

(No Model.)

L. J. ATWOOD.
LAMP.

No. 495,289.

Patented Apr. 11, 1893.

Fig. 1.

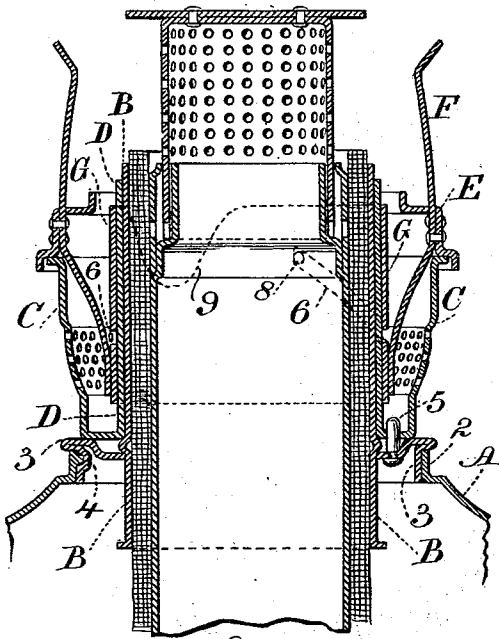


Fig. 2.

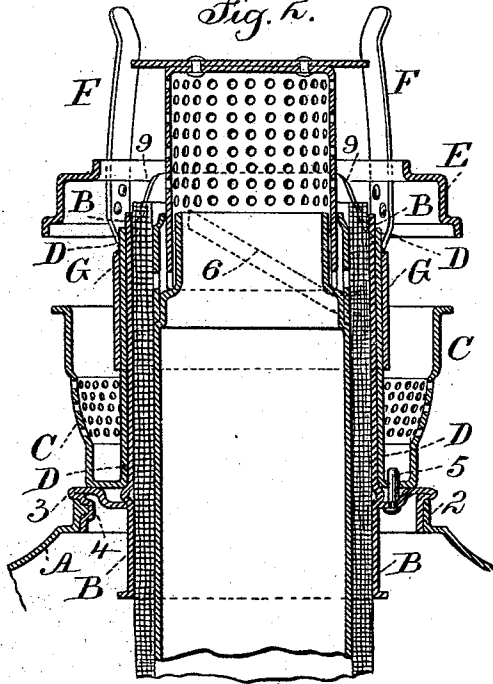


Fig. 4.

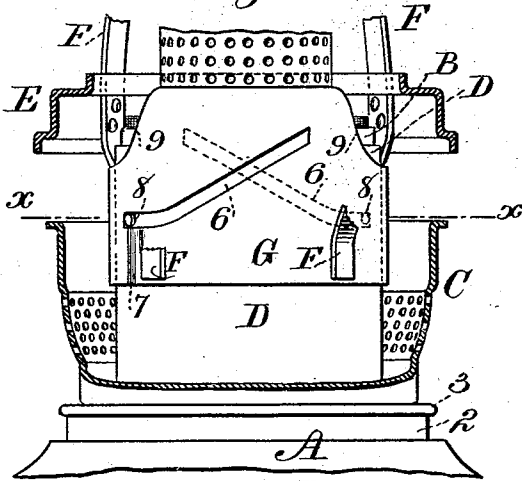
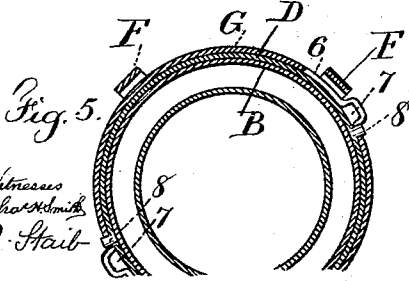
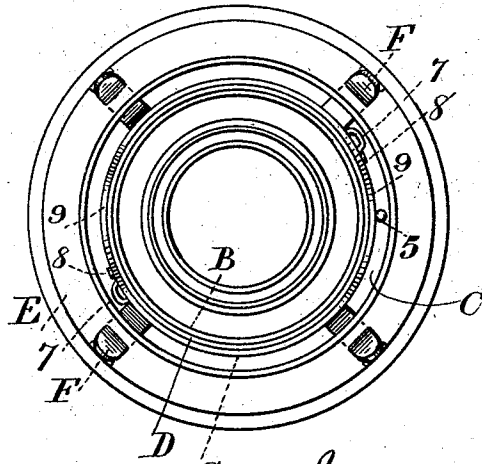


Fig. 3.



