(No Model.) 2 Sheets—Sheet 1.

A. CAUTIUS.

LAMP BURNER.

No. 384,744. Patented June 19, 1888.

Fig. 1.

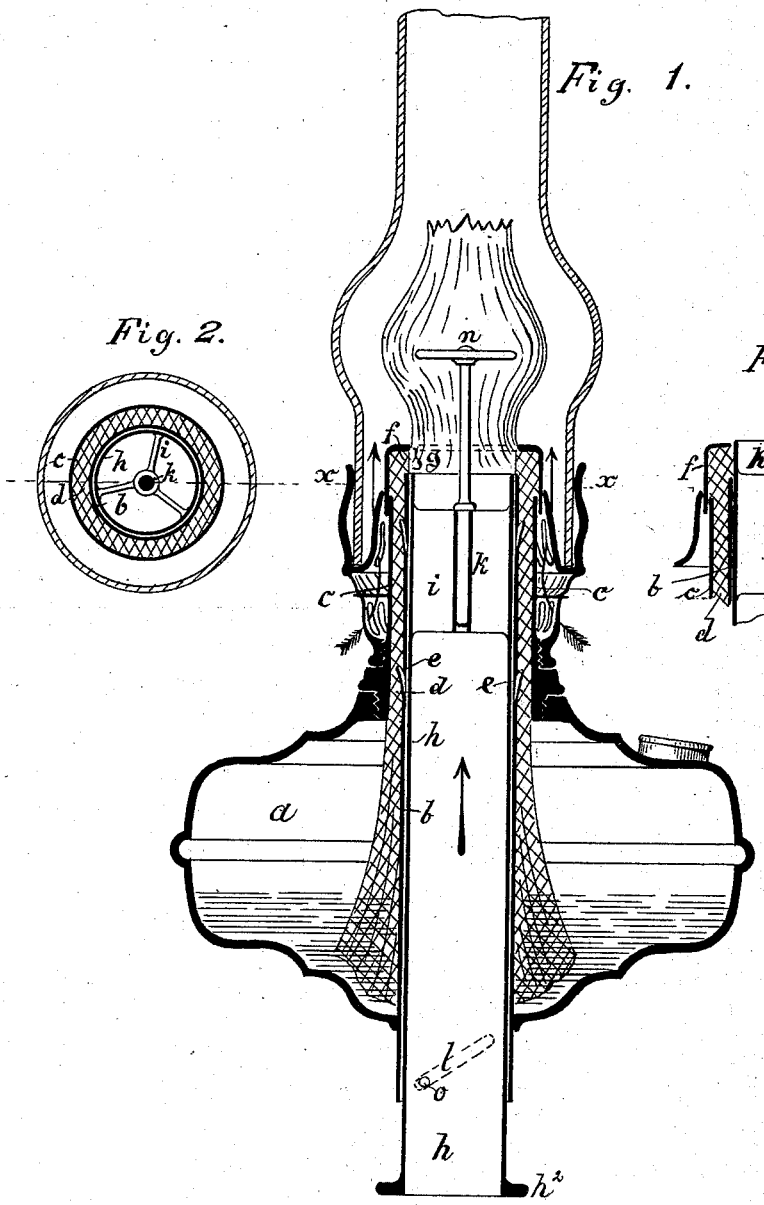
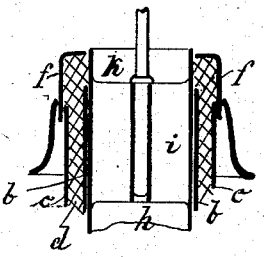


Fig. 2.

Fig. 3.



Witnesses:
John A. Ellis.
C. Sedgwick.

Inventor:
A. Cautius
Munn & Co
Attorneys.

