

(Model.)

W. W. EASTMAN.
LAMP BURNER.

No. 281,674.

Patented July 24, 1883.

Fig. 1.

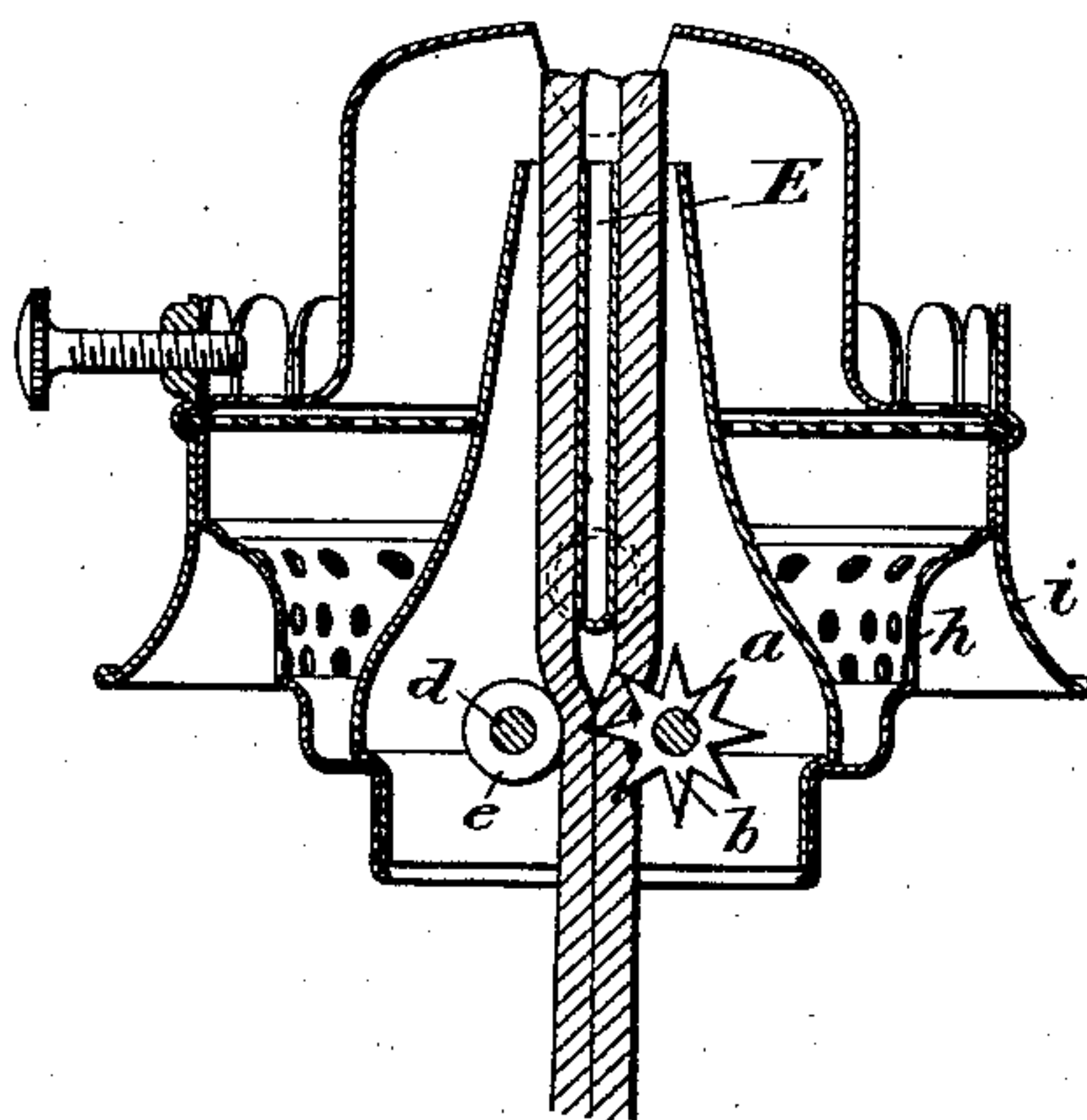
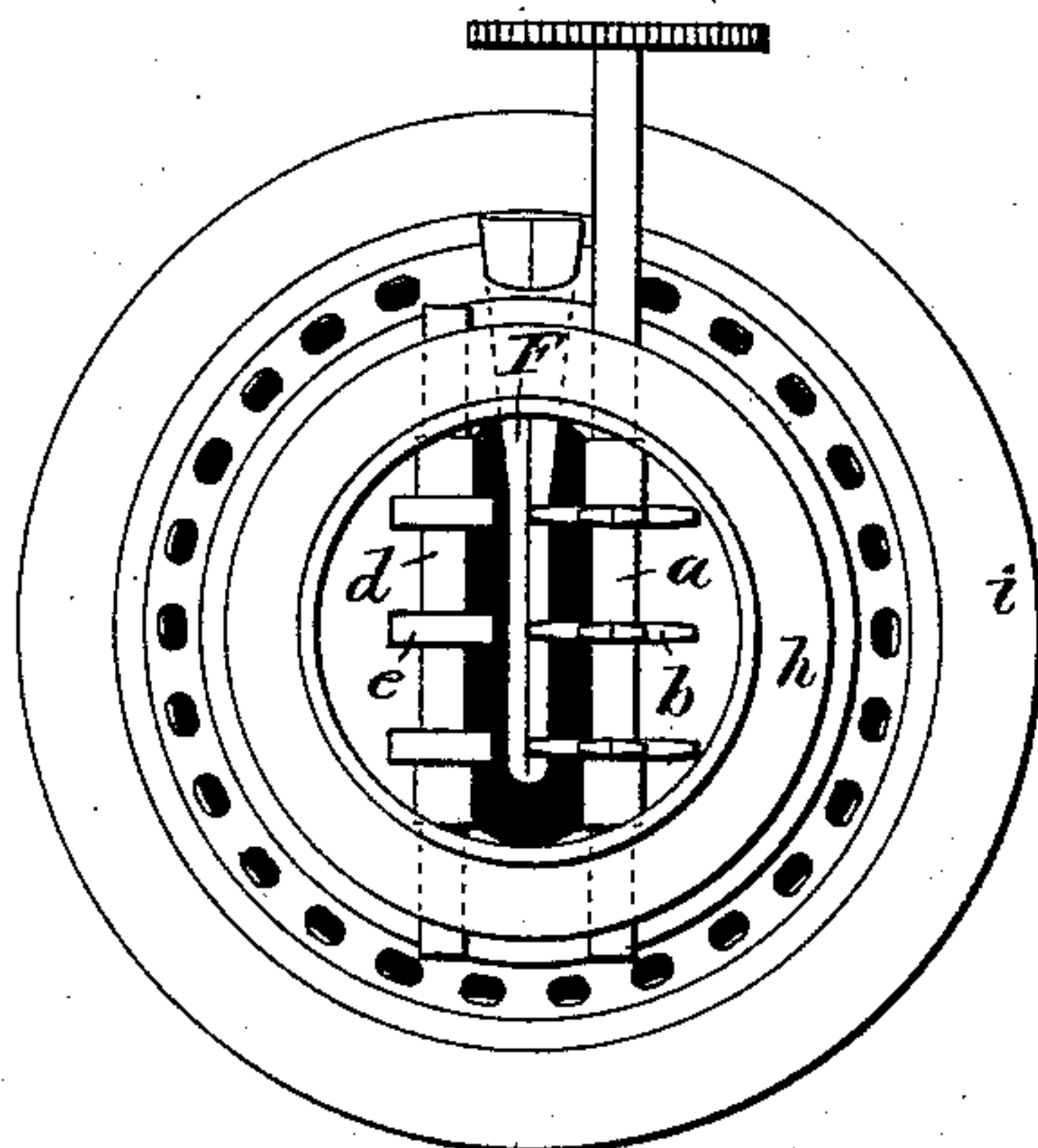


