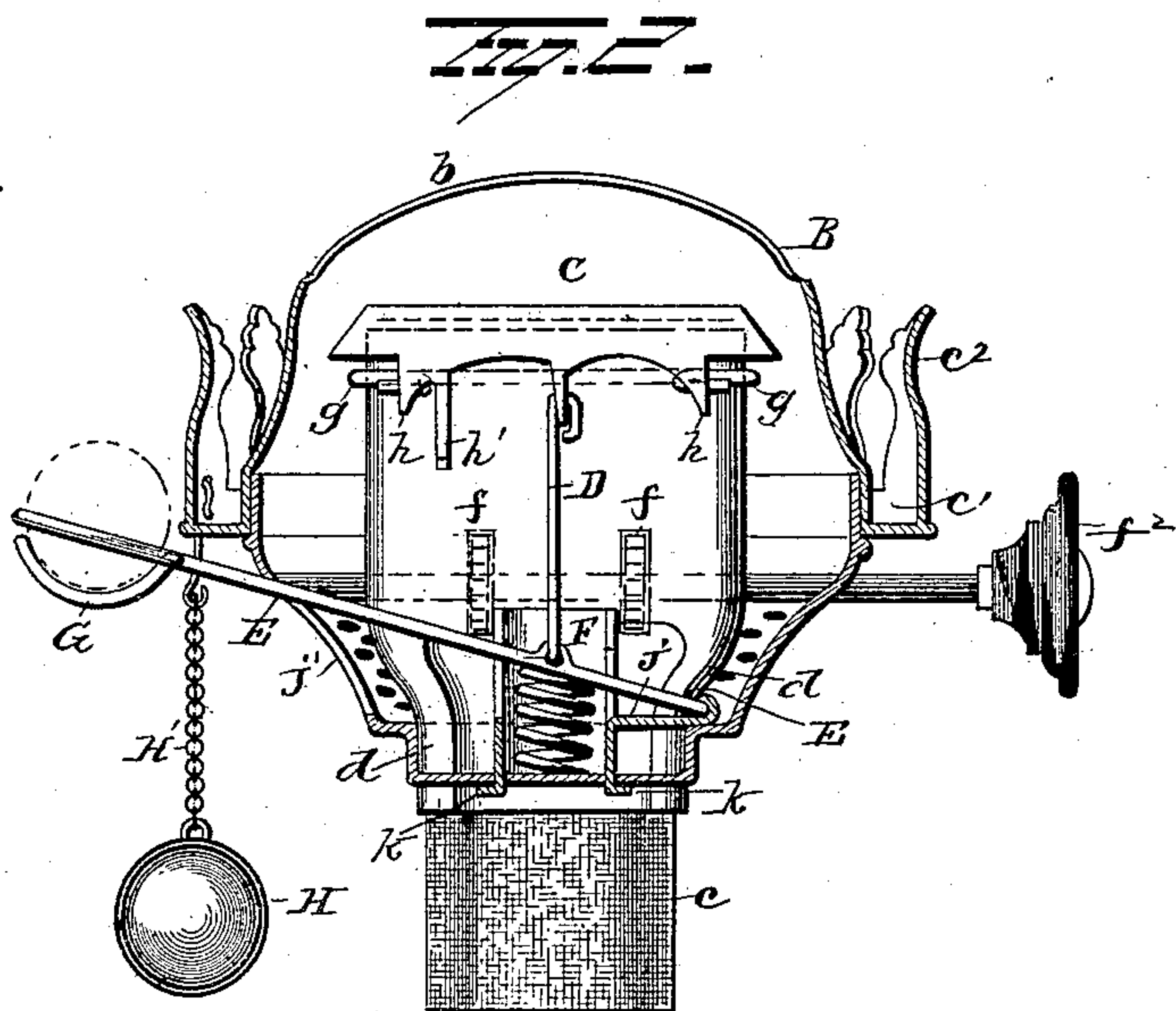
