

(No Model.)

C. T. HAM.
LANTERN.

No. 278,540.

Patented May 29, 1883.

Fig. 1.

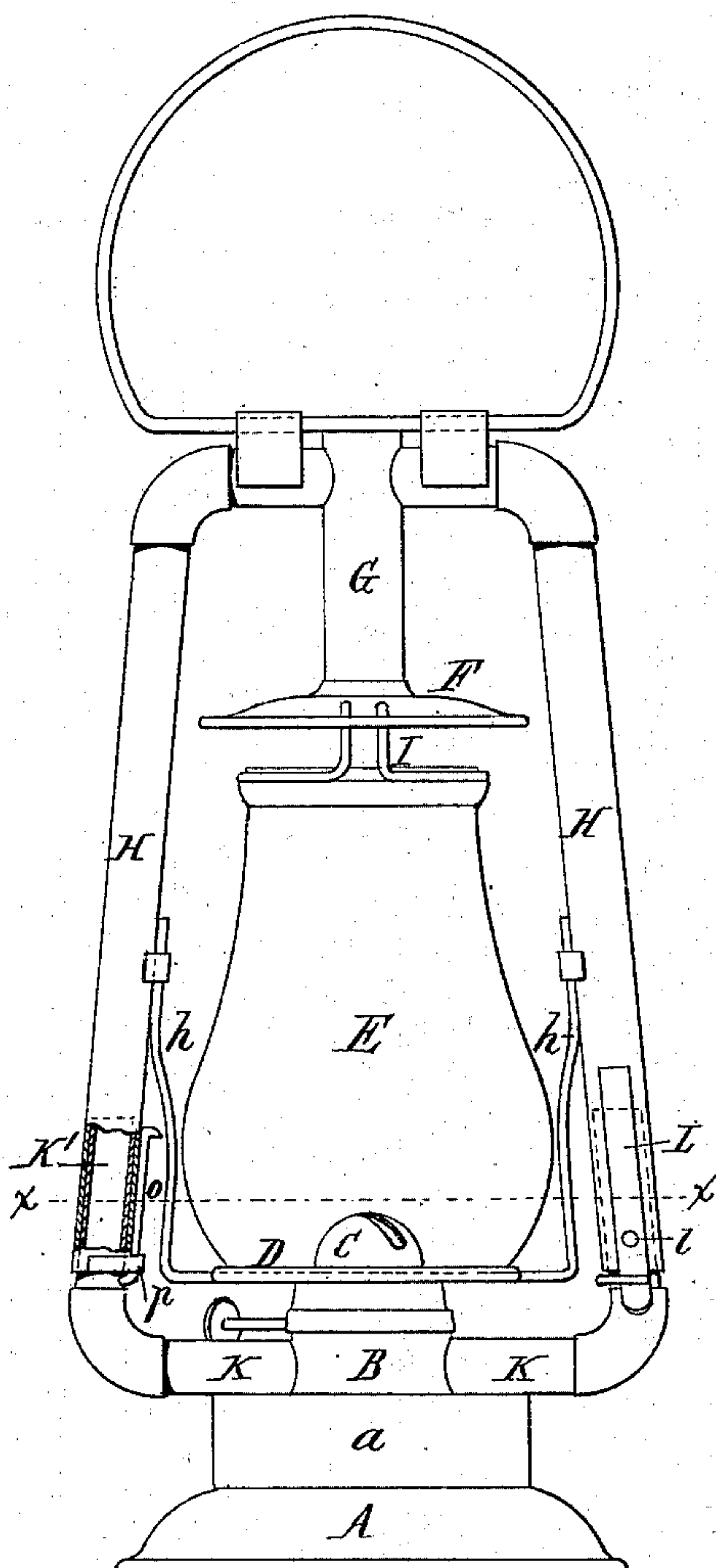


Fig. 2.

