

(No Model.)

3 Sheets—Sheet 1.

H. C. WEBB.

EXTINGUISHING MECHANISM FOR CENTRAL DRAFT LAMPS.

No. 466,545.

Patented Jan. 5, 1892.

Fig. 1.

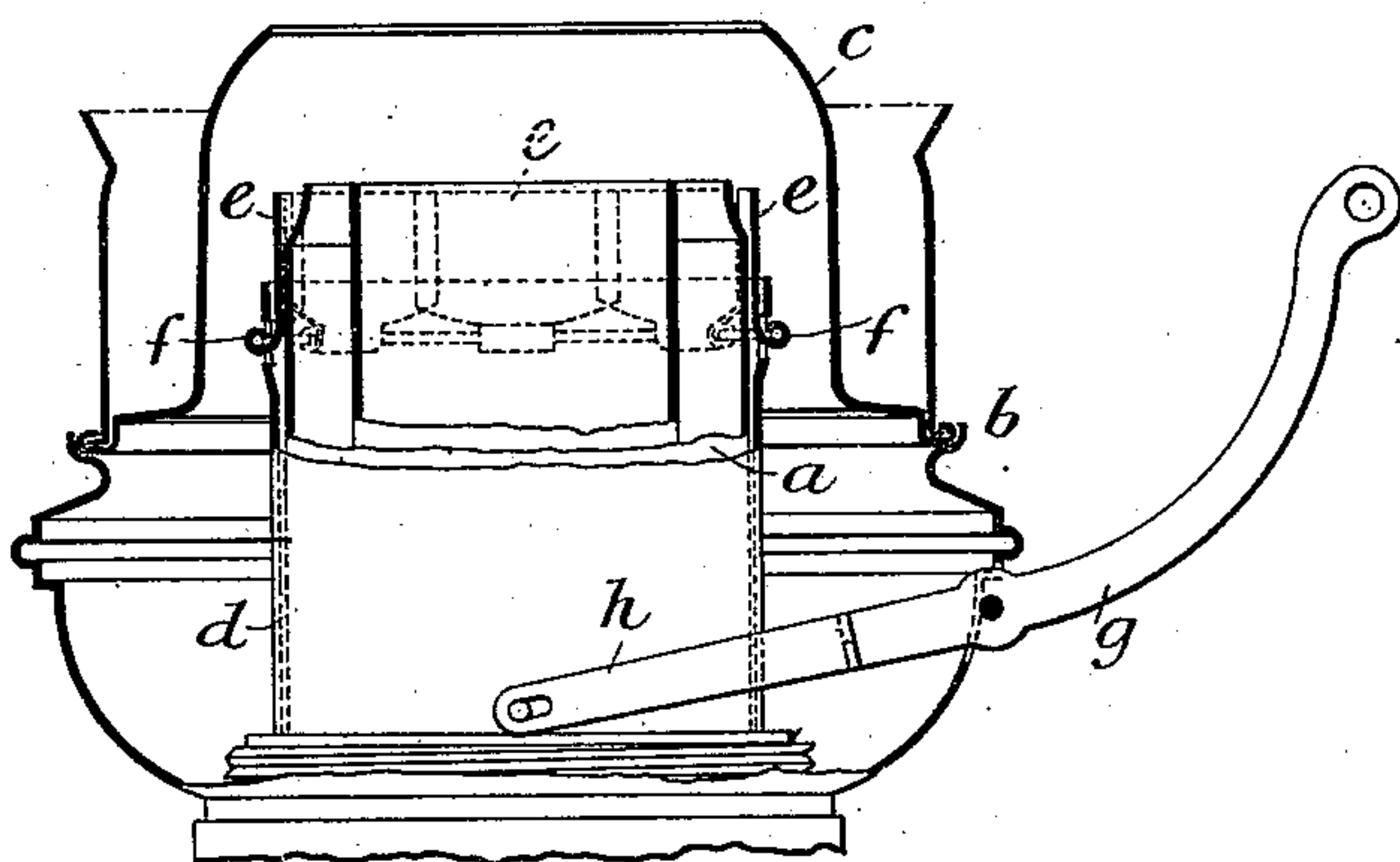
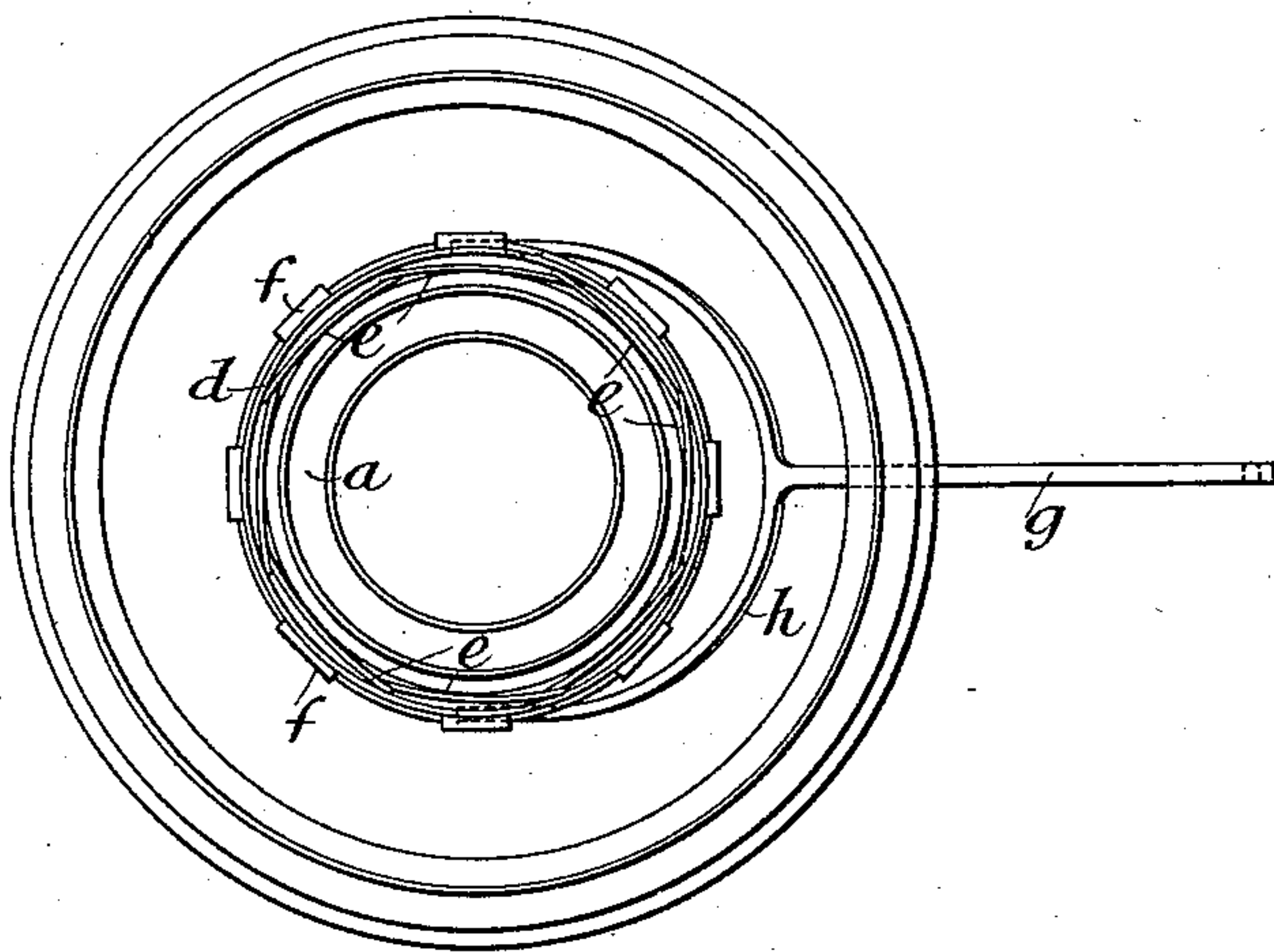


