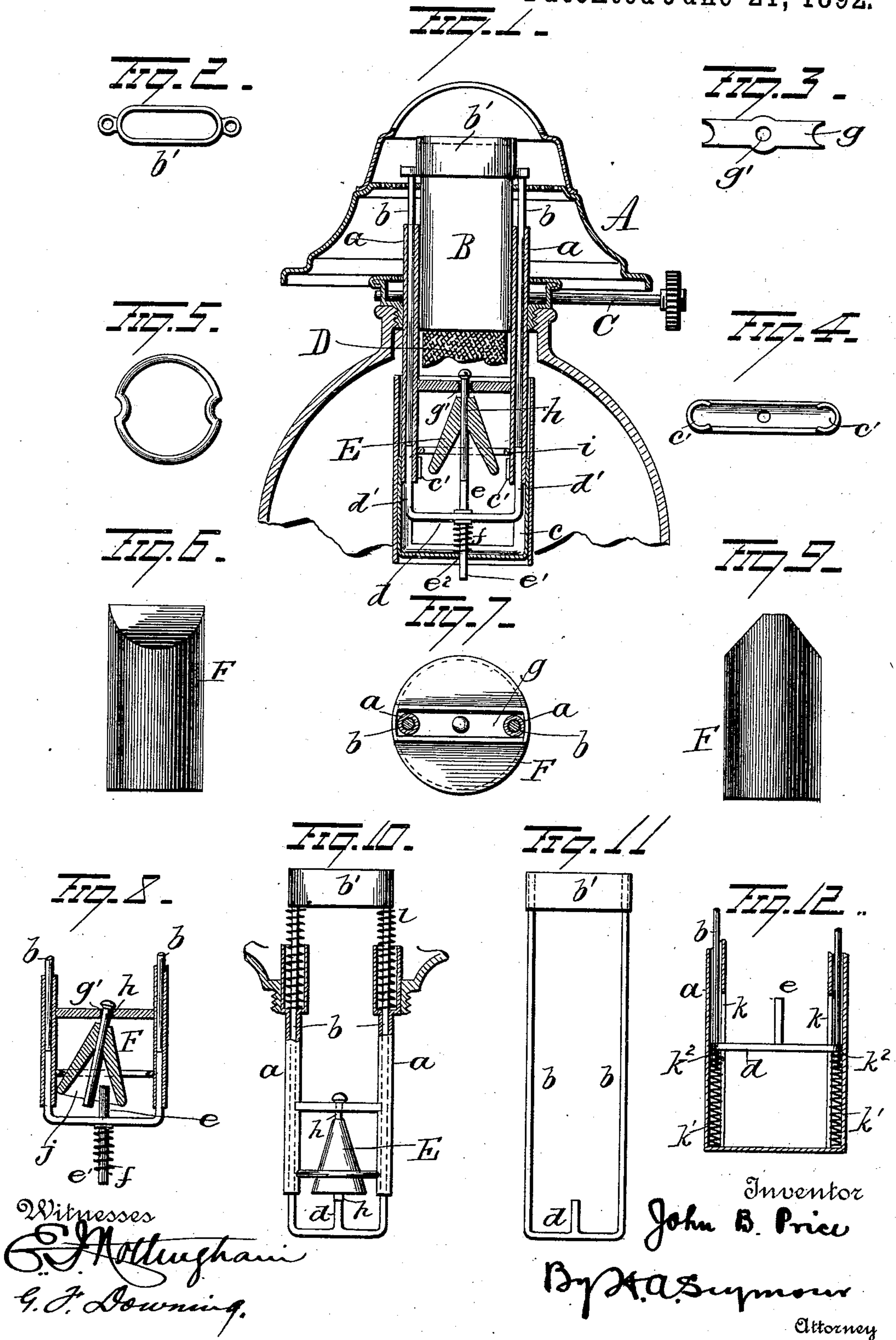


(No Model.)

J. B. PRICE.  
LAMP EXTINGUISHER.

No. 477,267.

Patented June 21, 1892.





# UNITED STATES PATENT OFFICE.

JOHN B. PRICE, OF WOLLASTON, MASSACHUSETTS.

## LAMP-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 477,267, dated June 21, 1892.

Application filed January 29, 1892. Serial No. 419,717. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN B. PRICE, a citizen of Wollaston, in the county of Norfolk and State of Massachusetts, have invented certain  
5 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  
10 make and use the same.

My invention relates to an improvement in lamp-extinguishers, the object of the invention being to produce devices which shall operate automatically and effectually to extinguish the light when the lamp is overturned or unduly jarred.

A further object is to produce a lamp-extinguisher which shall be simple in construction and which shall be effectual in the performance of its functions.

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

In the accompanying drawings, Figure 1 is a sectional view of a lamp-burner having my improvements applied thereto. Figs. 2, 3, 4, 5, 6, 7, 8, and 9 are detail views. Figs. 10, 11, and 12 are views of modifications of certain parts.

