

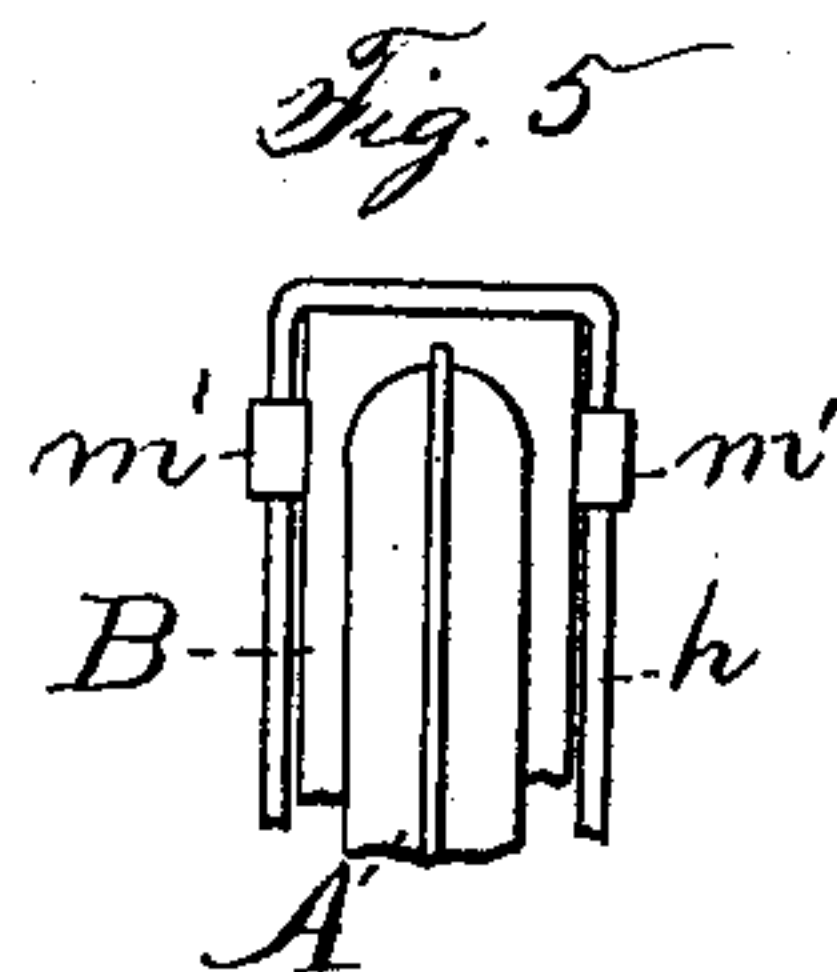
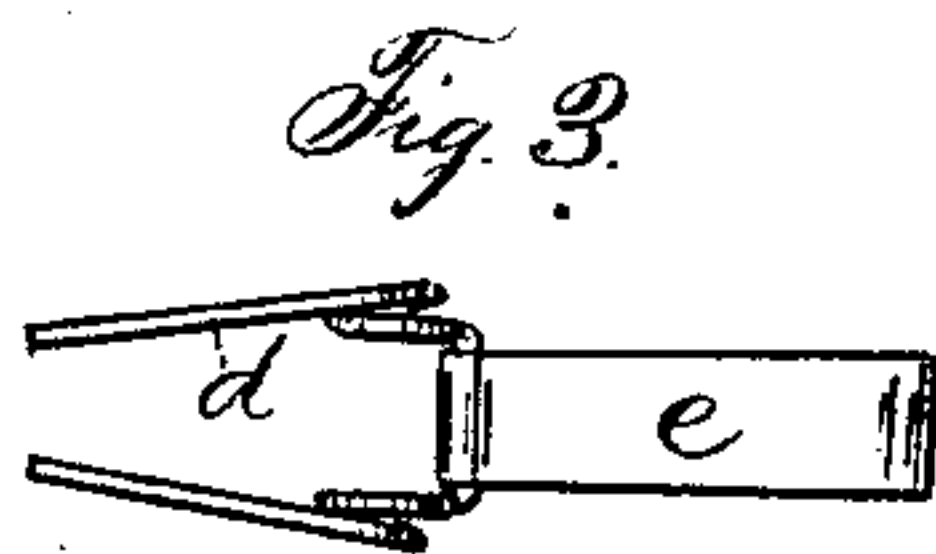
