

(No Model.)

W. S. BURGESS.

AUTOMATIC LAMP EXTINGUISHER.

No. 322,579.

Patented July 21, 1885.

Fig. 1

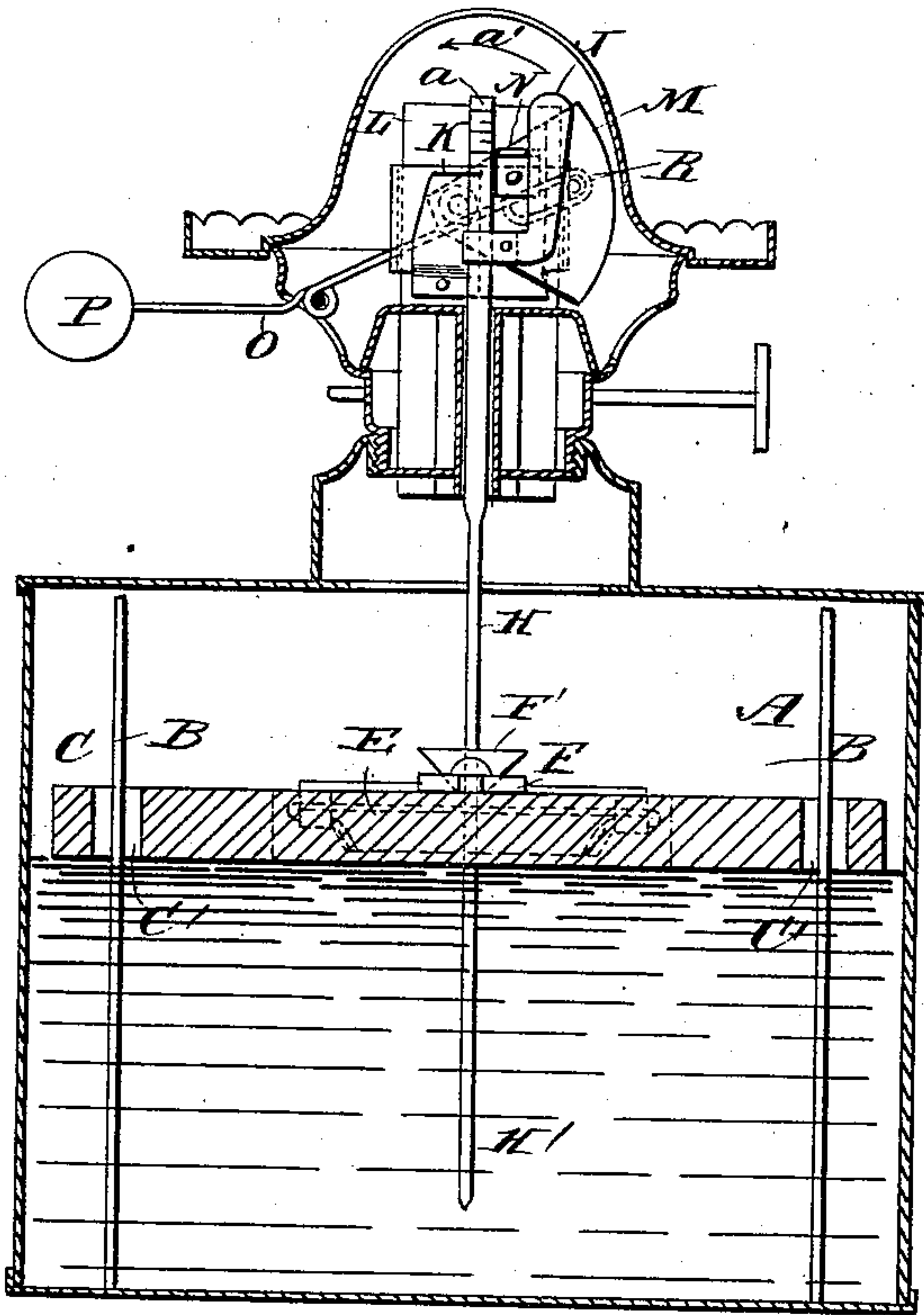


Fig. 2

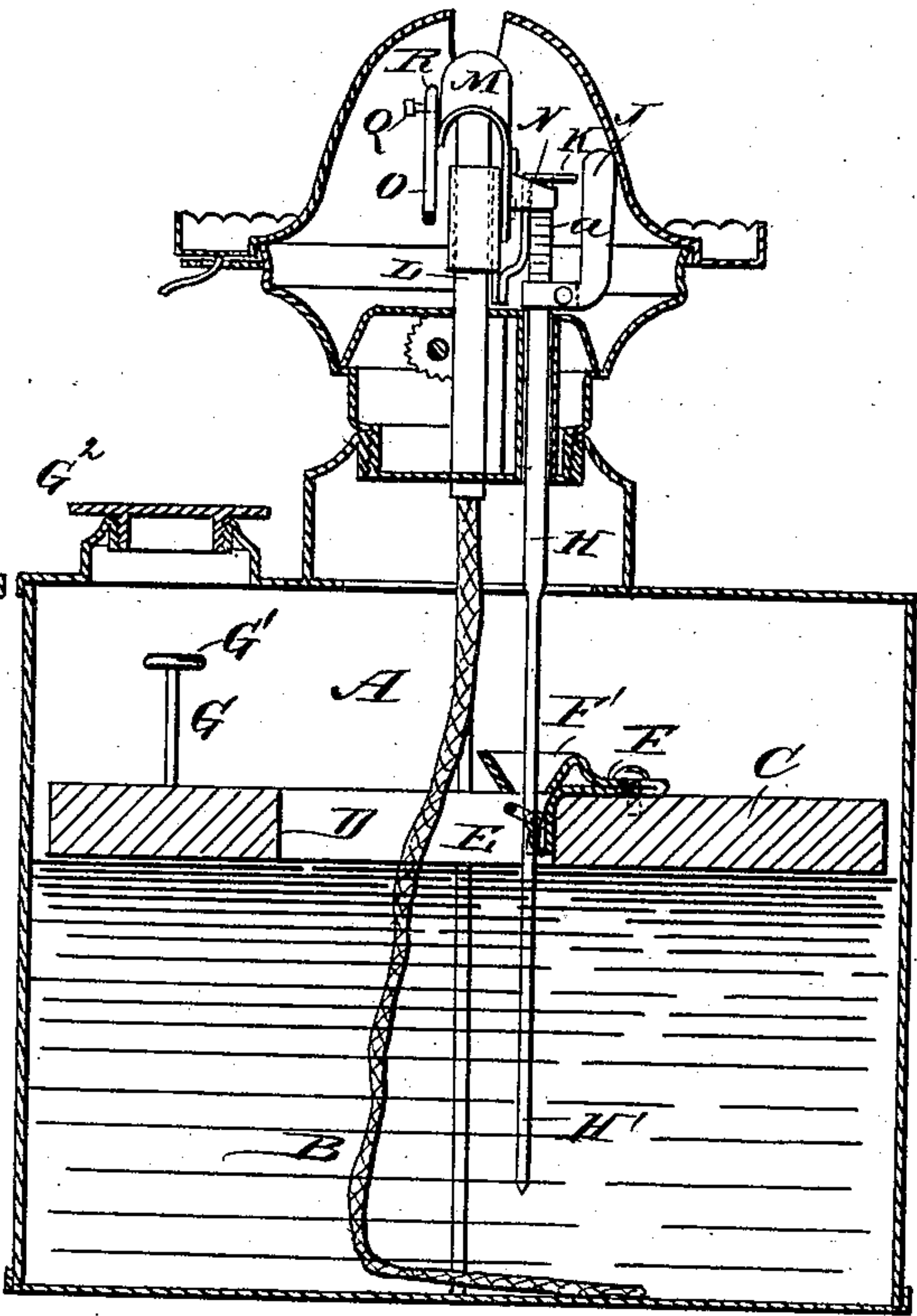


