(No Model.)

I. & S. WEINSTEIN.

LAMP EXTINGUISHER.

No. 312,414. Patented Feb. 17, 1885.

Fig. 1.

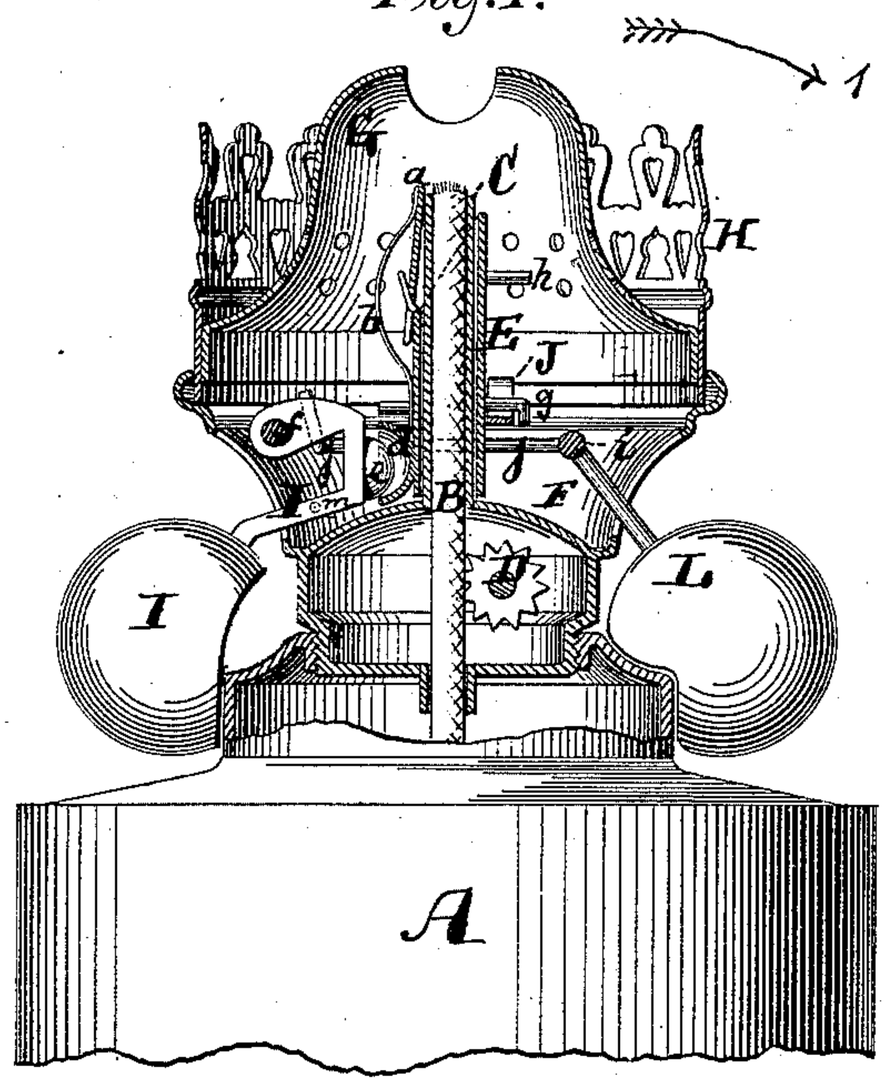


Fig. 3.

