

H. S. FIFIELD.
Heating Attachment for Lamps.
No. 218,950. Patented Aug. 26, 1879.

Fig. 1.

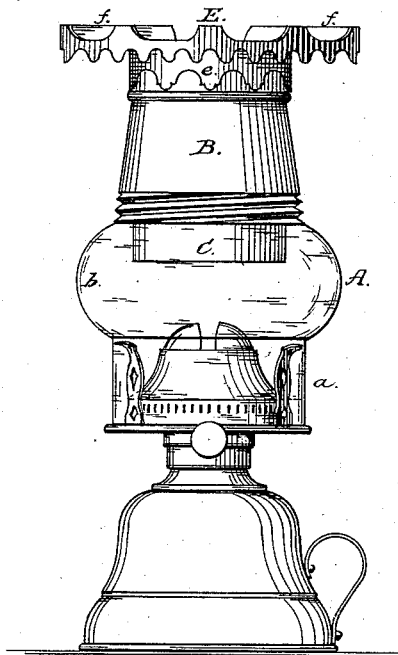


Fig. 2.

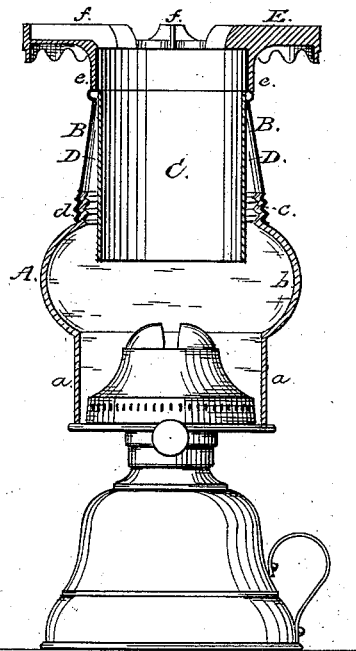
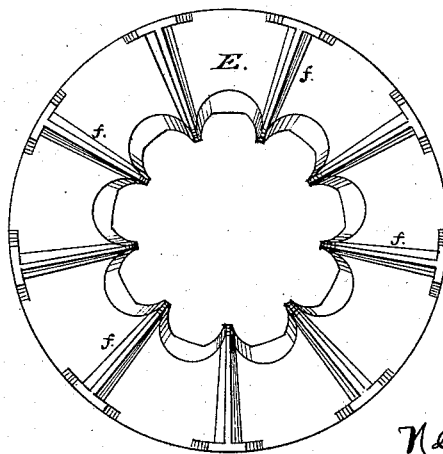


Fig. 3.



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UNITED STATES PATENT OFFICE.

HENRY S. FIFIELD, OF NEW HAMPTON, NEW HAMPSHIRE.

IMPROVEMENT IN HEATING ATTACHMENTS FOR LAMPS.

Specification forming part of Letters Patent No. **218,950**, dated August 26, 1879; application filed June 21, 1879.

To all whom it may concern:

Be it known that I, HENRY S. FIFIELD, of New Hampton, in the county of Belknap and State of New Hampshire, have invented a new and useful Improvement in Heating Attachment for Lamps; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object I have in view is to produce a cheap and simple attachment for lamps to convert them into lamp-heaters for heating water, and for the numerous other uses to which such devices are put, which can be applied to the ordinary kerosene-lamps now upon the market, and will be safe and effective in use.

My device is a chimney attachment, to be placed upon the lamp when the ordinary chimney is removed; and I propose to make it of a number of sizes, corresponding with the different sizes of chimneys.

These attachments can be sold alone, to be applied to lamps already owned by the purchaser, or can be sold with lamps of proper sizes, either with or without an ordinary lighting chimney.

My invention therein consists in the combination of a short glass chimney having bulged center and contracted ends, a metal chimney secured to the top of the glass chimney, and a flat top piece for carrying a heating or cooking vessel; in the combination of a globular glass chimney, a metal chimney secured to the top of the same, a flat top piece adapted to hold a heating or cooking vessel, and a downward-extending chimney adapted to partly inclose the flame; and, further, in the peculiar construction of the top piece, all as more fully hereinafter explained.