Fig. 3

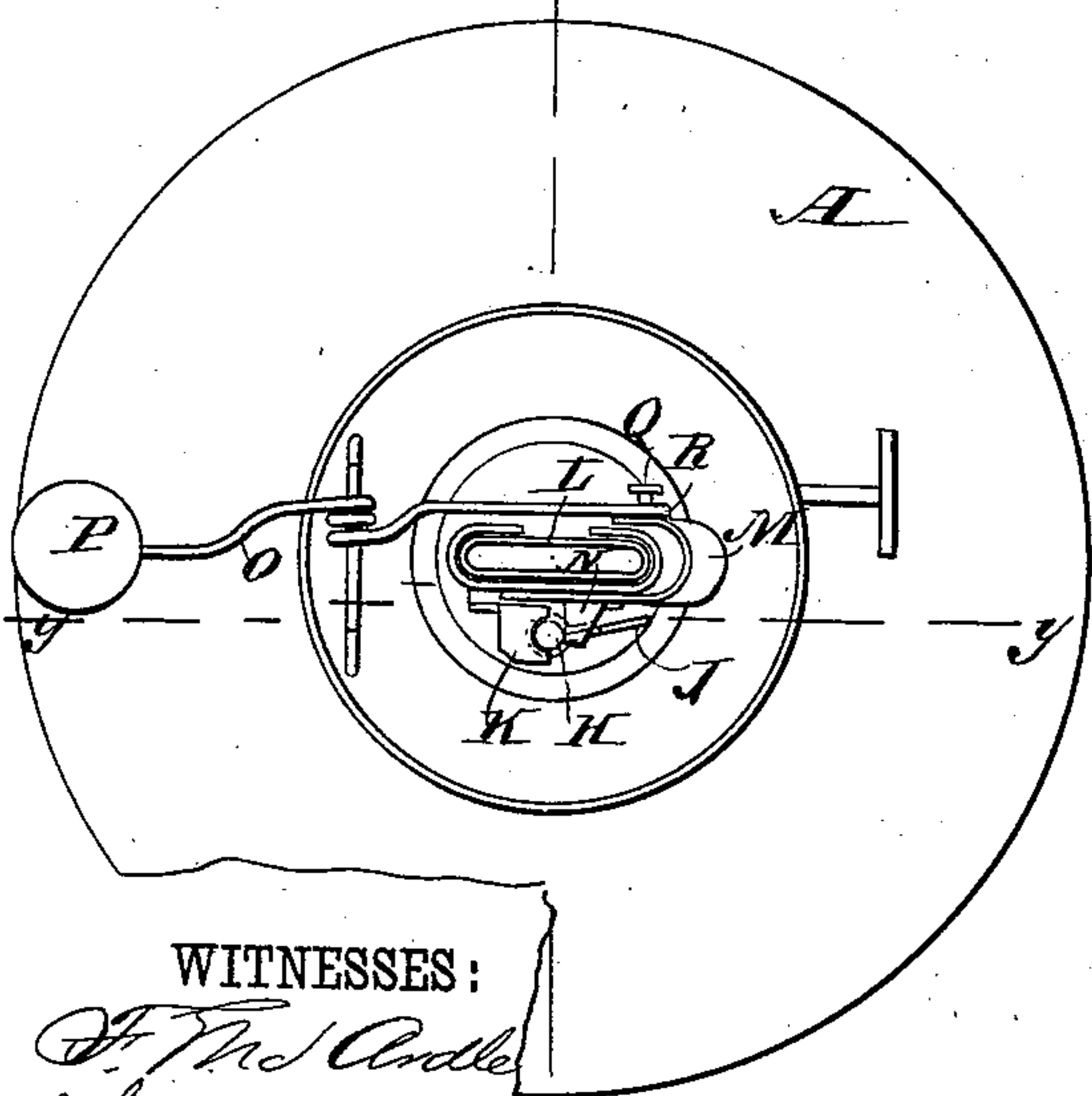
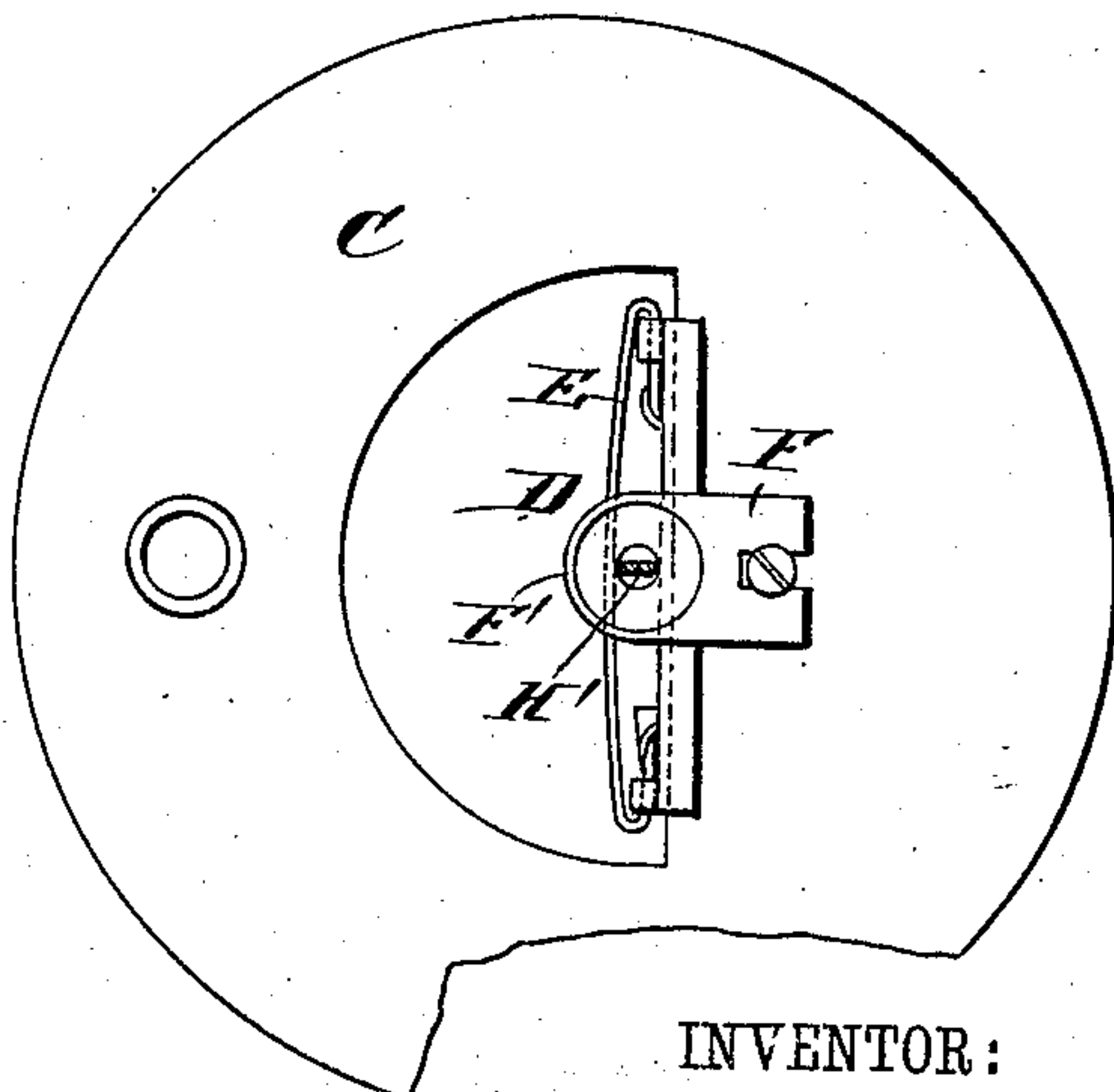


Fig. 4



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WINFIELD S. BURGESS, OF MARATHON, NEW YORK.