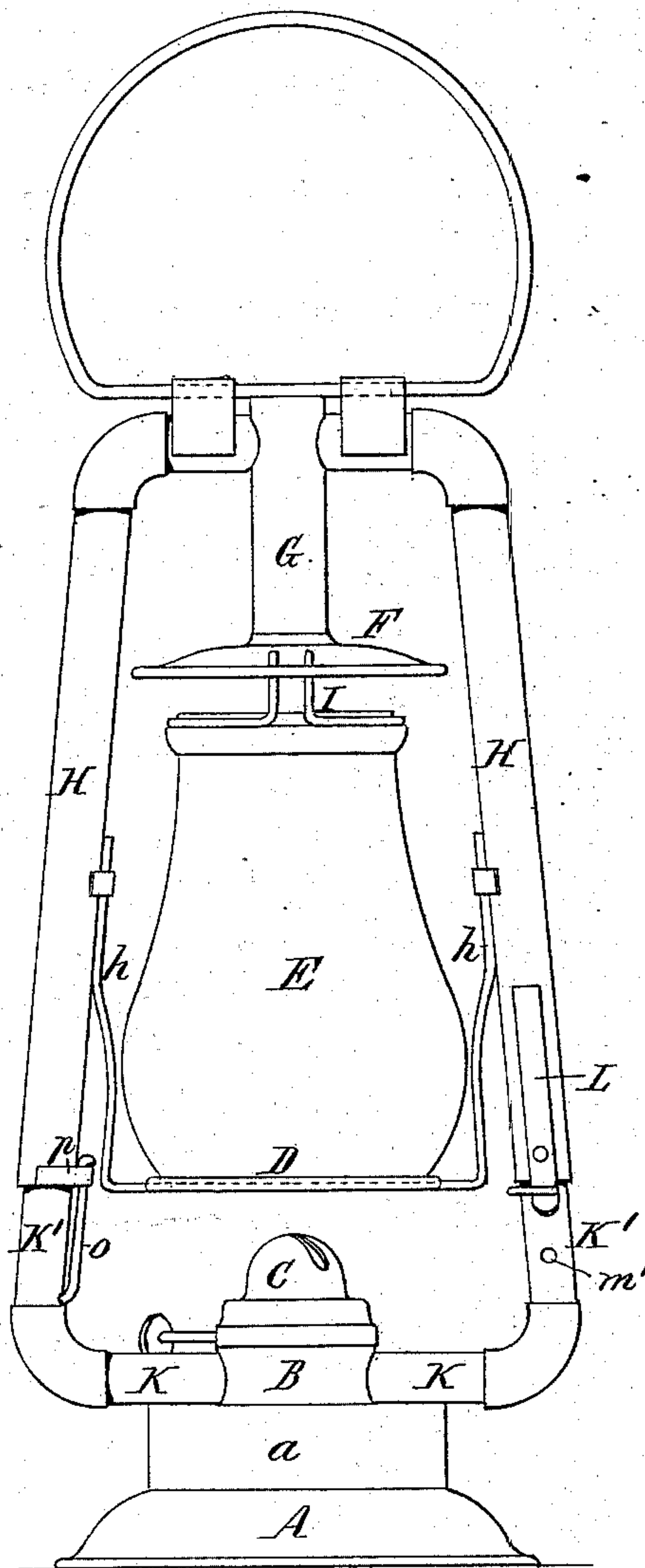


Fig. 4.