Fig. 2.



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Fig. 3.

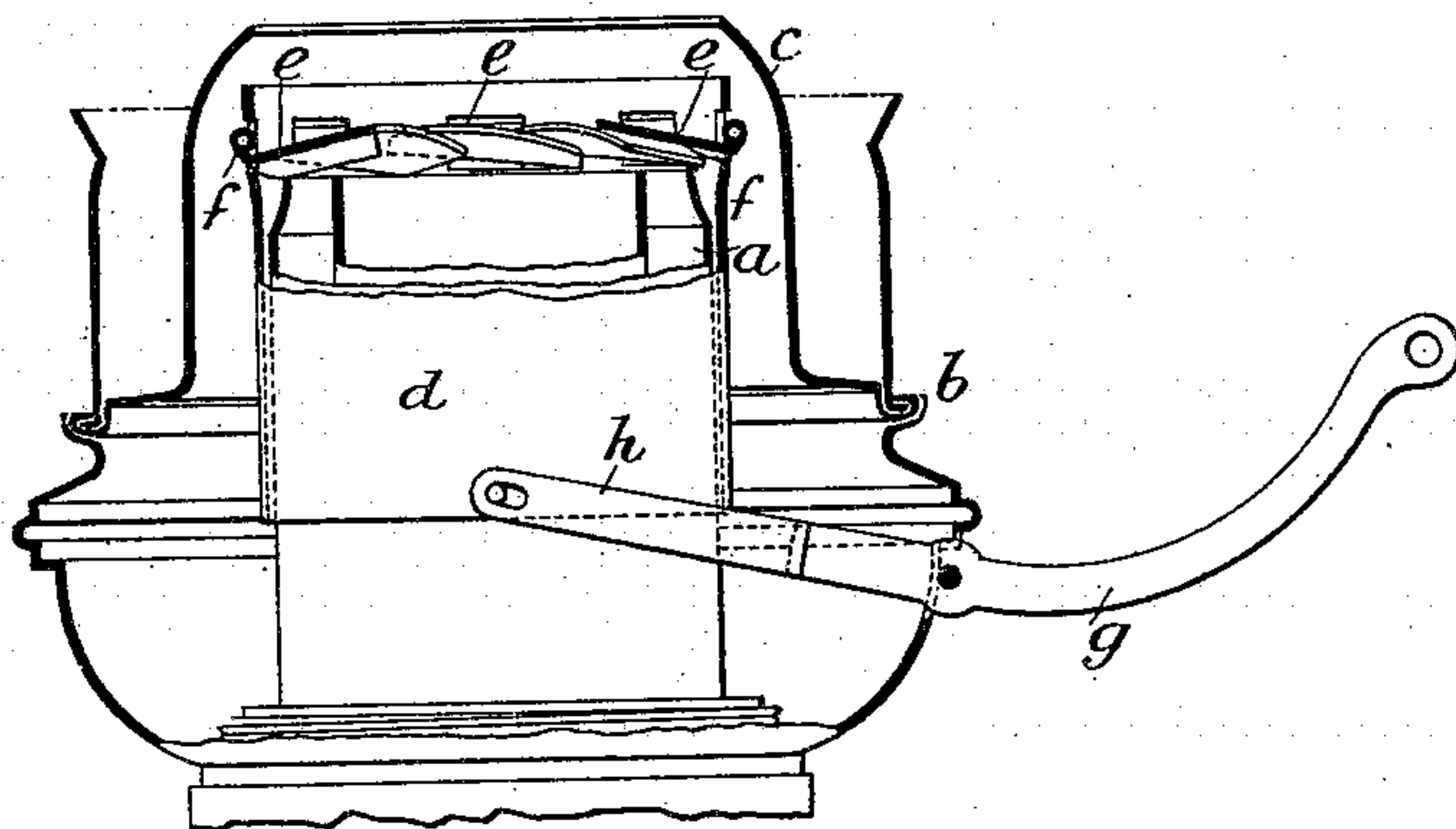
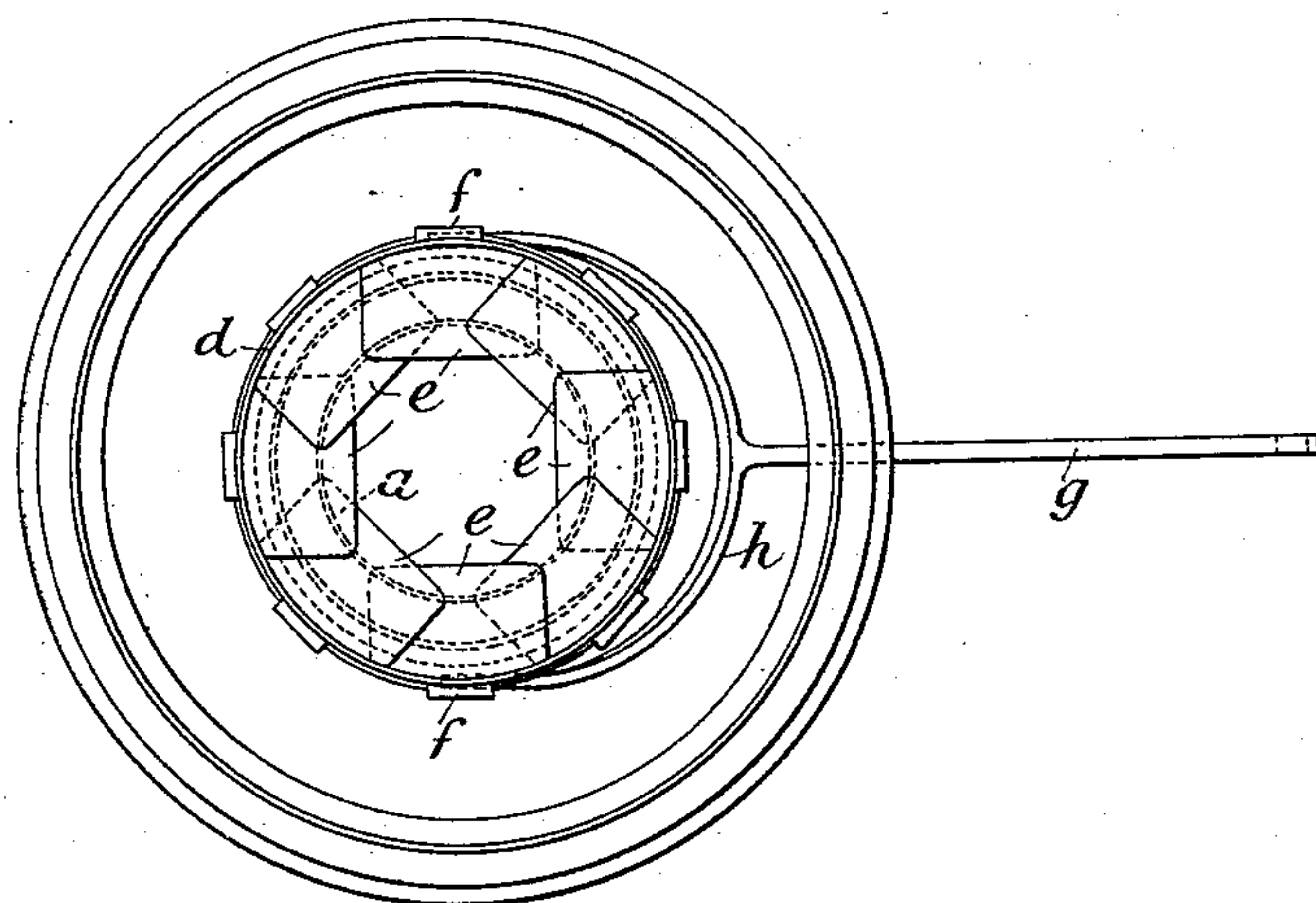


