

(No Model.)

2 Sheets—Sheet 1.

J. HARRIS.

SELF EXTINGUISHING LAMP.

No. 260,021.

Patented June 27, 1882.

Fig. 1.

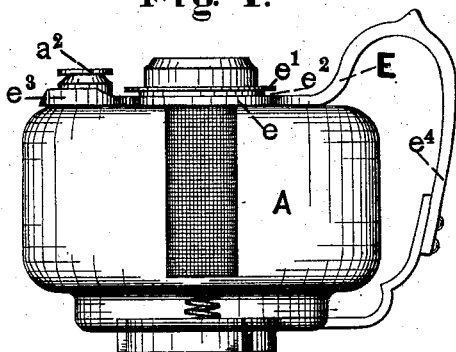


Fig. 2.

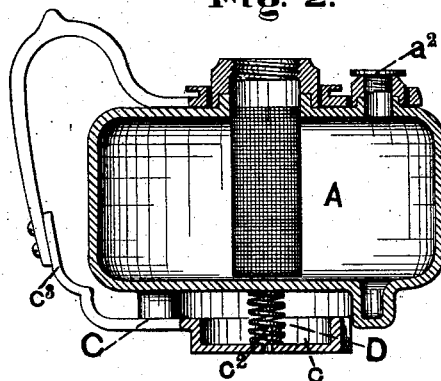


Fig. 3.

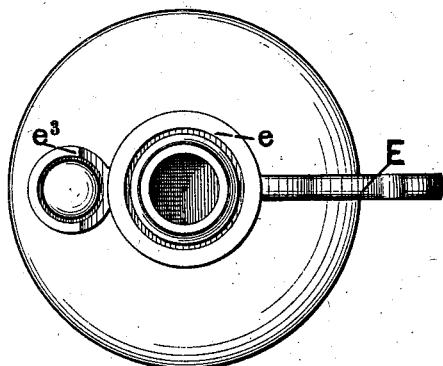


Fig. 4.

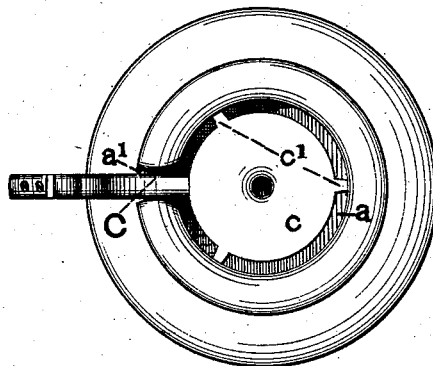


Fig. 5.

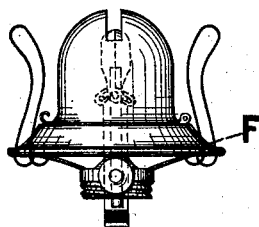


Fig. 6.

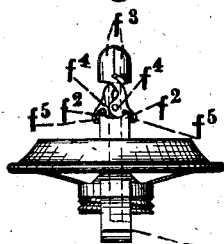


Fig. 7.

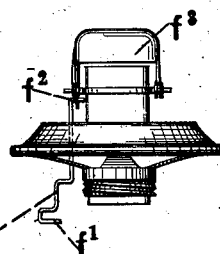
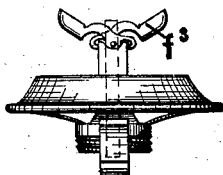


Fig. 8.



WITNESSES:

J. S. West,

Cornelius Cox

INVENTOR:

JAMES HARRIS.

BY

H. W. Beadle & Co.

ATTYS.

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Fig. 9.

Fig. 10.

Fig. 11.

Fig. 13.

Fig. 14.

Fig. 12.

WITNESSES:
T. S. West,
Cornelius Cox

INVENTOR:
JAMES HARRIS.
BY
H. W. Beadle & Co.
ATTYS

UNITED STATES PATENT OFFICE.

