(No Model.)

L. J. ATWOOD.

LAMP BURNER.

No. 588,788. Patented Aug. 24, 1897.

Fig. 1.

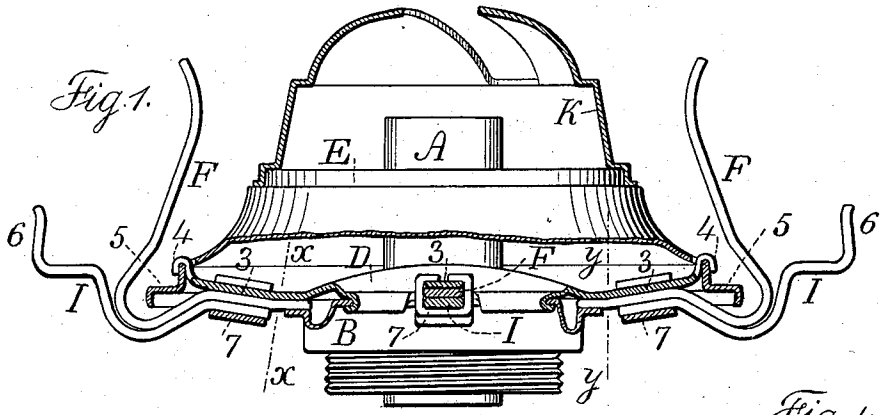


Fig. 4.

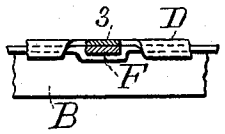


Fig. 3.

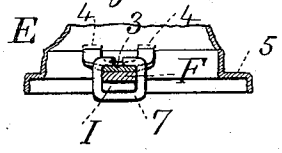


Fig. 2

Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 588,788, dated August 24, 1897.

Application filed July 21, 1897. Serial No. 645,331. (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 Lamp-Burners, of which the following is a specification.

Lamp-burners have been made with a closed ratchet-cap around the wick-tube and with arms extending from the same to the chimney-holder and air-distributer, and separate chimney-springs have been introduced below the chimney-holder and connected with the arms.

The present invention relates to the arms for connecting the ratchet-cap and the chimney-holder and the chimney-springs and the globe-holding arms that project beyond the springs and are attached to the ratchet-cap arms.

In the drawings, Figure 1 is an elevation, partially in section, of the burner, illustrating the present improvement. Fig. 2 is a plan view, partly in section, showing the mode of connecting the springs and arms. Fig. 3 is a section of the arms at the line *x x*, and Fig. 4 is a section at the line *y y*.

The wick-tube A and burner-base B are of any desired character, and usually there is a wick-raiser C, and the ratchet-cap D surrounds the wick-tube, and its edges are turned downward to embrace the top edge of the base B, and there are arms 3 extending out from the cap D and terminating as hooks that pass through the inner portion of the chimney-holder and are turned down to connect the parts, as shown at 4, and the air-distributer E surrounds the wick-tube and extends outwardly and downwardly and terminates as a chimney-rest 5.

The chimney-springs F pass beneath the arms 3, and their inner ends are advantageously received between the ratchet-cap D and the base B, and they are bent downward below the chimney-rest 5 and then extended upward to grasp the base of the chimney, and the shade-holding arms I are beneath and immediately in contact with the inner portions of the chimney-springs, and such arms I extend out a sufficient distance and are turned upward, as at 6, to form the shade-holders or shade-rests, and these arms I are connected with the chimney-springs F permanently and advantageously by sheet-metal clips 7, passing beneath the arms I with their ends bent up and turned over the arms 3, so as to hold these parts firmly together, and it is advantageous to employ solder in addition to prevent the motion of one part upon the other. In this manner the connections between the burner-base and the chimney-rest are made very strong and reliable, even when the sheet metal of the ratchet-cap is comparatively thin, because the lower and inner ends of the chimney-springs reinforce and strengthen the arms and make permanent connections between the burner-base and the chimney-rest, and the shade-holding arms I strengthen the connection and also allow for the proper support by the weight of the shade or globe being taken upon the burner-base and substantially independent of the chimney-holder. Hence great strength is obtained without the use of heavy sheet metal in the parts of the burner.

The burner-deflector is represented at K, the same being connected to the air-distributer at one side by a hinge.

I claim as my invention—

1. The combination with the chimney-holder and burner-base and wick-tube, a ratchet-cap surrounding the wick-tube and connected at its edges with the burner-base and having arms extending out and terminating as claws passing through holes in the chimney-rest and bent down, of chimney-springs connected permanently with the arms and having their ends received between the burner-base and ratchet-cap and extending below the chimney-rest and turned upward to receive the chimney, and shade-holding arms beneath the chimney-springs and metal clips connecting the chimney-springs and shade-holding arms with the arms of the ratchet-cap, substantially as set forth.

2. The combination with the chimney-

holder and air-distributer and the burner-base having arms extending to and connected with the chimney-holder, of chimney-springs beneath the arms and shade-holding arms beneath the chimney-springs and extending beyond them, and clip-pieces inclosing and connecting the shade-holding arms, chimney-springs, and burner-base arms, substantially as specified.

Signed by me this 16th day of July, 1897.

L. J. ATWOOD.

Witnesses:
J. H. HURLBUT,
J. L. SCOTT.