By

(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

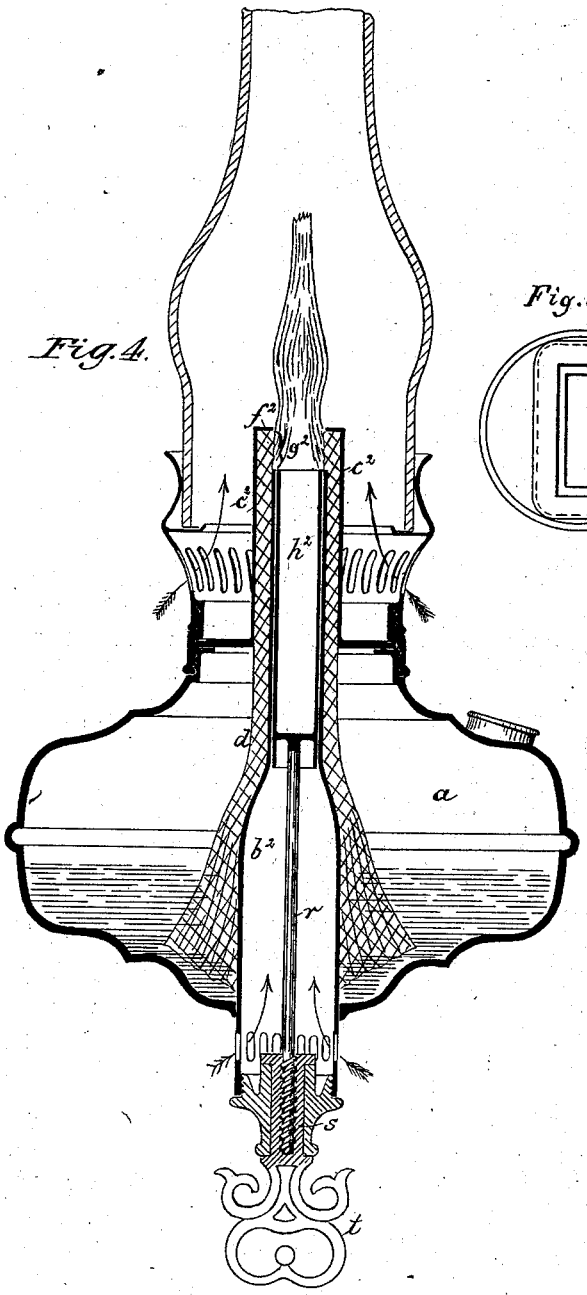

Fig. 5.

Witnesses:
John A. Ellis.
C. Bedgwick.

Inventor:
A. Cautius.
By Munn & Co
Attorneys.

UNITED STATES PATENT OFFICE.

ARTHUR CAUTIUS, OF BERLIN, GERMANY, ASSIGNOR TO CARL PATAKY, OF SAME PLACE.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 384,744, dated June 19, 1888.

Application filed February 15, 1887. Serial No. 227,674. (No model.) Patented in Belgium December 15, 1886, No. 75,397.

To all whom it may concern:

Be it known that I, ARTHUR CAUTIUS, of Berlin, Germany, have invented a new and Improved Lamp-Burner, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved lamp-burner which presents a large burning-area with a small diameter of wick, is easily extinguished, and very simple in construction.

The invention consists of various parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a central sectional elevation of a lamp provided with my improvement. Fig. 2 is a sectional plan view of the same on the line *x x* of Fig. 1, and Fig. 3 is a sectional elevation of part of the burner in a closed position. Fig. 4 is a central sectional elevation of a modified form of my improvement, and Fig. 5 is a plan view of the burner represented in Fig. 4.

The receptacle *a* is provided with the central stationary tube, *b*, over the outside of which passes the wick *d*, held on the said tube *b* by outwardly-projecting prongs *e*, formed on the said tube *b*. On the top of the oil-receptacle screws the tube *c*, covering part of the outside of the wick *d*, and on the upper end of the tube *c* fits the cap *f*, which rests with its top flange on the upper edge of the wick *d*.

In the tube *b* is held vertically adjustable the tube *h*, extending below the end of the said tube *b*, and provided with a pin, *o*, projecting into an inclined slot, *l*, formed on the tube *b*, so that the up-and-down movement of the tube *h* is limited and regulated. The upper end of the tube *h* in its uppermost position is in contact, or nearly so, with the cap *f*, as shown in Fig. 3, and in its lowest position, as shown in Fig. 1, is even with the edge of the tube *b*, and the lower end of the tube *h* is provided with a flange, h^2, for moving the said tube up and down conveniently.

In the upper end of the tube *h* is formed a central bearing, *k*, held by radial arms *i*, secured to the tube *h*. The bearing *k* supports the burner-disk *n*, held above the cap *f*. The other parts of the lamp are similar to those now in use and need no further description.

It will be seen that the burning-space is formed at *g* on the inside of the wick between the upper ends of the tubes *b* and *h* and the flange of the cap *f*. This space *g* can be increased or diminished by moving the tube *h* up or down in the tube *b*. If the lamp is lighted, it can be extinguished by moving the tube *h* upward, so as to close the open wick-space *g*, as shown in Fig. 3. A complete combustion takes place as the air is permitted to enter the burning-space *g* through the inside of the tube *h*, and also through the perforations in the side of the chimney-support, as indicated by arrows in Fig. 1.

My improvement can also be adapted for flat wicks, as shown in Figs. 4 and 5. The cap f^2 and the tubes h^2 and b^2 in this case are rectangular in shape, as shown in Fig. 5, and the tube h^2 is moved up or down by turning the handle *t*, provided with the nut *s*, adapted to turn in suitable bearings on the lower end of the tube b^2. In the nut *s* screws the rod *r*, which supports the said tube h^2. The tube b^2 is perforated near its lower end to admit air into the tube h^2.

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

1. A wick-tube consisting of two concentric tubes having a space between them forming a wick-chamber, one of the said tubes projecting through the lamp-body and the other projecting above the tube extending through the lamp-body, and provided with a flange covering the wick-chamber, in combination with a regulating-tube sliding in the inner tube, substantially as described.

2. The combination, with a lamp-body and a wick-tube projecting through the same, of a tube secured to the lamp-body and carrying

a cap projecting above the first-named tube, with its flange covering the space between the said tubes, and a regulating-tube adjustably held in the tube projecting through the lamp-body, substantially as shown and described.

3. The combination, with the receptacle *a*, provided with the tube *b*, having inclined slot *l*, of the tube *c*, secured to the top of the said receptacle and carrying the cap *f*, projecting above the tube *b*, and having its flange covering the space between the tubes *b c*, and the tube *h*, fitting in the tube *b* and provided with the pin *o*, working in the slot *l* of the said tube *b*, substantially as herein shown and described.

ARTHUR CAUTIUS.

Witnesses:
J. LEMAN,
A. SIEBER.