

(No Model.)

A. H. BIXLER.
LAMP EXTINGUISHER.

No. 405,764.

Patented June 25, 1889.

Fig. 1.

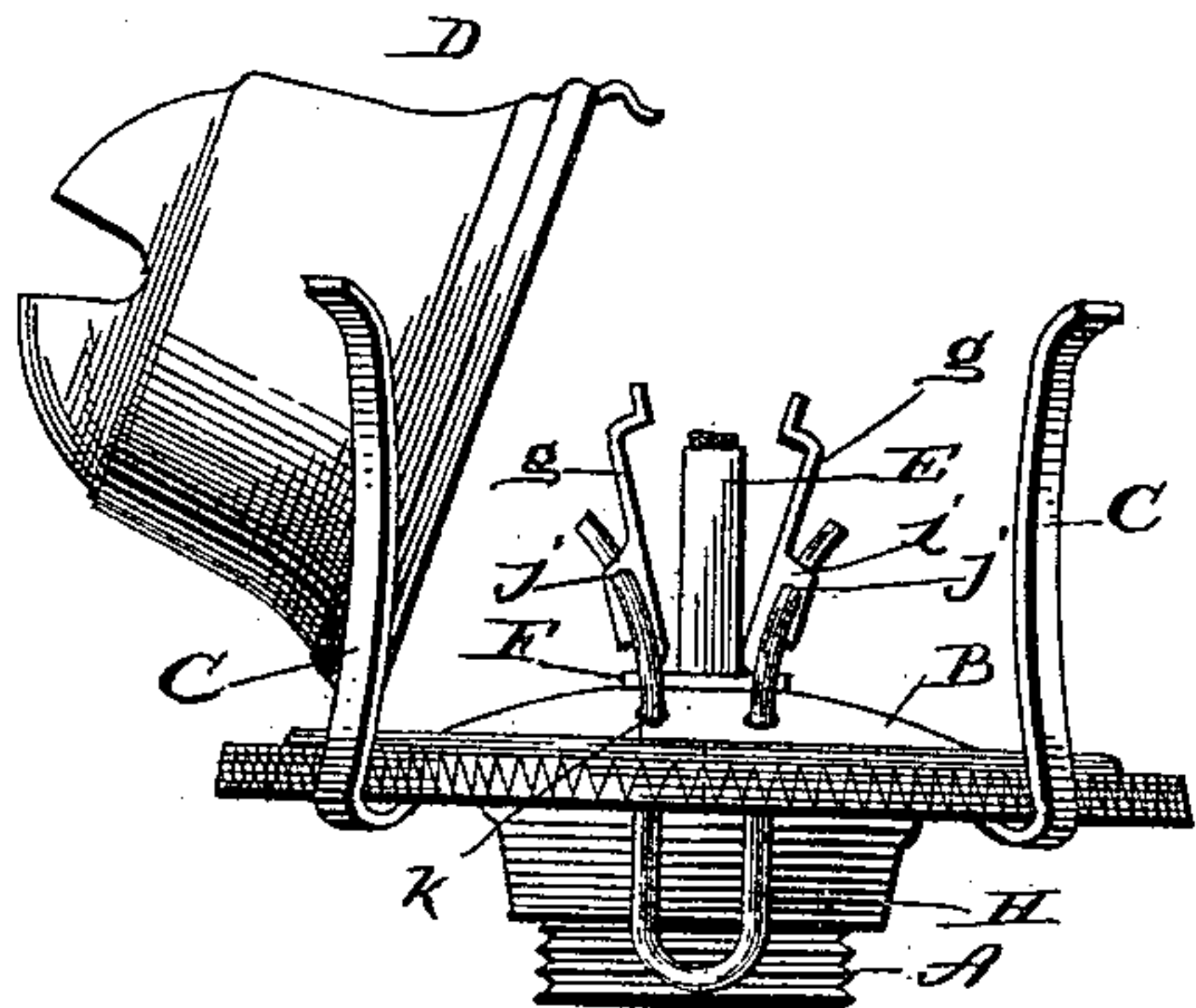


Fig. 2.

