

(No Model.)

2 Sheets—Sheet 1.

F. A. SAWYER.
LAMP POST AND LAMP.

No. 372,334.

Patented Nov. 1, 1887.

Fig. 1.

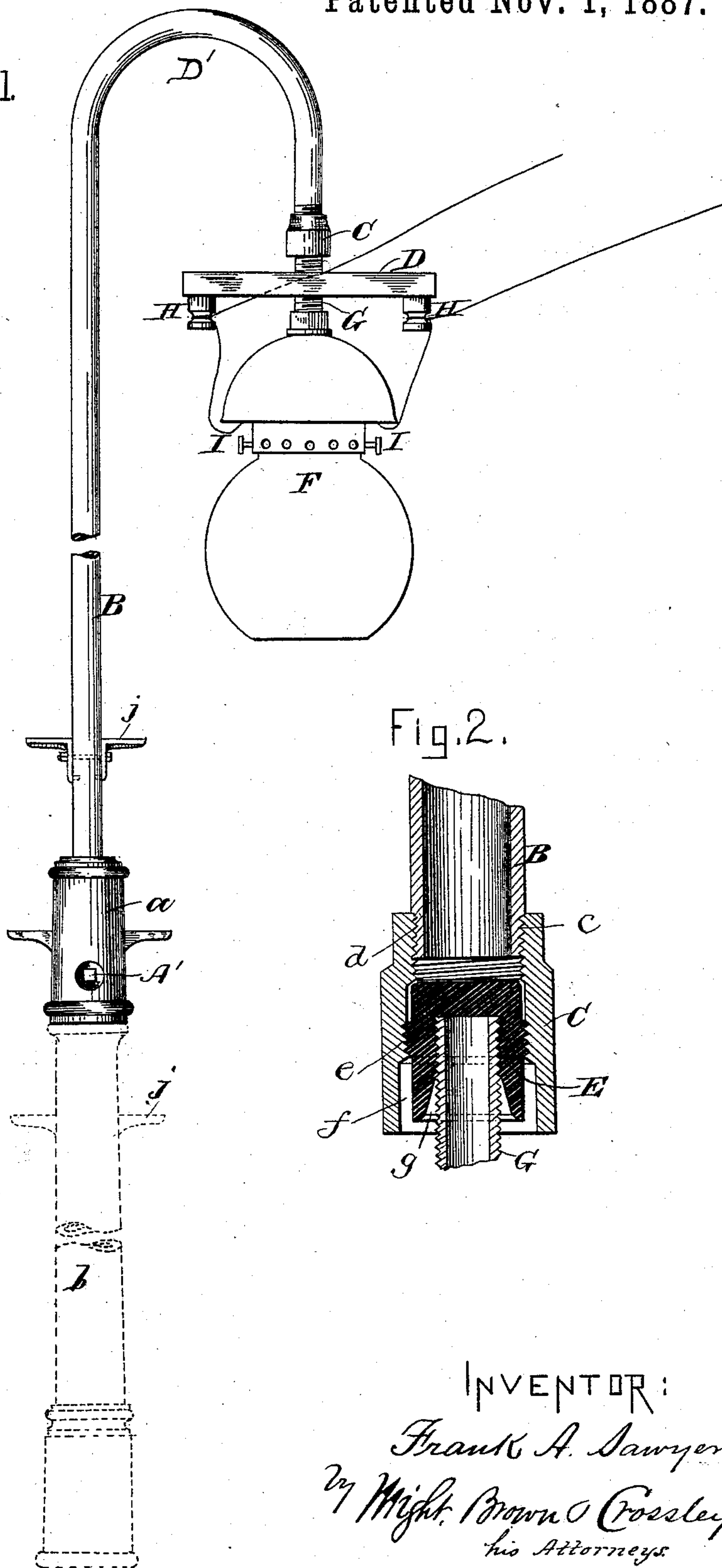
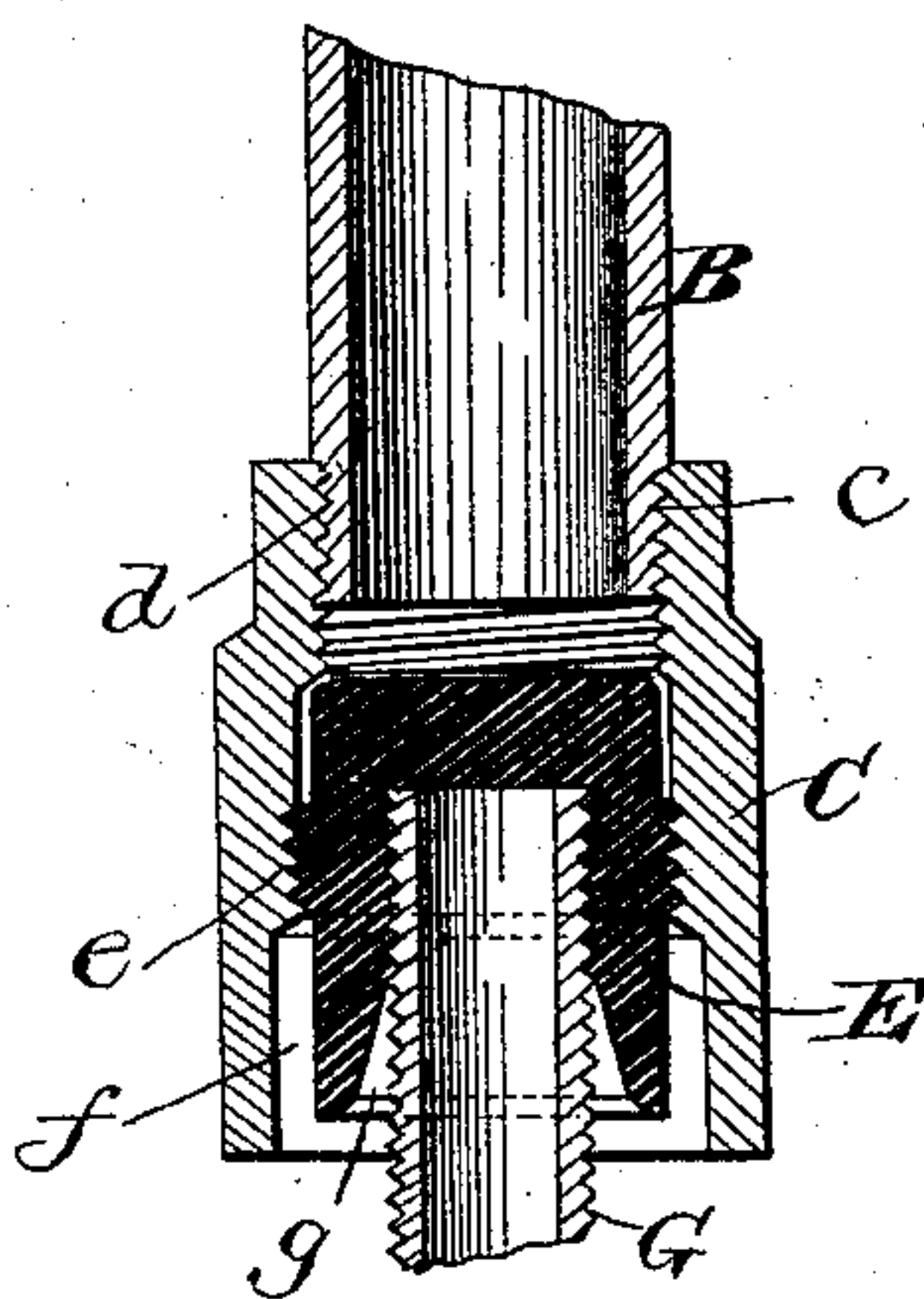