Fig. 2.



Attest:

Court. A. Cooper.
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Inventor:

By Chas. E. Foster
Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM W. EASTMAN, OF BROOKLYN, NEW YORK.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 281,674, dated July 24, 1883.

Application filed March 3, 1883. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM W. EASTMAN, of Brooklyn, Kings county, New York, have invented certain Improvements in Lamp-Burners, of which the following is a specification.

My invention relates to that class of lamp-burners in which folded wicks are used—such, for instance, as that patented to me October 8, 1878; and my invention consists in certain improvements, fully described hereinafter, whereby to facilitate and render absolutely uniform the elevation of the two sides of the wick, and to simplify and improve the construction of the burner.

In the drawings, Figure 1 is a sectional elevation of a lamp-burner showing my improvement. Fig. 2 is an inverted plan view.

My invention, which is applicable to burners of different construction, is specially adapted to that class in which the wick is folded in U shape and passed in this condition through the tube and burner. Heretofore it has been customary to elevate doubled wicks by means of two sets of feed-wheels geared together; but that has proved to be objectionable from the fact that the gears would wear, causing lost motion, so that one side of the wick would move to so much greater an extent than the other as to seriously interfere with the proper burning of the lamp. Attempts have been made to overcome this defect by using plain disks or cylinders upon one side, rotating freely and pressing the wick against the same by milled wheels upon the feed-shaft; but this has proved ineffectual, because the pressure upon the wick squeezes out the oil, so that it leaves the top part of the burner in a dry condition and chars and burns readily. I overcome these objections by using a feed-shaft, *a*, carrying spur-wheels *b*, with spurs of such length that they will penetrate both portions of the wick without any pressure thereon, and a counter-shaft, *d*, rotating freely in its bearings and carrying plain disks *e*, arranged directly opposite and almost in contact with the spur-wheels. The spur-wheels and disks are made so thin that but a small portion of the wick is subjected to their action, thereby reducing the pressure upon the wick to a mini-

mum. By this construction both sides of the wick are carried up together, and so nearly at the same rate of speed that no injury results from the difference, while this is effected without expressing the oil. In the aforesaid patent granted to me the spur-wheels acted upon the wick upon opposite sides of the central air-tube, and the latter was spread to a considerable extent at its lower end. In my present construction the central tube, *E*, is made of about uniform thickness throughout, so that the feed-wheels may be placed below the lower edge thereof, thereby enabling me to act upon the entire wick by one set of wheels acting in unison. This construction facilitates the manufacture and reduces the cost.

Instead of carrying the inlet-tube *F* to the external shell, as in the aforesaid patent, I cut it off at the outer side of the shell *h*, so that the external flange, *i*, of the detachable section of the burner will extend down opposite the mouth of the tube and prevent the access of dust and particles, which might otherwise enter and obstruct it.

It will be apparent that the improvements described may be used in connection with lamps having two wicks placed together and in contact with each other, instead of a single folded wick.

I claim—

1. The combination, in a lamp-burner, of a feed-shaft carrying spur-wheels having teeth of such a length as to penetrate without compressing the wick, and a counter-shaft, *d*, provided with thin disks arranged opposite the spur-wheels, substantially as set forth.

2. The combination of a burner adapted to employ a folded or doubled wick, a shaft, *a*, provided with spur-wheels *b*, and a counter-shaft, *d*, provided with disks *e*, arranged so that both portions of the wick shall be acted upon by said wheels, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM W. EASTMAN.

Witnesses:

JOSEPH FETTUTCH,
E. L. FORD.