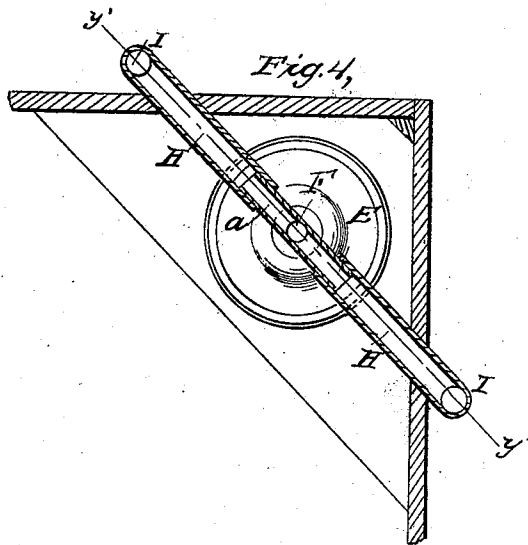
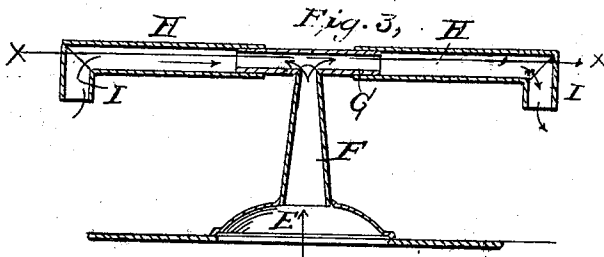
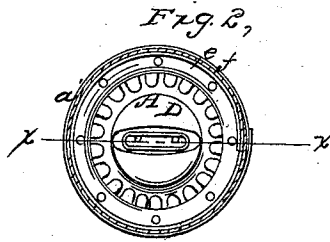
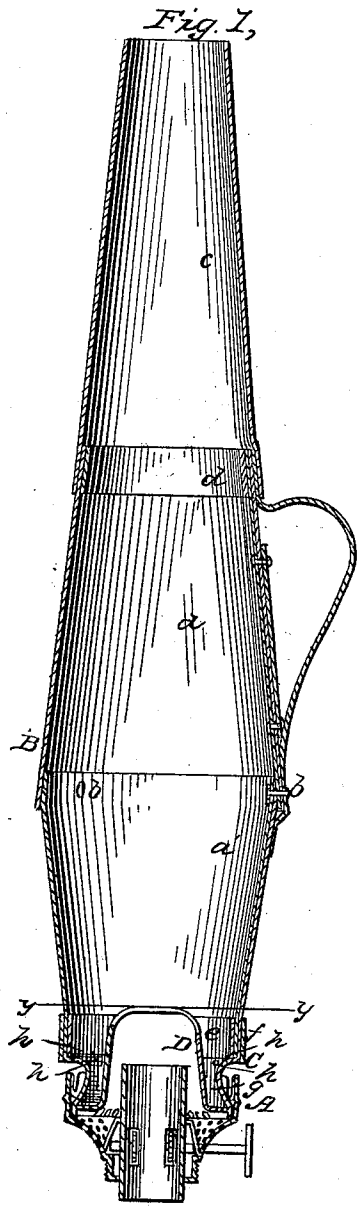


J. W. SCHREIBER.

Lamp Chimney.

No. 36,237.

Patented Aug. 19, 1862.



WITNESSES:

James Land
Lincoln

INVENTOR

John W. Schreiber

UNITED STATES PATENT OFFICE.

JOHN W. SCHREIBER, OF NEW YORK, N. Y.

IMPROVEMENT IN MICA CHIMNEYS FOR LAMPS.

Specification forming part of Letters Patent No. 36,237, dated August 19, 1862.

