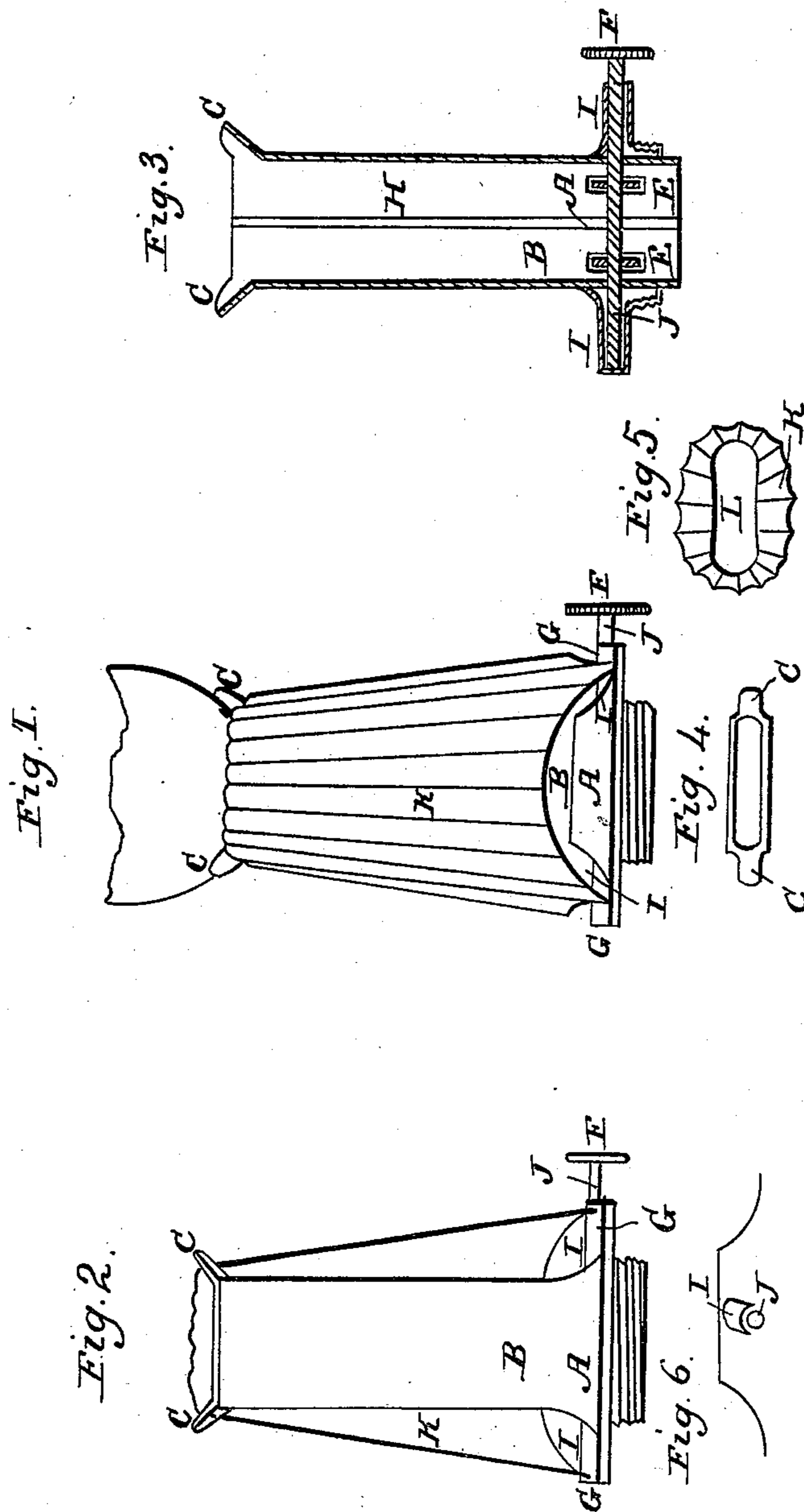


J. SANGSTER.

Lamp Burner.

No. 34,782.

Patented March 25, 1862.



Witnesses:
Amos W. Sangster
George H. Harris.

Inventor:
James Sangster

UNITED STATES PATENT OFFICE.

JAMES SANGSTER, OF BUFFALO, NEW YORK.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 34,782, dated March 25, 1862.

To all whom it may concern:

Be it known that I, JAMES SANGSTER, of Buffalo, in Erie county and State of New York, have invented certain new and useful Improvements in Lamp-Burners; and I hereby declare that the following is a clear and exact description of the same, reference being had to the accompanying drawings and the letters of reference marked thereon.

The same letters in Figures 1, 2, 3, 4, 5, and 6 represent similar parts in each.

The nature of my invention consists in—

First. The fluted or grooved cone, which I believe increases the amount of air directed against the flame, and hence insures a brighter light than the plain ones in common use. This cone is supported by four small points, so as to prevent the communication of heat to the lamp below.

Second. In forming the top of the wick-tubes so that a small groove or trough will project, as shown in Fig. 1, letters C C. These grooves or gutters conduct the flame outward from each side of the wick-tube, thereby increasing the width and brightness of the flame.

Third. In grooving the wick-tubes at the seam, so as to make them air-tight, without the necessity of soldering or brazing; also, in placing a circular flange with a groove or gutter on its underside, which partly incloses the wire J, to which is attached the wheels E E and the thumb-piece F at the base of the lamp and just above the wheels E E, which move the wick up or down, so as to make all parts of the tube or burner air-tight above the wheels and lamp, thus preventing all danger of explosion from the escape of gas which might be generated by the heat of the lamp while burning, as whatever vent is required is provided for below the flange and entirely out of reach of the flame.

Figure 1 represents a side elevation of the burner complete. Fig. 2 is an outline drawing representing the wick-tube and its position and length inside of the case or cone K. Fig. 3 represents the wick-tube, and the gutters or grooves which conduct the flame each

side of the wick-tube; also, the flange by the tube is made air-tight above the wheels and lamp.

A represents said flange; B, the tube; C C, the grooved projections which expand the flame; E E, the wheels which raise or lower the wick; F, the thumb-piece for turning said wheels.

Fig. 4 represents a top or plan view of the tube with the grooved projections.

Fig. 5 represents a top view of the case, showing the grooves in the said case. Another view of the same grooves will be seen by reference to Fig. 1.

G G represent the point or feet by which the case K is supported and attached to the flange A. The case K may be supported by four or more of these points or feet, which are made very small, so as to prevent (as much as possible) the heat from reaching the flange A and the lamp below it.

H in Fig. 3 represents the seam in the tube, which is grooved together by the common grooving-machine.

Fig. 6 represents the flange A with the two grooves or gutters on its under side, into which enters the wire J, that holds the wheels E E and the thumb-piece F. This groove in said flange holds the wire in its place, as will be seen by reference to the drawings. I I represent said grooves, and J represents the wire that holds the wick-wheels and thumb-piece.

What I claim as my invention, and desire to secure by Letters Patent, is—

The within-described lamp-burner constructed as represented—to wit, with the cone K, corrugated around its upper aperture and terminating in points at its lower extremity, the flange A, and the wick-tube B, provided with gutters at its top and having its edges bent together, as described, the several parts being constructed and arranged together for forming a lamp-burner, as is fully set forth.

JAMES SANGSTER.

Witnesses:

AMOS W. SANGSTER,
GEORGE J. HARRIS.