

(No Model.)

F. H. MARKER.

TRIMMING AND EXTINGUISHING ATTACHMENT FOR LAMP BURNERS.

No. 321,989.

Patented July 14, 1885.

Fig. 1.

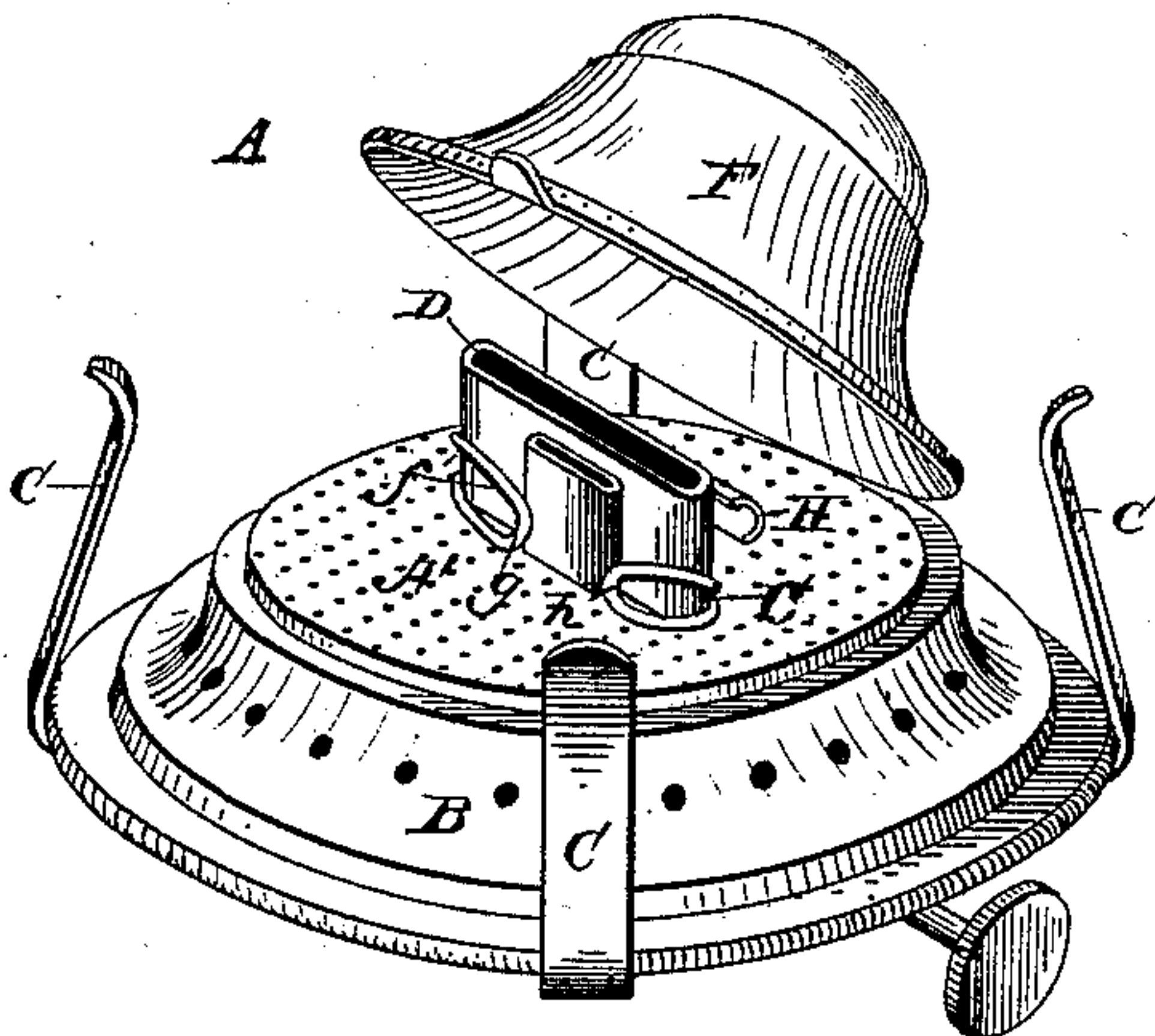


Fig. 2.