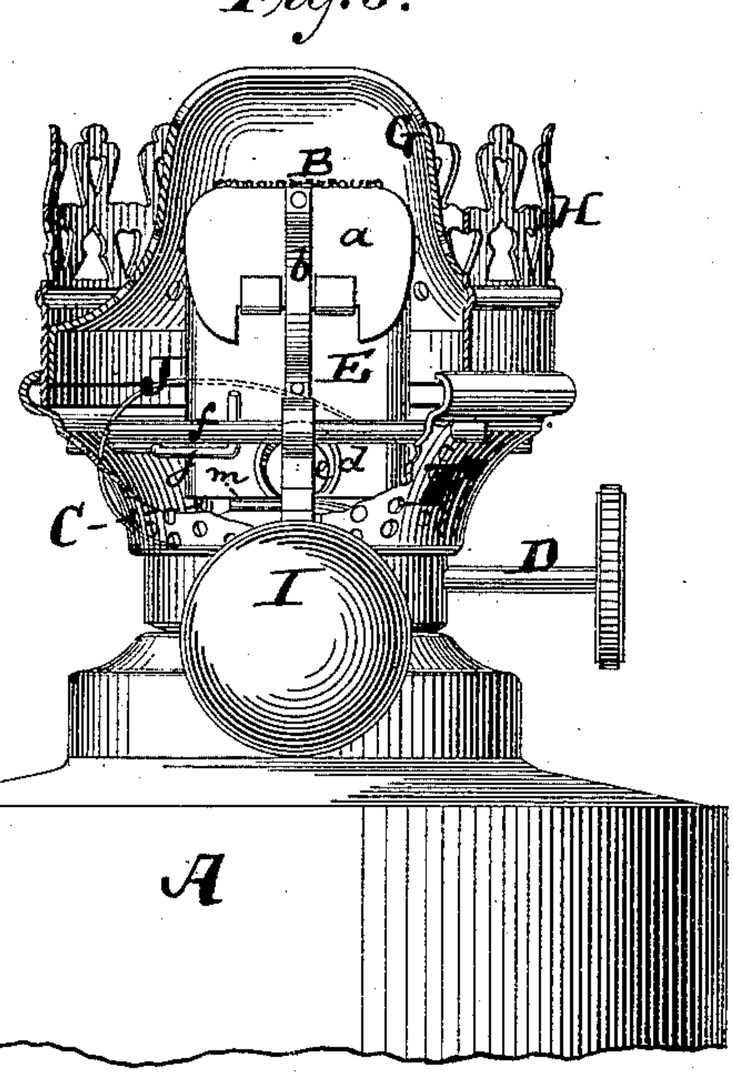
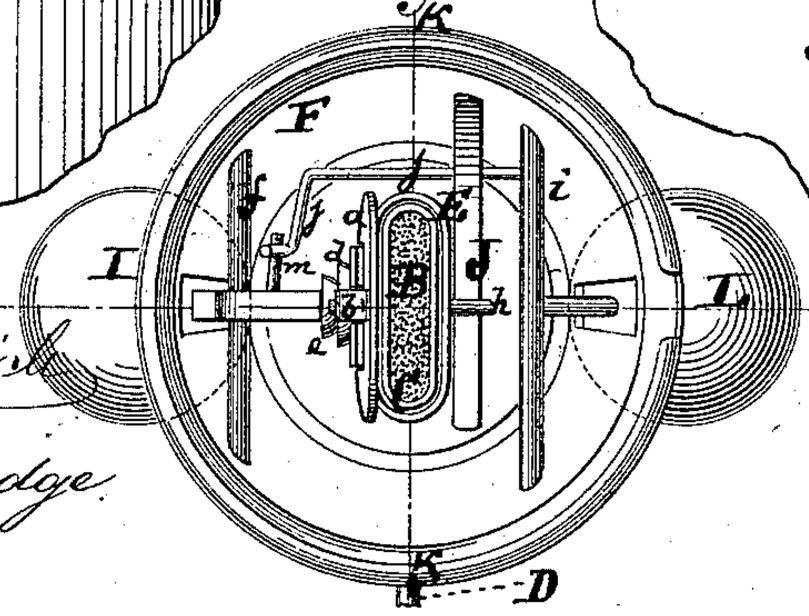


Fig. 2.

Fig. 5.

Fig. 4.



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UNITED STATES PATENT OFFICE.

ISAAC WEINSTEIN AND SAMUEL WEINSTEIN, OF NEW YORK, N. Y.

LAMP-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 312,414, dated February 17, 1885.

Application filed September 1, 1884. (No model.)

