C. A. KLEEMAN.

Lamp.

No. 37,867. Patented March 10, 1863.

Fig. 1,

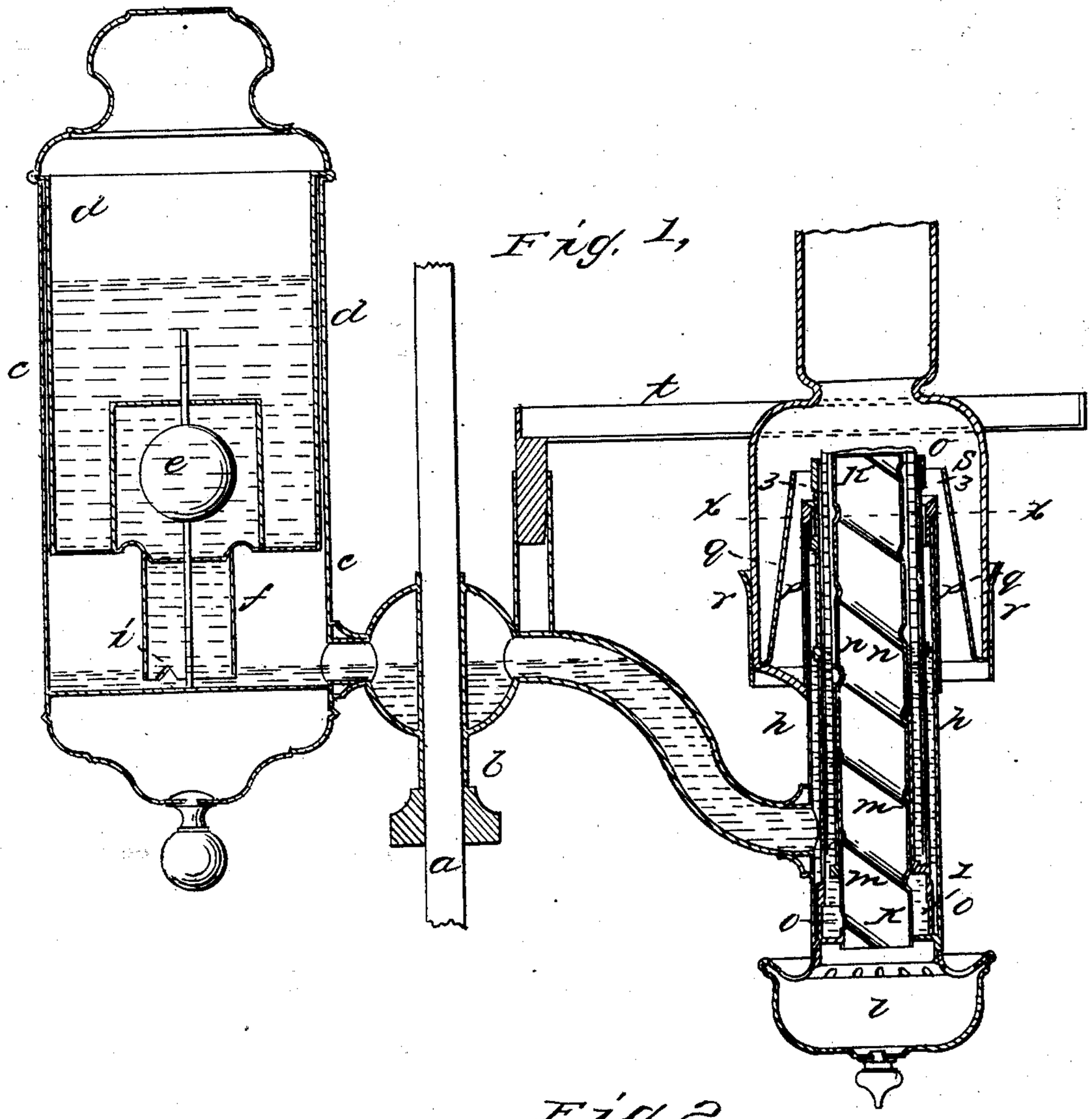
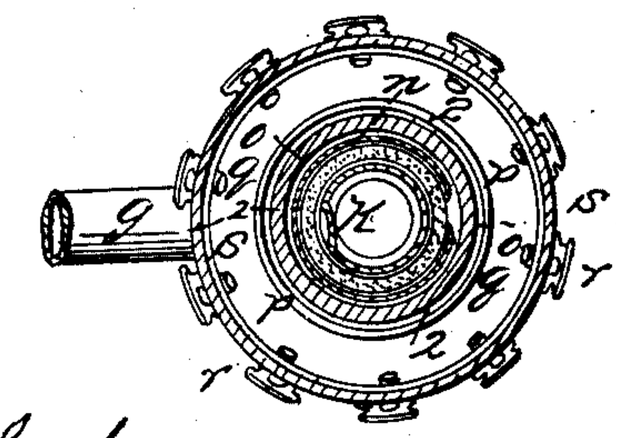


Fig. 2,



Witnesses:
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UNITED STATES PATENT OFFICE.