In the drawings, Figure 1 is a side elevation of the heating attachment upon a lamp; Fig. 2, a vertical section of the attachment, showing the lamp-burner in elevation; and Fig. 3, a separate view of the top piece.

Like letters denote corresponding parts in all the figures.

A represents the glass chimney of my heating attachment, which has a cylindrical portion, *a*, at its lower end to fit the burner of an ordinary lamp, as shown. Above the cylin-

dricial portion *a*, and opposite the flame of the lamp, the center, *b*, of the chimney has a bulged or globular form, and its upper end, *c*, is turned upward, and has preferably a spiral rib or screw-thread blown thereon. This chimney is quite short, rising but a short distance above the flame, which gives it greater strength and compactness and brings the heating-vessel close to the flame. Upon the glass chimney is placed a metal chimney composed of two sheet-metal parts, B C. The outer part or jacket, B, is of tapering form, except at its upper end, where it is preferably cylindrical. This jacket has an internal screw-thread or a rib pressed in its lower end, *d*, which engages with the screw-thread or rib on the upper end of the glass chimney, and thereby removably secures the metal portion of the attachment to the glass chimney, and allows the same to be secured to a new glass chimney when the first becomes cracked or broken.

The inner part, C, is a depending chimney of cylindrical form, or of less taper than the jacket B, and is secured within such jacket by forcing it up into the same till its upper end binds against the walls of the jacket. The chimney C hangs down below the top of the glass chimney and into the globular part of the same, its lower end terminating just above the flame, or so as to inclose the upper portion of the same. A dead-air-space, D, of angular shape, is formed by these means between the depending chimney and the glass chimney, and this space extends upward above the glass chimney, the depending chimney not coming into contact with the glass chimney, but communicating all its heat to the jacket B.

Upon the metal chimney is placed an annular top piece, E, preferably of cast metal, but which may also be stamped from sheet metal. This top piece is of broad annular form, to support a vessel for heating water or for other purposes, and has a downward-hanging flange, *e*, on its inner edge to fit over the top of the jacket B. On its upper face the top piece has a number of radial ribs, *f*, upon which the vessel rests. These ribs project sufficiently into the open center of the top piece to rest upon the upper edge of the jacket B and prevent the further downward movement of such top piece. At the outer ends of the ribs short

cross-pieces are cast, as shown, to strengthen the ribs and confine to some extent the products of combustion, so as to force them into more intimate contact with the vessel to be heated.

The parts of my heating attachment can be readily disconnected and separated from each other and easily put together. Their principal advantages have been already set forth.

The chimney C does not extend down so far as to obscure the light.

It is evident that where a small burner is used the chimney C need not extend so far down as is shown in the drawings, and in some instances may be dispensed with.

It is also evident that the jacket B may be removably attached to the top of the glass chimney by means equivalent to those described without departing from the spirit of my invention.

It is also apparent that this glass chimney may be made more or less globular, as skill or taste might warrant, without departing from the spirit of my invention.

What I claim as my invention is—

1. In a heating attachment for lamps, the combination of a short glass chimney having bulged center and contracted ends, a metal chimney secured to the top of the glass chimney, and a flat top piece for carrying a heating or cooking vessel, substantially as described and shown.

2. In a heating attachment for lamps, the combination of a globular glass chimney, a metal chimney secured to the top of the glass chimney, a flat top piece adapted to hold a heating or cooking vessel, and a depending chimney extending downward into the glass chimney, and adapted to partly inclose the flame, substantially as described and shown.

3. In a heating attachment for lamps, the annular top piece E, having downward-projecting flange *e*, and radial ribs *f*, extending from the open center to the periphery of the top piece, substantially as described and shown.

4. In a heating attachment for lamps, the vessel-carrying top piece described, consisting of an annular plate having downward-extending flange *e*, the radial ribs *f*, projecting into the open center of the plate and extending to the periphery of the same, and the short cross-pieces at the outer ends of such ribs, constructed and arranged substantially as described and shown.

This specification signed and witnessed this 2d day of May, 1879.

HENRY S. FIFIELD.

Witnesses:

R. N. DYER,
VINTON COOMBS.