JAMES HARRIS, OF JANESVILLE, WISCONSIN.

SELF-EXTINGUISHING LAMP.

SPECIFICATION forming part of Letters Patent No. 260,021, dated June 27, 1882.

Application filed September 6, 1880. (No model.)

To all whom it may concern:

Be it known that I, JAMES HARRIS, of Janesville, county of Rock, and State of Wisconsin, have invented new and useful Improvements in Self-Extinguishing Lamps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists mainly in the combination, broadly, with a lamp having proper extinguishing devices, of a supporting cup or basket having mechanism for actuating the extinguishing devices upon the lamp.

It consists, further, in certain details of construction, all of which will be fully described hereinafter.

In the drawings, Figure 1 represents a side elevation of the lamp-bowl and the mechanism upon it for actuating the extinguishing device; Fig. 2, a sectional elevation of the same; Fig. 3, a top plan view, and Fig. 4 a bottom plan view, of the same; Figs. 5, 6, 7, and 8, various views of the burner and its attachments; Fig. 9, a side elevation of the lamp complete as supported by my improved cup or basket; Figs. 10 and 11, a plan and side elevation of the movable false bottom of the basket; Fig. 12, a vertical sectional elevation of the bottom of the lamp-bowl and the cup or basket which supports the same; and Figs. 13 and 14, views of the gauze-wire pocket detached.

To enable others skilled in the art to make and use my invention, I will now proceed to fully describe the same.

A, Figs. 1 and 2, represents the bowl of the lamp, which may be constructed generally of any suitable shape and size and of any proper material, but which is essentially provided below with a recess, *a*, Fig. 4, having a side slot or opening, *a'*, as shown, and above with the ordinary filling opening having the ordinary screw-cap, *a²*, Figs. 1 and 2, as shown.

B, Fig. 13, represents a gauze-wire pocket for the wick, which is provided below with a flange-disk, *b*, Fig. 14, and above with a flanged collar, *b'*, by means of which latter it is united to the bowl of the lamp by the same plaster which secures the collar *a³* in place, but without coming in contact with the latter.

C, Figs. 2 and 4, represents the base-piece of the actuating mechanism of the extinguish-

ing device, consisting of the cup or disk *c*, having the guiding projections *c'* *c'*, Fig. 4, and the center stud, *c²*, Fig. 2, as shown. *c²* represents a bent arm or standard rising from the disk *c*, which is provided at its upper end with screw-holes or other proper means of attachment. The base-piece *c*, it will be observed, is adapted in size and shape to rest in the recess *a*, its arm *c³* lying in the slot *a'*, as shown in Fig. 4.

D, Fig. 2, represents a spring encircling the stud *c²*, which is interposed between the lower surface of the bowl and the top face of the disk *c*, as shown.

E, Figs. 1 and 3, represents the upper portion of the actuating mechanism of the extinguishing device, consisting of the central ring, *e*, adapted to inclose the collar of the bowl, as shown, and which is provided with a horizontal flange, *e'*, Fig. 1, and intermediate recess, *e²*, as shown. *e³* also represents a ring adapted to inclose the collar of the filling-opening, which is secured to one side of the main ring, as shown.

e⁴, Fig. 1, represents a bent arm extending outward from the other side of the main ring, the lower end of which is united to the upper end of arm *c³*, as shown, together forming the handle of the lamp.

F, Fig. 5, represents the burner, of any proper construction.

f, Figs. 6 and 7, represents a vertical standard or arm adapted to move freely in a vertical direction in proper guideways in the burner, which is provided below with a hook or bent end, *f'*, Fig. 7, adapted to rest in the recess *e²* of the part E, and above with the bent fingers *f²* *f²*, Figs. 6 and 7, as shown.

f³ *f³*, Figs. 6, 7, and 8, represent wings having lever-arms, *f⁴* *f⁴*, Fig. 6, at each end of the burner, as shown, the ends of which are provided with slots, *f⁵*, adapted to receive the ends of the fingers *f²*.

