

(No Model.)

J. S. RUSSELL.

LAMP BURNER.

No. 358,127.

Patented Feb. 22, 1887.

Fig. 1.

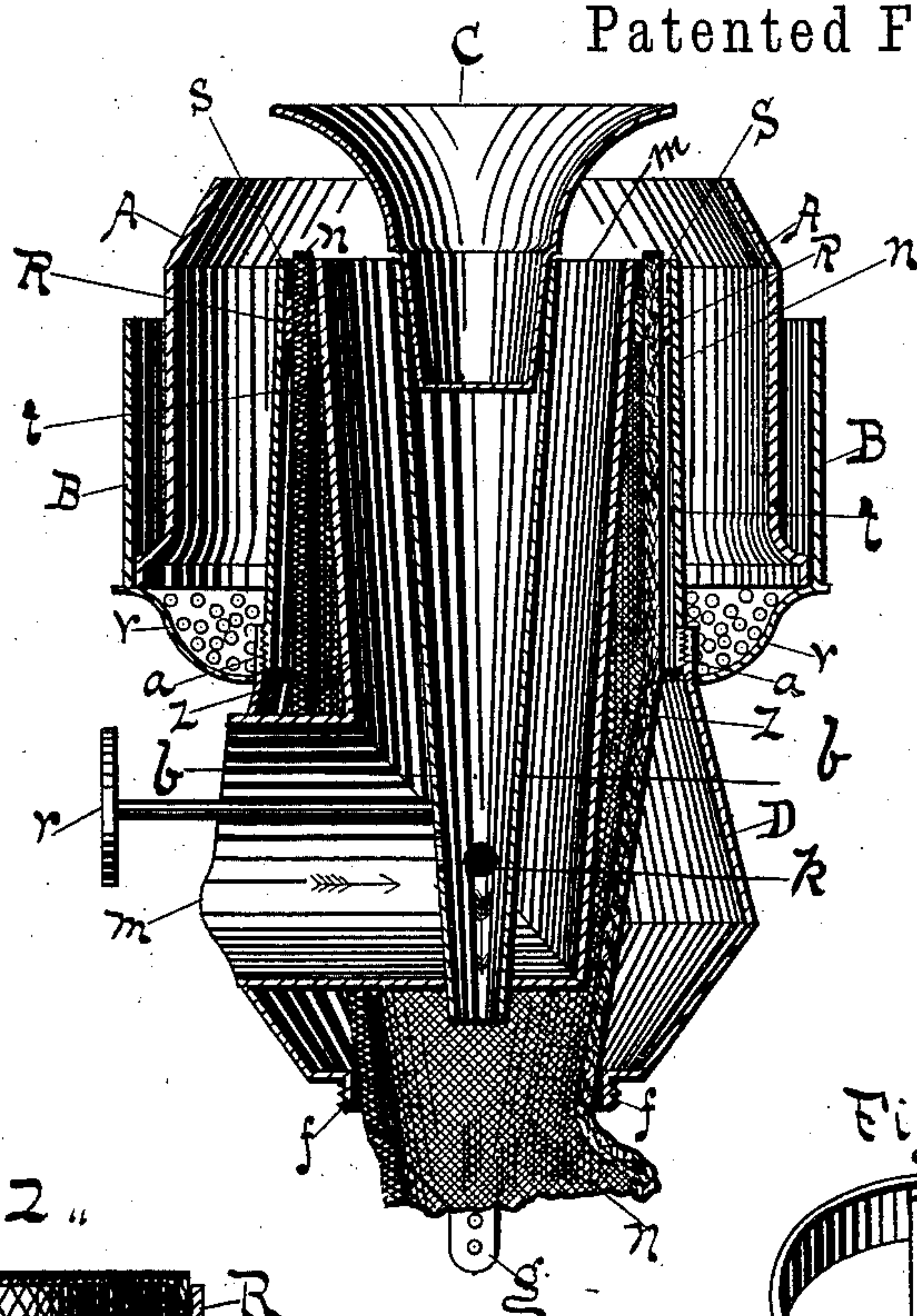


Fig. 2.