To all whom it may concern:

Be it known that I, JOHN WILLIAM SCHREIBER, of the city, county, and State of New York, have invented a new and useful Improvement in Draft Attachments for Chimney-Lamps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a longitudinal section of the same, taken in the line *y y*, Fig. 1; Fig. 3, a vertical section of a supplemental draft attachment, taken in the line *y' y'*, Fig. 4; Fig. 4, a longitudinal section of Fig. 3, taken in the line *x' x'*.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a new and improved draft-chimney and draft-tubes connected therewith, constructed and arranged with a view of obviating the difficulty of breakage, and also of insuring a perfect draft, so that lamps provided with burners for burning coal-oil and similar fluid hydrocarbons may be used in railroad cars, omnibuses, and other wheel vehicles, and a good illuminating-flame obtained.

To this end the invention consists in constructing a chimney of mica, of double taper or conical form, provided with a metal top, and also with a perforated metal base, and using, in connection with the chimney thus constructed, supplemental draft-tubes, as hereinafter described.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a lamp-burner, which may be constructed in the same way as those generally used for burning coal-oil, and B is a draft-chimney, which is constructed principally of mica, of double taper or conical form. This mica portion of the chimney is composed of two parts, *a a'*, of conical form, connected together at their larger ends by rivets *b*, as shown clearly in Fig. 1. This construction, it will be seen, forms a bulge at the central part of the mica portion of the chimney and permits the flame to expand, precisely the same as in the ordinary glass

chimneys. This result has not hitherto been attained in mica chimneys, they, so far as I am aware, having been made of cylindrical form.

The upper end of the mica portion of the chimney has a conical sheet-metal tube, *c*, attached, the taper of which corresponds with that of the upper half of the mica, as shown in Fig. 1. This metal tube *c* is nearly as long as the mica portion of the chimney, and it is secured to the mica by having a metal band, *d*, fitted within the upper end of the upper part, *a*, of the mica portion of the chimney, said band strengthening the mica and enabling the tube *c* to fit firmly on or over *a*. The band *d* may be secured to the mica and to the lower end of the tube *c* by rivets. The lower end of the lower part, *a'*, of the mica portion of the chimney has also a metal band, *e*, fitted within it, and on the exterior there is fitted a metal base, C, cylindrical at its upper parts, as shown at *f*, and of bell shape at its lower part, as shown at *g*. (See Fig. 1.) This bell-shaped portion *g* of the base C fits on the burner A, is perforated, as shown at *h*, and may be secured thereto by a set-screw or any suitable fastening. The perforations *h* admit air into the lower part of the chimney, so that the flame above the cone or deflector D of the burner will be supplied with oxygen in the same way as with the ordinary glass chimneys. This feature of the perforated base C is also novel applied to mica chimneys. By this means I obtain a chimney which will not break under the action of the flame of the lamp, and which possesses all the advantages of the ordinary glass chimney.

E is a metal bell-shaped cap, which is placed above the metal top *c* of the chimney, and has an upright metal tube, F, attached centrally to it, the upper end of the tube F communicating with and attached to a horizontal tube, G, on which tubes H are fitted, of any desired length, said tubes being provided with elbows I, extending downward. These tubes form an escape for the draft from the chimney B and admit of the lamp being placed in a glass case at the corner of an omnibus or railroad-car, as shown in Fig. 4, the tubes H H extending through the sides of the omnibus or car. These supplemental draft-tubes increase the draft within the chimney B, and, in consequence of

the tubes H H extending in opposite directions from the upright tube F, a constant draft is obtained, for if there should be a back draft produced in one tube H by a gust of wind, as indicated by the red arrows in Fig. 3, there would be a direct and accelerated draft in the other tube, H. This double-tube arrangement, therefore, is an important feature of the invention.

I do not claim, broadly, irrespective of the construction herein shown and described, a mica lamp-chimney, for they have been previously used; but

I do claim as new and desire to secure by Letters Patent—

1. A lamp-chimney composed of two conical mica tubes, *a a'*, connected together at their larger ends and provided with a metal top tube, *c*, and a perforated metallic base, *C*, substantially as set forth.

2. The supplemental draft-tubes F H H, with cap E attached, and arranged, as shown, to form two eductions or escape-passages for the draft, when said tubes are used in connection with the chimney B, for the purpose set forth.

JOHN W. SCHREIBER.

Witnesses:

JAMES LAIRD,
I. W. COOMBS.