To all whom it may concern:

Be it known that we, ISAAC WEINSTEIN and SAMUEL WEINSTEIN, of New York city, county and State of New York, have invented an Improved Lamp-Extinguisher, of which the following is a complete specification, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional elevation of a burner having our attachment, the wick being shown uncovered. The line *c c*, Fig. 4, indicates the plane of section. Fig. 2 is a similar view of the same, showing the wick covered. Fig. 3 is a partial section of the burner on the line *k k*, Fig. 4, showing the extinguisher lowered and in face view. Fig. 4 is a top view of the burner and attachment, the cone of the burner being removed. Fig. 5 is a view similar to Fig. 3, but showing the extinguisher raised.

This invention relates to a new attachment to a lamp-burner for extinguishing the flame whenever the lamp is tilted, overthrown, or suddenly jarred.

The invention consists in the novel combinations of parts, that are hereinafter more fully stated.

The invention is applicable to lamps consuming hydrocarbon or other explosive liquids.

In the drawings, the letter A represents the fuel-reservoir of a suitable lamp. B is the wick; C, the wick-tube; D, the shaft and wheel for raising and lowering the wick. F is the base of the burner; G, the cone; H, the chimney-holder on the burner. All the parts so far named are of ordinary or suitable construction.

E is a sleeve surrounding the wick-tube C and capable of moving up and down thereon. This sleeve carries a pivoted lid, *a*, on top, said lid being held closed by a spring, *b*, when the sleeve is raised, as in Fig. 2. The sleeve E also carries a cup-like socket, *d*, or equivalent recess or projection, for engaging the ball *e*, or equivalent projection, on the weighted arm I, the said weighted arm being pivoted at *f* to the base of the burner. The sleeve E also carries a pin, *g*, which engages with a spring, J, that is attached to the base or other part of the burner.

Another pin or projection, *h*, on the sleeve E serves as a stop against the cone G when the sleeve is raised; but this function may be performed by the pin *g* striking, when raised, a suitable stop on the burner.

To the base of the burner is pivoted at *i* another weighted arm, L, which has an extension, *j*, that is capable of making contact with a pin, *m*, that projects from the weighted arm I.

The operation is as follows: When the burner is to be used, the sleeve E is drawn down by a cord, *n*, Fig. 5, or by other means, until the socket *d* arrives opposite the ball *e*. The weight I now holds said ball in said socket, and thereby retains the sleeve E in the lower position, where it will not interfere with the wick. Even the lid *a* in this position folds against the side of the wick-tube, as is shown in Fig. 1. Should the lamp be jarred, thrown, or tilted, the weighted arm I will at once carry the ball *e* out of the socket *d*, whereupon the spring J will immediately raise the sleeve until the pin *h* strikes the cone G, as shown in Figs. 2 and 5. As soon as the upper part of the sleeve gets above the top of the wick-tube the lid *a* will at once be shut down by the spring *b* over the upper end of the sleeve E, thereby extinguishing the flame. If the lamp should be gently tilted in the direction of arrow 1, Fig. 1, the weight I would not have the tendency to liberate the sleeve E; but the heavier weight, L, in this case will carry its extension *j* against the pin *m*, and thereby move the weighted arm I sufficient to carry the ball *e* out of the socket *d*. Hence the lamp is certain to be extinguished whenever it is tilted, jarred, or thrown, and accidents by explosion can consequently be prevented.

We claim—

1. The combination of the sliding sleeve E, having folding lid *a*, spring *b*, pin *g*, and socket *d*, with the spring J, and weighted arm I, having ball *e*, all arranged for use on the wick-tube of a burner, substantially as shown and described.

2. The combination of the sliding sleeve E, having folding lid *a*, spring *b*, pin *g*, and socket *d*, with the spring J, weighted arm I, having ball *e*, and with the cord *n*, substantially as shown and described.

3. The combination of the sliding sleeve E, having folding lid *a*, spring *b*, pin *g*, and socket *d*, with the spring J, weighted arm I, having ball *e*, and pin *m*, and with the weighted arm L, having extension *j*, substantially as herein shown and described.

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