Witnesses
Charles Smith
J. Hall

Inventor
Lewis J. Atwood
per Lemuel W. Perrell
Att'y

UNITED STATES PATENT OFFICE.

LEWIS J. ATWOOD, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
PLUME & ATWOOD MANUFACTURING COMPANY, OF SAME PLACE.

LAMP.

SPECIFICATION forming part of Letters Patent No. 495,289, dated April 11, 1893.

Application filed December 12, 1892. Serial No. 454,839. (No model.)

To all whom it may concern:

Be it known that I, LEWIS J. ATWOOD, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented an Improvement in Lamps, of which the following is a specification.

This invention relates to that class of lamps in which the chimney holder can be elevated by a partial or complete rotation, so as to give access to the wick for lighting the same. In lamps of this character that have heretofore been made, the chimney holder has been provided with a downwardly projecting cylinder or arms having diagonal slots receiving stationary pins or ribs, so that by the rotation of the chimney holder the diagonal slots raise such chimney holder to give access for lighting the wick as seen in my patent No. 400,818, granted April 2, 1889. Where devices of this general character have been made use of directly inside the cylindrical air distributor the chimney raising devices are liable to interfere with the proper passage of the air to the flame, and where the chimney elevating devices have surrounded the wick tube the air distributor could not be conveniently removed from the stationary wick tube to give access to the wick in trimming the same.

In my present improvements the air distributor is connected with a sleeve sliding upon the wick tube, so that the air distributor and sleeve can easily be removed from the standing wick tube, and the chimney holder and the elevating devices for the same are applied around the sleeve, so that when the sleeve and air distributor are removed from the wick tube the chimney holder is simultaneously lifted off, leaving the wick tube and wick exposed for the easy trimming of the latter; and I construct the chimney raising devices in such a manner as to expose portions of the wick for igniting the same, other portions of such wick being shielded, if so desired, so as to lessen the risk of the flame being extinguished by currents of air while lighting the same.

In the drawings, Figure 1 is a vertical section showing the improvement with the chimney holder down in its place for use. Fig. 2 is a similar view with the chimney holder ele-

vated. Fig. 3 is a plan view. Fig. 4 is a partial section with the chimney holder elevated, and Fig. 5 is a plan view sectionally at the line *x x*.

A portion of the lamp fountain is represented at A, the same being provided with an open neck having a collar 2, as usual and in which is received the flange 3 of the wick tube B, and the connection may be effected by a bayonet joint or similar device, as indicated at 4.

The air distributor C is of any usual or desired character and it is preferably made to flare outwardly, as represented. The sleeve D is permanently connected at its lower end to the lower end of the air distributor C, and this sleeve D fits around the exterior of the wick tube B, so that the sleeve and the air distributor can be easily slipped upon or taken off the wick tube. To prevent the air distributor rotating I provide a steady pin 5 upon the flange 3 passing into a hole in the bottom of the removable portion where the sleeve D and air distributor C are united. This steady pin 5 prevents the air distributor being rotated when the parts are in use but it does not interfere with the easy removal of the sleeve and air distributor from the wick tube when the air distributor is lifted. Any suitable steady device may be used to prevent the rotation of the sleeve and air distributor.