CARL A. KLEEMAN, OF ERFURT, PRUSSIA.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **37,867**, dated March 10, 1863.

To all whom it may concern:

Be it known that I, CARL A. KLEEMAN, of Erfurt, in the Kingdom of Prussia, have invented, made, and applied to use a certain new and useful Improvement in Lamps; and I do hereby declare that the following is a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a vertical section of my said lamp; and Fig. 2 is a sectional plan of the burner at the line *x x*, Fig. 1.

Similar marks of reference indicate the same parts in both figures.

My invention relates to a fountain-lamp adapted to burning coal-oil, kerosene, or other oils, either pure or mixed with benzine or other material; and it consists in an improved means for delivering the oil from the reservoir and an improved burner adapted to burn the coal-oil without heating the lamp and without any risk of the oil overflowing.

In the drawings, *a* is a standard supported by any suitable pedestal, or said lamp may be sustained by any desired means. *b* is the sleeve on said standard *a*, clamped thereto by a screw, as usual. *c* is the reservoir, and *d* is the fountain, provided with the valve *e*, by which the fountain is closed while being inverted and entered into the reservoir, as usual. The cylinder *f* extends below the orifice for the valve *e*, and has a notch, *i*, at one side of said cylinder. In the ordinary fountain-lamps the lower edge of this cylinder *f* is straight, and hence as the oil burns down a large-sized bubble of air enters at the lower end of said cylinder and the quantity of oil delivered causes the light to flicker. In the present instance the air passes in at this notch *i* in small bubbles and much oftener, and thereby the light is not affected by the running down of the oil from the fountain.

g is a pipe leading from the reservoir *c* to the burner. *h* is the outer cylinder and *k* the inner cylinder of the burner, united at their lower ends and receiving the drip-cup *l*. The inner cylinder, *k*, is made of sheet metal, and the screw therein is made by bending or compressing said sheet metal, instead of cutting said screw-thread in the metal. The object of this is to get the metal of the burner as thin and light as possible, in order that it may keep cooler and not conduct heat down to the coal or similar oil. Around the tube *k* is the wick-holder *m*, carrying the wick *n*, and this holder *m* takes the screw-thread in *k*, so as to raise or lower the wick by the rotation thereof.

o is a cylinder outside the wick, with a slot taking the projection 1 from *m*, whereby said wick-holder *m* is rotated.

p is a cylinder outside of *h* and extending at the top end slightly down inside the cylinder *h* and notched to take the projections 2 2 for rotating the cylinder *o*. At the top of this tube *p* is a flaring or cup-shaped receptacle, 3, that catches any oil that may run down the outside of the wick-tube *o* and returns the same to the lamps and prevents any overflow. The cylinder *p* is connected to the chimney-holder *r* that carries the chimney *s*, and a cone, *q*, between the chimney and tube *p*, directs the air to the base of the flame. It will now be seen that the burner does not become heated to any considerable extent, because nothing but thin sheet metal is employed, and the air travels in contact with said sheet-metal tubes, and the tube *o* sustains the outside of the wick above the cup 3 that receives any overflow of oil by the capillary action of the wick and returns it within the burner.

t is a ring or holder that may be used to receive a shade.

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

1. The notch *i* in the cylinder *f*, for the purposes and as specified.

2. The interior air-tube *k* of the burner, formed of thin sheet metal, with the screw-thread made by bending said sheet-metal, as specified.

3. The arrangement of the wick-tube *o*, cylinder *p*, and cup 3, at the upper end of said cylinder *p*, to return any overflow of oil to the inside of the cylinder *h*, as specified.

In witness whereof I have hereunto set my signature this 3d day of January, 1863.

C. A. KLEEMAN.

Witnesses:

EMIL PREUSSER,

JOHN L. MOTHERSHEAD.