(No Model.)

W. A. STERN.

SUPPORTING POST FOR ELECTRIC CONDUCTORS.

No. 449,977. Patented Apr. 7, 1891.

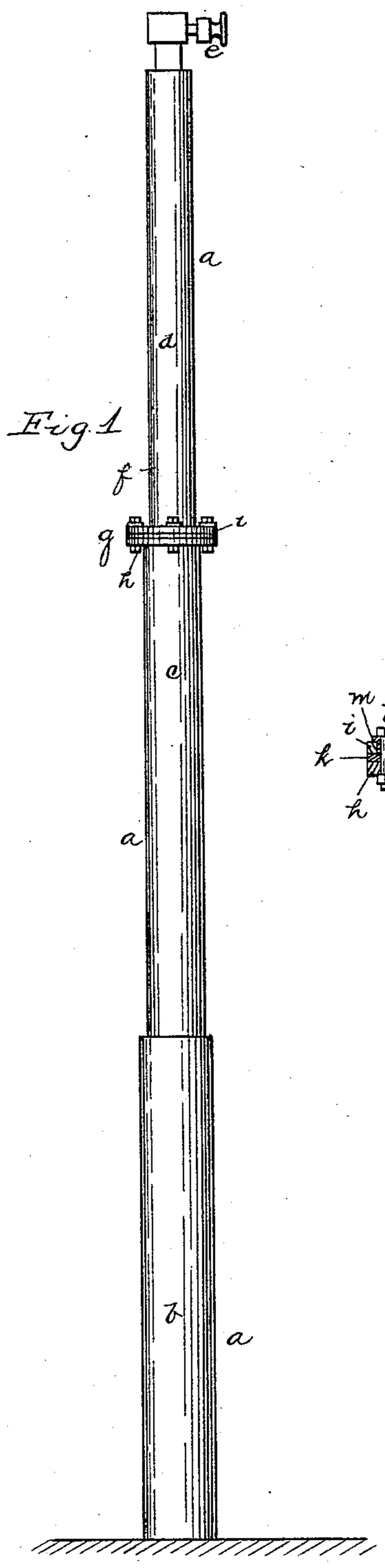

Fig. 1

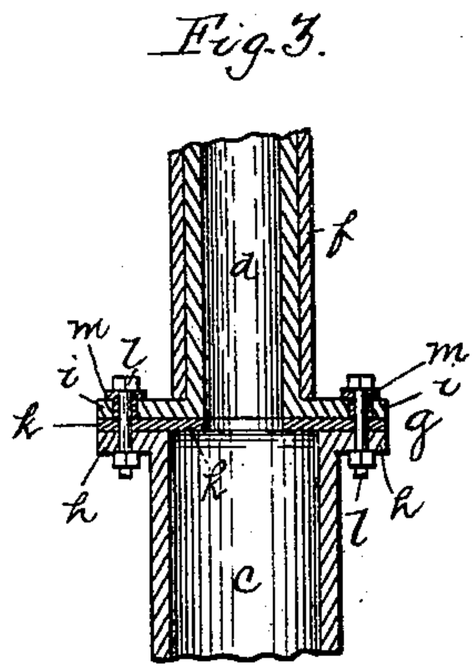

Fig. 3.

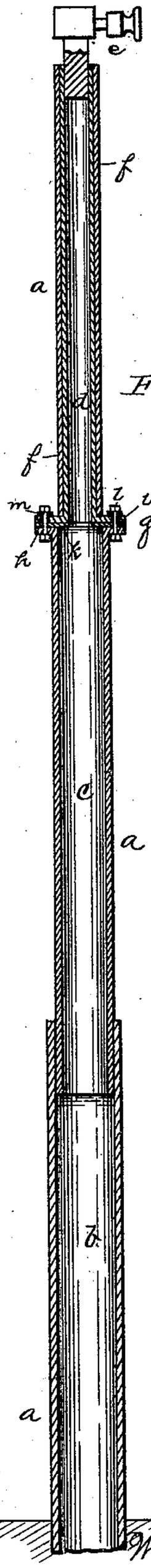

Fig. 2.

Witnesses:
J. R. Cooke
Robt. D. Potter

Inventor.
William A. Stern
By James D. Hay
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM A. STERN, OF ALLEGHENY, ASSIGNOR OF ONE-HALF TO I. H. SILVERMAN, OF PITTSBURG, PENNSYLVANIA.

SUPPORTING-POST FOR ELECTRIC CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 449,977, dated April 7, 1891.

