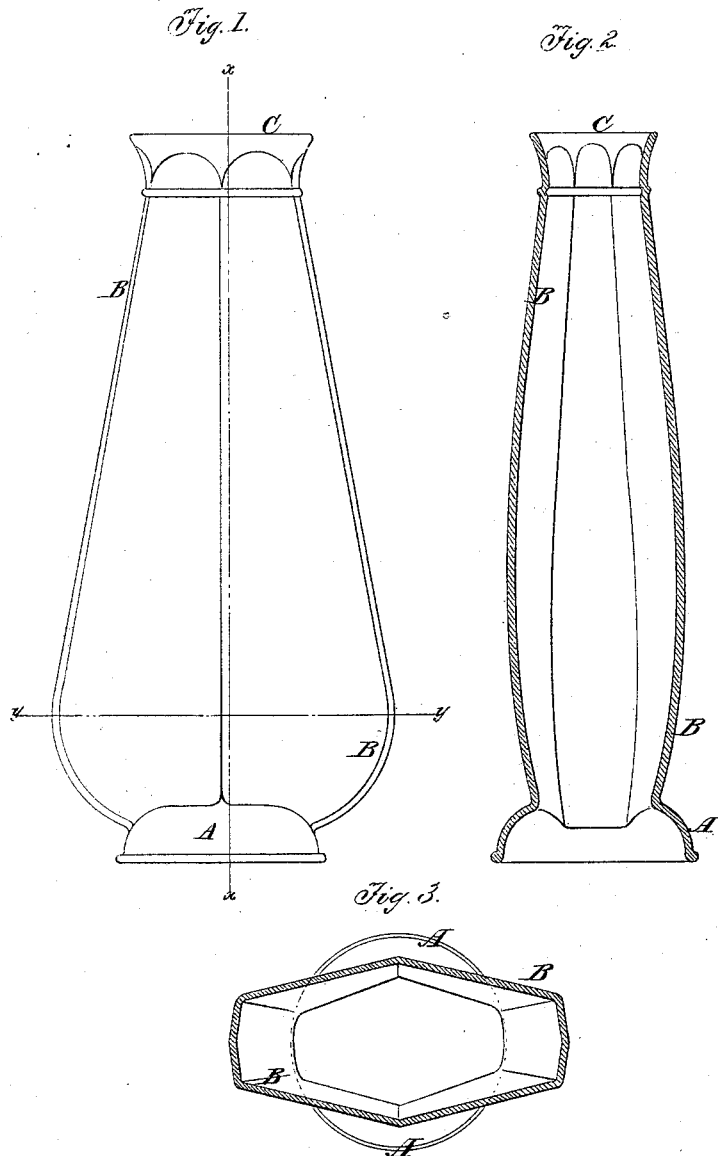


J. M. RANKIN, Jr.

LAMP CHIMNEY.

No. 112,182.

Patented Feb. 28, 1871.



WITNESSES,

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# UNITED STATES PATENT OFFICE.

JAMES M. RANKIN, JR., OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. **112,182**, dated February 28, 1871; antedated February 24, 1871.

### *To all whom it may concern:*

Be it known that I, JAMES M. RANKIN, JR., of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Lamp-Chimneys; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my improved chimney. Fig. 2 is a vertical longitudinal section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a horizontal cross-section of the same, taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved lamp-chimney which shall be so constructed and formed as to cause a more perfect combustion of the escaping and ignited gases, give a better shape to the flame, and a more perfect dissemination of light than the chimneys constructed in the ordinary manner; and it consists in the chimney constructed as hereinafter more fully described.

A is the base of the chimney, which is made round and is flanged in the ordinary manner to fit upon and be secured to the lamp-burner, and the upper part of which is made convex, as shown in Figs. 1, 2, and 3.

B is the body of the chimney, which, in its general form, is flattened, or made wider in one direction than in the other, as shown in Figs. 1, 2, and 3. The narrower sides or edges of the body B are extended down into the base A, as shown in Figs. 1 and 2. The form thus given to the lower part of the interior of the chimney brings the ascending current of air

around the flame in such directions as to render the combustion more perfect and give a better form to the flame. The narrow edges of the body B may be rounded or may be flat with a slight angle along the line of the parting of the mold, as shown in Fig. 3. Each of the broader sides of the body B consists of two flat parts meeting at an obtuse angle, as shown in Fig. 3, and at the same time swelling outward or made convex, as shown in Fig. 2. This construction of the body of the chimney brings the current of air around the flame in a shape best calculated to give a good form to the flame. The slightly-inclined flat sides of the said body also cause the light to be better radiated through the room. The upper end, C, of the body B of the chimney is made flaring or bell-shaped, as shown in Figs. 1 and 2. This construction causes the ascending currents of heated air to escape more freely from the chimney, thus improving the draft, and consequently promoting the combustion.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved lamp-chimney, the parts of the broader sides of the body A of which are made flat, meeting each other at an obtuse angle and with a slight swell or convexity, with its narrower sides projecting downward into the round convex base A, and with its upper end, C, flaring or bell-shaped, substantially as herein shown and described, and for the purposes set forth.

The above specification of my invention signed by me this 15th day of August, 1870.

JAMES M. RANKIN, JR.

Witnesses:

GEO. W. MABEE,  
JAMES T. GRAHAM.