The chimney holder E is of any ordinary character and it is represented as provided with chimney springs F for receiving the base of the chimney between them, and these chimney springs F are shown as passing through the metal of the chimney rest or holder and extending down inside the air distributor and attached at their lower ends to the cylindrical lifter G, which cylindrical lifter is sufficiently large to slide freely down around the outside of the sleeve D. In this cylindrical lifter are diagonal slots 6 and vertical recesses 7, and upon the sleeve D are projecting studs 8.

The parts are so constructed that when the cylindrical lifter G is slipped down around the sleeve D, the recesses 7 pass the studs 8, and such studs enter the diagonal slots 6, and these parts are so constructed that when the

chimney holder receives a partial rotation the diagonal slots 6 and studs 8 cause the chimney holder to be lifted bodily to separate the chimney holder from the air distributor sufficiently for the introduction of a match or other igniting device applied to the top of the wick to light the lamp.

Upon reference to Figs. 2 and 3, it will be seen that the top edge of the lifting cylinder G is above the top edge of the wick when the chimney holder is raised, hence if this lifting cylinder G had a straight upper edge, access would not be given for igniting the wick; I therefore notch the upper edge of the lifting cylinder G, preferably at opposite sides, as shown at 9, which notches 9 extend down sufficiently low to uncover the wick and give access to the same for lighting it; and it will be apparent that the upper parts of the cylindrical lifter which are not cut away become shields or guards to lessen the risk of the flame being blown out by currents of air when lighting the lamp, but when the chimney holder is turned down to place, as shown in Fig. 1, the upper end of the lifter cylinder G comes below the top end of the sleeve D and hence the draft is not interfered with in its action upon the flame of the lamp.

In consequence of being able to remove the air distributor and also to separate the cylindrical lifter and chimney holder from the air distributor, the respective parts can be easily cleaned and the chimney can be taken off with the chimney holder and air distributor to give access to the wick, and the chimney itself does not become soiled, as it is unnecessary to touch the same with the fingers in removing or replacing the parts.

I claim as my invention—

1. The combination with the wick tube in an Argand burner, of an air distributor and a sleeve permanently connected together at their lower ends and removable bodily from around the wick tube, a steady device for preventing the rotation of the sleeve and air distributor around the wick tube, a chimney holder and a cylindrical lifter with inclines connected with the chimney holder and surrounding the sleeve, substantially as set forth.
2. The combination in an Argand lamp, with

the wick tube, of a sleeve surrounding and removable from the wick tube, an air distributor permanently connected at its lower end to the lower end of the sleeve, a chimney holder above the upper end of the air distributor, chimney springs passing through the chimney holder, a cylindrical lifter surrounding the sleeve and connected with the lower ends of the chimney springs and inclines and projections for elevating the chimney holder by a partial rotation thereof, and a steady device for connecting the base of the air distributor and the flange of the wick tube to prevent the rotation of the air distributor as the chimney holder is raised or lowered, substantially as set forth.

3. The combination with the wick tube and air distributor in an Argand lamp, of a removable sleeve surrounding the wick tube, and means for preventing the sleeve rotating, a chimney holder and a cylinder connected with the chimney holder, and inclines and projections upon the sleeve and cylinder respectively whereby the chimney holder and its cylinder are raised or lowered by their partial rotation upon the sleeve, substantially as set forth.

4. The combination in an Argand lamp, with the wick tube, of a sleeve surrounding and removable from the wick tube, an air distributor permanently connected at its lower end to the lower end of the sleeve, a chimney holder above the upper end of the air distributor, chimney springs passing through the chimney holder, a cylindrical lifter surrounding the sleeve and connected with the lower ends of the chimney springs and inclines and projections for elevating the chimney holder by a partial rotation thereof, and a steady device for connecting the base of the air distributor and the flange of the wick tube to prevent the rotation of the air distributor as the chimney holder is raised or lowered, substantially as set forth.

Signed by me this 7th day of December, 1892.

L. J. ATWOOD.

Witnesses:

GEO. T. PINCKNEY,
A. M. OLIVER.