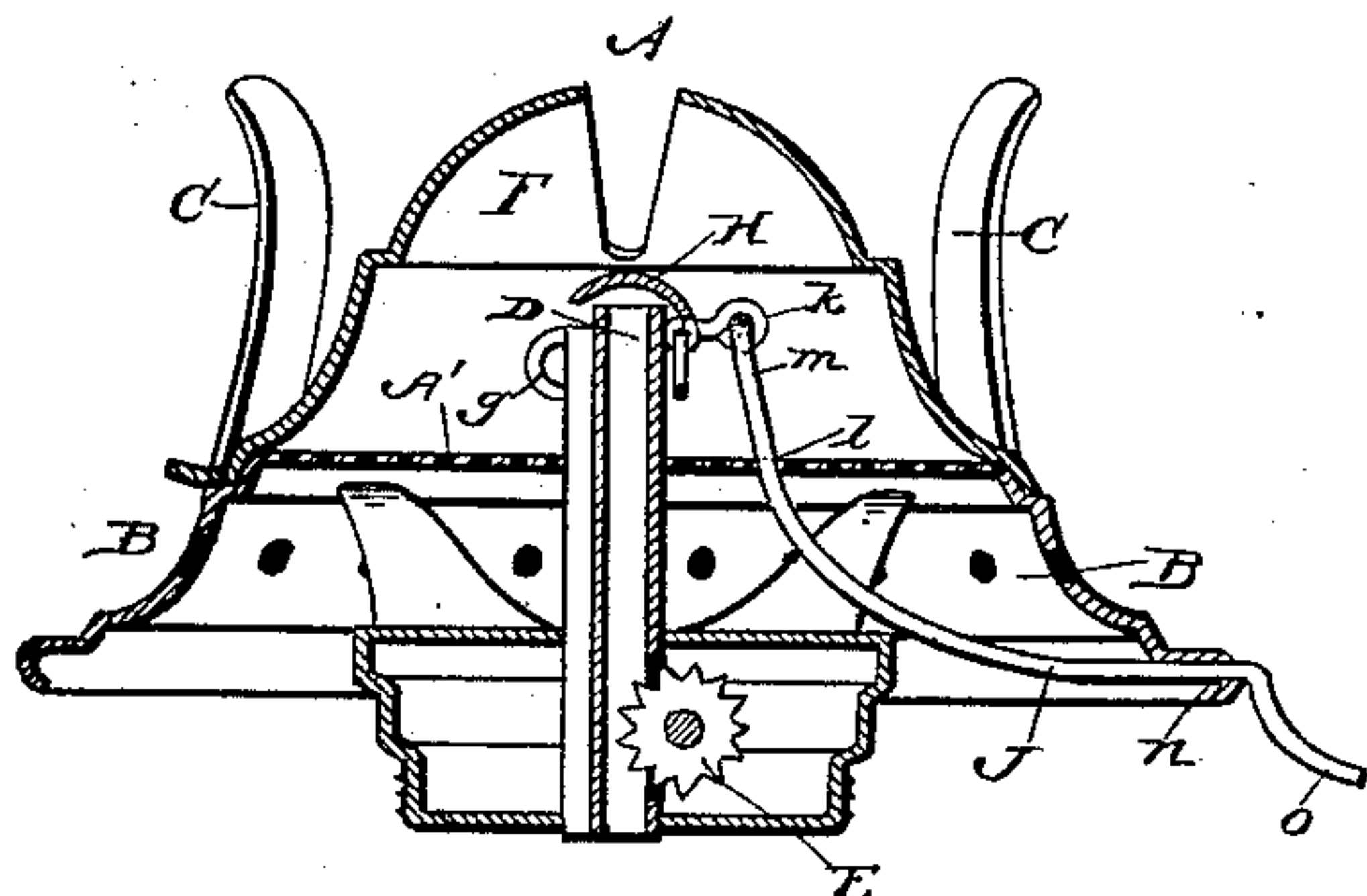


Fig. 3.

