A. BRANDON.
Lamp-Extinguisher.

No. 209,955. Patented Nov. 19, 1878.

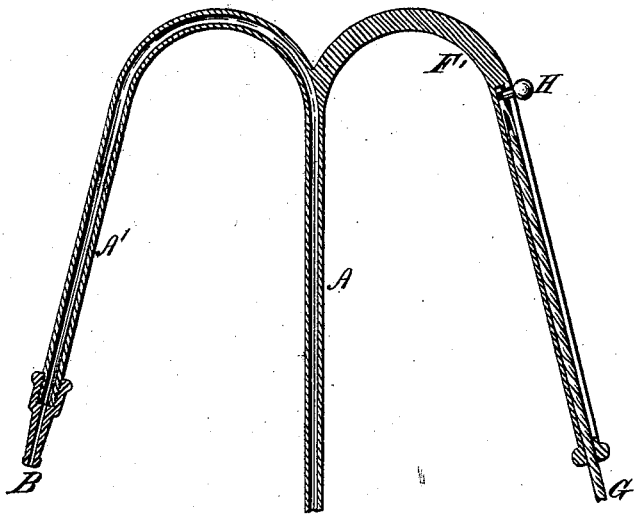
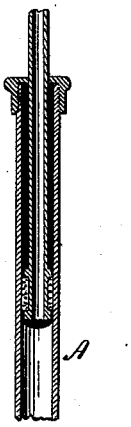
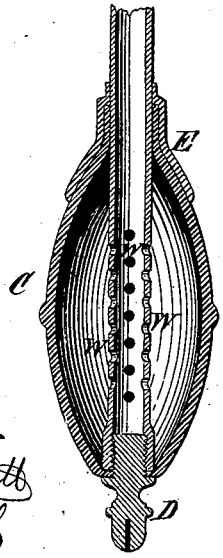



Figure 1.



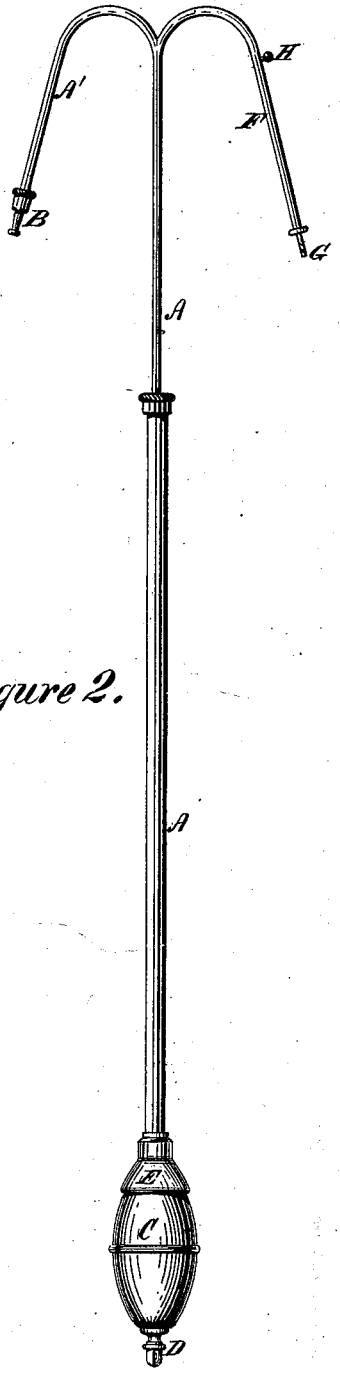




Figure 2.

Witnesses:
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# UNITED STATES PATENT OFFICE.

ALEXANDER BRANDON, OF NEW YORK, N. Y.

## IMPROVEMENT IN LAMP-EXTINGUISHERS.

Specification forming part of Letters Patent No. **209,955**, dated November 19, 1878; application filed December 26, 1877.

*To all whom it may concern:*

Be it known that I, ALEXANDER BRANDON, of the city, county, and State of New York, have invented a new and useful Improvement in Extinguishers for Lamps, of which the following is a specification:

My invention relates to a device for extinguishing kerosene or other lamps which are suspended in chandeliers and brackets or otherwise fixed beyond ready reach; and it consists of an extended metallic bent tube, fitted at its longer lower end with an air-compressing device, and reduced at the other so as to terminate in a contracted orifice, for producing a strong concentrated blast with moderate pressure, the instrument being rendered very complete by making the tube in sections, connected by a telescopic joint, so that it may be extended to reach the lamps of elevated chandeliers, and by combining with its upper end a suitable taper-holder in such manner as that the device shall be serviceable in lighting as well as in extinguishing lamps.