Fig. 2.



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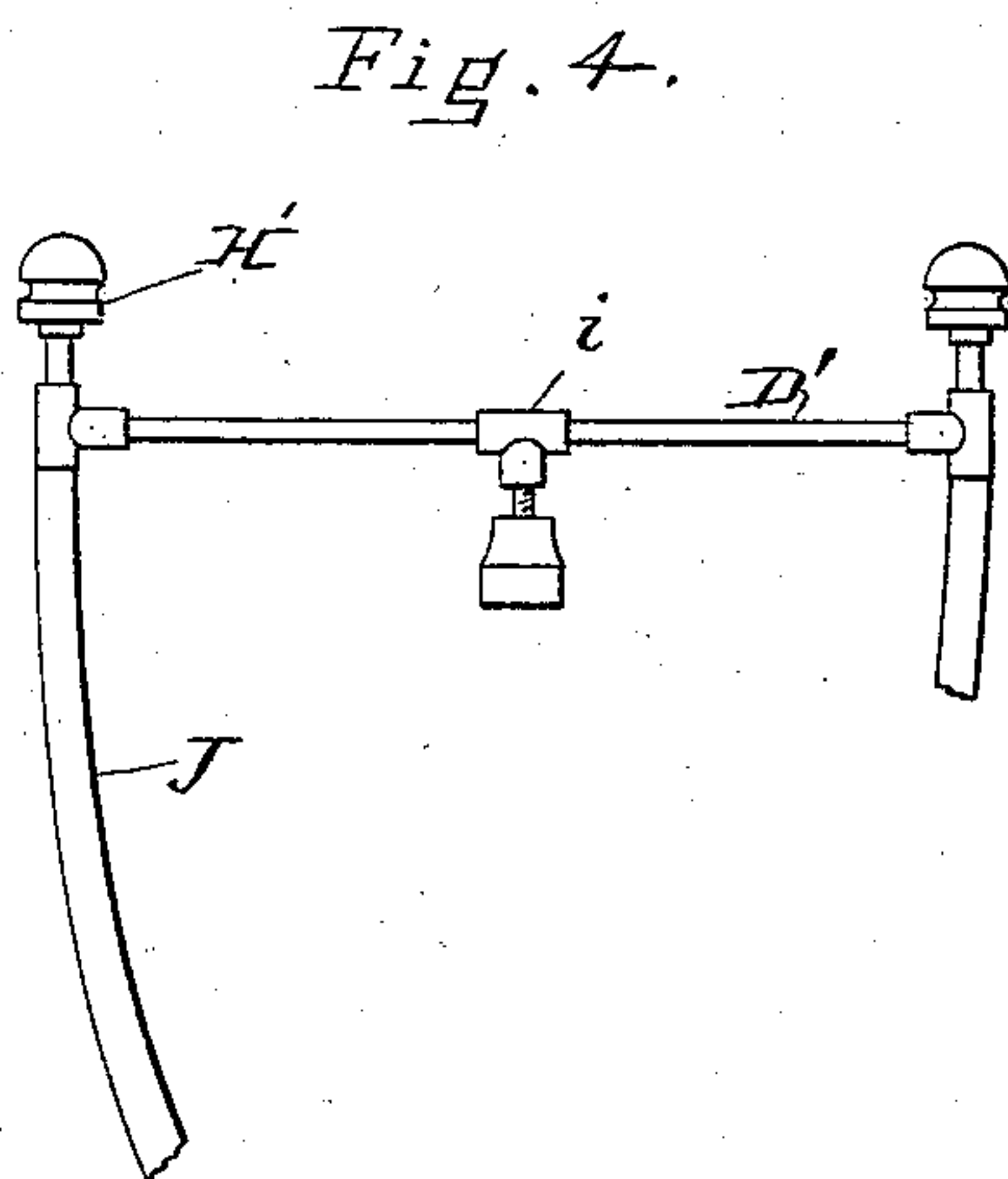