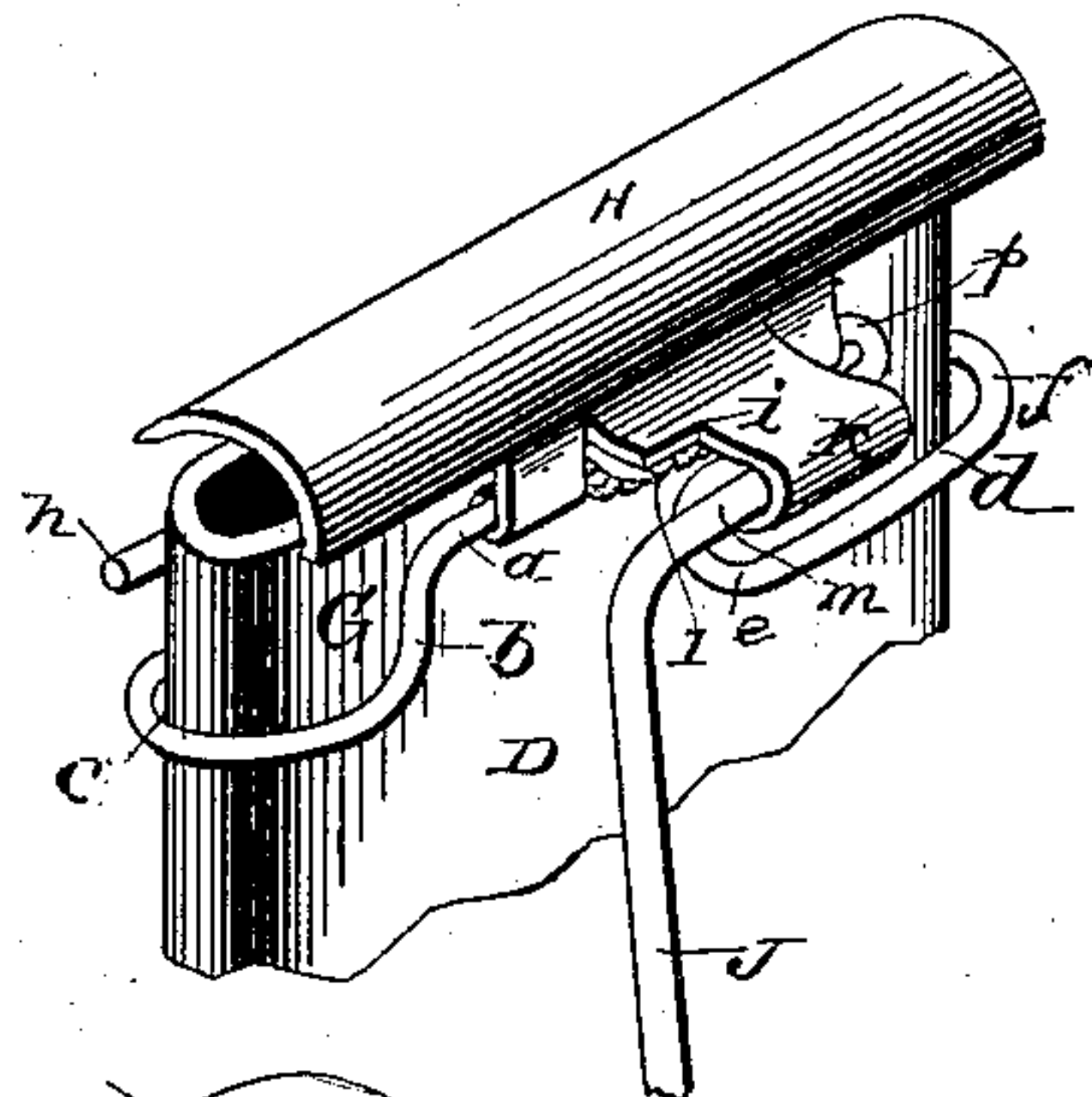


Fig. 4.

