

(No Model.)

F. RHIND.

LAMP.

No. 361,545.

Patented Apr. 19, 1887.

Fig. 1

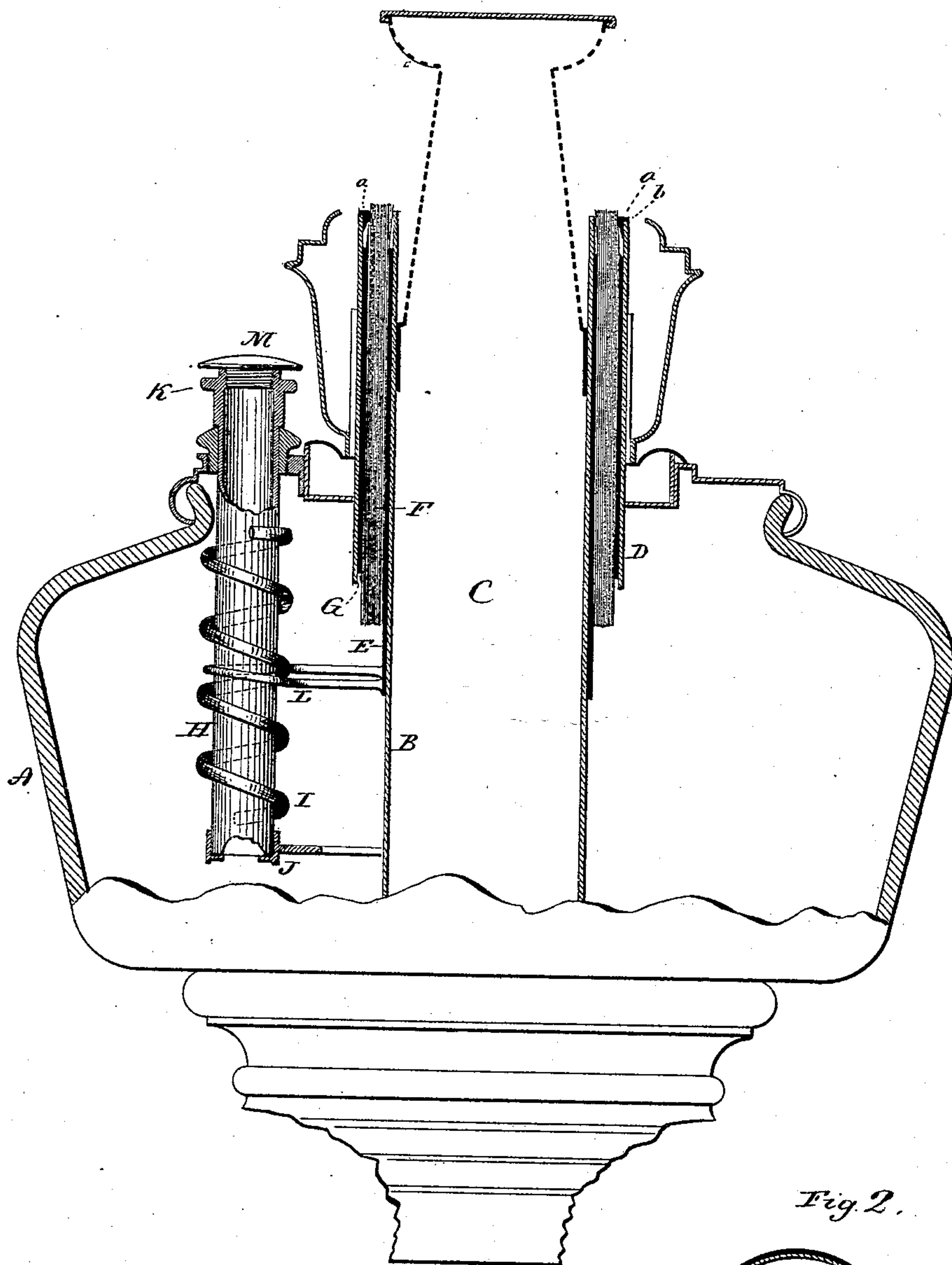
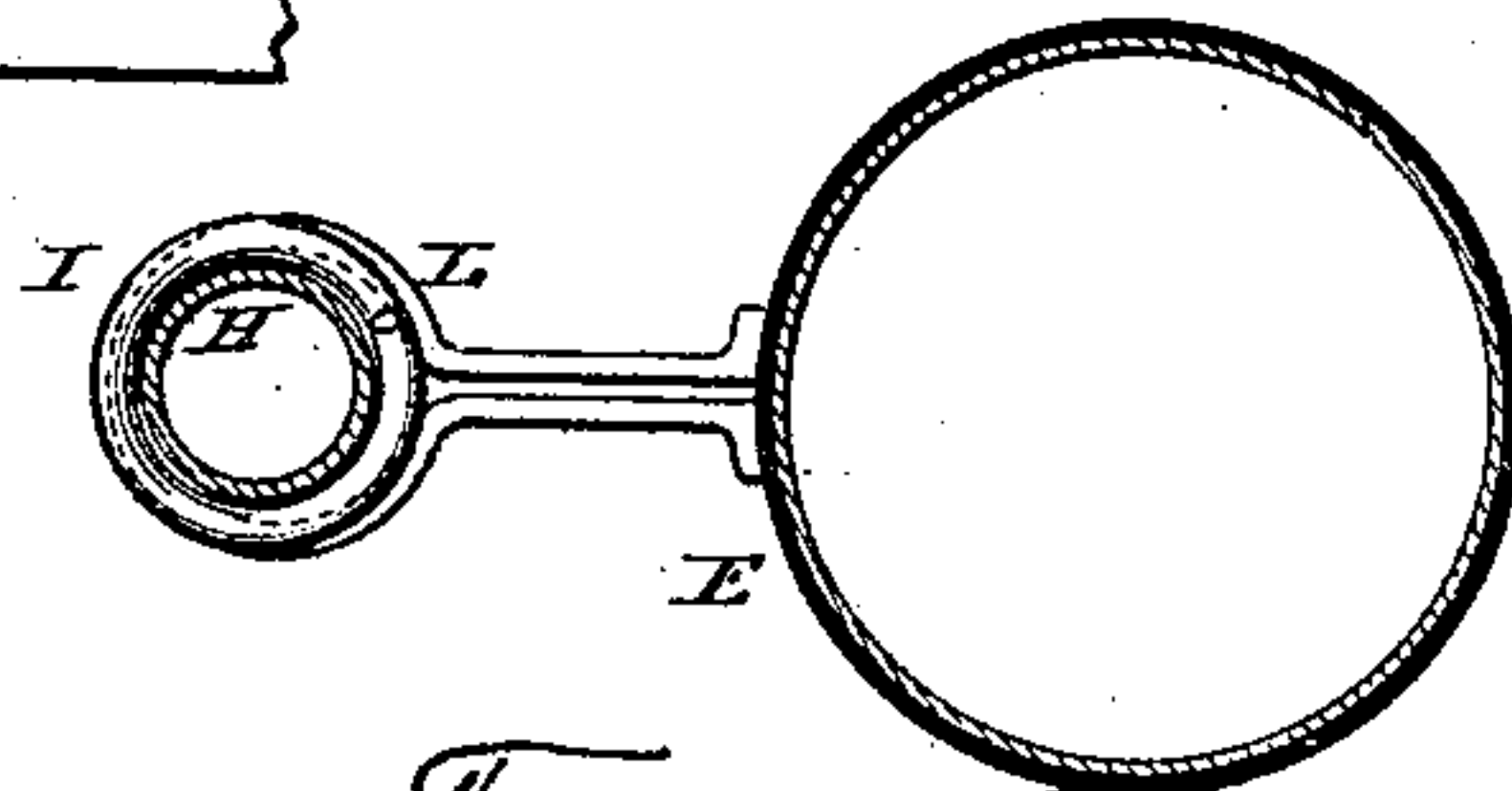