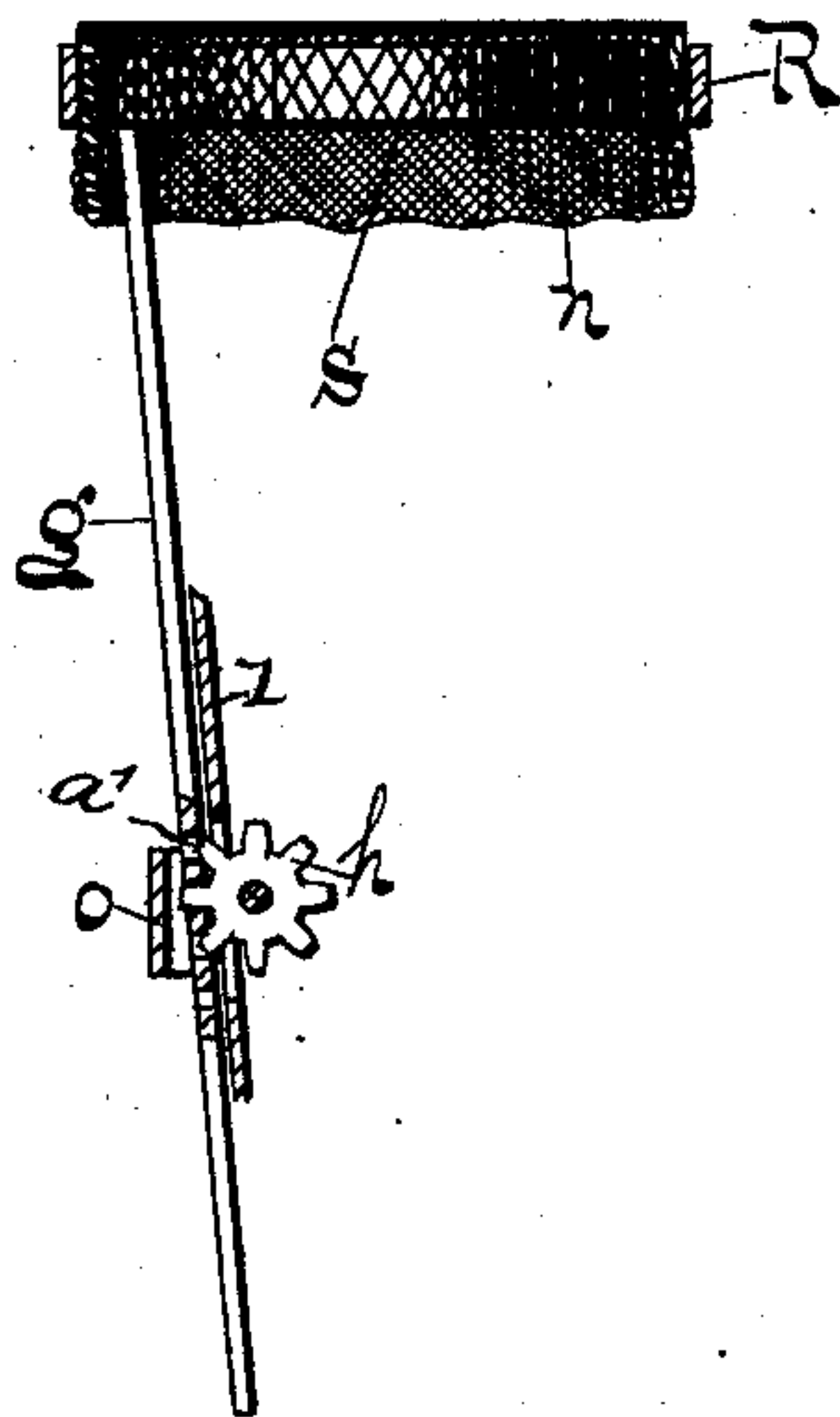
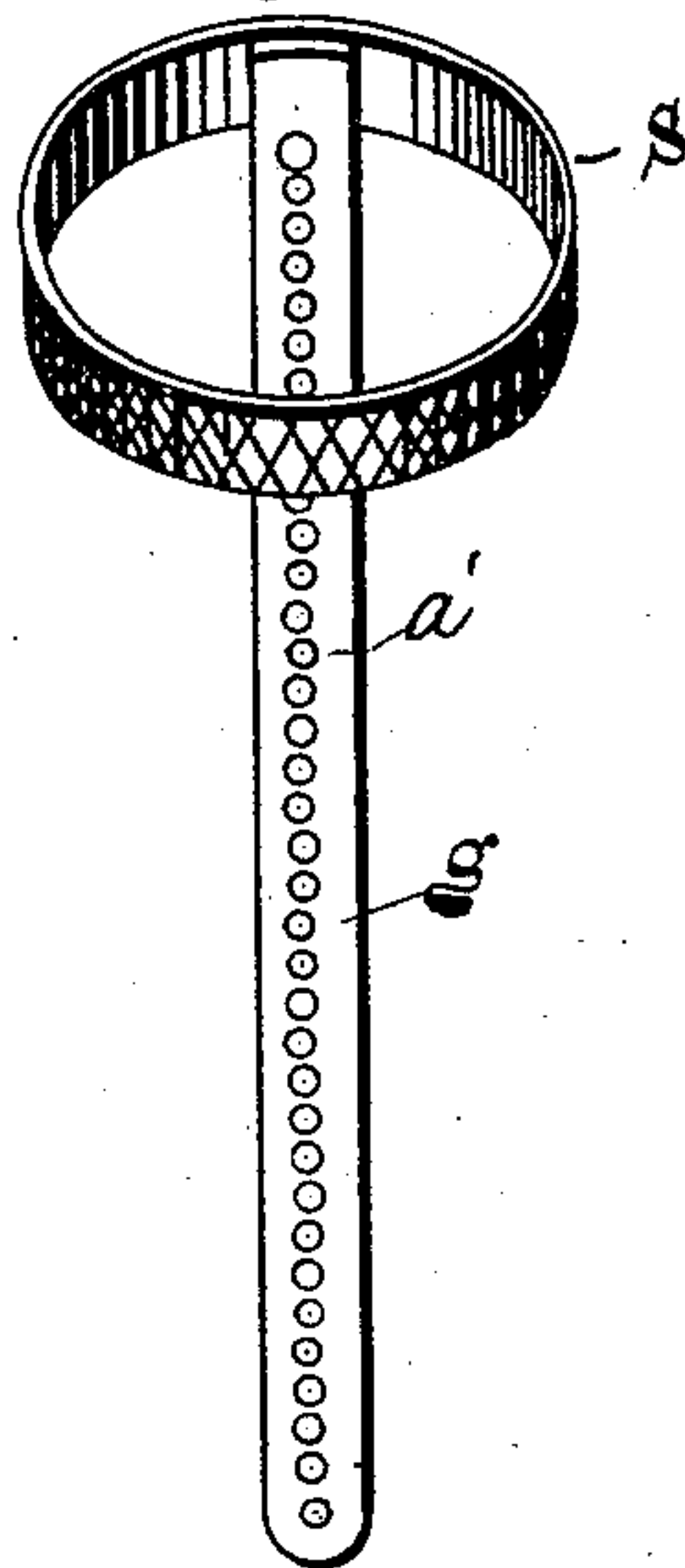