The object of my invention will best appear by reference to the ordinary method of extinguishing lamps in chandeliers or brackets. The lamp must be reached by climbing upon a chair or ladder; must be removed from its support, and its extinguishment effected either by blowing down the chimney or by turning down the wick. Apart from the time consumed and the labor, fatigue, and annoyance involved in this operation, it involves the possibility of a fall of the lamp, with the danger and damage consequent thereon. Furthermore, if it be a kerosene-lamp, and the light be put out by blowing down the chimney, the danger of an explosion is also incurred, from the possibility that the flame shall be carried down and reach the gas generated above the oil; and if it be extinguished by turning down the wick, apart from the occasional annoyance of burning the fingers upon an overheated wick-regulator, it necessitates retrimming the wick before the lamp is again used, for in turning up the charred wick it will almost invariably emerge from the burner unevenly or with irregular projections, producing a bad smoky flame. My device overcomes all these difficulties and obviates these objections, and is designed to supply a neat, efficient instrument for the purposes named.

In the accompanying drawings, Figure 1 is a longitudinal sectional view, and Fig. 2 an elevation, of my improved lamp-extinguisher.

A is an extended metallic tube, made in a single piece, long enough to reach to the desired height, or else in one or more lengths, fitting together with an ordinary sliding or telescopic joint, properly packed to remain air-tight, as shown in Fig. 1. The upper end of the tube A is bent to such an angle as that it may be readily inserted into the chimney of a lamp by a party standing below at one side of it, and the length of the shorter arm, A′, from its tip to the bend is properly proportioned to admit of readily reaching the burner without striking the top of the lamp chimney or globe.

The end of the tube is constructed so that it shall terminate in a very small aperture, B, either round or elongated in the form of a slit, in order that the diameter or area of the orifice B, through which the air is emitted, shall be very much smaller than the diameter or transverse area of the tube A, through which the air is transmitted, and a fine powerful jet or blast of air be thus produced. Instead of contracting the end of the tube itself, a nozzle having a small aperture may be fitted thereon; or a section of tube, A′, of smaller diameter may be combined with the main tube, A, for the same purpose. By means of this improvement the danger of an explosion, such as has occurred as the result of simply blowing down the chimney, is avoided, the effect of puffing air upon the flame through an open-ended tube to extinguish the light being merely equivalent to blowing down the chimney.

The lower end of the tube A is connected with a convenient form of bellows or air-compressor, C. I employ, preferably, for the purpose a bulb of india-rubber, as illustrated in the drawings, the bulb serving to give a finish to the instrument, and to provide equally a neat and convenient handle therefor; but I contemplate the use in this connection of any suitable compressible and self-expanding device, by means whereof a volume of air may

be quickly and forcibly ejected into and through the tube A.

In order to protect the elastic air-compressing bulb C from injury, I pass the lower end of the tube down through the top of the bulb, and cause it to rest upon the inner side of the bottom thereof.

The end of the tube is threaded interiorly, to receive and be closed by a screw-plug, D, which is passed into it through the bottom of the bulb, and is provided with an enlarged head, formed to overlap and bind the encircling edges of the bulb against the end of the tube, as shown in Fig. 1. Hence, when the instrument is dropped or set down, the bulb is protected from injury by the plug D.

The upper end of the bulb passes under and against an upper protecting-cap, E, fitted upon and secured to the tube A for the purpose.

The portion of the tube A inclosed within the bulb C is pierced with small perforations W W, which, without materially diminishing the strength of the tube, permit a free passage of air from the bulb into the tube.

The usefulness of my device may be increased by combining therewith an ordinary taper-holder, F, Fig. 2, consisting of a slotted tube containing a sliding clip, H, to catch and carry a taper, G, Fig. 1, the taper-holder being united with the upper end of the extinguisher-tube by means of a bent rod or wire, F′, as illustrated in the drawings.

In the use of this instrument as an extinguisher, the bulb C, serving as a handle, is taken in the hand, and the bent end A′ of the tube A is inserted down the chimney of the lamp until its nozzle is close to the flame. By quickly closing the hand upon the bulb a puff of air will be expelled from the nozzle with sufficient force to immediately extinguish the light. This violent expulsion of the air in a fine jet in close proximity to the flame will produce its immediate extinguishment without carrying it downward into the burner, and absolute safety as well as efficiency in the use of my extinguisher are thus secured. The wick of the lamp is left in the same condition as when burning, and it is only necessary to strike off and remove the charred portion with a match or straight edge of any sort to trim it perfectly.

I claim as my invention—

1. As a new article of manufacture for the purpose described, a lamp-flame extinguisher composed of the tube A, ajutage or reducing-nozzle B, and elastic bulb C, combined and arranged substantially as herein set forth.

2. A screw-plug, D, combined with the perforated air-pipe A, elastic bulb C, and retaining-cap E of a lamp-extinguisher, substantially as and for the purpose herein set forth.

In testimony whereof I have hereunto set my hand this 24th day of December, 1877.

ALEX. BRANDON.

In presence of—
DAVID A. BURR,
BENJ. A. SMITH.