Fig. 4.



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Fig. 5.

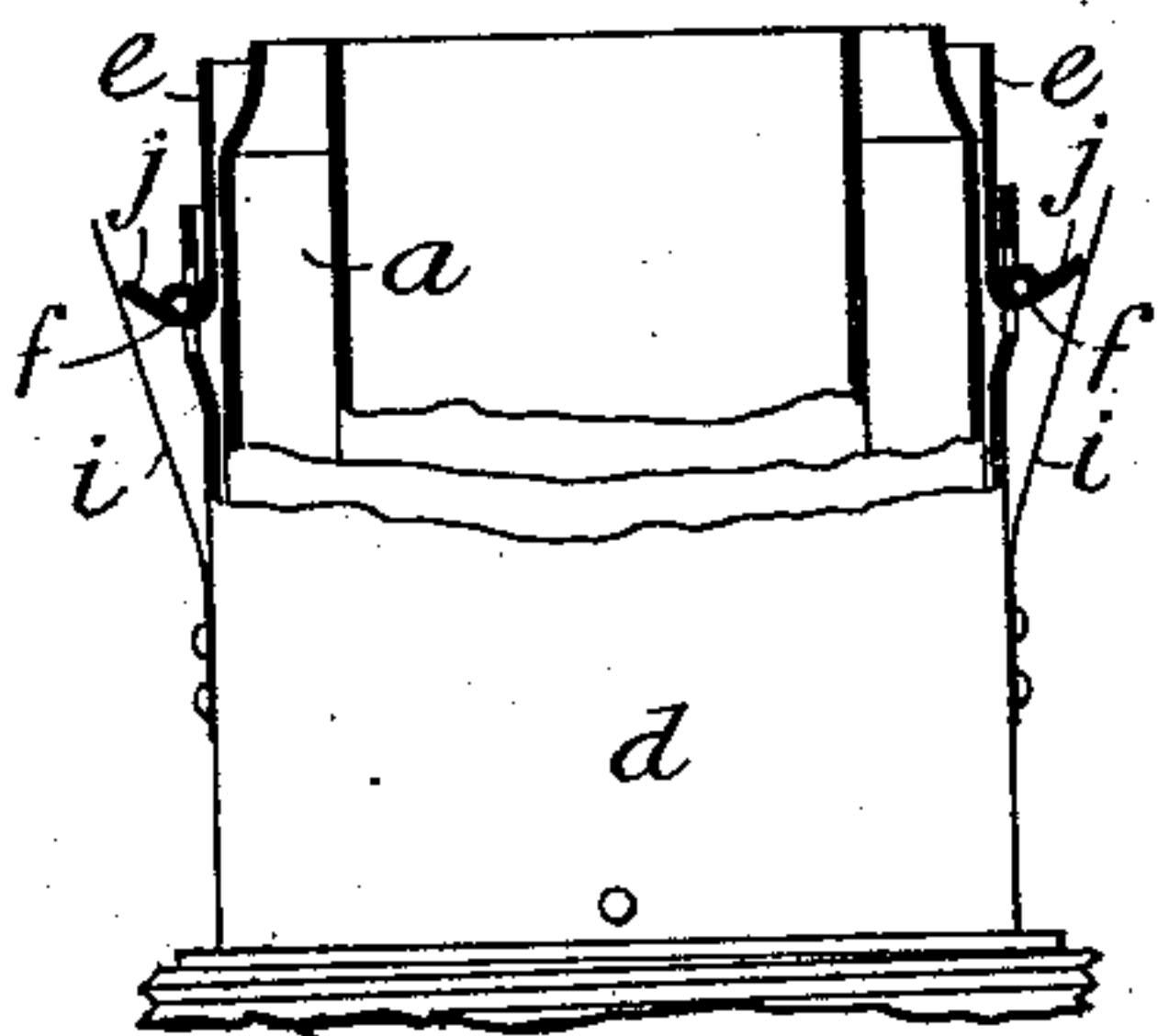


Fig. 6.