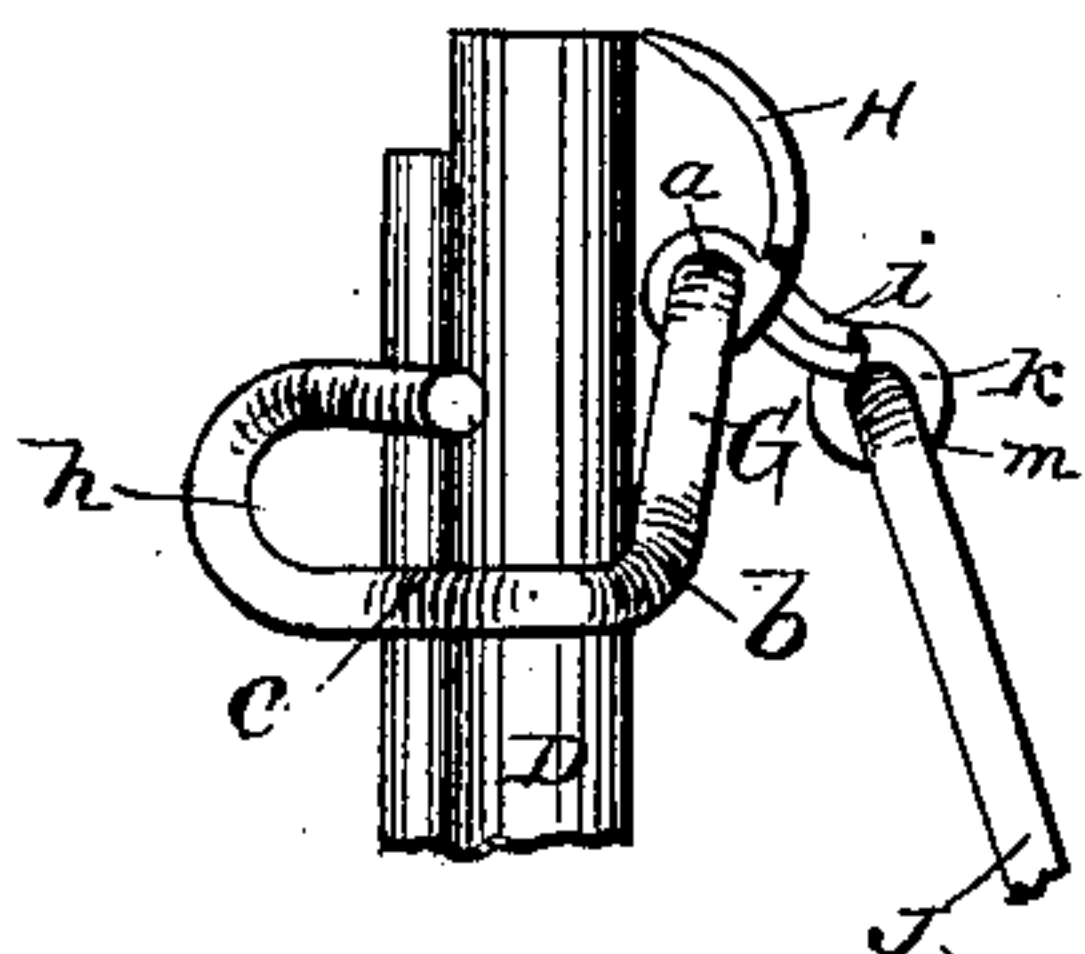
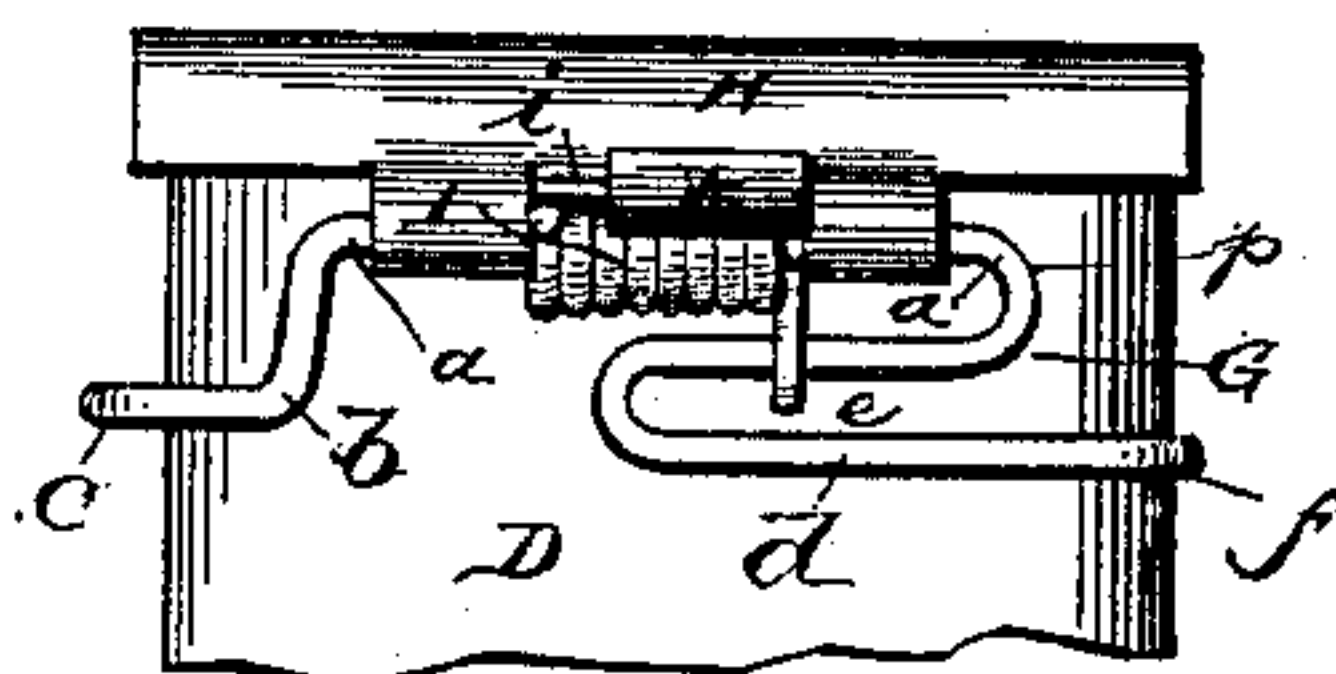


