

(No Model.)

E. RASMUSSEN.
LAMP FOR VELOCIPEDES, &c.

No. 368,355.

Patented Aug. 16, 1887.

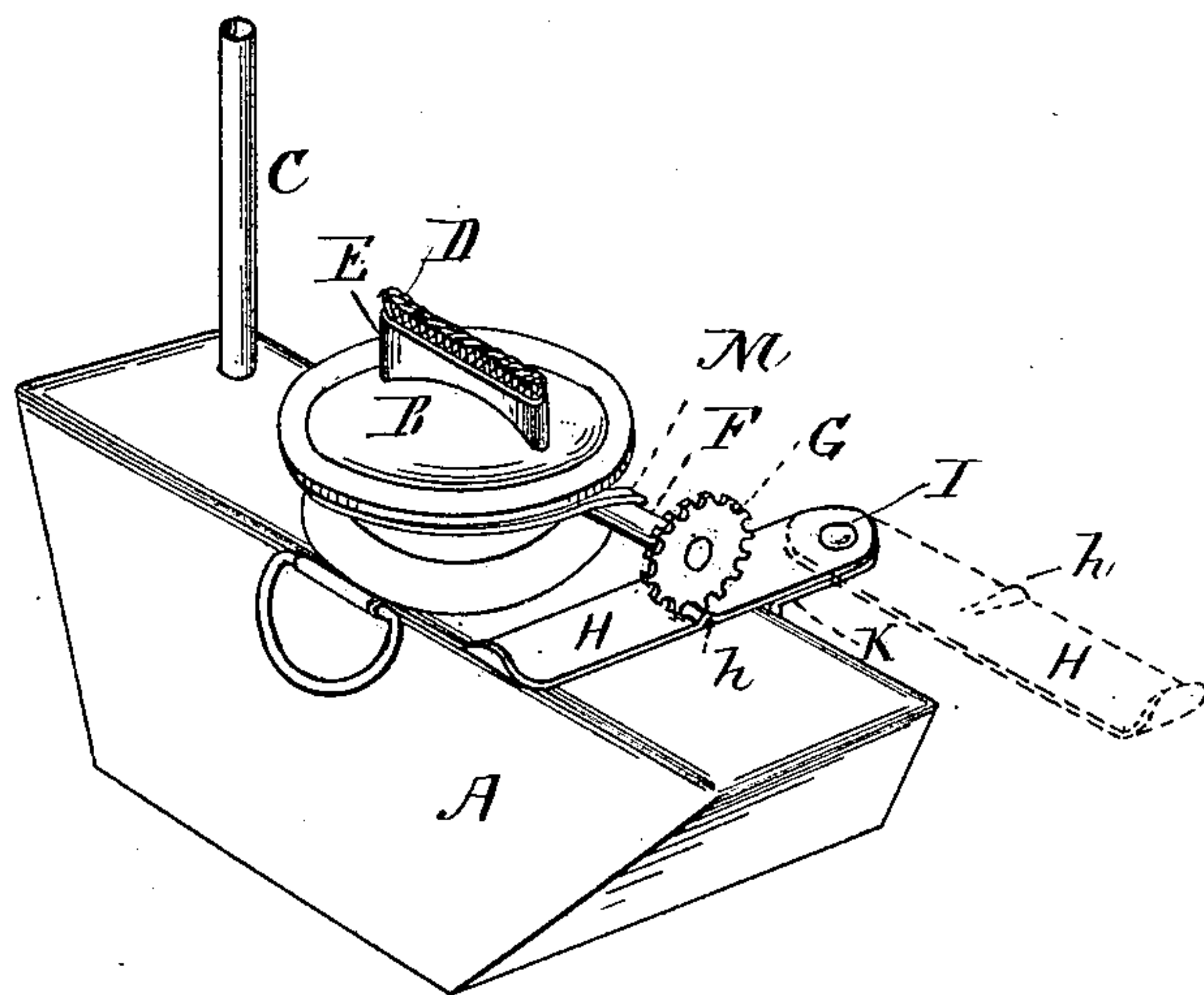


Fig. 1.