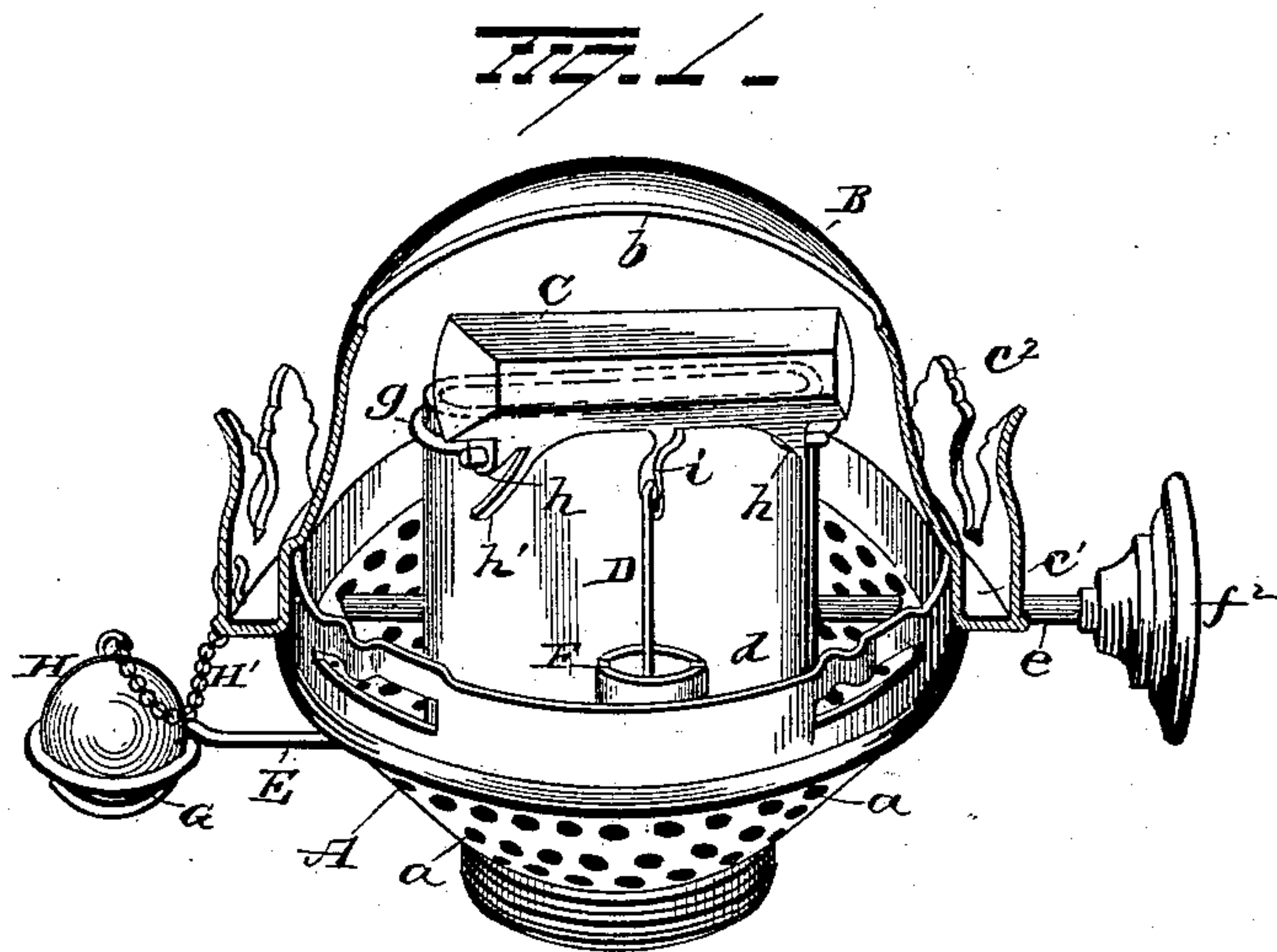