Fig. 5.



WITNESSES

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TRIMMING AND EXTINGUISHING ATTACHMENT FOR LAMP-BURNERS.

SPECIFICATION forming part of Letters Patent No. 321,989, dated July 14, 1885.

Application filed February 20, 1885. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. MARKER, a citizen of the United States, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented a new and useful Improvement in Trimming and Extinguishing Attachments for Lamp-Burners, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to lamp-burners; and it has for its object to provide a simple, convenient, and efficient attachment for the same, by means of which the light may be extinguished in an instant, and the wick trimmed
15 evenly at the same time.

With these ends in view the said invention consists in certain details of construction and combination of parts, as hereinafter set forth, and particularly pointed out in the claims.

20 In the accompanying drawings, Figure 1 is a perspective view of a lamp-burner, showing the hinged cap thrown back, with my improved attachment applied thereto. Fig. 2 is a transverse section through the wick-tube
25 with the cap closed down, the attachment being shown in the position assumed when extinguishing the light. Fig. 3 is a detail perspective view of the attachment, with a portion of the wick-tube, showing more clearly
30 the connections. Fig. 4 is a rear view of the wick-tube. Fig. 5 is a side elevation of a portion of said tube.

Like letters are used to indicate corresponding parts in the several figures.

35 Referring to the drawings, A designates a lamp-burner of any suitable construction, to which my improvement is applied. In the present instance the burner comprises the usual perforated diaphragm, A', having the perforated depending rim or wall B around its
40 edge, the spring-arms C C, (four in number,) extending upwardly from the rim or wall, the wick-tube D, extending vertically up through the diaphragm, the wick-raising wheel E, and
45 the hinged cap F, all combined and arranged in the usual manner.