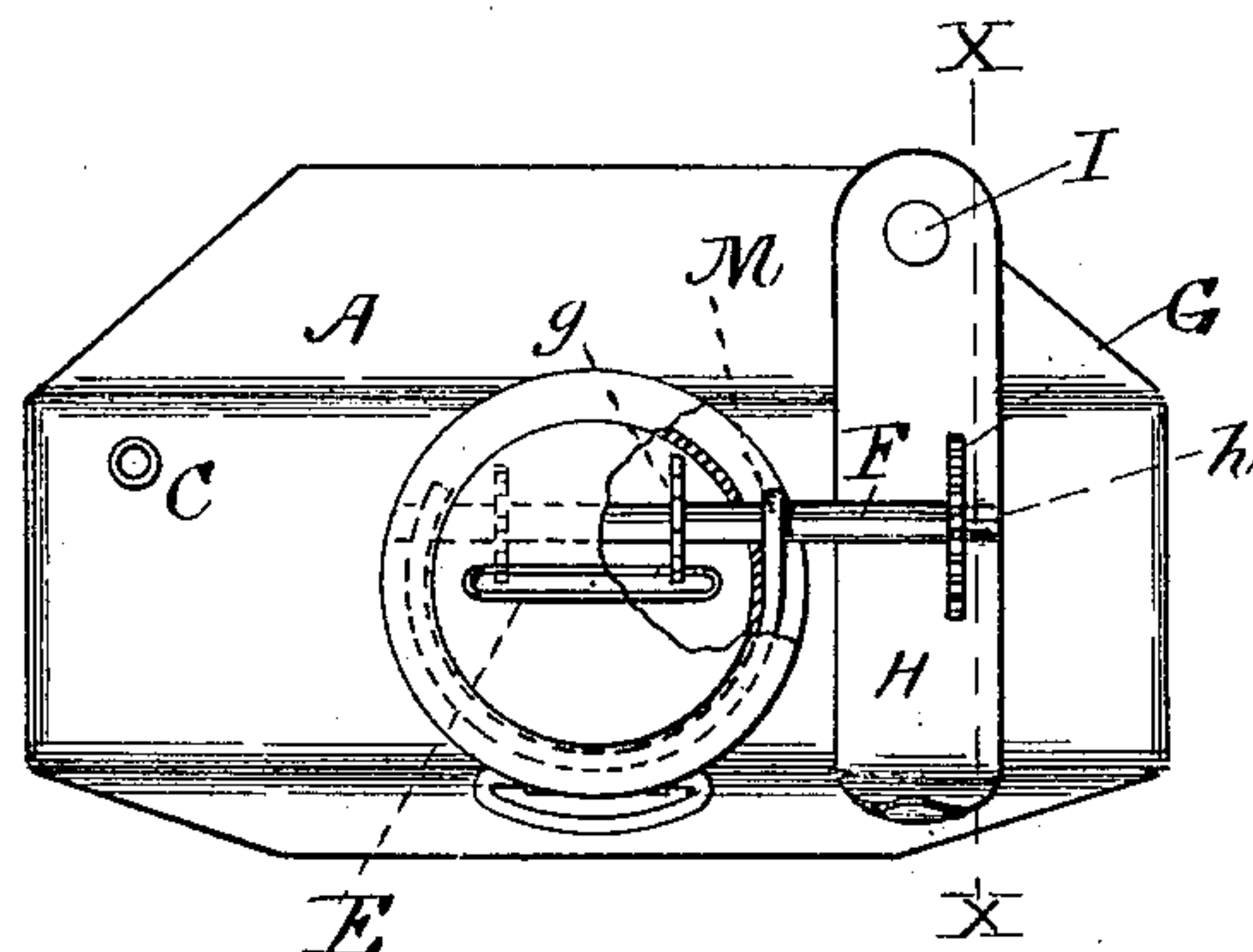


Fig. 2.