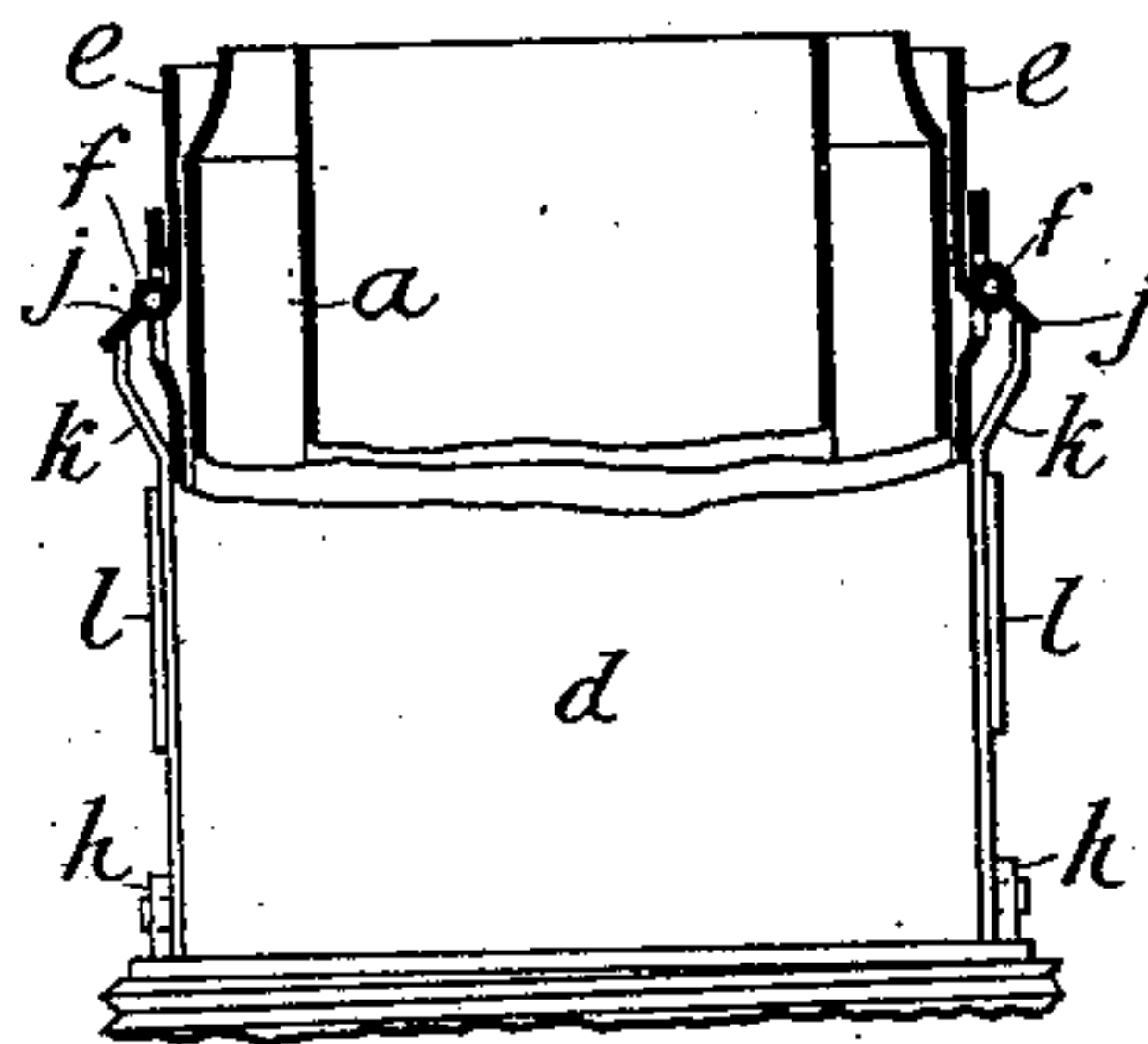
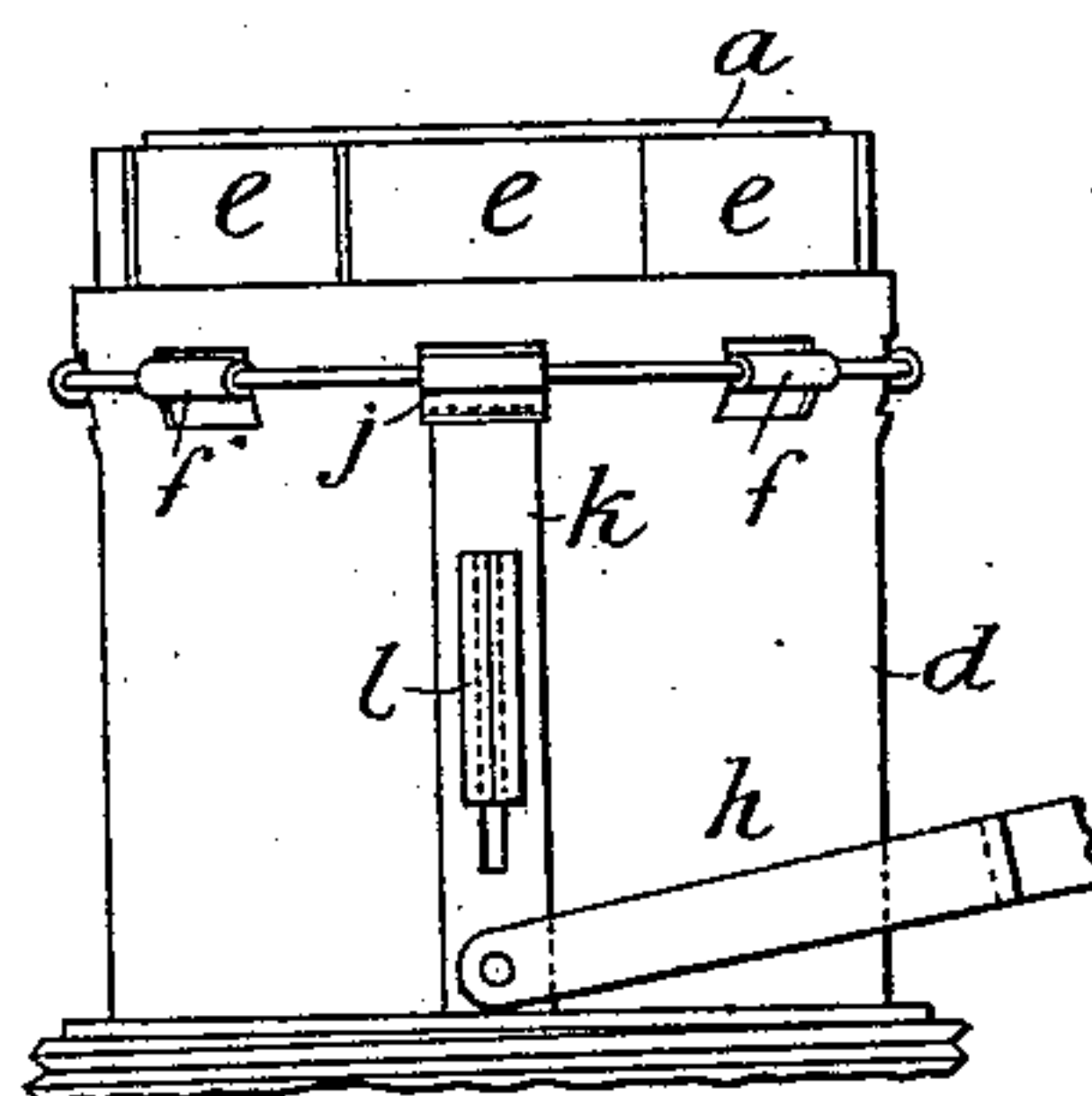


