C. T. COLBY.

LAMP FLAME-EXTINGUISHER.

No. 186,414. Patented Jan. 23, 1877.

Fig. 1.

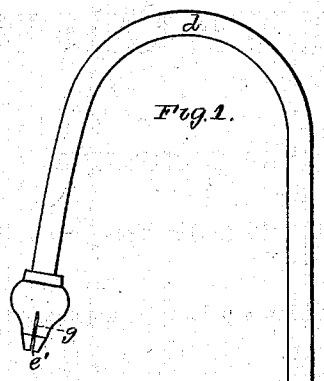


Fig. 2.

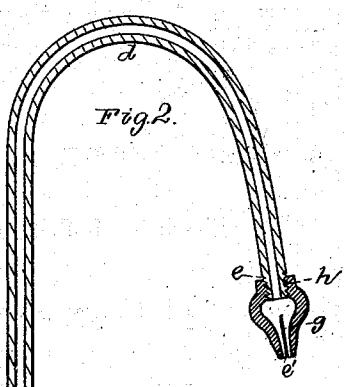


Fig 3

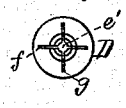
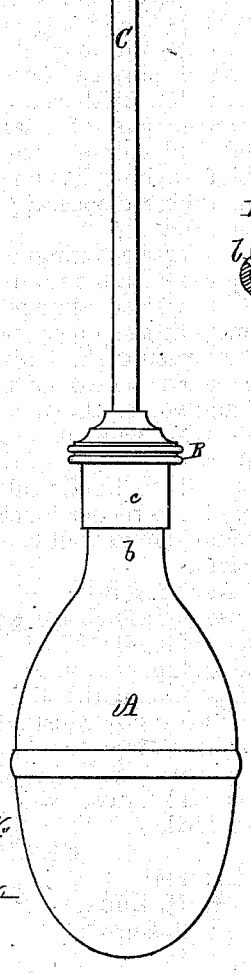


Fig 4.





Witnesses.

S. W. Pierce.

L. W. Miller.

Charles T. Colby

by his attorney

R. H. Eddy.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES T. COLBY, OF NEWBURYPORT, MASSACHUSETTS.

IMPROVEMENT IN LAMP-FLAME EXTINGUISHERS.

Specification forming part of Letters Patent No. **186,414**, dated January 23, 1877; application filed November 24, 1876.

To all whom it may concern:

Be it known that I, CHARLES T. COLBY, of Newburyport, in the county of Essex and State of Massachusetts, have invented a new and useful Lamp-Flame Extinguisher; and do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side view and Fig. 2 a longitudinal section of it. Fig. 3 is an under-side view of its ajutage. Fig. 4 is a vertical section of an ajutage for upward discharge of air.

The article in question is for putting out the flame of the wick of an Argand burner, or any lamp provided with a glass chimney; and it is mainly composed of an elastic hollow bulb or handle, a tube bent downward near its upper end, and an ajutage or discharging-nipple, all being essentially as represented.

In the drawings, A denotes the elastic hollow bulb, made usually of vulcanized india-rubber or composition containing caoutchouc, it being surmounted by a metallic connection or head, B, concentrically within which is a tube, *a*, upon which the neck *b* of the bulb A fits closely, while the neck is encompassed by the ferrule or tubular part *c* of the said head.

A pipe or tube, C, screwed at its lower end into the head and bent near its upper end, as represented at *d*, has a screw, *e*, to receive and hold an ajutage, D. This ajutage is a hollow bulb or teat, having a female screw, *h*, in its mouth, and also having a central hole or perforation, *e'*, and two slits, *f g*, crossing such hole at right angles to each other, all being arranged as shown.

When air is blown from the pipe C into such ajutage, such air will be discharged therefrom through the hole and slits, it flowing downward from the hole and laterally and downward from the slits. The peculiar discharges or currents of air, when the ajutage is within the chimney of a lamp, operate to excellent advantage in extinguishing the flame.

The ajutage may have the crossed slits without the central orifice, but it operates very much better with the latter.

Sometimes I make it as shown in Fig. 4—that is, without either the slits or central orifice, but with a series of holes, *l*, in its upper part, so as to discharge air upward instead of downward within a chimney, when the extinguisher may be in use.

A sudden discharge of air upward within the upper part of a lamp-chimney, I have found, will induce a consequent sudden inrush of air into the chimney at its lower end, to an extent to generally extinguish the flame of the wick.

In using the extinguisher, a person should grasp the elastic bulb in his right hand, and next insert the ajutage down into a lamp-chimney at the upper end thereof. By quickly compressing the bulb, the air therein will be expelled and driven through the tube and into and out of the ajutage, so as to extinguish the flame of the wick within such chimney.

I usually make the tube three or more feet in length, to render it serviceable for chandeliers and side or wall lamps.

I claim—

1. As a new article of manufacture for the purpose described, the lamp-flame extinguisher, as composed of the elastic bulb A, the metallic duplex tubular connection or head B, the tube C, and the ajutage D, all constructed and arranged substantially as set forth.

2. The ajutage, as provided with the central orifice *e'* and the crossed slits *f g*, arranged and for use with the tube and bulb, as specified.

CHARLES T. COLBY.

Witnesses:

R. H. EDDY,

J. R. SNOW.