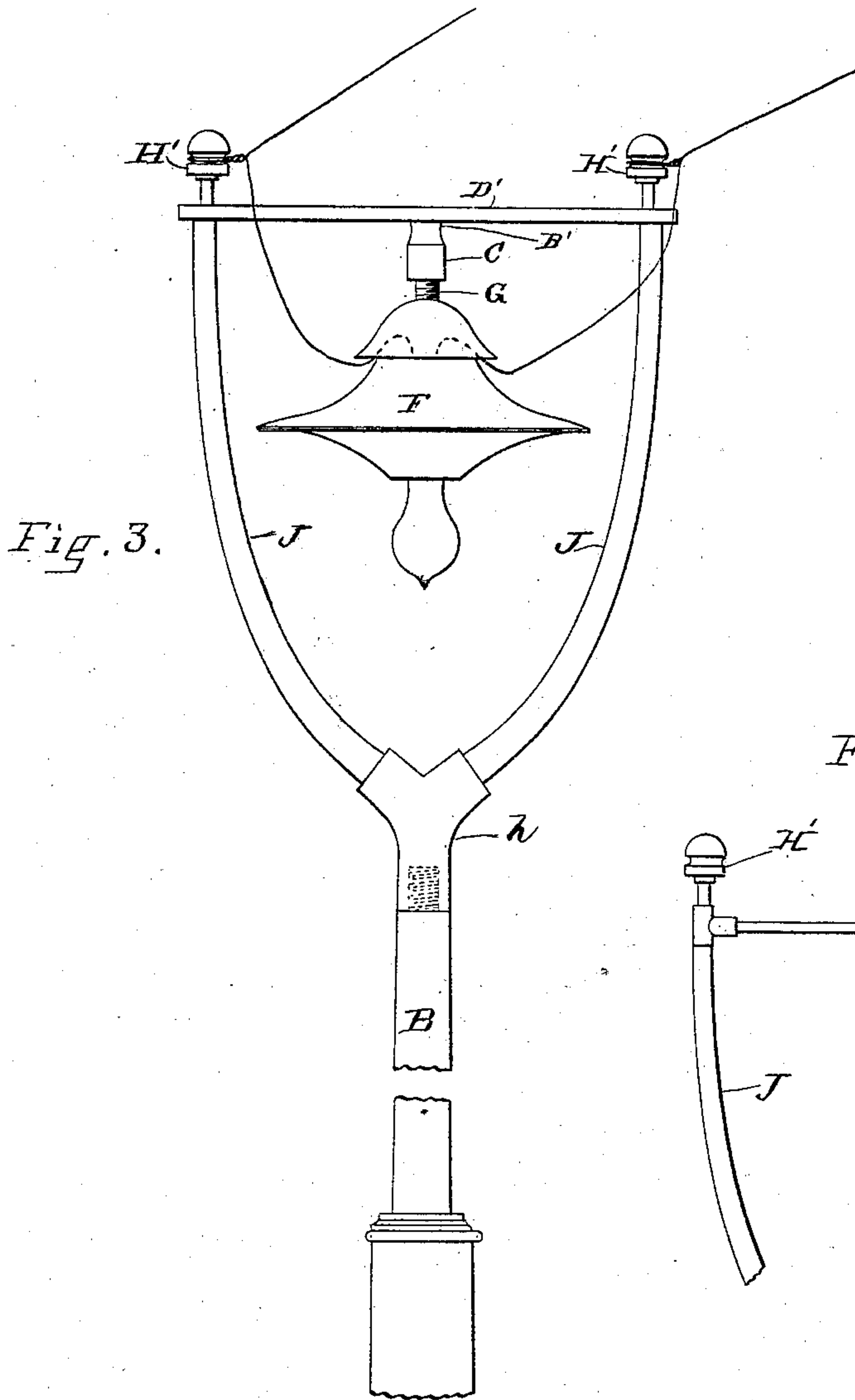
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2 Sheets—Sheet 2.