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN S. RUSSELL, OF DETROIT, MICHIGAN.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 358,127, dated February 22, 1887.

Application filed January 2, 1885. Serial No. 151,714. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. RUSSELL, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Lamp-Burners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-
10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 My present invention relates to that class of lamp-burners that produce a round blaze by using a flat wick, which, when extended through the wick-tube, meets at the top, forming a continuous circular wick; and my invention consists in the combination and arrange-
20 ment of parts, as herein set forth, and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a longitudinal section through my invention. Figs. 2 and 3 are
25 details of the parts employed for feeding or raising the wick.

D represents the body or base of my burner, which is screw-threaded at *f* for attachment
30 to the lamp-bowl, and is screw-threaded at the top, as indicated at *a*, to which is screwed the tube *t*. Said tube surrounds the wick *n*.

Z is an elbow-shaped tube passing from the top of the burner down and out through the
35 side of the base D. Said tube is flaring from the bottom upward, its mouth *m* being located in the side of the base, through which the air is fed to the center of the flame. Passing through the vertical part of the tube Z is a central
40 tube, *b*, which is funnel-shaped. Its lower end passes through the horizontal wall of the tube Z, and is anchored to said tube rigidly where it passes through. The upper end of the tube *b* supports the disk or spreader C,
45 and said tube is also provided with a vent-hole, *k*, for the admission of air down into the lamp-bowl as the oil is consumed.

Near the top of the base I attach rigidly the common ventilator *v*, through which the air

passes to the outside of the blaze up through 50 the cone A, which it also supports.

B is the open guard which encircles the lamp-chimney.

These parts are in common use, and need not be particularly described. 55

I locate the stem *r*, which operates the spur-wheel, in the mouth *m* of the tube Z or air-flue. I enlarge the base D at the center, to give sufficient room for the wick *n* as it folds over the elbow of the tube Z. 60

It will be observed from the foregoing description that the wick *n* is parted where it passes over the horizontal portion of the tube Z, but is brought together where it enters the tube *t*. By constructing the central tubes 65 large at the top and smaller at the bottom I am enabled to construct a burner using a wick five inches wide, producing a large clear light, having ample ventilation, that may be readily attached to any ordinary lamp-bowl 70 now in use.

S is a ring having a serrated outer surface. To this ring I attach the perforated bar *g*, its lower end being thrown inward toward the vertical center of the ring S, as shown in Fig. 75 2, which brings said bar flush with the receding side of the tube Z, thus throwing the lower end of the bar *g* toward the center of the opening of the lamp-bowl, thus allowing it to pass freely into a lamp-bowl having a 80 small ring or opening for a common burner.

The wick *n* encircles the ring S, and is held in place by the ring R, which surrounds the wick. This ring, however, I do not claim, broadly, the wick *n* and rings S and R being 85 located between said ring and the tube *t*, as shown in Fig. 1, and is raised and lowered by the common stem *r* and spur-wheel. Said wheel engages with the series of holes in the bar *g*. (See Figs. 1 and 2.) The stem *r* is lo- 90 cated in the mouth of the air-flue. The spur-wheel passes through the wall of the tube Z, as shown in Fig. 2. I attach to the outer wall of the tube Z the yoke *o*, which encircles and supports the bar *g*. I enlarge the base D of 95 the burner at the center to make sufficient room for the wick in folding over the elbow of the tube Z. The wick is parted where it passes

the horizontal portion of the tube Z. Its edges are joined where they encircle the ring S, making a circular wick at the top.

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

In a lamp-burner, the combination of the base D, screw-threaded at top and bottom, the tube *t*, attached thereto, the flaring and elbow-shaped tube Z, the central conical tube, *b*, at-

tached to tube Z, as specified, and having the vent-hole *k*, and disk C, as and for the purposes specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN S. RUSSELL.

Witnesses:

R. B. WHEELER,

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