(No Model.)

J. H. PAIGE.  
LAMP EXTINGUISHER.

No. 397,931.

Patented Feb. 19, 1889.



Witnesses.  
G. F. Downing.  
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# UNITED STATES PATENT OFFICE.

JAMES H. PAIGE, OF LEADVILLE, COLORADO.

## LAMP-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 397,931, dated February 19, 1889.

Application filed June 15, 1888. Serial No. 277,188. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. PAIGE, of Leadville, in the county of Lake and State of Colorado, have invented certain new and useful Improvements in Lamp - Extinguishers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in lamps, and more particularly to devices for extinguishing the flame, and has for its object to provide a device by which the flame on the wick of the lamp will be automatically extinguished should the lamp be accidentally overturned, said device being simple in construction, effective in operation, and cheap to manufacture.

With these objects in view my invention consists in certain novel features of construction and peculiar combinations and arrangements of parts, as will be hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a lamp, partly in section, embodying my improved extinguisher. Fig. 2 is a section taken on the line *x x* of Fig. 1.

A indicates an air-chamber provided with perforations *a*, and B a cone having a central elongated slot, *b*, for the flame, a gallery, *c'*, for the reception of a lamp-chimney, and spring-fingers *c''*, for the retention in said gallery of the chimney, these parts being of any well-known and preferred form of construction.

The bottom of the chamber A is provided with an opening for the reception of the wick-tube *d*, which extends upwardly within the chamber A, and is flattened into oblong shape from a point near its attachment to the chamber A to its upper extremity for the reception of the similarly-shaped wick *c*. A shaft, *e*, is journaled in the walls of the chamber A, and carries a series of toothed wheels, *f*, adapted to project through slots in one wall of the wick-tube and engage the wick *c*, and thereby serve to raise and lower said wick when the shaft *e* is rotated by means of a knob, *f''*, fixed at one end thereof. Fitted about the wick-

tube *d*, near its upper end, is a wire bracket, *g*, having its free ends bent outwardly to serve as pivotal supports for a cap, C. This cap C is advisably composed of a piece of metal, stamped or otherwise formed into rectangular cup shape, and adapted to be swung over the wick *c* and extinguish the light thereon automatically when the lamp is tilted, as presently explained. Two integral perforated ears, *h*, are made to project from one side of the cap C for the reception of the ends of the wire bracket *g*, upon which the cap turns. A finger, *h'*, also made integral with the cap C at the same side thereof as the ears *h*, is adapted to strike the wall of the tube and limit the backward movement of the cap C.

Pivotaly attached to a lug, *i*, made integral with and projecting centrally from the cap C, is a rod, D, which extends outwardly and is connected at its lower extremity to a lever, E. The lever E is pivotaly supported at one end in an arm, *j*, made integral with and bent outwardly from a tube, F, the other end of said lever E being extended through a slot in the opposite side of the tube, and finally out of the chamber A through an elongated slot, *j'*, in said chamber. The outer extremity of the lever E is first bent into circular form, and the extremity of the wire then bent across said circle and curved downwardly, the whole producing a bracket or receptacle, G, for a weighted ball, H, as explained farther on.

The tube F is located in the bottom of the chamber A at one side of the wick-tube *c*, and is secured to said bottom by means of two or more integral lugs, *k*, passed through perforations in the bottom of the chamber and bent so as to secure the tube in place.

The tube F serves as a housing for a spring, I, which is inserted therein beneath the lever E, and tends to force said lever upwardly when the weighted ball H is not in the receptacle G, and thereby force the cap over the wick through the medium of the rod D, and thus smother the flame on the wick. When, however, the weighted ball H is in the receptacle G of the lever E, the force of the spring I will be overcome by the weight H and the cap C maintained in a raised position and away from the wick.

The weighted ball H may be connected by



a chain, H', to a convenient part of the lamp. The weighted ball will be kept normally in the receptacle G of lever E, so as to retain the cap C in a raised position. When, however,  
5 the lamp is tilted, the weighted ball H will fall from its receptacle G and release the lever E, which will then be forced upwardly by the spring I and the cap caused to swing on its bearing through the medium of the rod D,  
10 and thereby smother the flame on the wick c.

Considerable annoyance and inconvenience are experienced in extinguishing a lamp by blowing down the chimney. This is obviated by the use of my improved extinguisher, as it  
15 is simply necessary to raise the weighted receptacle with the finger to extinguish the light. The weighted receptacle is then released, and the lamp is ready for relighting when desired.

20 Slight changes might be made in the constructive details of my invention without departing from the spirit thereof; hence I do not wish to limit myself to the precise details of construction herein set forth; but,

25 Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a lamp, the combination, with an air-

chamber and a wick-tube, of a wire bent around the latter near its top, a cap pivotally supported by said wire, a tube secured in the chamber and having a spring therein, a lever pivoted above said spring and extended outside the chamber, a weight-receptacle at the outer end of the lever, a rod connecting said lever and cap, and a weight adapted to be inserted in the receptacle at the end of the lever, substantially as set forth. 30 35

2. In a lamp, the combination, with an air-chamber and a wick-tube, of a wire bent around the latter near its top, a cap pivotally supported by said wire, a tube secured to the chamber, an integral arm projecting from the tube and serving as a pivotal bearing for a lever, a weight-receptacle at the free end of said lever, a weight to be inserted in the receptacle, a spring in the tube beneath the lever, and a rod connecting said lever and cap, substantially as set forth. 40 45

In testimony whereof I have signed this specification in the presence of two subscribing witnesses. 50

JAMES H. PAIGE.

Witnesses:

JOHN A. HALL,  
A. E. MORTON.