Fig. 2.



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UNITED STATES PATENT OFFICE.

FRANK RHIND, OF MERIDEN, CONNECTICUT.

LAMP.

SPECIFICATION forming part of Letters Patent No. 361,545, dated April 19, 1887.

Application filed September 27, 1886. Serial No. 214,621. (No model.)

To all whom it may concern:

Be it known that I, FRANK RHIND, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Lamps; and I do hereby declare the following, when taken in connection with accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a vertical central section of the lamp, showing a sectional side view of the wick-adjusting device; Fig. 2, a transverse section through the shaft, showing a top view of the yoke and wick-holder.

This invention relates to an improvement in the class of lamps in which a tubular wick is employed, and in which air is admitted upward inside the burner to aid in supporting combustion.

The object of my invention is a simple and convenient device for adjusting or raising and lowering the wick; and it consists in a vertically-guided slide to which the wick is attached, combined with a vertical screw fixed as to longitudinal movement, but free to rotate, the axis of the screw being parallel with the axis of the wick, with a yoke adapted to work between the threads of the screw, the said yoke being connected to the slide, and so that by the rotation of the said vertical screw the yoke and the slide, with the wick attached thereto, will be raised or lowered, according to the direction in which the shaft is rotated.

I illustrate in Fig. 1 a complete lamp, a brief description of which will only be necessary to a full understanding of my invention.

A represents the fount, which may be of any of the usual constructions; C, the central air-tube, and which forms the inner wall of the wick-chamber; D, a concentric tube surrounding the tube C, but so as to leave a space between them, in the usual manner for this class of wicks.

E is a slide or sleeve arranged upon the tube C, and so as to slide freely up and down thereon.

F is the wick which surrounds the sleeve E; G, a sleeve which surrounds the wick F, and so as to clamp the wick between it and the

slide E, as shown, and so that as the slide E is raised or lowered the wick F and the sleeve G will be raised or lowered accordingly, the external diameter of the sleeve G corresponding to the internal diameter of the tube D, so that the movement of the wick-holding device may be free between the two tubes. The space between the tubes C and D is therefore equal to the thickness of the slide E, the wick F, and the sleeve G. To introduce the wick, the slide and sleeve necessarily are raised to a point so far above the wick-chamber that the sleeve may be removed, and then the wick applied, the sleeve replaced, and then drawn down into place.

The wick-adjusting device consists of a shaft, H, arranged vertically in the fount with its axis parallel with the axis of the wick-tube, and the shaft is provided with a spiral rib, I, forming a screw-thread thereon. The shaft is supported at its lower end in a suitable bearing, J, and extends up through the fount, where it is provided with a suitable head, K, by which it may be readily rotated. Surrounding the shaft is a yoke, L, which works upon the spiral rib or screw-thread of the shaft, and is fixed to the wick-holder E. The shaft is free for rotation, but is supported against vertical movement. By rotating the shaft in one direction the yoke L will rise, and with it the wick-holder and the wick it carries. Turned in the opposite direction, the yoke will be forced downward, together with the wick-holder and the wick it carries.

Preferably the spiral rib is made of a quick pitch, so that slight extent of rotation will impart a considerable up or down movement to the wick.

To utilize the shaft as a filler, it is made tubular, as shown, opening into the fount at the bottom, and its upper end closed by the usual filler-cap, M, on the removal of which oil may be poured into the fount through the tubular shaft, in the usual manner of filling lamp founts.

I have represented in the illustration a central air-distributor in the wick-tube; but while this is desirable in this class of burners, it is not essential to the invention.

I claim—

1. In a tubular-wick lamp, the combination

of a wick-holder adapted to engage the wick
of the lamp and vertically guided and a ver-
tical shaft outside said wick-tube and in en-
gagement with said wick-holder, whereby
5 through said shaft said wick-holder may be
raised or lowered for the adjustment of the
wick, the said shaft made tubular and extend-
ing up through the fount, open outside the
fount, and also open into the fount, substan-
10 tially as described, and whereby said shaft
serves not only as a means for adjusting the
wick, but also as a tube for filling the fount.

2. In a lamp, the combination of a lamp-
fount, a vertical tubular shaft supported

against vertical movement, but free to revolve, 15
the said tubular shaft extending through the
top of the lamp-fount, open outside the fount,
and also open into the fount, a wick-holder,
and a yoke adapted to engage a spiral rib on
the shaft and fixed to the wick-holder, sub- 20
stantially as described, whereby said tubu-
lar shaft forms a filling-tube for the supply of
the fount, the said shaft also serving as the
means to raise or lower the wick.

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Witnesses:

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