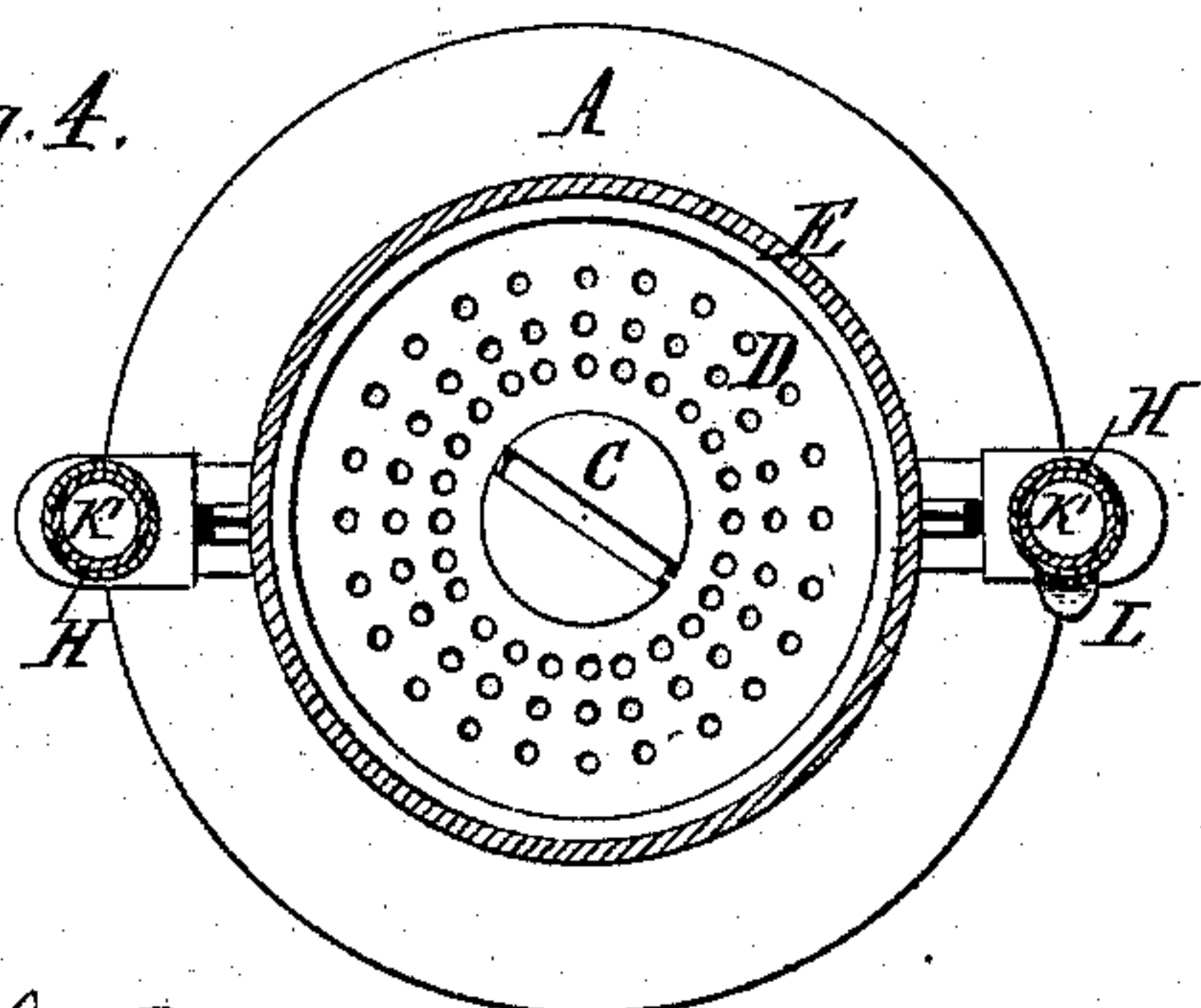
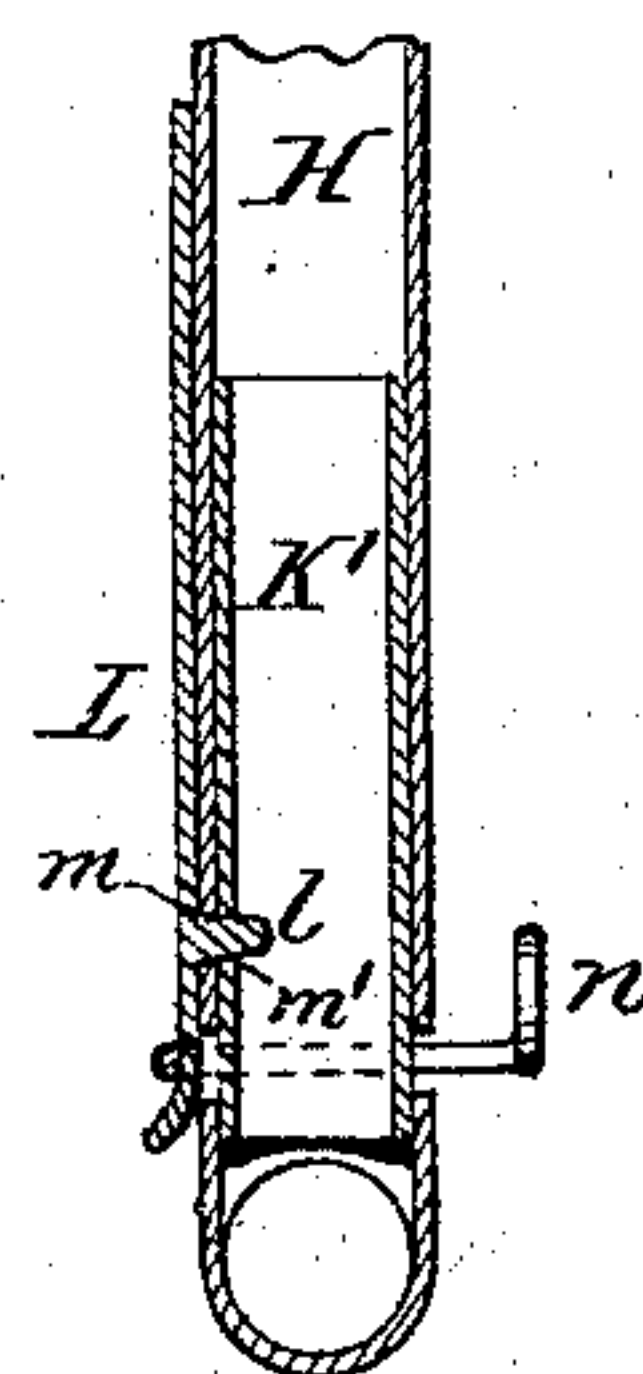


