

C. A. HOWARD.

HEATER ATTACHMENTS FOR LAMPS.

No. 186,839.

Patented Jan. 30, 1877.

Fig. 1.

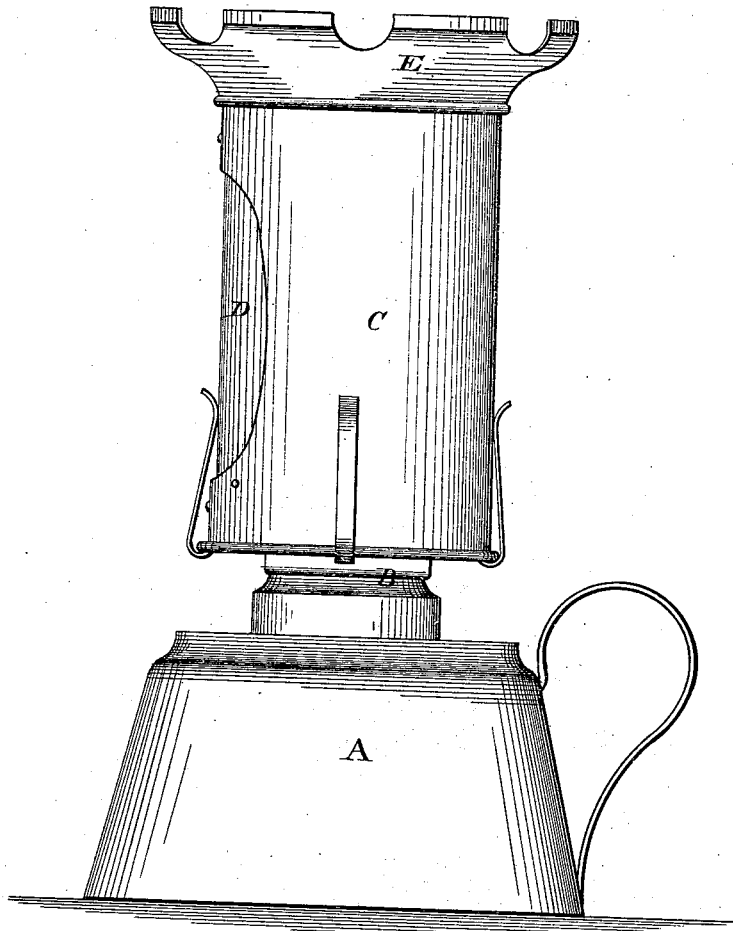
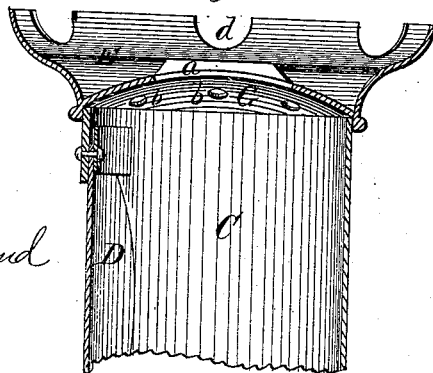


Fig. 2.



WITNESSES
Frank L. Curand
Frank Galt

INVENTOR
Chas. A. Howard
Alexander Hinson
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES A. HOWARD, OF PONTIAC, MICHIGAN.

IMPROVEMENT IN HEATER ATTACHMENTS FOR LAMPS.

Specification forming part of Letters Patent No. **186,839**, dated January 30, 1877; application filed November 4, 1876.

To all whom it may concern:

Be it known that I, CHAS. A. HOWARD, of Pontiac, in the county of Oakland, and in the State of Michigan, have invented certain new and useful Improvements in Heater Attachment for Lamps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to lamps; and it consists in the construction and arrangement of an attachment to the same to be used in the place of a chimney, and whereby any ordinary lamp may be used as a nursery-lamp, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation referring to the annexed drawing, in which—

Figure 1 is a side elevation of a lamp with my attachment placed thereon. Fig. 2 is a vertical section of the upper part of said attachment.

A represents the oil-reservoir, and B the burner, of an ordinary lamp for burning coal-oil or other fluid. C represents a sheet-metal cylinder of any suitable height, and of such diameter as to fit around the burner B, and be easily removed when not desired for use. This cylinder may be held on the burner by any of the usual fastenings for holding the ordinary chimney. In one side of the cylinder C is an opening covered with mica or isinglass D, so as to give sufficient light from the lamp. On the upper end of the cylinder is

placed a rim, E, which projects above the cylinder, to support a cup or other small vessel. In the lower portion of this rim is a concavo-convex diaphragm, G, covering the top of the cylinder. This diaphragm is provided with a central elongated opening, *a*, and a series of perforations, *b*, as shown, to allow the heat to escape.

This attachment is not designed as a permanent fixture to a lamp, but simply to put on when it is needed by taking off the chimney, and putting this in its place, and by making the rim and diaphragm removable it facilitates cleaning. The upper edge of the rim E is provided with a series of notches, *d*, for draft.

The advantages of this invention consist in its application to any ordinary lamp, the facility of instantly converting a common lamp into a portable heater, useful for night-lamp, nursery-lamp, and any other purpose where a small portable heater is required.

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

In combination with an ordinary lamp, the removable sheet-metal cylinder C, provided with the notched rim E; and diaphragm G having elongated opening *a* and perforations *b*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of November, 1876.

CHARLES A. HOWARD.

Witnesses:

WILLIAM L. BRAMHALL,
C. L. EVERT.