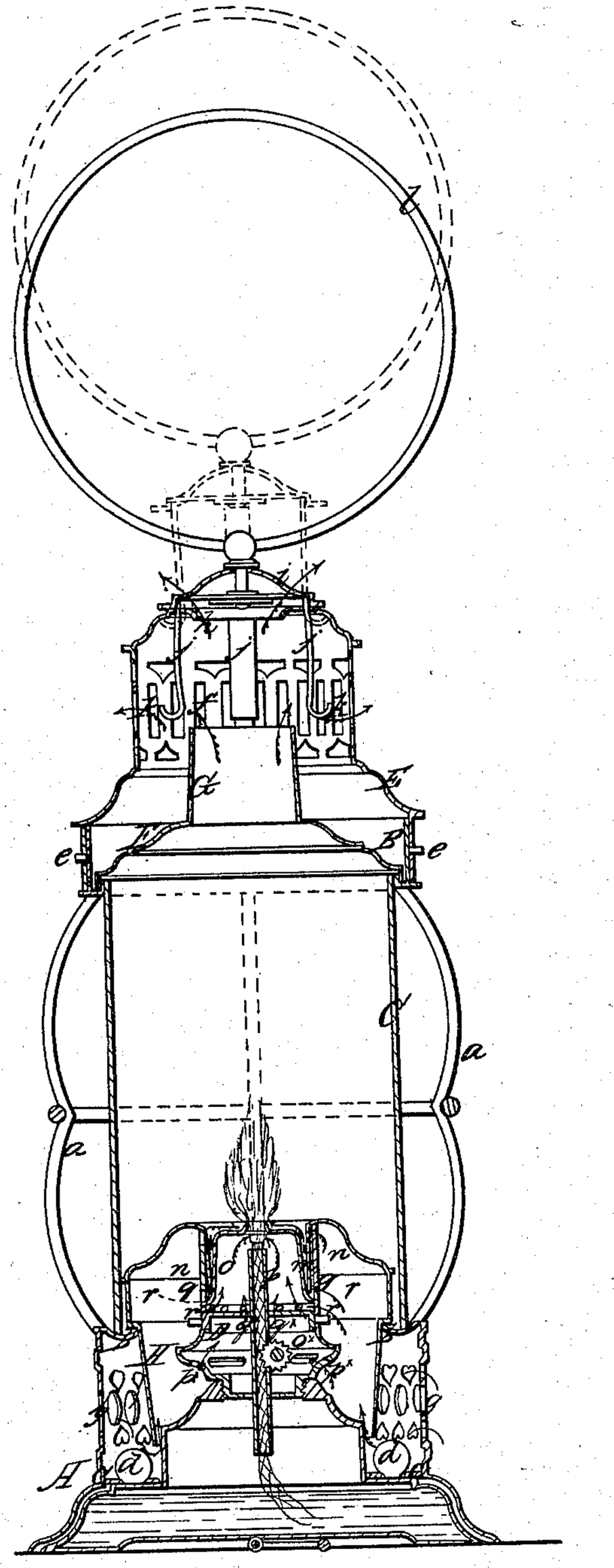
M. MILLER.

KEROSENE LANTERN.

No. 21,209. Patented Aug. 17, 1858



UNITED STATES PATENT OFFICE.

MAX MILLER, OF BROOKLYN, NEW YORK.

LANTERN FOR BURNING COAL-OIL.

Specification forming part of Letters Patent No. 21,209, dated August 17, 1858; Reissued January 6, 1863, No. 1,374.

To all whom it may concern:

Be it known that I, MAX MILLER, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Lantern for Burning Coal-Oil, generally known as "Kerosene and Carbon Oils;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, said drawing being a vertical section of my improvement.

The object of this invention is to dispense with the usual draft chimney, which has been hitherto necessarily used in lanterns for burning coal oil, by so constructing and arranging certain parts, which will be hereinafter fully shown and described, that the usual glass globe or cylinder which has hitherto only served to protect the flame, serve the double purpose of protector and draft creator, whereby a more even and steady flame than usual will be obtained.

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

A, represents the base of the lantern which externally is of the usual form and B, is a metal ring or band, which is attached to the base A, by guards or rods *a*.

C, is a glass cylinder which is fitted within the ring or band B, and guards *a*, the lower end of the cylinder C, resting in a recess *b*, in the top of the base A, as plainly shown in the drawings.

Within the base A, and near its lower part an annular horizontal projecting plate *c*, is attached, said plate being slotted to receive knobs *d*, which when fitted in the slots of the plate *c*, and properly turned or adjusted, secure the lamp D, within the base A. The lamp D, is constructed precisely similar to those for burning coal oil and therefore a minute description is not necessary.

On the ring or band B, a cap E, is fitted and secured by pins *e*, on the ring or band which fit in slots made in the cap. The cap E, is perforated at its side as shown at *f*, and the base A, is also perforated at its side as shown at *g*.

In the top of the cap E, an aperture *h*, is made and *i*, is a plate placed over said opening and secured in proper position by springs or elastic bars *j*, which pass through the top of the cap and press sufficiently hard against the edges of the apertures through which they pass as to retain the plate when pressed in and closed over the aperture *h*. The inner ends of the bars *j*, are bent as shown at *k*, so that the bars cannot be withdrawn from the cap. To the plate *i*, a handle or ring *l*, is attached.

Within the ring or band B, and directly over the top of the cylinder C, a plate F, is placed, said plate having a short tube G, at its center, which extends upward a short distance within the cap E.

Within the base A, an inverted cup H, is placed, the lower end of said cup extending down to within a short distance of the plate *c*. The upper end of the cup has a band *m*, fitted in it at its center, said band projecting downward a short distance and being perforated as shown at *n*. The band *m*, projects downward between the cylindrical portion *o*, of the cap, which encompasses the wick tube *p*, and the outer flanch *q*, of said cap, the flanch *q*, being perforated as usual both above and below the junction of the cylindrical portion *o*, as shown at *r*. The cap $o^{\times}$, which screws into the top of the body of the lamp D, is also perforated at its lower part as shown at $p^{\times}$, and apertures $q^{\times}$, are made in the top of the cap $o^{\times}$, at each side of the wick tube *p*.

From the above description it will be seen that the flame is supplied with air by a current or draft which passes through the perforations *g*, of the base A, and upward through the cup H, through the perforations *r*, of the flanch *q*, of the cap that covers the wick tube and passes up both within and at the outer side of wick-tube cap *o*, the air also passes upward through the cap $o^{\times}$, escaping through the openings $q^{\times}$. The cylinder C, being filled with heated air serves the purpose of a chimney and the flame is supplied with a steady current or stream of air in consequence of the arrangement of the cup H, and perforated band *m*, encompassing the upper part of the lamp D, said arrangement preventing the ill effects of sudden gusts of wind by retarding and disturbing or dividing the same in its passage upward so that it will be equally presented to the flame all around. The tube G, at the upper end of the cylinder C, prevents the air from passing too rapidly through the cylinder C, so that the flame will receive the

benefit of all the oxygen that enters the cylinder C.

By this invention the ordinary glass chimney is dispensed with and a steady and good illuminating flame obtained. The lamp may be readily filled and trimmed and the several parts easily detached for the purpose of being cleansed.

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

The inverted cup H, provided with the perforated band *m*, and placed over the lamp D, the band *m*, encompassing the wick-tube cap *o*, in combination with the glass cylinder C, and the tube G, or its equivalent, the whole being arranged substantially as and for the purpose set forth.

MAX MILLER.

Witnesses:
W. TUSCH,
W. HAUFF.

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