Fig. 3.



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Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES T. HAM, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE STEAM GAUGE AND LANTERN COMPANY, OF SAME PLACE.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 278,540, dated May 29, 1883.

Application filed December 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. HAM, of the city of Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Lanterns, of which the following is a specification.

This invention relates more particularly to an improvement in that class of lanterns in which the globe and the perforated plate or gallery supporting the globe can be raised, so as to expose the burner-cone for the purpose of giving access to the burner when the wick is required to be trimmed, or for lighting or extinguishing the flame without requiring the globe to be removed from the lantern, or to be disconnected from the parts by which it is held in place.

The object of my invention is the construction of a simple device whereby these results are attained; and my invention consists, to that end, of the particular improvements which will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of a lantern provided with my improvements, with the parts arranged in their operative position. Fig. 2 is a similar view, with the globe raised so as to expose the burner-cone. Fig. 3 is a vertical section, illustrating the spring-catch whereby the globe is secured in place on the burner-cone. Fig. 4 is a horizontal section in line *x x*, Fig. 1.

Like letters of reference indicate like parts in the several figures.

A represents the base of the lantern, containing the oil-reservoir *a*.

B represents the air-chamber, arranged upon the oil-reservoir and surrounding the wick-tube.

C represents the burner, resting upon the air-chamber B.

D represents the perforated plate or gallery which surrounds the burner-cone and supports the glass globe E.

F represents the dished plate or bell arranged over the upper end of the globe.

G represents the air-tube, which rises from the center of the bell F.

H H represent the upper movable portions of the descending air-tubes which connect the

upper end of the tube G with the air-chamber B, and which are arranged on diametrically-opposite sides of the globe.

I represents an annular spring, which is attached to the bell F, and which serves to hold the upper end of the globe in such manner that the globe can be readily detached when desired.

K K' represent the lower horizontal portions of the air-tubes, which connect at their inner ends with the air-chamber B. The air-tubes are each composed of an upper and a lower portion, the latter, of which the horizontal portion K forms a part, being firmly secured to the base of the lantern, and the upper portion being firmly secured to the tube G and bell F, or the top of the lantern, and both portions being so connected together that the lower end of the upper portion can slide up and down on the upright portion K' of the lower portion, in the manner of a telescopic joint, without disconnecting the two parts of the tubes. The plate or gallery D is attached to the upper portion, H, of the tubes by wires *h*, so that it takes part in the vertical movement of the upper portions of the tubes, thereby causing the plate D and the globe E, resting thereon, to rise or descend as the upper part of the lantern is raised or lowered.

