, which are forced into the heated metal, as shown in Fig. 3, and by the contraction thereof are bound tightly onto their tube C in a manner readily understood without a more explicit description.

Having thus explained my invention, what I claim is—

1. In an electric-light post, a series of metallic tubes of different diameters, the smaller tubes being provided with straps onto which the ends of the adjacent larger tubes are shrunk, and having metallic collars dis-

posed around the joints thus formed, substantially as described.

2. The combination of the tube C, provided with straps *r v*, with the tube B, shrunk
5 onto said straps, substantially as described.

3. An electric-light post provided with a series of step-blocks having vertical dovetail grooves, in combination with detachable steps
10 having an end dovetailed to enter said grooves.

4. The steps *m*, having the dovetail *p*, in combination with the post A, provided with the blocks *i*, substantially as described.

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Witnesses:

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