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LAMP POST AND LAMP.

No. 372,334.

Patented Nov. 1, 1887.



WITNESSES:
H. Brown.
J. Long.

INVENTOR:
Frank A. Sawyer.
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His Attorneys.

UNITED STATES PATENT OFFICE.

FRANK A. SAWYER, OF PORTLAND, MAINE.

LAMP-POST AND LAMP.

SPECIFICATION forming part of Letters Patent No. 372,334, dated November 1, 1887.

Application filed August 7, 1886. Serial No. 210,316. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. SAWYER, of Portland, in the county of Cumberland and State of Maine, have invented certain new and
5 useful Improvements in Lamp - Posts and Lamps, of which the following is a specification.

My invention relates to electric lamps and posts or supports therefor, and more particularly to contrivances of this character designed
10 for outdoor or street use.

It is the object of my invention to produce an effective and seemly post or support for electric lamps, which can be readily and
15 cheaply produced and applied to ordinary street-lamp posts or similar devices.

It is also the object of the invention to improve the means whereby the lamp is connected with and insulated from its immediate
20 support.

To these ends my invention consists in the improvements which I will now proceed to describe, so that others skilled in the art may be able to make and use the same, reference being made to the accompanying drawings, forming a part of this specification, and the invention being particularly set forth in the claims hereunto appended.

Of the drawings, Figure 1 represents a side view of one form of lamp post or support and lamp embodying my improvements, an ordinary street gas-lamp post to which my invention is applied being represented by dotted lines and parts being shown as broken out.
30 Fig. 2 represents a vertical sectional view, on an enlarged scale, taken through the coupling and insulating devices, whereby the lamp is connected to its immediate support. Figs. 3 and 4 represent modified forms of the invention.
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Similar letters of reference indicate similar parts in all of the figures.

