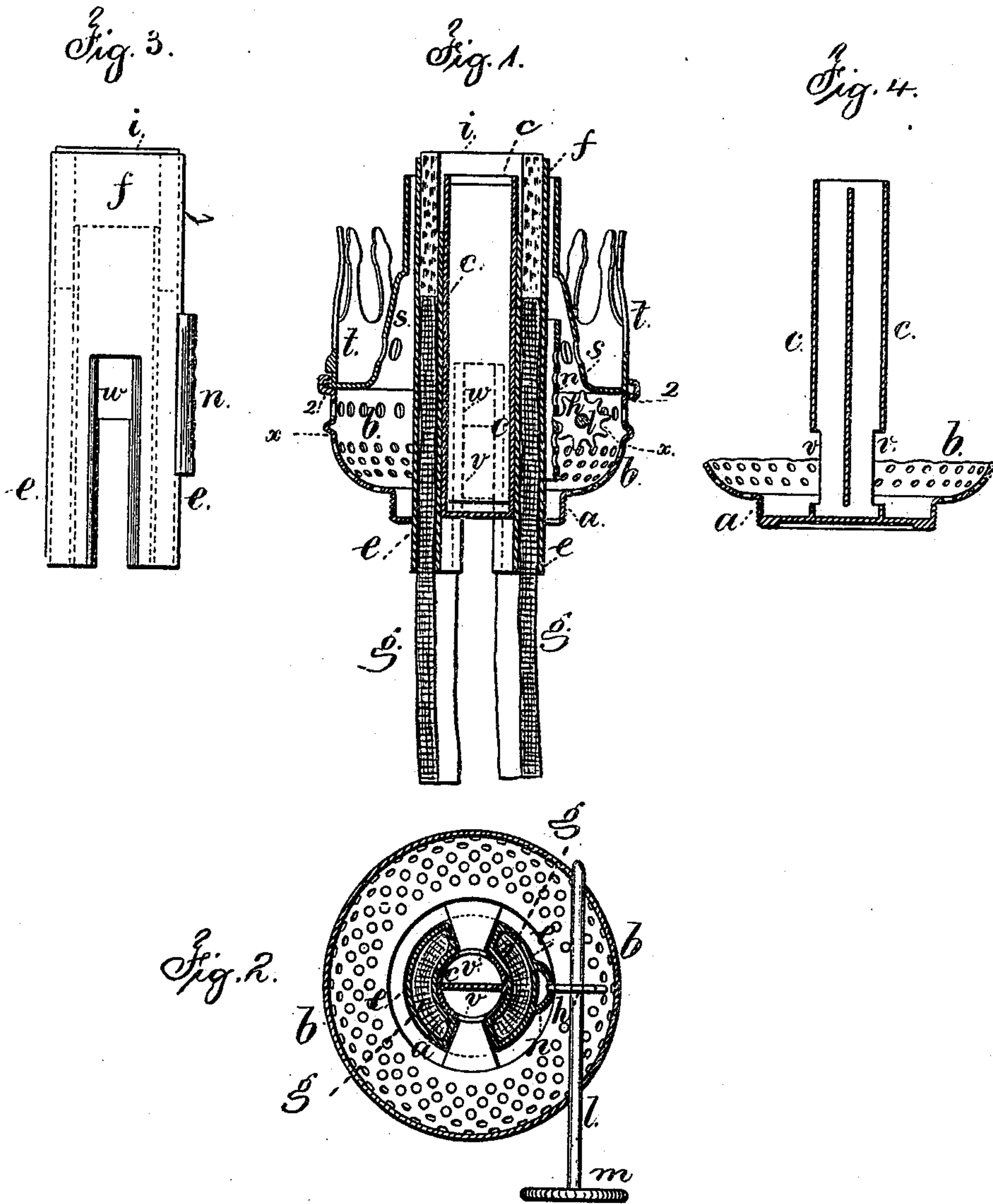


C. REISTLE.  
LAMP.

No. 188,542.

Patented March 20, 1877.