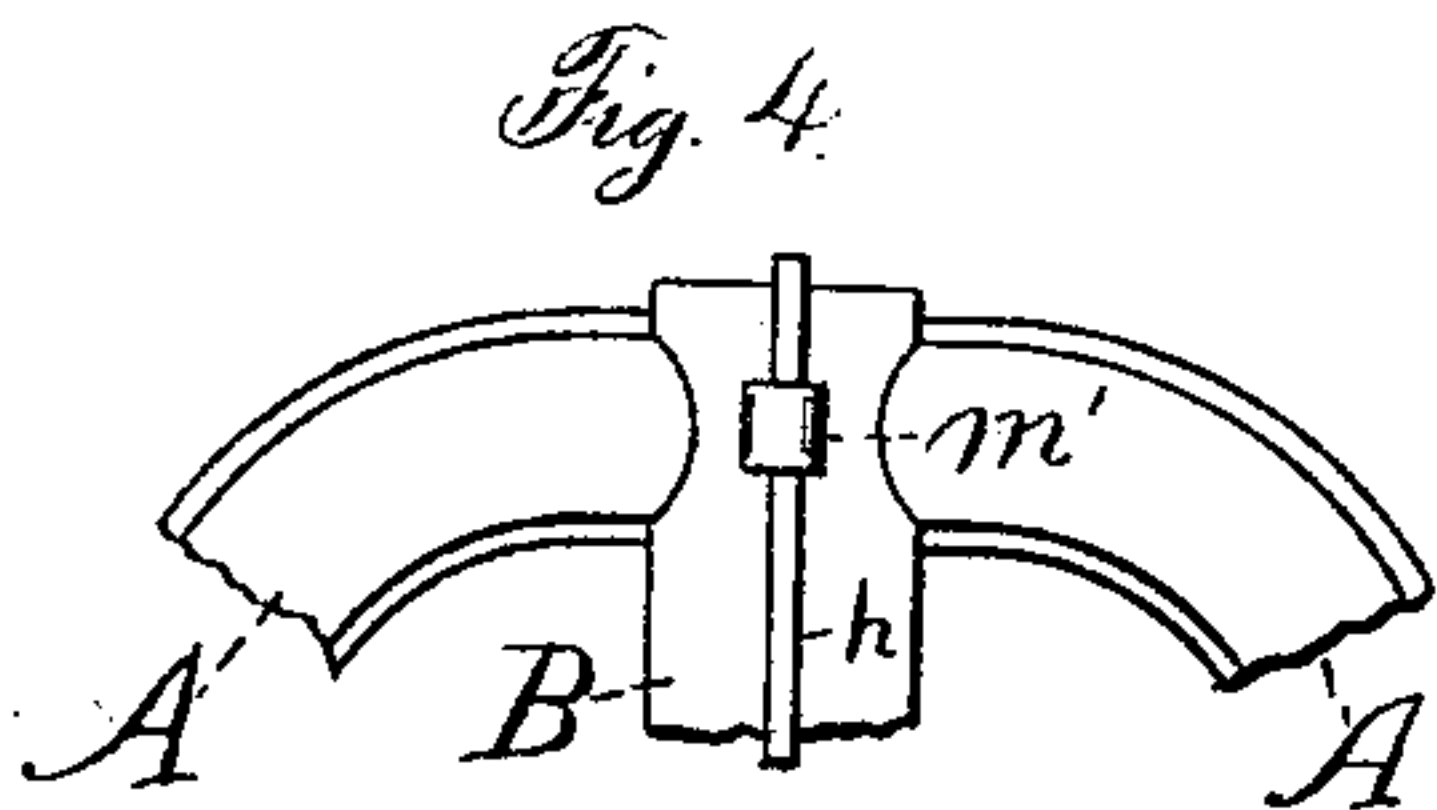
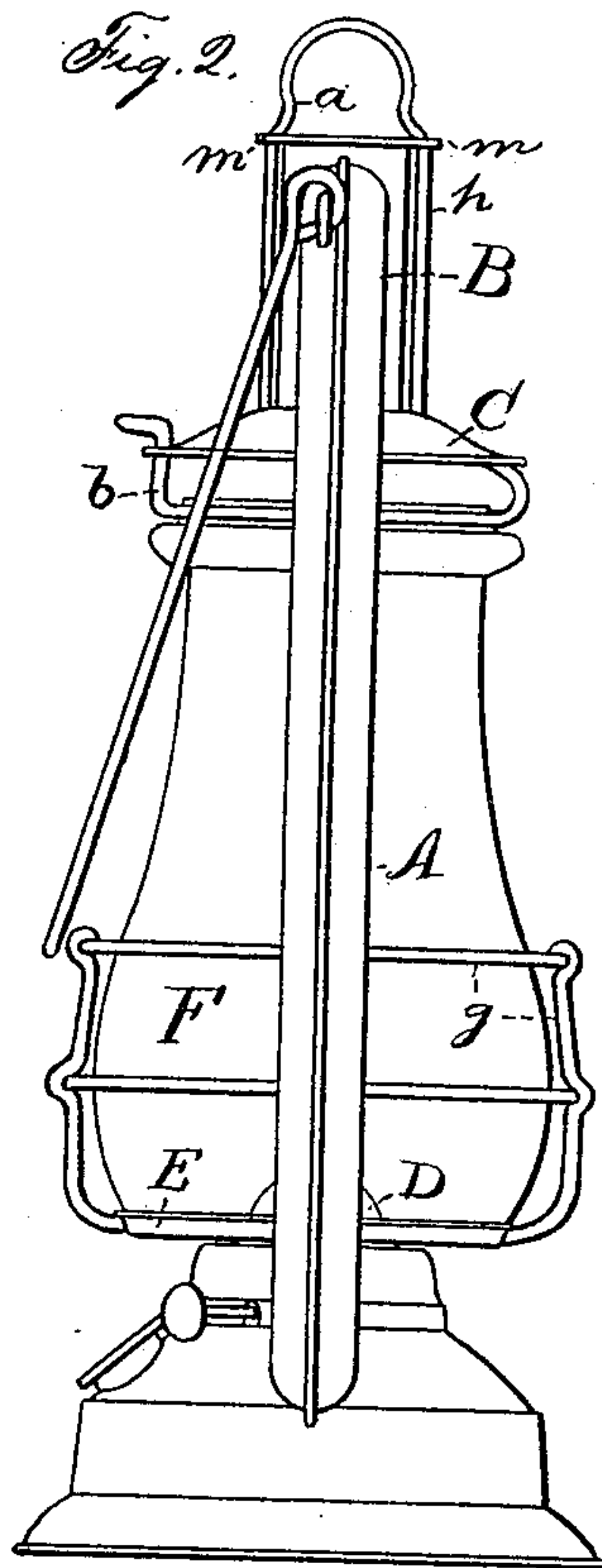