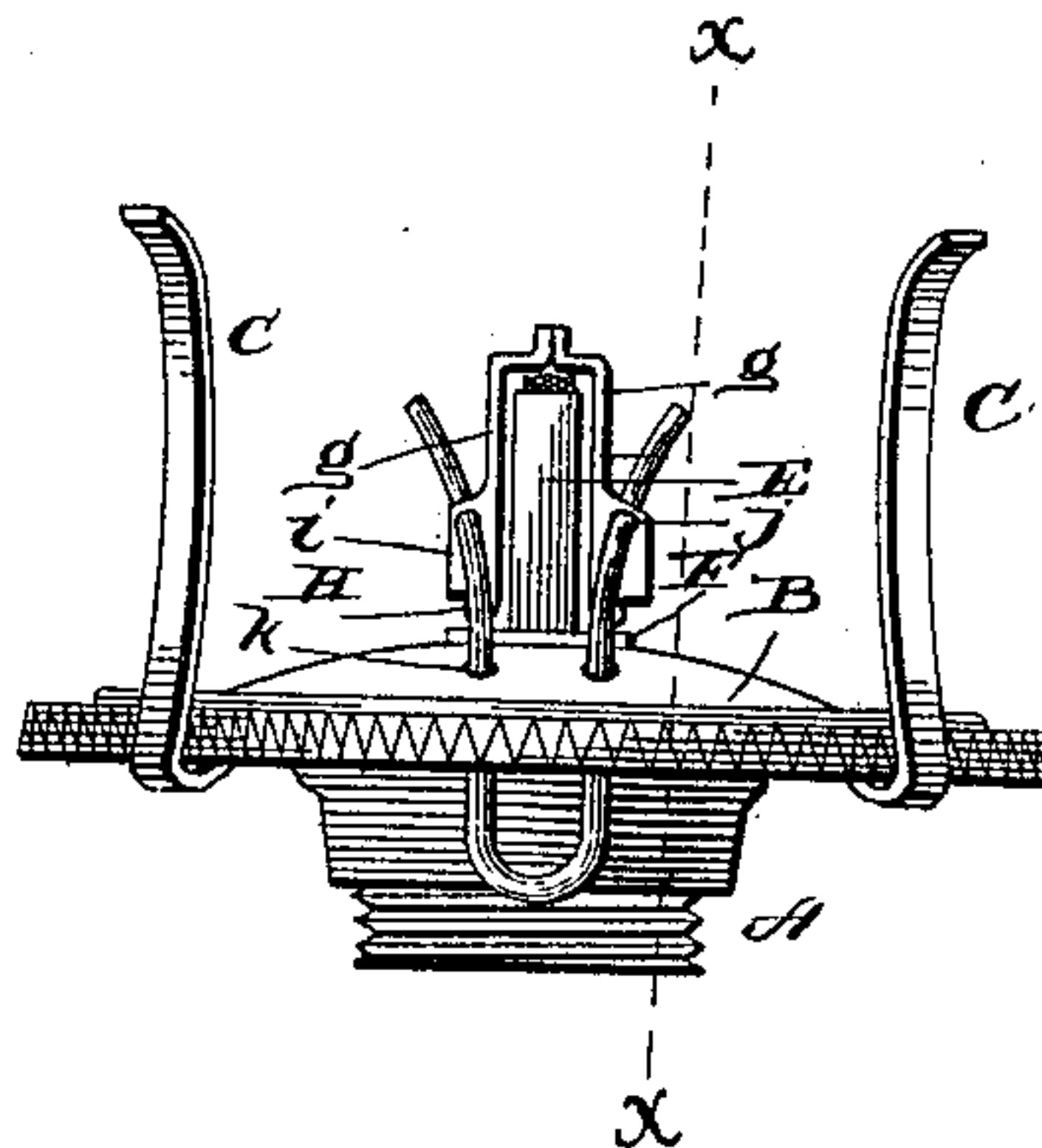


Fig. 3.