Application filed May 31, 1889. Serial No. 312,735. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. STERN, a resident of Allegheny city, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Supporting-Posts for Electrical Conductors; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the supporting-posts for electrical conductors, its object being to provide means for preventing danger to the person in case of the contact of wires carrying dangerous currents with such supporting-poles. In the densely-crowded streets of cities where at the present time there are a large number of poles and posts used for the support of carrying wires, such as for telegraph, electric light, electric railway, and like purposes, and in the rapid and extensive introduction of electric street-railways, it is found advisable for the purpose of neatness and ornamentation to use metallic posts for carrying these wires, and especially for supporting the wires of electric railways, as such metallic posts are much neater than the wooden poles and do not occupy so much space. As, however, there are in most cities large numbers of wires carrying high tension or pressure currents of a dangerous or fatal kind, which might in case of accident come in contact with said poles, and the current carried by such wires in passing to the ground through the pole might cause fatal accident to any person happening to come in contact with such pole, it is necessary to furnish means to guard against the entrance of such dangerous currents into the poles, or, if such currents should enter the poles, prevent the possibility of its reaching such a point as to make it possible for a person upon the street to come in contact with the charged portion of the pole. By my invention I provide a pole meeting these requirements.

It consists, essentially, in a metallic pole or post for supporting electrical conductors, having a sleeve or covering of insulating material covering part or all of the body of the post and so acting to prevent surface contact therewith, such as to prevent the passage of currents from neighboring conductors into the post or to prevent the passage of electricity from the post, if charged, into a person coming into contact therewith.

To enable others skilled in the art to make and use my invention, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a side view of the supporting-post embodying my invention. Fig. 2 is a longitudinal central section of the same, and Fig. 3 is a detail view of the insulating-joint.

Like letters of reference indicate like parts in each.

The supporting post or pole *a* is preferably made of sections of tubing, as the necessary strength can be obtained in this way and the post is much lighter. Any suitable number of sections *b c d* may be employed in the posts, according to the desired height thereof, the post shown having three of these sections and having at the upper end of the top section *d* the insulator *e*, the insulator shown being that generally employed for electrical railways where the wire over the track is supported by wires stretched between two such supporting-poles. Surrounding the upper section *d* is the sleeve or covering *f*, of insulating material, this covering being formed of proper insulating material, such as gelatinized fiber, hard or soft rubber, non-absorbent woods, or painted cloth or canvas, the most desirable form consisting of a sleeve of proper diameter slipped over the upper section of the post and fitting around the same, as shown in the drawings. The covering may, however, be made by wrapping sheets—such as of rubber—spirally around the part to be protected, or I may employ any other way of covering the same, so as to prevent passage of current either into the post or from the post, if charged, by contact therewith. For all practical purposes it is only necessary to cover the upper section of the post with this insulating-sleeve, as the main point of danger is in said upper section, where, in case of the swinging or breaking of neighboring electrical conductors carrying high tension or pressure currents, the said wires may come in contact with said upper section of the supporting-post or into such close prox-

imity therewith as to permit the passage of current from the wire to the post, this insulating sleeve or covering in such case preventing passage of current into the post and so preventing accident from such cause. The entire post may, however, be protected with this insulated sleeve or covering, or it may be employed on the lower section of the post, so as to prevent passage of current from the post, if charged, into any person coming in contact with the post.

In case of the passage of the current into the upper part of the post, in order to prevent danger from contact with the lower part thereof, I also prefer to employ the insulated joint *g*, such as shown, between the two upper sections *c d* in the drawings. This joint *g* may be of any desired construction, that shown being a simple form of insulated joint, in which the section *c* has a flange *h* at its upper end. The section *d* has a flange *i* at its lower end, and a thick sheet of rubber or other insulating material *k* is placed between the flanges, the flanges being united by screw-bolts *l*, which pass through bushings *m*, formed of insulated material, and so prevent the passage of current from the upper section *d* into the lower section *c*. Such insulated joint, however, forms no part of the present invention.

By covering the body of the post as above described I am thus enabled to protect the person from danger either by preventing the high-tension currents from any neighboring conductors from passing into the upper part of the post and so guarding against the mass of accidents from this source, or where the sleeve or covering is applied to the lower part of the post to prevent injury to the person in case of contact with a post charged with such dangerous current, my invention being simple and inexpensive for such purposes.

What I claim as my invention, and desire to secure by Letters Patent, is—

A metallic post for supporting electrical conductors, having a sleeve or covering of insulating material covering part or all of the body thereof, substantially as and for the purposes set forth.

In testimony whereof I, the said WILLIAM A. STERN, have hereunto set my hand.

WILLIAM A. STERN.

Witnesses:

JAMES I. KAY,

J. N. COOKE.