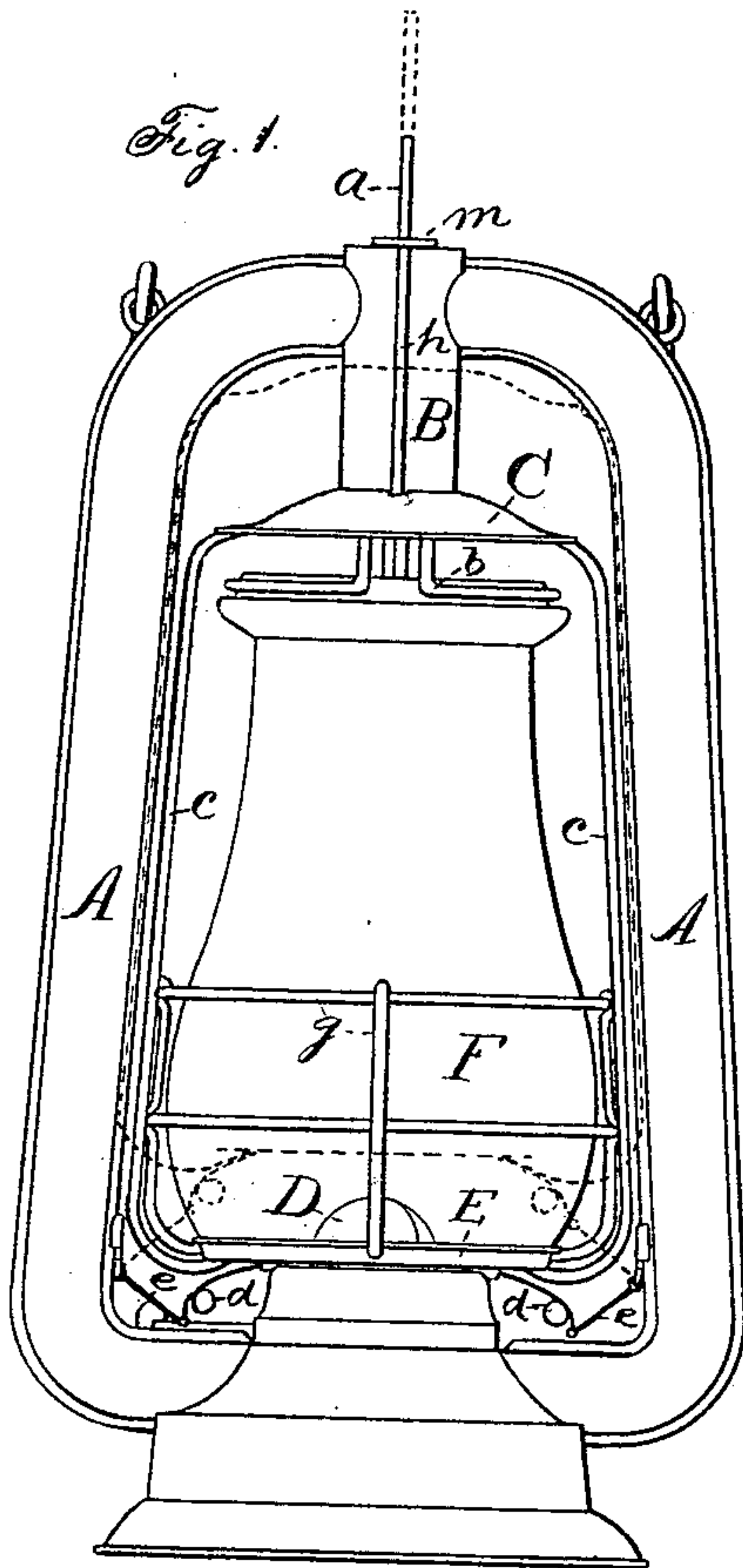
(No Model.)