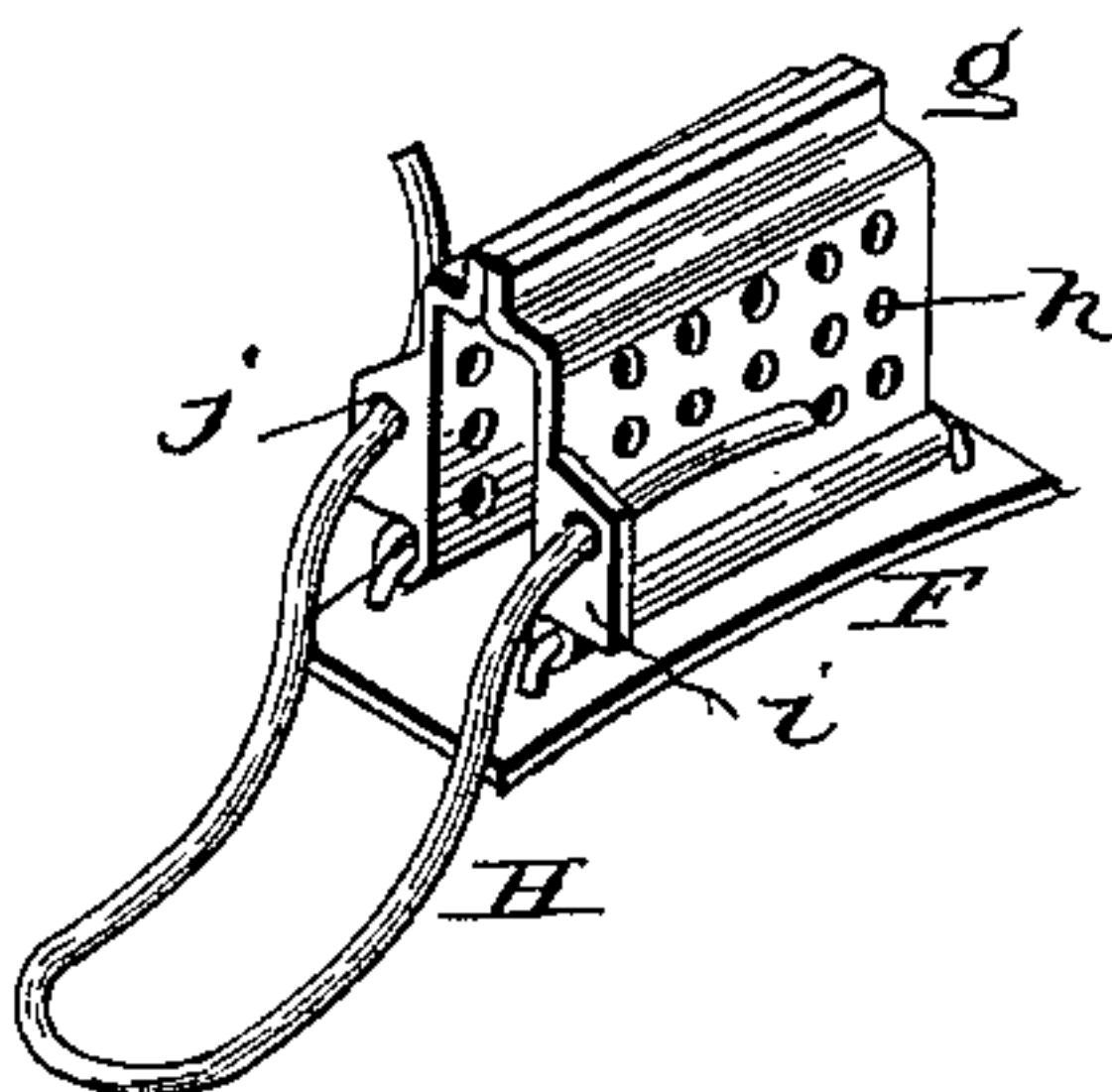


Fig. 4.