L is a spring-catch, which serves to connect the upper movable portion, H, of the side tube with the lower stationary portion thereof when the globe is in its lowest position. This spring-catch is composed, as shown in the drawings, of a flat spring, secured with its upper end to the movable portion H of the tube, and provided near its lower end with an inwardly-projecting stud or pin, *l*, which projects through openings *m m'*, formed, respectively, in the upper movable and the lower stationary parts of the same tube, and which coincide when the globe is in its lowest position. The spring L tends to hold the stud *l* in engagement with the openings *m m'*, and the movable portion of the lantern is thereby firmly secured to the lower stationary portion thereof.

n represents a thumb-piece, which is attached to the lower end of the spring L for withdrawing the pin *l* from the openings *m m'* by pressing against said thumb-piece when it is de-

sired to raise the upper movable portion of the lantern.

o represents a stop, which is attached to the lower stationary portion of the side tube, and extends upwardly along the lower portion of the movable part of the tube, and is bent or provided with an enlargement at its upper end.

p represents a sleeve or strap, which is secured to the movable portion of the tube *H*, and which surrounds or runs in contact with the stop *o* in such manner that when the movable portion of the lantern has been raised to the proper height the sleeve or strap *p* will come in contact with the bent portion or enlargement of the stop *o*, and thereby prevent the further upward movement of the upper movable part of the lantern and its disconnection from the lower part thereof.

The upwardly-converging form of the side tubes will cause the movable parts of the tubes to slightly bind against the stationary parts thereof when the movable part of the lantern has been raised, whereby the movable part is supported in its elevated position.

By simply releasing the spring-catch *L* and raising the upper part of the lantern the globe and its supporting-plate are raised above the burner to a sufficient height to permit access to the wick for trimming the same, and for lighting and extinguishing the flame, and by lowering the upper portion of the lantern until the plate supporting the globe seats itself upon the burner the parts are again placed in their operative position and secured therein by the spring-catch *L*, which automatically engages when the movable part of the lantern has been lowered to the proper position. The globe can also be readily removed from the lantern, upon releasing the annular spring-catch *I*, when it is required to be cleaned or for replacing a broken globe.

The construction of the upper part of the lantern herein shown and described is of course not essential to the operation of my improvement, and may be varied without departing from my invention, so long as the tubes have the telescopic adjustment and the globe is so held at its upper end that it can be removed when desired.

My improvement may also be applied to

lamps having a single tube by arranging the stop and catch on the same tube.

I claim as my invention—

1. The combination, in a lamp or lantern, of a base containing the burner, an air-supply tube communicating with the burner and composed of two parts capable of sliding upon each other, in the manner of a telescopic joint, the lower part of said tube being secured to the base of the lantern, a plate or frame adapted to support the lower end of the globe and secured to the upper portion of the air-tube, and a catch whereby both portions of the air-supply tube are locked together for securing the parts in their operative position, substantially as set forth.

2. The combination, in a lamp or lantern, of a base provided with a burner, a tube, *K K'*, secured to the base, and provided with an opening, *m'*, a tube, *H*, capable of sliding on the fixed tube, and provided with an opening, *m*, a globe-supporting plate, *D*, secured to the movable tube *H*, and a spring-catch, *L*, attached to the movable tube and provided with a stud or pin, *l*, adapted to engage in the openings *m m'*, substantially as set forth.

3. The combination, in a lamp or lantern, of a base provided with a burner, a tube, *K K'*, secured to the base, a tube, *H*, capable of sliding on the tube *K K'*, a globe-supporting plate, *D*, secured to the movable tube *H*, a stop-bar, *o*, secured to the fixed tube, and a strap or sleeve, *p*, secured to the movable tube, substantially as set forth.

4. The combination, in a lamp or lantern, of a base provided with a burner, a tube, *K K'*, secured to the base, a tube, *H*, capable of sliding on the tube *K K'*, and connected at its upper end with a bell, *F*, a globe-supporting plate, *D*, secured to the movable tube *H*, a catch, *I*, adapted to secure the upper end of the globe to the bell *F*, a spring-catch, *L*, whereby the two parts of the lamp or lantern are secured in their operative position, and a stop device, *o*, whereby the movement of the movable part of the lantern is limited, substantially as set forth.

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Witnesses:

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