Fig. 7.



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UNITED STATES PATENT OFFICE.

HENRY CLAY WEBB, OF CROYDON, ASSIGNOR TO SALOMON FALK, OF LONDON, ENGLAND.

EXTINGUISHING MECHANISM FOR CENTRAL-DRAFT LAMPS.

SPECIFICATION forming part of Letters Patent No. 466,545, dated January 5, 1892.

Application filed June 7, 1890. Renewed June 23, 1891. Serial No. 397,198. (No model.)

To all whom it may concern:

Be it known that I, HENRY CLAY WEBB, a citizen of the United States of America, residing in Croydon, in the county of Surrey, England, have invented new and useful Improvements in Extinguishing Mechanisms for Central-Draft Lamps, of which the following is a specification.

My invention relates to improved mechanism for extinguishing oil-lamps having round wicks; and it consists, essentially, in the employment of a number of thin metal plates in the form of segments of a disk or of other suitable shape, which plates are hinged or jointed to a tube sliding upon the wick-tube of a lamp in such a manner that when the sliding tube is raised the required distance the said plates will close inward over the wick and so extinguish the flame.

To enable my invention to be fully understood, I will describe the same with reference to the accompanying drawings, in which—

Figure 1 is a sectional elevation of a lamp-burner provided with extinguishing mechanism constructed according to my invention, the extinguisher being represented in its "off" position—that is to say, in the position which it occupies while the lamp is alight. Fig. 2 is a plan of the same, the dome of the burner being removed. Figs. 3 and 4 are views similar to Figs. 1 and 2, respectively, but showing the extinguisher in its "on" position—that is to say, in the position which it occupies to extinguish the flame. Fig. 5 is a sectional elevation of a wick-tube and extinguisher, showing the arrangement of springs for insuring the inward turning of the segmental plates when the sliding tube is raised. Fig. 6 is a view similar to Fig. 5, illustrating a modified arrangement for insuring the inturning of the said plates. Fig. 7 is an elevation of the parts shown in Fig. 6 and at right angles thereto. Figs. 8 and 9 are plan views showing different forms of plates from those shown in Figs. 1 to 4.