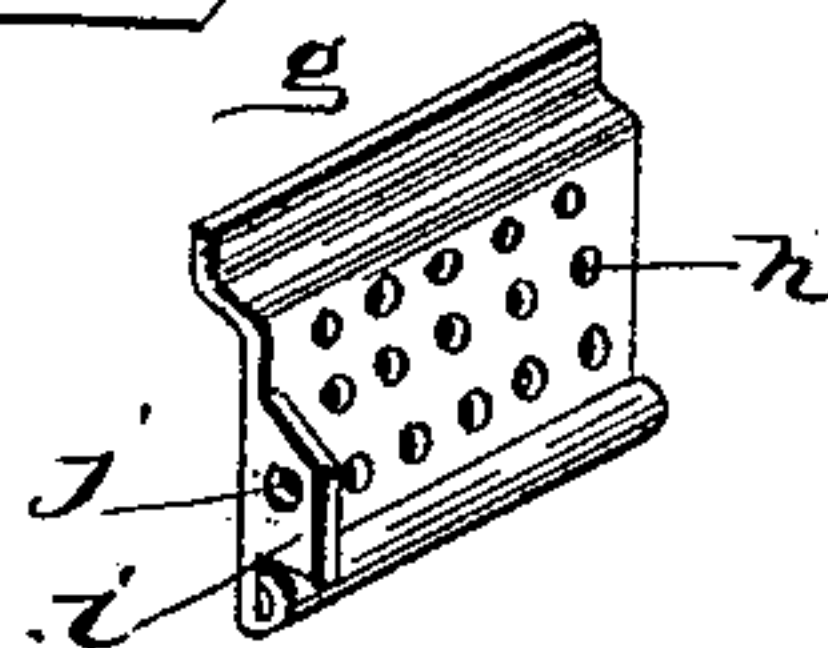
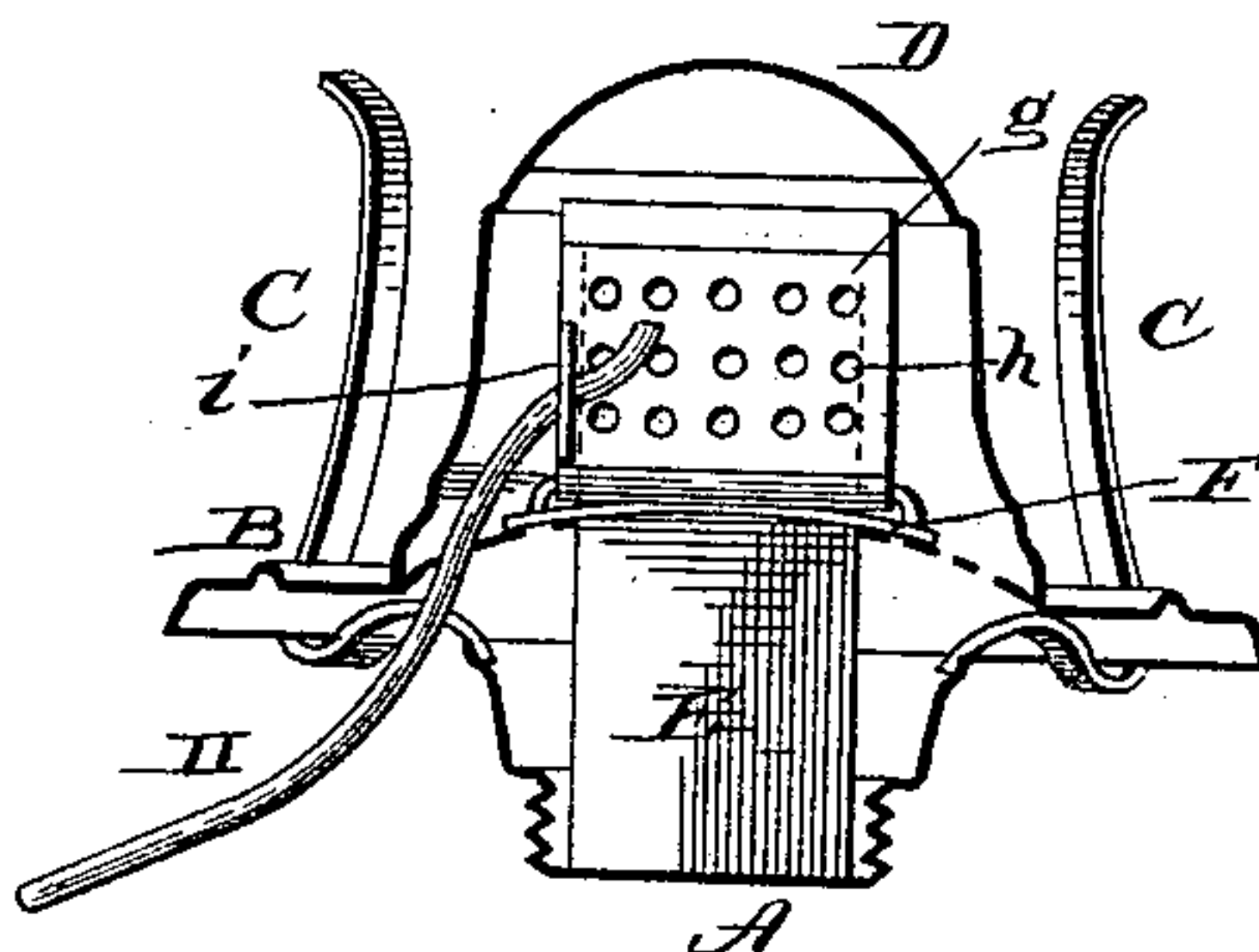