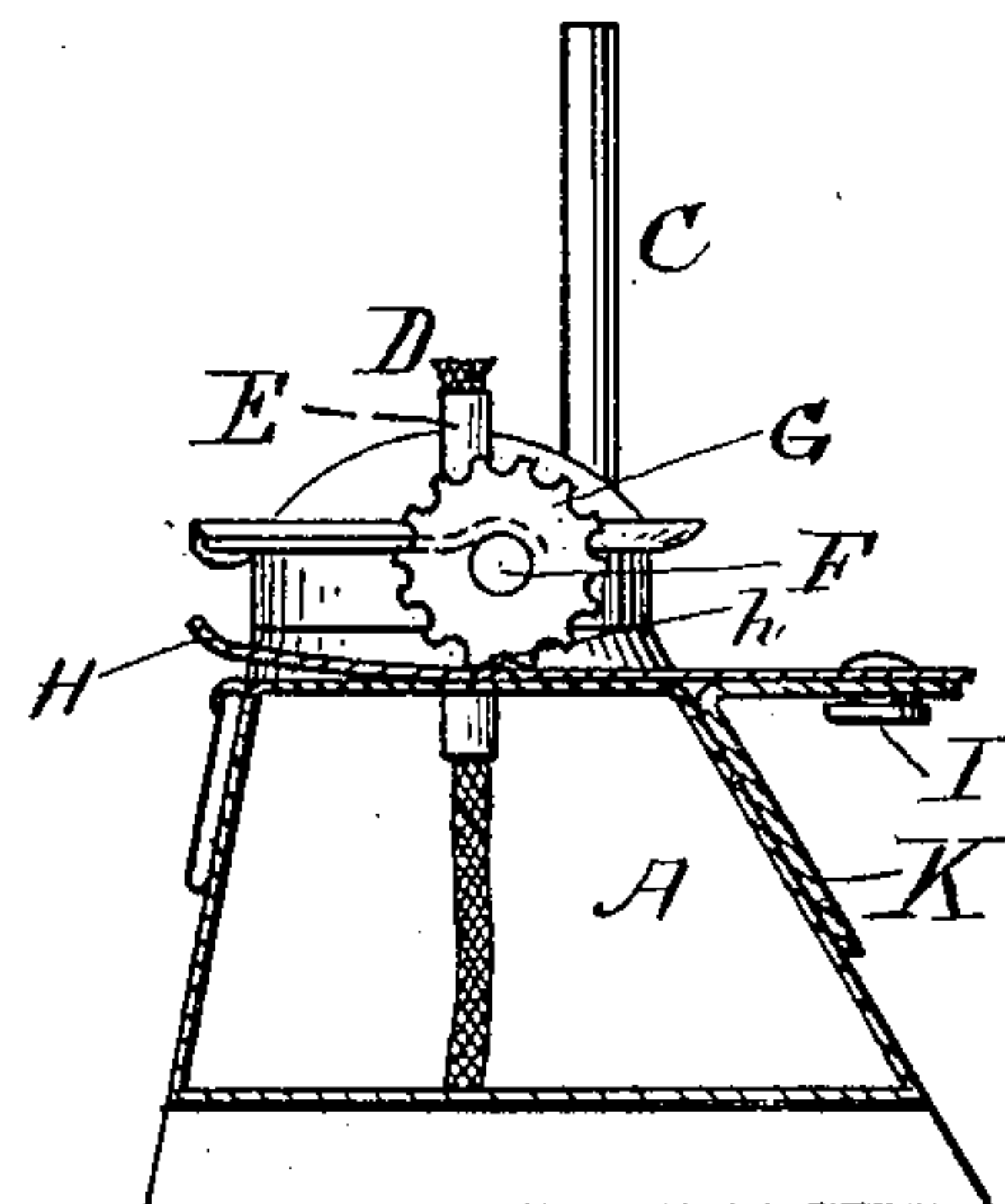


Fig. 3.

WITNESSES

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EINAR RASMUSSEN, OF HARTFORD, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE POPE MANUFACTURING COMPANY, OF PORTLAND, MAINE.

LAMP FOR VELOCIPEDES, &c.

SPECIFICATION forming part of Letters Patent No. 368,355, dated August 16, 1887.

Application filed September 29, 1886. Serial No. 214,818. (No model.)

To all whom it may concern:

Be it known that I, EINAR RASMUSSEN, a subject of the King of Norway, and now a resident of Hartford, Connecticut, have invented certain new and useful Improvements in Lamp-Wick Detainers, of which the following is a specification.