In the drawings, *a* represents a cap or socket adapted to be secured to the upper end of an ordinary lamp-post, *b*, (shown in dotted lines in Fig. 1,) or similar device, by means of set-screws or bolts *A'*, which socket is adapted to receive and have secured therein one end of a metallic rod or pipe, *B*, (preferably the latter,) as shown in Fig. 1. Said rod or pipe *B* extends upward from said socket, and is bent at
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its upper end in such manner as that a curved horizontally-projecting arm, *D'*, will be formed thereat, from the end of which a lamp may be pendently supported. In the example represented in the last-mentioned figure the upper end of the pipe is bent into curved form, so that the extremity of said end is turned vertically downward on a line parallel with the main body of the post. Said end is screw-threaded exteriorly, as indicated at *c*, and adapted to receive a sleeve-coupling, *C*, correspondingly screw-threaded on its upper end, as indicated by the letter *d*. Said sleeve-coupling is also screw-threaded on its interior, near the center thereof, as at *e*, into which is screwed a bushing or cap, *E*, of hard rubber or other insulating material, having a screw-thread formed on both its exterior and interior surfaces.
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The sleeve-coupling *C* has its bore below the screw-threaded point *e* considerably enlarged, as represented at *f*, and the hollow or bore of the bushing or cap *E*, at the lower end thereof, is also cut away or enlarged, as at *g*, for a purpose to be presently explained.
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F represents the lamp, provided with an externally-screw-threaded neck, *G*, the upper end of which is screwed into the bushing or cap *E*, whereby the lamp is completely insulated from its post or support and the earth.
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By cutting away the bore of the cap or bushing *E*, as at *g*, and enlarging the bore of the sleeve-coupling *C*, as at *f*, a very considerable free surface is given to the cap or bushing between the point of its contact with the neck of the lamp and the sleeve-coupling, which construction obviates the liability of leakage of the electric current through any moisture that may collect on said surfaces.
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D represents a cross-arm affixed to the neck *G* just above the lamp proper, which cross-arm is provided at its ends with the usual porcelain or glass knobs, to which the wires are attached or by which the wires are supported leading to the lamp, and secured thereto by the binding screws or similar contrivances, *I*.
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The description thus far given has been confined to the construction portrayed in Figs. 1 and 2. In Fig. 3 I have shown a modified form of the invention, in which a straight section or piece of pipe, *B*, is secured at its lower
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end in the socket *a*, and provided at its upper end with a branch coupling, *b*, branching outwardly and upwardly from which, in substantially V form, are two pipes or rods, J J, each provided at its upper end with a porcelain or glass knob, H', similar in construction and purpose to the knobs H in Fig. 1. A cross-arm, D', similar to cross-arm D, is attached at its ends in any suitable manner to said pipes or rods J, near the upper ends thereof, and to the under side of this cross-arm D', near its middle, is secured a stud, B', to which the lamp F is connected, and from which it is insulated in the same manner hereinbefore set forth with reference to Fig. 2.

In Fig. 4 I have shown the cross-arm D' as formed of ordinary gas-pipe, and connected to the upper ends of supports J J by means of common T-couplings. The sleeve-coupling C is in this instance connected to the cross-arm D' by a similar T-coupling, *i*. Other modifications may obviously be made in the form and construction of these parts without departing from my invention.

The post may be provided with steps or brackets *j*, by means of which the attendant may climb up the post to the lamp when for any reason it may be desired to have access to the latter.

By the invention described a lamp-post for electric lights may be provided which will be at once simple in construction, effective in and convenient for use, one which can be easily and cheaply manufactured and readily secured to the base of lamp-posts now commonly used for supporting gas-lamps for lighting streets, &c., and in which the lamp will be thoroughly insulated from its support.

It may also be mentioned that the invention is of seemly form and construction, by which it is made pleasing to the eye and an ornament to the street, which feature relieves it of the objection attaching to most contrivances of this class, which are of an unsightly character.

It will be understood that a different form of bend from that shown in Fig. 1 may be given

to the upper end of the post, and different equipments for the lamp for guiding and securing the wires thereto, as well as different means for attaching the cap or socket A' to the ordinary lamp-post, may be provided, and that a different form may be given to and arrangement made of the coupling and insulating contrivances without departing from the spirit of my invention.

What I claim is—

1. The combination, with the metal post and a horizontal metal lamp-arm projecting therefrom, of an electric-lamp socket secured to such arm by an insulating-nipple threaded to engage a section of the lamp-arm and also the socket, substantially as set forth.

2. The combination, with the post and a horizontal lamp-arm extending therefrom, and having a threaded portion, of a lamp provided with an upper threaded portion, a sleeve, C, engaging said post-arm, and an insulating-sleeve interiorly engaging said sleeve C and internally threaded to engage the threaded portion of the lamp and suspend the same, substantially as set forth.

3. The combination, with the metal post and a horizontal metal lamp-arm projecting therefrom, of an electric-lamp socket, and insulating-sleeve located in said arm, a lamp provided with a threaded portion to engage said socket, and a cross-arm carried by said threaded portion and provided with external insulator-connections, substantially as set forth.

4. The combination, with the metal post and a horizontal metal lamp-arm projecting therefrom, of an electric-lamp socket secured to such arm, and comprising a sleeve, C, and insulator-sleeve E, both interiorly cut away, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK A. SAWYER.

Witnesses:

GEO. M. SEIDERS,
F. M. HIGGINS.