Witnesses

Charles Smith  
Geo. T. Pinckney

Inventor

Charles Reistle.  
per Lemuel W. Serrell  
Atty



# UNITED STATES PATENT OFFICE

CHARLES REISTLE, OF BROOKLYN, NEW YORK, ASSIGNOR TO CHARLES  
F. A. HINRICHS, OF SAME PLACE.

## IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 188,542, dated March 20, 1877; application filed  
February 20, 1877.

*To all whom it may concern:*

Be it known that I, CHARLES REISTLE, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Lamps, of which the following is a specification:

Lamps have been made with a mineral wick in an annular wick-holder, from the bottom of which there are two stationary wick-tubes passing down through and attached to the body of the burner, near the burner-screw, and a movable air-tube has been applied inside the wick-tube, both in connection with the two stationary wicks, and also an Argand burner with the air-tube passing through to the drip-cup.

My present invention consists in a stationary central air-tube, connected to the body of the burner, in combination with a surrounding Argand wick-tube containing a non-combustible wick, and having two wick-tubes extending below the Argand tube and sliding through the body of the burner, and a pinion for raising and lowering the wick-tube to expose more or less of the stationary wick and increase or lessen the flame.

In the drawing, Figure 1 is a vertical section of the lamp-burner. Fig. 2 is a sectional plan of the same at the line *x x*. Fig. 3 is an elevation of the wick-tubes; and Fig. 4 is a section of the body and air-tube.

The body of the burner contains the screw *a*, for attaching the lamp to the reservoir, and also the air-distributor *b*, in the form of a perforated cup. The central stationary air-tube *c* is fastened, at the lower end, to the body of the burner, inside the screw *a*, and there are openings through the body *a*, at each side of this tube *c*, for the segmental wick-tubes *e*, that extend up and terminate at the annular Argand wick-cylinder *f*, which is of a size to surround the air-tube *c*, and to contain the stationary mineral wick *i* between the outer and inner cylinders of this annular Argand wick-tube. The fibrous wicks *g* extend up into the space beneath the mineral wick-cylinder *i*, so as to supply oil to the same.

The wick-tube is of a size to slide upon

the outside of the stationary air-tube *c*, and I make use of the pointed pinion-wheel *l* upon the shaft *l*, which passes across the body of the burner, and is turned by the button-head *m*; and there is a rack, *n*, upon the wick-tube *e*, into which the teeth of the pinion gear, so that the wick-tubes can be raised or lowered by turning the said button. This pinion and rack may be outside the wick-tube, as shown, or else between the two tube *e*, and inside the air-tube *c*.

By this construction the mineral wick will be exposed more or less, and the flame thereby regulated by raising or lowering the wick-tubes, because the stationary air-tube *c* will cover more or less of the interior surface of the mineral wick.

There are lateral openings *v* in the stationary air-tube, and adjacent to these are the plates or cut-offs *w* upon the wick-tubes, so that when the wick-tubes are drawn down and the flame lessened the central supply of air will be lessened by the plates *w* partially coming down over the opening *v*. When the wick-tubes are drawn down to the lowest position the plates *w* close the openings *v*, so as to prevent air passing into the Argand wick. This lessens the smell that usually passes off from the lamp immediately after the flame has been extinguished, because the circulation of air is checked.

The removable chimney-holder *t* is made with a perforated cone, *s*, coming up around the wick-tube *f*, but not touching the same, so that any overflow of oil will not pass upon the outside of the cone, and any oily vapor from outside the wick-tube, when the lamp is burning, may pass directly into the flame.

There is a rest, *2*, around the upper part of the body *b*, for the chimney-holder, and the two parts are connected by bayonet-locks passing through slots in the edge of the burner.

I claim as my invention—

1. The stationary air-tube *c*, having side openings *v*, in combination with the mineral Argand wick *i* and the flexible wicks *g* at their metallic wick-tubes or holders, and the pinion and rack for raising and lowering the

tubes and wicks, substantially as set  
l.

The plates *w* upon the movable Argand  
tubes, in combination with the central  
tube *c* and its lateral openings *v* for regu-  
lating the air passing to the inside of the  
e, as set forth.

Signed by me this 16th day of February,  
A. D. 1877.

CHS. REISTLE.

Witnesses:

GEO. T. PINCKNEY,  
CHAS. H. SMITH.