Heretofore in lamps constructed with a wick and its tube, and a ratchet-shaft and thumb-wheel thereon, by means of which the wick might be raised or lowered in the tube, it has usually been customary to leave the thumb-wheel free in lamps intended for stationary use; but for lamps intended to be carried and subject either to shaking or jarring, there have been devices used either for the purpose of retarding or detaining the revolution of the ratchet-shaft, tending to keep it at rest under jar when not in use, and so to keep the wick in its position, and other devices for mechanically revolving the ratchet-shaft without the application of the thumb and finger. In the former class a set-screw bearing against the face of the milled thumb-wheel, or a frictional clasp about a milled portion of the ratchet-shaft, or a friction-spring or yielding catch operating upon the milled edge of the thumb-wheel are instances; and in the other class the wheel on the ratchet-shaft has been made either a spur, bevel, or crown tooth wheel, and another wheel meshing with it has been used through its shaft to operate it, and sometimes, instead of this second gear and shaft, a revolving circular rack meshing with the wheel on the ratchet-shaft has been used, these latter devices all being for the main purpose of raising and lowering the wick without opening or removing parts of the lamp; and only incidentally have they operated as detaining devices. I am aware that another device has been described and shown to operate through a gagging-segment disk, and a spring-catch to limit the operation of the wick between high and low light-marks; but none of these devices in either class have a positive detainer by means of which, after the wick has been adjusted in height by revolving the ratchet-shaft, it may be held secure against all jar by moving the detainer into engagement, and may be released

by moving the detainer out of engagement, as in the device which I have contrived.

The object of my improvements is to secure in a lamp for use on velocipedes or other carriages where it is subject to jarring the wick from dropping or being jolted down in the tube by means of a positive device, accessible, ready, convenient of throwing in and out of operation, effective, and simple; and the manner in which I accomplish this result will be apparent from the following description, taken in connection with the drawings, in which--

Figure 1 shows in elevation a bicycle-lamp embodying my improvement in one form. Fig. 2 shows the same in top plan view with part of the burner and the wick removed, and Fig. 3 shows the same in section on the line *x x* of Fig. 2.

A is an oil-reservoir.

B is a burner.

C is a ventilator-tube.

D is a wick.

E is a wick-tube.

F is a ratchet-shaft mounted in suitable bearings in the burner and having at one end a notched thumb-wheel, G, and within the burner and operating in slots in the wick-tube ratchet wick-wheels *g*.

H is a thin metallic plate or lever or swing-bar having a hinge, I, at one end, by which it is freely connected with a bracket, K, attached to the lamp, and having on its middle part a rib, *h*, to engage with the notches in the thumb-wheel G, against which the lever H or its rib *h* is made to impinge.

M is a spring attached at one end to the burner, and at the other it has a loop partially surrounding the shaft F, against which it presses, and which is and has been heretofore used as a sort of spring-detainer to stay the shaft and prevent it from turning too easily. This I prefer still to use, although it may be dispensed with, and by itself is insufficient to prevent the shaft from turning or the wick from falling when the lamp is subjected to any jar. The bar H, with its hinge I and rib *h*, operates, however, as a positive detainer, holding the thumb-wheel, and therefore the shaft F, from turning when it is in position, so as to

engage with the thumb-wheel, and it may be swung off, as shown in dotted lines in Fig. 1, so as not to engage with the thumb-wheel, when the latter can be turned freely to raise or lower the wick. It will be seen that this bar H has but a limited spring action, sufficient only to make a little friction between the rib and the wheel and between it and the bracket or the body of the lamp on which it rests, but not sufficient play to allow the bar to operate simply as a yielding spring-catch and allow the wheel to turn when the rib is in engagement, and that the detainer must first be vibrated or removed from engagement with the wheel before the latter can be turned. This would be equally the case were the bar H with its rib *h* made to slide or reciprocate toward and from into and out of connection with the wheel F, instead of swinging on a hinge, as now, which would be an equivalent method of construction, provided the sliding bar were also so constructed and arranged in the lamp as to be held against its engagement with the wheel, except by an act of the operator, as in the form shown. It will also be seen that my detainer has no connection with the parts in operation in raising and low-

ering the wick, but simply in holding the wick in position after it has been raised or lowered by a positive movement into position for that purpose, and that it requires a positive movement out of that position to permit the operation of raising or lowering again.

I do not mean to limit myself to the precise form or arrangement of the parts herein shown, as these may evidently be departed from and the substance of my invention still be retained.

I claim as new and of my invention—

1. The combination, with a lamp and burner, a ratchet-shaft and thumb-wheel, as G, of a movable bar, as H, having a rib, as *h*, constructed to engage with a thumb-wheel as a positive detainer.

2. The combination, with a lamp and burner, a ratchet-shaft and thumb-wheel, as G, of a vibratory bar, H, the rib *h*, hinge I, and support K, constructed to operate essentially as set forth.

EINAR RASMUSSEN.

Witnesses:

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