ARGAND LAMP.


To all whom it may concern:  
Be it known that I, JOSEPH FUNCK, of Tompkinsville, in the county of Richmond and State of New York, have invented an Improvement in Lamps, of which the following is a specification.

In my Patent No. 188,600 I make use of an air-tube with a ferrule sliding thereon, that receives the lower end of the cylindrical wick, and there is a pin projecting from the thimble into a helical groove in the tube that surrounds the wick, and the slotted tube that is revolved to raise and lower the wick is outside the wick and inside the grooved tube.

In my present improvement I make the wick-tube of thin sheet metal, and bend upon it a hollow helical rib, forming on the inside the wick-raising groove; and I combine with this an air-well passing down into the lamp-reservoir, so that the air to the central air-tube first descends outside the wick-tube; and I provide an air-distributor that is connected with the slotted wick-raising tube, and a pinion to revolve the same. This air-distributor is below and separate from a movable spring chimney-holder, and rests upon the upper perforated portion or gallery of the air-well. By this improvement I am enabled to raise and lower the wick-tube with ease and accuracy, and to remove the chimney-holder and chimney without disturbing the other parts, thereby increasing facility for cleaning the burner in this class of lamps, because by removing the spring chimney-holder the air-distributor becomes accessible and can be wiped off and kept clean.

In the drawings, Figure 1 is a vertical section of the lamp complete. Fig. 2 is an elevation of the wick-raiser and air-distributor detached. Fig. 3 is a detached section of the chimney-holder, and Fig. 4 is a plan of the lamp with part of the chimney-holder removed. The air-well is provided with a screw at 1, by which it is screwed into the collar of the lamp-reservoir. At the top of the air-well is an enlargement or gallery, 2, that is perforated at 3 for air to pass into the lamp.

The air-tube 4 and wick-tube 5 are united together at their bottom ends to form an oil-holder for the wick, and one or more tubes, 6, passing through the oil-well, allow the oil from the reservoir to run into this oil-holder. The wick-tube 5 is of thin sheet metal, with a rib, 7, pressed up in it to form the wick-raising screw or helix. The lamp does not become as much heated with a thin sheet-metal screw as it does when the metal is thick enough for the screw to be cut in it.

The thimble 8 receives around it the lower end of the cylindrical wick 9, and there is a projecting pin, 10, that passes into the helical 11 or screw groove in the wick-tube 12.

The wick-raiser tube 13 is slotted to pass at each side of the pin 10, and its upper end surrounds the wick, and is at the same level, or nearly so, as the top of the air-tube 14. This tube 15 is provided with a perforated flange or skirt, 16, forming an air-distributor, the edge of which is within the gallery 17, and this air-distributor and wick-raiser tube 18 can be rotated by the thumb wheel 19, shaft 20, and pinion 21, that is supported upon the gallery 22, and the pointed teeth of the pinion 23 enter the outer circular row of holes in the air-distributor to revolve the same in either one direction or the other and raise or lower the wick.

The chimney-holding springs 24 stand up from the chimney-rest 25, and there is a circular downward flange, 26, that surrounds the upper part of the gallery 27, so that the chimney and chimney-holder can be lifted off when desired. The flange or rim 28 serves as a holder for a globe, if the same is used.

The central stem 29, and button 30 are applied inside the Argand flame, and the neck-chimney 31 outside the flame, so that the air is forced 32 into contact with both sides of the Argand flame. The button may be either above or below the neck of the chimney.

I claim as my invention—

1. The combination, in a lamp-burner, of the air-well, the air-tube 4, and the wick-tube, united at their lower ends, the oil-supply tubes, the ferrule and its pin, the wick-raiser slotted longitudinally, the gallery at the top end of the air-well, the air-distributor connected with the wick-raiser and passing inside of the gallery, and the thumb-wheel, shaft, and pinion, operating upon the air-distributor to revolve the same and raise and lower the wick, substantially as set forth.
2. The movable chimney-rest and spring chimney-holder, in combination with the separate air-distributor that is below the same, the gallery, air-well, wick-tube and air-tube, and wick-raiser, substantially as set forth.

3. The combination, in an Argand burner, of a chimney with a contracted neck, a button above the wick, a movable chimney-rest and spring chimney-holder, a gallery on which the chimney-holder rests, and an air-distributor below the chimney-rest connected with the wick-raiser, and a thumb-wheel and pinion to rotate the air-distributor and wick-raiser, substantially as set forth.

Signed by me this 1st day of September, A. D. 1882.

JOSEPH FUNCK.

Witnesses:

Geo. T. Pinckney,
William G. Mott.