A represents a lamp-burner, B the wick-tube, and C the device for manipulating the wick D. Soldered or otherwise secured to the burner-frame at the ends of the slot through which the wick passes are two tubes  
35 *a a*, which extend upwardly within the burner-frame and downwardly some distance below the said frame. Fitted loosely and adapted to have a sliding movement in the tubes *a* are two rods *b*, which extend at their lower ends to points in proximity to the lower ends of the tubes *a*, and at their upper ends are secured to an oblong collar or extinguisher *b'*,  
45 which embraces the upper end of the wick-tube B, said collar or extinguisher being adapted to be moved upwardly by devices hereinafter to be described to a sufficient extent to inclose the flame on the end of the wick, and thus extinguish said flame. Connected to the lower end of the tubes *a* is a yoke  
50 *c*, made of material curved in cross-section

and provided with ears *c'*, whereby to connect said yoke with the tubes *a*. Located between the sides of the yoke *c* is a slide *d*, the  
55 upwardly-projecting portions *d'* of which are adapted to slide in the sides of the yoke and project into the tubes *a*, where the lower ends of the rods *b* rest upon them. At the center of the slide *d* a pin or projection *e* is located,  
60 and depending from the center of said slide is a stem *e'*, which latter passes freely through an opening *e<sup>2</sup>* in the cross-bar of the yoke *c*. A coiled spring *f* encircles the stem *e'*, and tends to normally force the slide *d* and the  
65 parts supported thereby upwardly. Thus it will be seen that when the movement of the slide is not prevented the spring will cause said slide, the rods *b*, and collar or extinguisher *b'* to move upwardly and smother the  
70 flame on the wick by inclosing the same within said collar or extinguisher *b'*.

Soldered or otherwise secured between the tubes *a* is a cross-bar *g*, having an opening  
75 *g'* in its center for the reception of the headed stem *h* of a weight E, said weight being pendulously suspended from said cross-bar. The weight E is preferably made cone-shaped, and near the lower end of said weight a ring or  
80 guide *i* is soldered or otherwise secured to the tubes *a*, and serves to limit the pendulous movements of the weight.

In the lower end of the pendulous weight E a conical recess *j* is made, and the stem *h* is projected through this recess and preferably  
85 slightly below the lower end of the weight.

Normally and when the lamp is in an upright position the lower end of the stem *h* is directly over the pin or projection *e*, so that the latter will engage the former, and the ex-  
90 tinguisher will be thus prevented from moving upwardly and the light on the wick will remain undisturbed. Should the lamp be overturned or unduly jarred, the weight E will swing so as to carry the stem *h* out of align-  
95 ment with the pin or projection *e*, and the slide *d* will be permitted to be forced up by the spring *f* and the extinguisher *b* moved up above the upper end of the wick-tube, and thus extinguish the light. By the construction and arrangement of parts above de-  
100 scribed the extinguisher *b'* and the rods *b*, attached thereto, may be readily removed for cleaning.



In order to protect the devices which operate the extinguisher, they are inclosed by a cylinder F, preferably of sheet metal, as shown in Figs. 6 and 9.

5 Instead of providing the yoke *c* the tubes *a* may be extended and provided with recesses *k*, as shown in Fig. 12, in which case springs *k'* will be arranged in the lower ends of said tubes and the slide provided with projections  
10 *k*<sup>2</sup>, adapted to enter said springs.

If desired, the construction shown in Fig. 10 may be adopted, in which case the springs *l* are arranged in the tubes *a* (which are somewhat enlarged for the reception of said  
15 springs) within the burner-frame and adapted to encircle the rods *b*. With the construction the slide *d* will be made integral with the rods *b*, as shown in Fig. 11.

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

1. The combination, with a lamp-burner, a wick-tube, an extinguisher, and rods extending downward from the latter, of spring mechanism for throwing the extinguisher over the  
25 flame to extinguish it, and a gravity device interposed when in its normal position between the extinguisher and its rods, whereby to hold the extinguisher away from the wick,  
30 substantially as set forth.

2. The combination, with a lamp-burner, of tubes secured thereto, rods extending through said tube, a collar secured to the upper ends of said rods and loosely embracing the wick-  
35 tube, a slide adapted to receive the lower ends of said rods, a spring bearing on said slide and tending to force it upwardly, a pendulous weight adapted to normally prevent the upward movement of the slide, and a cylinder  
40 or drum inclosing the parts which control the operation of the collar or extinguisher, substantially as set forth.

3. The combination, with a lamp-burner, of tubes secured thereto, rods passing through

said tubes, a collar or extinguisher secured to  
45 said rods and adapted to loosely embrace the wick-tube, a spring-actuated slide adapted to receive the lower ends of said rods, a pin projecting upwardly from said slide, a cross-bar  
50 between the tubes, a weight pendulously suspended from said cross-bar and having a recess in its lower end, and a stem extending from the weight and through said recess, said  
55 stem being adapted to receive the pin on the slide when the lamp is in an upright position, said pin being adapted, when the lamp is  
60 overturned or unduly jarred, to enter the recess in the weight, and thus permit the upward movement of the collar or extinguisher to extinguish the light on the wick, substantially as set forth.

4. The combination, with a burner, of tubes secured thereto, rods extending through said tubes, an extinguisher or collar secured to the  
65 rods and adapted to loosely embrace the wick-tube, a yoke removably connected with the tubes at their lower ends, a slide mounted in said yoke, a stem projecting from said slide and through said yoke, a spring encircling  
70 said stem, a pin projecting upwardly from the slide, a cross-bar between the tubes, a weight pendulously suspended from said cross-bar and having a recess in its lower end, and a  
75 stem projecting from said weight and through the recess in the weight, said stem being adapted to remain normally in line with the pin on the slide, said pin being adapted to enter the recess in the weight when the stem of the weight moves out of line therewith,  
80 substantially as and for the purpose set forth.

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

JOHN B. PRICE.

Witnesses:

A. D. GARRETT,

O. A. COWLES.