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

ANDREW H. BIXLER, OF NORTH TOPEKA, KANSAS.

LAMP-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 405,764, dated June 25, 1889.

Application filed December 20, 1888. Serial No. 294,222. (No model.)

To all whom it may concern:

Be it known that I, ANDREW H. BIXLER, a citizen of the United States, residing at North Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Lamp-Extinguishers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to certain new and useful improvements in lamp-extinguishers; and it consists of the parts and details of construction, as will be hereinafter more fully pointed out and described in the drawings and specification.

The general object of my invention consists in providing a lamp-extinguisher whereby the flame or light of a lamp may be extinguished and immediately smothered without removing the burner-cap or chimney from the lamp; and my invention further consists in providing a lamp-extinguisher which shall be so constructed as to permit of the operation thereof from the outside of the lamp, and which at the same time shall be more simple in its construction, more durable, and more effective in its operation than any device heretofore made for the accomplishment of the same result now known to me.

Referring to the drawings forming a part of this application, Figure 1 represents a side view of my improved extinguisher as applied to an ordinary lamp-burner, showing the extinguisher as being opened; Fig. 2, a similar view showing the extinguisher as being closed; Fig. 3, a perspective view of the extinguisher removed from the lamp-burner; Fig. 4, a cross-sectional view taken on line *x x*, Fig. 2; and Fig. 5 is a detail view of one of the wings of the extinguisher.

Like letters of reference are used to denote corresponding parts throughout the entire specification and several views of the drawings.

A represents the screw-threaded coupling by which the burner is secured to the lamp; B, the base or chimney-support; C, the standards or uprights by which the chimney is retained steadily upon the base or support B.

D indicates the burner-cap, and E the wick-tube, all of which parts being of ordinary construction and forming no part of this application, need not herein be specifically referred to.

