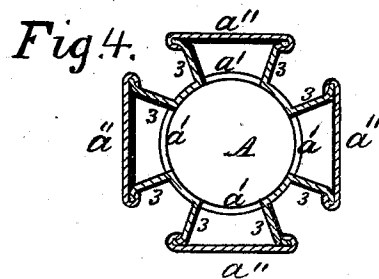
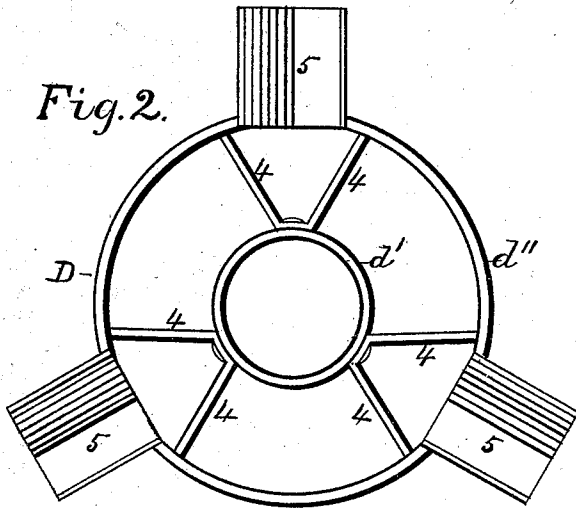
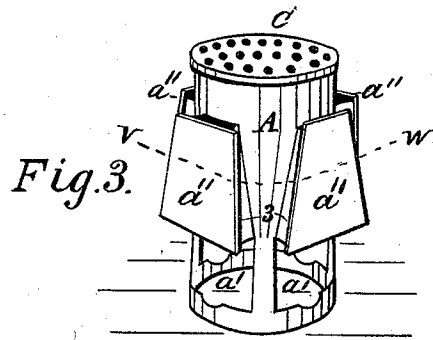
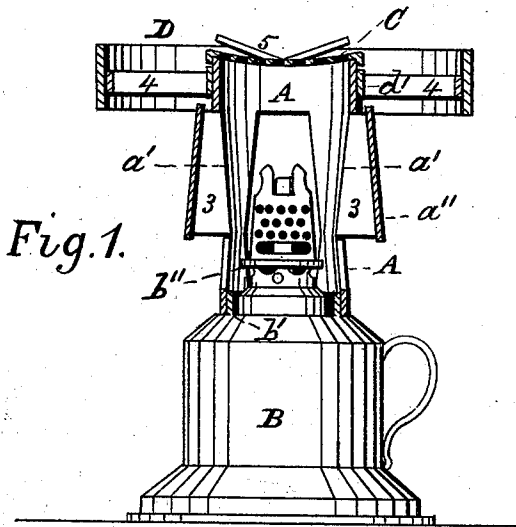


L. BADER.
Shoemakers' Lamps.

No. 149,560.

Patented April 14, 1874.



Witnesses:

*Benj Morison,
Wm H. Morison.*

Inventor:

Louis Bader

UNITED STATES PATENT OFFICE.

LOUIS BADER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SHOEMAKERS' LAMPS.

Specification forming part of Letters Patent No. **149,560**, dated April 14, 1874; application filed March 6, 1874.

To all whom it may concern:

Be it known that I, LOUIS BADER, of the city of Philadelphia, in the State of Pennsylvania, have invented an Improvement in the Shoemaker's Lamp, of which the following is a specification:

The object of my invention is to produce an unvarying and efficient heating power in the lamp used by shoemakers for heating the implements required for smoothing and polishing the edges of the heels and soles of boots and shoes; and my invention consists in the peculiar construction and combination of a sheet-metal chimney, a foraminous top plate, and a supporting-frame for the implements to be heated with the ordinary heat and flame generating lamp, in such a manner that horizontal currents or gusts of air will be prevented from deflecting the upward draft of air in the chimney heated by the flame of the generating-lamp below it, explosions in the chimney prevented, and the heat more perfectly diffused about the required hot ends of the implements, as will hereinafter be described in full, clear, and exact terms, with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the usual heating-lamp, with a vertical section of my improvement applied over the lamp. Fig. 2 is a plan view of the horizontal supporting-frame of the implements to be heated, (not shown,) detached from the chimney. Fig. 3 is a perspective view of the chimney with its series of openings and covering-plates around its sides, and of the foraminous plate laid on the top of the chimney, detached from the lamp and from the supporting-frame of the implements. Fig. 4 is a horizontal section of Fig. 3 below the dotted line *v w* of the latter.

The chimney A is of sheet metal, of a circular form in its transverse section, flared outward at its lower end, so as to allow it to be slipped tightly upon an annular flange, *b'*, (fixed vertically upon the top of the lamp B,) and slightly flared outward from the wick-plate *b''* of the lamp to the upper end of the said chimney. (See Figs. 1 and 3.) There are four separate side openings *a'*, which extend from near the lower end of the chimney A to within about three-fourths of an inch of the

top of the same, and each of said openings is about an inch and a quarter wide at its bottom, and narrows upward to about three-fourths of an inch at its top, and is about two and a half inches long, the whole chimney being about three or four inches long and two inches in average diameter. The covering-plates *a''* are set off from the chimney by side pieces 3 3, which project outward from the edges of the openings or boundaries thereof, respectively, and are united to the respective side edges of the plates *a''*, so as to form a cover for the openings respectively, which will prevent sudden blasts of the surrounding air from entering the upper portions of the openings *a'* horizontally, and thus breaking the upward currents of heated air in the chimney, and at the same time allow any excess of hot-air draft in the chimney, or any explosive gas therein when ignited, to escape through the open space which is left between the tops of the several plates *a''* and the sides of the chimney above them. The foraminous plate *c* rests loosely either upon the top of the chimney A, as shown in Fig. 3, or upon the central ring *d'* of the frame D, and thus causes the upward draft of hot air in the chimney to become diffused by passing through the numerous small holes of said plate *c*. The frame D consists of the central ring or annular band *d'*, and a larger ring or band, *d''*, connected together in the same horizontal plane, and concentrically, by a series of arms, 4 4. The outer ring or band *d''* has three angular troughs, 5 5 5, attached, so as to serve as radial troughs for supporting three of the usual implements at once, instead of two only, as heretofore. In fitting the different parts A, C, and D together upon the lamp B, the flared lower end of A is slipped tightly around the vertical flange *b'* of the lamp B, then the frame D applied by slipping its central ring *d'* tightly down around the upper end of the chimney A, and, finally, the foraminous plate C then laid loosely and concentrically upon the ring *d'*. (See Fig. 1.) In operation, the surrounding air passes freely to the lamp-wick and the chimney through the four large openings at the lower end of A, and thence, in a highly-heated condition, together with the upper portion of the flame of the wick, up to the foraminous plate C, and

through the numerous holes in the latter into contact with the implements resting thereon, which latter soon become properly heated and ready for use. During the operation, if a blast of air strikes the apparatus horizontally, the series of plates *a''* prevent its striking the upward draft of flame and heated air in the chimney so as to deflect or impair the upward draft, and if an explosion of any gas in the chimney should occur, no injury would occur to the chimney, because of the free openings (for expansion consequent upon explosions of gas in such case) between the upper ends of

the plates *a''* and inside of the chimney communicating therewith.

I claim as my invention—

A heating attachment for lamps or gas-light, consisting of the frame D, supported on chimney A, of chimney A, having lateral orifices *a'*, and of flanged covers *a''* 3, covering the upper portion only of orifices *a'* exteriorly and laterally, but not at top and bottom thereof, as and for the purpose described.

Witnesses: LOUIS BADER.

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WM. H. MORISON.