(No Model.)

T. HIPWELL.

LAMP.

No. 323,037. Patented July 28, 1885.

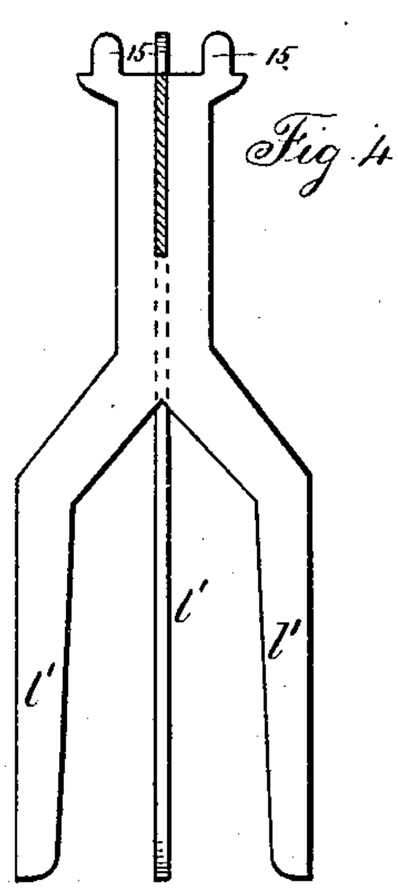

Fig. 4

Fig. 1.

Fig. 3.

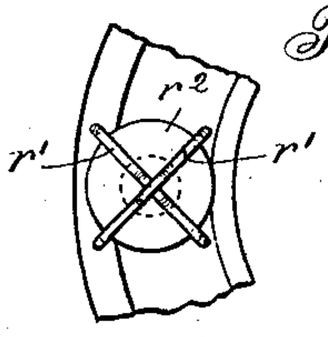

Fig. 2.

Witnesses:
I. Stair
Chas. H. Smith

Inventor
Thomas Hipwell
per Lemuel W. Serrell atty

UNITED STATES PATENT OFFICE.

THOMAS HIPWELL, OF ASTORIA, ASSIGNOR TO THE MANHATTAN BRASS COMPANY, OF NEW YORK, N. Y.

LAMP.

SPECIFICATION forming part of Letters Patent No. 323,037, dated July 28, 1885.

Application filed April 6, 1885. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HIPWELL, of Astoria, in the county of Queens and State of New York, have invented an Improvement in Lamps, of which the following is a specification.

My present invention is made for lessening the expense of constructing Argand lamps, especially those of a large size, and for supporting the lamp upon an arm or bracket, and for allowing the easy removal of such lamp from the arm or bracket.

In the drawings, Figure 1 is a vertical section of my improved lamp. Fig. 2 is an inverted plan of the indicating-float. Fig. 3 is a detached plan view of the foot-piece and skeleton socket. Fig. 4 is a separate view of the supports that hold the flame-spreading button.

In the application of James H. White and Thomas Hipwell, No. 129,336, filed April 26, 1884, a lamp is shown containing all the features of the present invention, except those that are herein especially pointed out; and a reference is hereby made to the said application for a description of all those parts not here specifically set forth—such as the wick-raising device, the reservoir wick-tubes, air-tube, annular ratchet-cores, gallery, removable deflector, and spring chimney-holder. Lamps of this character containing a large Argand wick are extensively used upon chandeliers and brackets, and they have to be removed therefrom for cleaning and trimming.

One feature of my said invention relates to a skeleton socket and foot-piece applied at the lower end of the air-tube *g*, such skeleton socket being made of two metal plates, *g'*, each of which is provided with a central slot at 10 and two projecting feet at 11, and the central cross-bar is notched, the notch in one piece being at the top of the cross-bar and the notch in the other piece at the bottom of the cross-bar, so that these two cross-bars, when placed together, interlock, and with the other portions form a skeleton socket and foot-piece that is passed up into the lower end of the air-tube *g* and secured therein. This foot-piece, projecting at the bottom of the lamp outside the lower end of the air-tube *g*, forms a support for holding up the lamp while being trimmed or filled, and the air can pass easily into the air-tube; hence the flame can be adjusted before placing the lamp on the chandelier, and the skeleton socket formed by the notched plates within the air-tube receives the plug or stud *h'* of the chandelier or bracket, by which stud the lamp is supported when in use, and from which it is easily removed for filling and trimming, and the skeleton socket is not liable to adhere to the plug in consequence of rust or any accumulation of foreign matter.

At the upper end of the wick-tube *g* the flame-spreader or button *n* is supported by the legs *l'*, which project downwardly from said button *n* and pass into the air-tube *g*, and rest upon an inward-projecting rib, 14, that is bent in the sheet metal of such air-tube *g*. The legs are made of two crossing plates cut out in the form represented in Fig. 4. One plate has a central slot cut from the upper end of the body downwardly, and the other plate has a central slot cut from the lower end of the body upwardly, and these plates are interlocked across each other by the central slot of one plate receiving the sheet metal of the other plate. At the upper ends of these plates are projecting ears 15, that are passed through radial slots in the central portion of the flame-spreader *n*, and these ears are turned over and clinched, so as to hold the flame-spreader or button firmly to the supports formed by the crossing plates and legs *l'*. When these legs are passed down into the air-tube *g*, and their lower ends rest upon the rib 14, the flame-spreader will be held in its proper position in relation to the upper end of the wick, and the legs and support to the flame-spreader, being comparatively of thin sheet metal and standing edgewise to the current of air passing up the tube *g*, offer but little resistance to the air, and such support is kept cool, and but little heat is conducted from the button to the lamp. These legs, being spring metal, accommodate themselves to any inequalities in the size of the air-tube. In filling lamps of this character it is often difficult to determine when the necessary quantity of oil has been supplied.

Lamps have been made containing a float and a stem, so that the quantity of oil in the lamp may be indicated by the rising of the

stem of the float. If such float and stem were applied to a lamp of the present construction, the stem projecting above the metal annular ratchet-cover *t*, such stem would interfere with the polishing and finishing of the lamp. To avoid this I make use of a wire cage, *r'*, inside the reservoir, the same being formed by preference of two wire loops crossing each other and soldered at their upper ends to the metallic portion of the lamp, and containing between them a cylindrical float, r^2, preferably of cork, with a central depression in the upper surface, and there is a hole through the metal of the lamp and in line with the center of the float for the reception of the stem s^2; but this stem is not put in place until after the body of the lamp has been put together and polished and finished, after which such stem is thrust through the hole in the metal and driven into the cork, the central depression in such cork serving to guide the end of the stem, and I make the stem of wire with the end portion corrugated, so as to prevent the stem being pulled out of the cork float accidentally. It is to be understood that the cage and float are put into place before the lamp-reservoir is put together.

I do not herein lay claim to the float, cage, and stem hereinbefore described.

I claim as my invention—

1. The combination, with the wick-tube and air-tube in an Argand lamp, of a flame-spreader or button, *n*, two longitudinally-slotted, crossing, and interlocking plates, each having legs *l'* extending down into the air-tube *g*, and ears 15 at their upper ends passing through mortises in the flame-spreader and clinched, substantially as set forth.

2. The combination, with an Argand lamp, of the crossing and interlocking plates with slots forming a skeleton socket fitted within the air-tube, and having projecting foot-pieces below the lower end of such air-tube, and the plug *h* fitted within the socket-piece, substantially as set forth.

Signed by me this 30th day of March, A. D. 1885.

THOMAS HIPWELL.

Witnesses:
R. TURNER,
T. M. HADLEY.