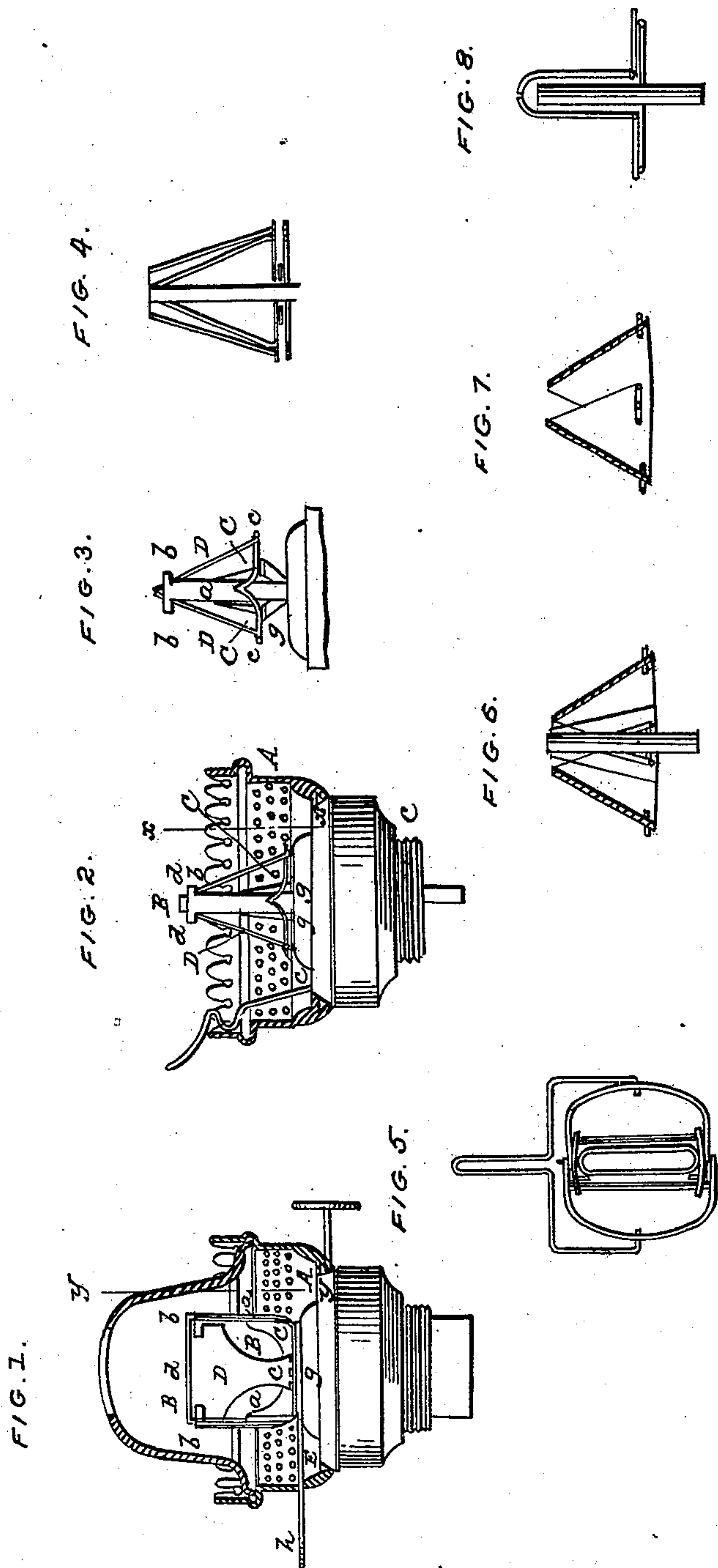


F. ROHRER.
Lamp Extinguisher.

No. 71,221.

Patented Nov. 19, 1867.



WITNESSES:
Geo A Manthly
C W Smith

INVENTOR.
Fred Rohrer
By Dewey & Co
attys

United States Patent Office.

FRED. ROHRER, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 71,221, dated November 19, 1867.

IMPROVEMENT IN LAMP-EXTINGUISHERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FRED. ROHRER, of San Francisco, county of San Francisco, State of California, have invented a new and useful "Lamp-Extinguisher;" and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment.

The object of my invention is to provide a "lamp-extinguisher" which may be applied to any kind of lamp, but is chiefly intended to be used upon lamps which burn fluids from which inflammable and explosive gases are generated, and which are all more or less liable to explode if extinguished by turning the wick down suddenly, or by blowing them out.