Similar letters of reference indicate corresponding parts in all the figures.

a indicates the wick-tube of the burner, *b* the gallery, and *c* the dome, all the said parts being of ordinary construction.

d is the tube sliding upon the exterior of

the wick-tube, and *e e* are the plates pivoted to the same at *ff* and adapted to close inward over the wick. As represented in Figs. 1 to 4, these plates are of a substantially oblong form, except that the side of each plate which is pivoted to the tube *d* is curved to correspond with the contour of the wick-tube and the said plates are arranged in such a manner that each one overlaps one of the adjacent plates at one end, as will be clearly seen by reference to Fig. 4, the object of this arrangement being to insure that all the plates shall close over the wick, no one of them being capable of turning down without turning all the others down with it. The said plates are advantageously slightly curved, as shown most clearly in Figs. 2 and 3, to cause them to lie as closely as possible against the wick-tube and thus occupy a comparatively small space.

g is a lever, which is pivoted in the lower part of the gallery *b* and provided at one end with a fork *h*, engaging with pins on the sliding tube *d* in such a manner that when the said lever is depressed from the position shown in Fig. 1 to that shown in Fig. 4 the said tube *d* will be elevated to extinguish the flame. It will be noticed that the weight of the plates *e* is on the inner side of the pivots *f*, so that when the tube is raised the weight of the said plates themselves will cause them to fall inward over the wick, as shown in Fig. 3.

In some cases it may be advisable to provide means for positively moving the plates when the tube *d* is raised, and for this purpose I advantageously employ one or more springs *i*, as shown in Fig. 5, which are secured to the sliding tube *d* and adapted to bear upon a projection *j* or projections *j j*, formed integral with the plates *e*.

In cases where the use of springs is considered objectionable I advantageously employ the arrangement shown in Figs. 6 and 7, in which *k k* indicate bars sliding vertically upon guides *l l* on the tube *d*, which bars at their lower ends have connected to them the arms of the fork *h* of the extinguisher-lever *g* and at their upper ends bear against the under sides of the projections *j j* on the plates *e e*. With this arrangement when the

lever *g* is depressed the bars *k* (by pressing against the projections *j*) will raise the tube *d* without moving relatively to the said tube until the said plates have moved sufficiently far above the top of the wick-tube when the said bars *k k*, owing to their being able to move for a short distance independently, will turn the said plates over the flame. If the segments are constructed and intended to lie side by side in the same plane, it will be found that they cannot be made to work with sufficient accuracy to insure a proper extinguishing of the lamp. Segments made in this way would be continually striking against each other along their edges and hinder the operation of the device. By making the segments so that each overlaps its adjacent segment on one side and is overlapped by its adjacent segment on the other side the segments, when operated to extinguish the lamp, will fall in upon one another without hitching or interfering. By making the segments to overlap the perfect and accurate operation of the extinguisher is secured.

Having now particularly described my invention, what I claim is—

1. The combination, with the wick-tube, of the sleeve or collar adapted to slide longitudinally thereon, a series of extinguisher-plates pivotally mounted on said collar and provided with projecting portions, a series of plates movably secured to said sleeve or collar and engaging said projections, and means for moving said sleeve or collar and said sliding plates together and also moving said sliding plates in relation to said sleeve or collar to operate said extinguisher-plates, substantially as described.

2. The combination, with the wick-tube, of a sleeve or collar adapted to slide longitudinally thereon, a series of extinguisher-plates pivoted to said sleeve and held in vertical position by the wick-tube, said plates being provided with projecting portions, a series of sliding plates secured to the sleeve or collar and engaging the said projections, and a lever connected to said sliding plates, whereby said sleeve or collar and said plates will be raised simultaneously until the wick-tube is disengaged by the extinguisher-plates, when said sliding plates will move relatively to said sleeve or collar to depress the extinguisher-plates over said wick-tube, substantially as described.

3. The combination, with the wick-tube, of the sliding extinguisher-tube having a series of segments pivotally connected thereto and adapted to overlap each other when closed over the wick-tube, substantially as described.

4. The combination, with the wick-tube, of the sliding extinguisher-tube provided with a series of pivoted segments engaging the side of the wick-tube, each of said segments overlapping its adjacent segment on one side and being overlapped by its adjacent segment on the other side, and means for raising said extinguisher-tube so as to move the segments out of engagement with the side of the wick-tube, whereby the segments may engage the top of the wick-tube and extinguish the lamp, substantially as described.

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Witnesses:

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