F represents the lamp-extinguisher support, and consists of the rectangular piece of metal having an opening formed therein sufficient in size to permit of the same passing over and fitting closely to the wick-tube E, and said support or plate is secured in any well-known manner to the base or chimney-support B. Of course I do not wish to be understood as confining myself to the rectangular-shaped piece of metal to form the extinguisher-support, for this will vary in shape according to the contour of the wick-tube. Pivotal to this plate or support is secured the extinguishing-cap, said extinguishing-cap consisting of two wings *g g*, which wings, as aforesaid, are pivotally secured at their lower ends to the supporting or base plate F, and said wings are situated on either side of the wick-tube E. These wings are sufficient in height to extend above the top of the wick-tube, and have their upper or projecting portion bent first inward and then upward, so that when the wings are brought together, as hereinafter more fully explained, they will completely cover said wick-tube. These wings have their lower ends bent or turned upward, so as to form a tubular bearing, through which a wire or rod passes in order to connect or secure the wings to the metallic base-plate. They are further provided with a series of openings *h*, which, when the extinguisher or wings forming the extinguisher are opened, permits of the free admission of the air to the flame, and when closed to extinguish the flame permits of the exit of the smoke caused by the smothering thereof. The front sides of the wings *g g* are provided with the projecting arms *i i*, which arms may be made integral therewith or separate therefrom, and secured thereon in any desired manner. These arms are provided with the apertures *j j* for the reception of the ends of the spring-lever H. Said spring-lever slides or works in the apertures formed in the extending arms of the wings *g g*, and extending through said apertures pass on either side of the wings,

and the spring-lever is so constructed that when in its normal position (which is when withdrawn) the ends thereof will have a tendency to spring or spread apart, and consequently hold the wings forming the extinguisher in an open position. The ends of the spring-lever before entering the apertured arms pass through the holes *k*, formed in the base or support B for the chimney, and the lower or projecting end of said spring-lever extends downward and then outward below the aforesaid chimney-support, as shown in the drawings.

When the extinguisher is in a closed position—that is, when the wings completely cover the wick-tube—and it is desired to light the wick, the spring-lever is pulled outward, and as the ends of the same work in the apertures formed in the projecting arms of the wings (which arms are considerably spread apart) it is obvious that the farther the spring-lever is withdrawn the greater will be the separation of the wings, until at last they will be spread to their full extent, when further withdrawal of the spring-lever will be impossible without damage being done to the device by way of breakage.

When it is desired to extinguish the flame of the lamp, the operation of the extinguisher is the reverse to that previously described—that is, the spring-lever is pushed inward, and as it passes therein through the apertured arms formed upon the wings the wings are gradually brought closer together until they finally completely cover the entire wick-tube, wick, and flame, and consequently cause the smothering thereof and the immediate extinguishment of the flame.

Having thus fully described my device and the operation thereof, what I claim as new, and desire to secure protection in by Letters Patent of the United States, is—

1. In a lamp-extinguisher, the combination of the horizontal base-plate having a longitudinal opening formed therein fitting over the wick-tube and being secured to the chimney-base, the wings, located on either side of the wick-tube, pivotally secured to the metallic base-plate and provided with laterally-extending apertured arms, and the spring-le-

ver, the diverging ends of which pass through the apertured extending arms of the pivotal wings, and adapted, when said lever is moved inward or outward, to close or open the wings, substantially as herein shown and described.

2. In a lamp-extinguisher, the combination of the perforated wings secured to either side of the wick-tube, laterally-extending arms secured to the front edges of the pivotal wings, slightly below the center thereof, said wings being provided with the lower upwardly-turned ends, so as to form a tubular bearing, the horizontal base-plate having a longitudinal opening formed therein fitting over the wick-tube and secured to the chimney-base at the lower end of the wick-tube, the rods or wires, located upon each side of the wick-tube, passing through the tubular bearing of the pivotal wings and secured at each end to the metallic base-plate, and the operating spring-lever having the inner diverging ends thereof adapted to pass through the perforations in the laterally-extending arms of the pivotal wings, substantially as herein shown and described.

3. The combination, with a lamp-burner, of the herein-described flame-extinguisher, consisting of wings situated on either side of the wick-tube and provided with suitable openings for the inlet of air, the upper ends of the wings being bent inward and then upward, so as to entirely cover the wick-tube when in a closed position, the metallic base-plate having a longitudinal opening formed therein adapted to fit over the wick-tube and be secured to the chimney-support or base and having the wings pivotally secured thereto, the laterally-extending apertured arms, and the spring-lever, the diverging ends of which pass through the apertured laterally-extending arms, and adapted, when said lever is moved inward or outward, to close or open the wings, substantially as herein shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW H. BIXLER.

Witnesses:

I. H. HELLER,
A. C. HALE.