To effect this in any of the lamps which use "directors" or "air-caps" surrounding the wick-tube, I make a base-plate, fitting loosely around the wick-tube, and resting upon a forked lever, the forks extending each side of the wick-tube, and serving to raise this base-plate, with its attachments, while the other end passes through a slot cut in the side of the burner, and serves as a handle on the outside. Two thin metal plates are hinged to the outer edge of the base-plate described, their upper ends extending under the air-cap to the top of the wick-tube, against which they rest, forming an angle more or less acute with its sides, or they may be slightly curved, so that when they are raised by the lever they meet over the wick, thus extinguishing the flame. These plates are equal in width to the longest diameter of the wick, so that when raised it is all covered; and when the lever is released, these plates drop back to their former position, without disturbing the wick or oil, and leaving the lamp in the condition to be lighted again.

The same general arrangement is used when there are no air-caps, except that the edge of the base-plate is turned up along the narrow edge of the wick-tube to near the top, where it is bent around, so as to keep the side plates in position in their up and down movements.

A third method is to form two pieces of metal into the shape of an air-cap, so that they will act in that capacity; while, being hinged together at the bottom, when lifted by the lever they close over and extinguish the flame, as before described.

To more fully explain my invention, reference is had to the accompanying drawings, forming a part of this specification, of which—

Figure 1 is a sectional elevation of burner through *x x*, showing side view of extinguisher.

Figure 2 is a sectional elevation through *y y*.

Figure 3 shows the side plates raised to cover the wick.

Figure 4 is the form where an air-cap is used.

Figures 5, 6, and 7 are views of an extinguisher which serves also as an air-cap.

Similar letters indicate like parts in each of the figures.

A is the body of a burner, having the wick-tube B. Around the bottom of this wick-tube, and fitting loosely, is the base-plate C, the sides of which are turned up, as shown at *a a*. At the top these sides have small projections or lugs, *b b*, which are bent around as shown, so as to serve as guides to the side plates. D D are the side plates, which are hinged loosely at *c c* to the base-plate, their upper edges resting against the sides of the wick-tube, as shown at *d d*, figs. 1 and 2. A forked lever, E, passes through a slot in the side of the burner, and has one branch, *g g*, each side of the wick-tube extending under the base-plate C, and far enough to raise and lower it easily. The outer end *h* serves as a handle or thumb-piece, by which the base-plates are elevated and lowered. When not in use, and when the lamp is burning, the side plates D D rest at or near the top of the wick-tube, extending across the longest diameter of the wick-tube.

When it is desired to extinguish the flame, by pressing on the end *h* of the lever E, the base-plate, with the inclined sides, are raised, till the upper edges of the side plates are sufficiently elevated above the wick to meet, as shown at fig. 3, which they do by their inclination and weight, when the flame is put out. The plates may then be allowed to fall back to their original position, and the lamps will be ready for relighting.

In the form shown in fig. 4, where an air-cap or director is used, either extending a part or the whole of the way to the bottom of the wick-tube, this air-cap will be a sufficient guide and support for the side plates, so that the base-plate is more simple.

Figs. 5, 6, 7 show another modification of the extinguisher, where the side plates are bent around, so as to enclose the wick-tube, being in the form of a hollow wedge, hinged together at the bottom, and having its apex at the top. Two triangular plates are placed across the least diameter of the wick-tube, having slots, in which move pins, formed by extending the hinge-rivet, as here shown, so as to keep the lips of the side plates separated sufficiently to allow the air to pass up and supply the flame. The lever which operates them is attached to the side plates at the bottom, so that it closes them above the wick-tube when they are elevated, as in the first instance.

These extinguishers may be made in a form to suit any shape of wick-tube, and are stamped out of suitable metal, which may be cut into blanks, no part needing to be soldered or brazed. They are also applicable to any lamp now in use at a very trifling expense, without alteration of the burner.

In order to extinguish any number of lamps, as in a chandelier, arms may be extended from each lever to a central spring, down through which they pass, to be operated at once. The side plates may also be bent at an angle at the bottom, so that the weight of the extending ends will separate the plates at the top, while, by raising the lever, they will be closed and extinguish the light.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A lamp-extinguisher, constructed and arranged substantially as described, as a new article of manufacture. In witness whereof I have hereunto set my hand and affixed my seal.

FRED. ROHRER. [L. S.]

Witnesses:

GEO. H. STRONG,
C. WM. SMITH.