G designates a wire rod arranged horizontally across one side of the wick-tube, and having its middle or central portion, a, formed
50 straight, one arm, b, of the rod being extended downward, and then bent around the wick-

tube in the form of a V-shaped clasp, c, and the other arm, d, being looped or bent backward, as at e, beneath the straight portion a, and then bent around the opposite side of
55 the wick-tube to form a V-shaped clasp, f. It will be observed that the ends of the arms b d, forming the clasps c f, are returned back or formed with U-shaped bends g h, which insure a spring action to the clasps and causes
60 the same to clasp the opposite sides of the wick-tube with such a degree of firmness as to effectually prevent displacement of the parts, but at the same time readily allow the upward movement of the clasps over the sides of said
65 tube.

H designates a closing-cap or cover (segmental in cross-section, Fig. 2) having its front edge preferably sharpened to act upon the wick, and its rear edge hinged near the
70 middle to the straight portion a of the rod G. Between the eyes of the hinge the rear edge of the cover is cut out and turned upward, as at i, the end of which extension is formed with an eye, k, for the purpose presently explained. 75

Coiled on the straight portion a of the rod G, between the eyes of the hinge, is a spring, I, one end of which bears against the extension i on one side of the eye k, and the other end presses against the loop e, formed on the
80 rod G. It will be observed that by this construction and arrangement of the spring I the action of the latter is to retain the cover or cap H down upon the top of the wick-tube over the wick until said cover is operated, so
85 as to be withdrawn from its normal position by the means which I will now proceed to describe.

J designates a curved or bent rod having its upper end passed through a hole or opening, l, in the diaphragm A', on one side of the
90 wick-tube, and provided with an angle-arm, m, which passes through the eye k of the cover, and serves as a pintle on which said cover turns when operated. The other end of the
95 rod J is passed through a hole or opening, n, of the rim or wall B, and is formed with a handle, o, for convenience in operation.

The operation and advantages of my invention will be readily understood from the foregoing description, taken in connection with
100 the annexed drawings.

In applying my attachment to a lamp-burner all that is necessary to do is to provide the opening *l* in the diaphragm *A'* and the opening *n* in the wall or rim *B'*, when the improvement may be fitted in place, as shown, the clasps *c f* on the ends of the rod *G* being sprung around the opposite sides of the wick-tube, and the rod *J* connected to the hinged cap or cover *H*. It will be observed that the spring *V*-shaped clasps *c f* effectually retain the parts to their normal positions on the wick-tube, while at the same time they cannot bind against said tube, but are allowed a free vertical movement when the cover *H* is drawn upon. The loop *e* on said rod *G* works vertically against one side or face of the wick-tube, and thereby serves as an additional guiding means. As before stated, the spring *I* serves to keep the cover *H* down over the wick-tube in the position shown in Fig. 2. Supposing the parts to be in this position, the operation is substantially as follows: By drawing the handle *o* of the rod *J* in an outward direction the cover *H* is drawn downward over the top of the wick-tube and down one side or face of the same, the front edge of the cover bearing against that side of the said tube to retain the parts in the position shown in Fig. 1. By this working of the rod *J* the spring-clasps *c f* have been drawn down so as to rest upon the diaphragm *A'*. It will be observed that the parts are held in the uncovered position entirely by the contact of the front edge of the cover *H* with the side of the wick-tube, the spring *I* serving to bind the connection.

When it is desired to extinguish the light, I first proceed to lower the flame until it is about even with the top of the burner, and then operate the rod *J* by pushing in the handle *o*, the cover *H* riding up the side of the wick-tube and over the top of the same, and thus the flame is smothered, and thereby extinguished. At the same time the sharpened front edge of the cover *H*, in passing over the top of the wick-tube, severs or removes the charred part or top crust of the wick and thereby trimming the latter.

In this manner I provide an attachment which will simultaneously extinguish the light and trim the wick, thereby combining two articles heretofore made use of in one simple and inexpensive attachment. Since the cover travels over the entire top edge of the wick-tube, the whole upper edge of the wick will be trimmed by the front edge of the cover, and thus any unevenness in trimming will be avoided.