F. DIETZ.

LANTERN.

No. 273,712.

Patented Mar. 13, 1883.



Witnesses.
John Edwards Jr.
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UNITED STATES PATENT OFFICE.

FREDERICK DIETZ, OF NEW YORK, N. Y.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 273,712, dated March 13, 1883.

Application filed November 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK DIETZ, of the city, county and State of New York, have invented certain new and useful Improvements in Lanterns, of which the following is a specification.

The invention relates to that class of lanterns known as the "tubular" lantern.

The object of my invention is to facilitate the filling, trimming, lighting, and extinguishing the lantern. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of my lantern; Fig. 2, a side elevation of the same. Fig. 3 is a plan view of one of the spring-arms and one link. Fig. 4 is a front elevation of a portion of my lantern as arranged without the lifting-handle, and Fig. 5 is a side elevation of the same.

In the drawings, A A designate the usual side draft-tubes of the tubular frame, B the central tube, and C the bell-top. This top I fit to slide up and down upon the tube B, and provide it with a suitable strengthening-wire, *h*, which extends upwardly from said bell-top through suitable loops or guides *m* by the sides of the central draft-tube, B. This strengthening-wire is mainly for the purpose of giving a better support for the bell-top, and it may or may not be provided with the handle *a*. To the under side of this bell-top C, I attach the ordinary spring, *b*, for holding the upper end of the globe in place in the ordinary manner, and also a vertically-sliding globe-supporting frame consisting of two side wires, *c c*, and a ring or collar at their lower ends, which forms a seat for encircling the burner-cone D and for the usual perforated air-plate E to rest upon. I secure two spring-wires, *d d*, to the globe-supporting frame, preferably at the lower end of the frame, and to the outer ends of each of said arms I hinge a link, *e*. The other ends of these links *e e* are hinged to the side draft-tubes, A A.

I prefer to secure the guard *g* to the perforated air-plate E as shown; but it may be attached in any other manner, or omitted, if desired. The globe F is placed upon the perforated air-plate E. Said plate is then placed on the seat at the lower end of the globe-supporting frame and secured by the spring *b* to hold it within said frame. The ring-shaped seat is small enough to allow the perforated

air-plate to rock thereon while the globe is being inserted or removed. By taking hold of the perforated air-plate or other convenient part which moves with the frame and starting it upward, the bell-top, globe-supporting frame, perforated air-plate, and the globe may be raised into the position indicated by broken lines in Fig. 1 for convenience in the trimming, lighting, &c., of the lantern. In thus raising the globe, &c., the spring-arms *d d* yield a little to allow the links *e e* to swing upward, the face of said arms acting to resist said movement until the links have passed a certain point, after which the arms assist in forcing the globe, &c., upward, and then hold it in its elevated position. By depressing the handle or other part moving with the frame the spring-arms will yield to allow the parts to descend, and after they have descended a given distance said arms cause the globe, &c., to snap down into place secure against accidental removal.

Figs. 4 and 5 show the strengthening-wire *h* without the handle *a*, and, instead of the guides *m m*, loops *m' m'* are secured to the sides of the tube B to guide said wire *h*.

I prefer to form the links of a flat piece of metal having a roll or bend at the ends to form half of a hinge, and to make the spring-arms of wire bent as shown in Figs. 1 and 3; but they may be otherwise constructed and still perform the same office in the combination, as hereinbefore specified.

I claim as my invention—

1. In a tubular lantern, the combination of the vertically-sliding globe-supporting frame, the spring-arms, and the links whose ends are pivoted or hinged to the side draft-tubes and spring arms, respectively, substantially as described, and for the purpose specified.

2. The combination of the vertically-sliding globe-supporting frame, the central draft-tube, B, the bell-top sliding thereon, the strengthening-wire, either with or without a handle fitted to slide in suitable guides by the sides of the tube B, the spring-arms, and the links whose ends are pivoted or hinged to the side draft-tubes and spring-arms, respectively, substantially as described, and for the purpose specified.

FREDERICK DIETZ.

Witnesses:

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