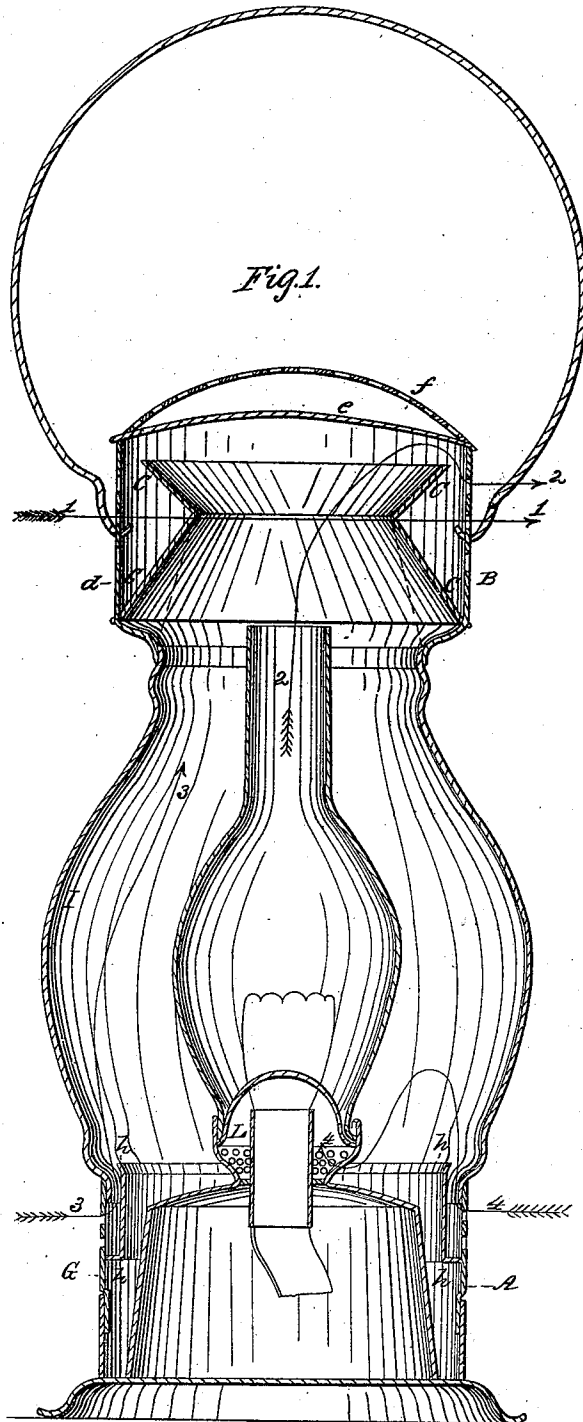


A. DAVIS.

Lantern.

No. 36,077.

Patented Aug. 5, 1862.



Witnesses:
L. L. Bend
S. W. Gray

Inventor:
Abram Davis

UNITED STATES PATENT OFFICE.

ABRAM DAVIS, OF CHICAGO, ILLINOIS.

WIND-BREAKER FOR LANTERNS.

Specification forming part of Letters Patent No. 36,077, dated August 5, 1862.

To all whom it may concern:

Be it known that I, ABRAM DAVIS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wind-Breakers for the Top and Bottom of Lanterns and Lamps; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, and letters of reference marked thereon, and which forms part of this specification, the figure being a vertical section of a lantern full size.

The nature of my invention consists in providing the usual tops of lanterns and lamps with wind-breaker *c c c c*, that will effectually prevent currents of air from striking the flame and causing smoke and extinguishing it, and at the bottom with wind-breaker *h h h h*, which will prevent currents of air from striking the flame and producing smoke and extinguishing it, as usually occurs when kerosene and other oils are burned in strong currents of air.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my lanterns or lamps in any of the usual forms, and apply wind-breakers, as hereinafter described.

The figure is a vertical section of a hand-lantern with wind-breakers applied.

A represents the bottom or foot of the lantern.

B represents the top or head.

Wind-breaker *c c c c* in the top of the lantern, of any suitable material, I make by uniting the frusta of two cones of greater or less acuteness, as the diameter and height of top may require. It may also be made by flanging the top of a conical or straight tube; but I prefer the former. The base of this wind-breaker is made to fit the top band, *d*, and its top about three-eighths ($\frac{3}{8}$) of an inch less in diameter, and thus leave about three-sixteenths ($\frac{3}{16}$) of an inch space around its circumference between it and the top band, *d*, and about one-fourth ($\frac{1}{4}$) of an inch below the close top *e*, for the passage of smoke and heated air, as indicated by arrow No. 2. The perforations in the top band, *d*, should be one-eighth ($\frac{1}{8}$) of an inch or more below the top of the wind-breaker.

Arrow 1 indicates the passage of air-currents through the perforations in top band, *d*,

and around the concavity of the wind-breaker and escaping at the opposite side.

f is a perforated top over the close top *e*, as a guard for the hand against excessive heat.

The bottom wind-breaker, *h h h h*, is a band of tin or any other suitable metal or glass, with a flange at its base, and set in the bottom band, *G*, below the usual perforations, and sufficiently wide to turn the current of air between the wind-breaker and bottom band up into the chamber of the globe *I*, as indicated by arrow 3, and thus guard the flame from sudden blasts and excessive currents, which would produce smoke and extinguish the flame. The diameter of this wind-breaker should be about three-eighths ($\frac{3}{8}$) of an inch less than the bottom of the globe, thus leaving about three-sixteenths ($\frac{3}{16}$) of an inch space around its top for the passage of air to the chamber above, and any excess passing off through the top.

Arrow 4 indicates the natural current of air through the perforations of the bottom band, *G*, over the wind-breaker, and down through the perforations of the kerosene-burner *L* to support the flame.

If glass is used for this wind-breaker, it may be made wider and extend higher into the globe or lantern without obstructing the light, and when it is made of metal it may be perforated; but I prefer it without.

I usually construct my wind-breakers as above described, varying in proportion to the size and form of the lantern or lamp.

Having thus fully described my invention, what I claim is—

1. The wind-breaker *c c c c* for the top of lanterns and lamps, made of any suitable material by uniting the frusta of two cones or their equivalents, which will cause currents of air to pass around their concavities and escape at the opposite side without disturbing or extinguishing the flame, as described.

2. The wind-breaker *h h h h*, which is a band made of tin or any other suitable metal or of glass, with a flange at its base, and set in the bottom band below the perforations, which will turn the current of air up into the chamber above and prevent extinguishing the flame, as described, and for the purposes specified.

ABRAM DAVIS.

Witnesses:

G. W. GRAY,
L. L. BOND.