It will also be seen that the attachment may be applied to both new and old burners of any form or design by a mere change in the arrangement of the parts to accommodate the circumstances. When the lamp is not in use, the cover should be over the top of the wick-tube, so as to prevent the oil drawn up by the wick by capillary attraction from spreading over the top of the burner, and thus I am enabled to keep the latter always dry.

The advantages of keeping the wick always trimmed evenly and close are so well known as not to require a detailed reference here. By my invention I attain the numerous advantages referred to, for by the peculiar arrangement of the parts the wick is constantly trimmed, or the charred part is removed after each time that the lamp is used.

My attachment is simple and inexpensive in construction, convenient to apply, is efficient in operation, and will not work out of order.

In order to define the nature and scope of the present invention, I would state that heretofore it has been proposed to construct a lamp-extinguishing attachment comprising a rigid clasp for encircling the wick-tube, a cap hinged to the clasp and adapted to fit over the top of the tube to extinguish the flame, and a rod connecting with the cap to withdraw it when it is desired to use the lamp; but in this construction the hinged cap serves merely as a cover to extinguish the flame, and is not intended to be used for trimming the wick at the same time. Moreover, the hinged cap is merely thrown up or out to one side of the wick-tube, and is not spring-pressed, as in my improvement, and does not work down, so as to catch at its front edge against one of the sides of the tube, and thus be held in its uncovered position.

It has also been proposed to construct a lamp-extinguisher of a sliding spring-pressed tube, carrying hinged extinguishing-wings at its upper end, said tube sliding vertically along the wick-tube, so that when down at its lowest point the spring is compressed and the hinged wings rest parallel along the side of the wick-tube, and when operated will cause the said wings to extend in an inclined line over the top of the wick, and thus extinguish the flame. It has also been proposed to provide a wick-tube with a vertically-sliding collar carrying a series of trimmers at its upper end, said collar being actuated by a toothed wheel on a horizontal shaft. Projections are provided on the wick-tube to press against the inner sides of the trimmers to keep them apart, said projections entering slots to cause the trimmers to come together over the top of the wick-tube and trim the wick and extinguish the flame.

I hereby disclaim the use of either of the constructions above specified. My improvement consists in providing a spring-pressed hinged cap or cover connected to the wick-tube by vertically-sliding clasps, and provided with an operating-rod, by means of which the action of throwing the cap or cover back from the wick-tube causes the clasps to slide downward along the same, carrying the cap or cover, and causing the latter to ride over the tube and catch at its front edge against the side thereof, just below the top. In this manner the cap or cover is held out of the way when uncovered, and when operated by the rod it is caused to ride upward along the wick-tube and over the top thereof, the

front edge of the cap or cover being sharpened to act upon the upper edge of the wick, sever the crust or charred part thereof, and push it over the opposite side of the wick-tube.

5 Having described my invention, I claim—

1. The wick-tube, in combination with a vertically-sliding rod or bar arranged transversely across the tube and fitting at its ends around the sides thereof, a spring-pressed cap or cover hinged or pivoted to the rod, and an operating-rod connected to the cap or cover, to cause the latter to travel upward and work inward over the entire top of the wick-tube to extinguish the flame, the front edge of the cap severing the crust or charred part of the wick and pushing it over the opposite side of the tube, as set forth.

2. In a lamp-burner, the wick-tube, in combination with the vertically-sliding rod or bar extending transversely across the tube and formed with clasps at the ends to hold it on the tube, a cap or cover hinged or pivoted to

the rod at one of its edges, a spring connected to the rod and bearing against the cap or cover, a projection or extension provided on the latter, and an operating-rod connected to the projection, to cause the swinging of the cap or cover and the sliding of the rod or bar at the same time, for the purpose set forth.

3. The herein-described attachment, comprising the rod G, having clasps at each end, the cover or cap hinged or pivoted to the rod, a spring coiled on said rod and having one end bearing against the cap or cover, and an operating-rod connected to the latter, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FRANK H. MARKER.

Witnesses:

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D. N. LEIB.