G, Fig. 9, represents a cup or basket of any proper size and form, adapted to receive and hold the bowl of the lamp, which cup is itself supported by a bracket, *g*, as shown, or by any other proper means.

g', Fig. 12, represents a recess in the bottom of the cup, which is provided with guiding projections *g²*, as shown.

g³, Figs. 10, 11, and 12, represents a mova-

ble section adapted to rest in the recess which is supported a short distance above the bottom of the cup by means of the interposed spring g^4 , as shown in Fig. 12. g^5 , Figs. 11 and 12, represents a ring encircling the projection g^6 , Fig. 12, of the cup, which is united to this movable section g^3 by means of the vertical arms or standards g^7 , Figs. 11 and 12, as shown.

10 The operation of my invention will now be described: The lamp, it will be understood, is provided with the ordinary device to fit it for illuminating purposes, and in this respect it does not differ from others of its class. The

15 extinguishing device, also, in its general features, is not new with me, and therefore its operation need not be particularly described. The device, however, for preventing the filling of the lamp is believed to be entirely new, and

20 the operation of this therefore will be fully set forth. When the lamp stands upon the table, and the wings of the extinguisher are consequently in proper position to permit the lamp to burn, as shown in Fig. 8, the ring e^3

25 is caused to project above the cap of the filling-opening, as shown in Fig. 9, and hence the same cannot be unscrewed for removal. If, then, the bowl of the lamp is raised vertically for the purpose of lifting the cap above the

30 ring, the wings will be closed, as shown in Fig. 6, by this action, and the lamp be consequently extinguished. The normal position of the cap a^2 relative to the ring e^3 when the extinguishing device is in position to permit the lamp to

35 burn, is such that, as before described, the former cannot be reached, and no change whatever can be made to bring it in position for unscrewing without actuating the extinguishing device to put out the flame. The cup

40 or basket having means for actuating the extinguishing device is also believed to be entirely new, and the operation of this therefore will also be fully set forth. The lamp having been placed in the cup or basket, as shown in

45 Fig. 12, the same, if burning, may be extinguished without removal therefrom by simply pulling down the ring g^5 of the cup, as indicated in dotted lines, Fig. 12, by which means the movable section g^3 is depressed against the

50 action of the spring g^4 , and consequently the base-piece of the extinguishing device upon

the lamp which rests there moves it and extinguishes the flame. When the lamp is burning the movable section is held in the proper position to support the base-piece of the extinguishing device by the spring g^4 .

The burner may be removed from the lamp when desired by unscrewing the same, the hook f' being permitted to turn by means of the recess e^2 .

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the handle mechanism having the ring e' , adapted to actuate the extinguishing mechanism, and the ring e^3 , the cap a^2 , the construction being such that by means of the handle the flame may be extinguished and the ring e^3 be removed from the horizontal plane of the filling-cap by the same movement, as described.

2. In combination with extinguishing mechanism, substantially as described, the main ring e' for actuating the extinguishing mechanism, and the auxiliary ring e^3 , inclosing the filling-cap, the construction being as described, so that the cap cannot be elevated above the ring without actuating the extinguishing mechanism.

3. In a self-extinguishing lamp, a bowl having a recess in the bottom and a slot extending from the recess to the outside of the bowl, in combination with a handle constructed in the described manner, that its lower portion may move in said recess and slot for the purpose of actuating the extinguisher.

4. In combination with a lamp having extinguishing mechanism, substantially as described, an independent bracket-basket provided with means, substantially as described, adapted to actuate the extinguishing mechanism.

5. The lamp-supporting basket having the false bottom, spring, and actuating-ring, as and for the purpose described.

This specification signed and witnessed this 7th day of June, 1880.

JAMES HARRIS.

Witnesses:

B. P. DUNWIDDIE,
A. L. WICKHAM.