AUTOMATIC LAMP-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 322,579, dated July 21, 1885.

Application filed March 25, 1885. (No model.)

To all whom it may concern:

Be it known that I, WINFIELD S. BURGESS, of Marathon, in the county of Cortland and State of New York, have invented a new and Improved Automatic Lamp-Extinguisher, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved automatic lamp-extinguisher for automatically extinguishing the flame at any desired time after the lamp has been lighted.

The invention consists in the combination, with the burner, of a cap pivoted on the same, a rod for holding the cap from over the wick-tube, a spring or weight acting on the cap, a float in the fount and devices for locking the float to the rod at any desired elevation of the float above the bottom of the fount.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of a lamp provided with my improved extinguishing device, taken on the line *x x*, Fig. 3. Fig. 2 is a cross-sectional elevation of the same on the line *y y*, Fig. 3. Fig. 3 is a plan view of the same. Fig. 4 is a plan view of the float.

From the bottom of the fount A the guide-rods B project upward and through apertures C' in a float, C, in the fount, which float has a larger central aperture, D, one edge of which is straight.

A wire bow spring, E, or other shaped spring, has its ends secured to the straight edge of the aperture D in such a manner that the middle portion of the spring almost rests against the said edge.

A metal clip, F, provided with a funnel-shaped part, F', is held on the top of the float in such a manner that the funnel projects beyond the straight edge of the opening D.

A pin, G, having a head, G', projects upward from the float below the filling-neck, G².

A rod, H, passes through the burner and through the funnel F', the upper part of the rod being round and the lower part, H', flattened. The upper part of the rod H is graduated, as at *a*, and to the said upper part an

angular handle-piece, J, is secured by means of which the rod can be turned. The upper end of the rod H rests against a guide-lug, K, on the side of the wick-tube L.

A flattened cap, M, is pivoted to the sides of the wick-tube in such a manner that it can swing over the top of the wick-tube and cover the same. A lug, N, projects from the side of the cap at the edge.

A lever, O, is pivoted in the burner-frame or shell and has a weight, P, on the outer end, the inner end forming a lengthened loop, R, through which a pin, Q, passes, which projects from the side of the cap.

Instead of providing the loop, the inner end of the lever O may be slotted.

A spring may be provided to act on the cap in place of the weight and lever.

The other parts of the burner are of the usual construction.

The operation is as follows: The rod H is pulled upward until the lug N on the cap M is at the desired mark or graduation on the rod, as shown in Fig. 1, whereby the cap is held off the wick-tube, and the weight P is raised. The handle-piece J is then parallel with the wick-tube, and the flat portion H' of the rod H is at right angles to the straight edge of the opening D. The handle-piece J is then brought into a position at right angles with the wick-tube, whereby the flat portion H' of the rod H is brought into a position parallel with the straight edge of the opening D, and is forced against the spring E, as shown in Fig. 4, and whereby the rod is held fixed to the float and must rise and descend with the same.

When the flat portion H' of the bar H is parallel with the straight edge of the opening D, the rod can be moved up and down freely between the spring E and the straight edge of the aperture.

When the rod H is locked to the float, it descends with the float, and when its upper end passes under the lug N on the cap M the said cap is released and swung by the weight P in the direction of the arrow *a'* and over the top of the wick-tube, thus extinguishing the light. The device can be adjusted to extinguish the light after any desired time.

When the upper end of the rod projects a

greater distance above the lug N, the light will burn a longer time before it is extinguished.

It is immaterial how full the fount is, as the rod H and float C can be locked together at any time and independent of the height of the float above the bottom of the fount.

When the fount is being filled, the pin G rises through the filling-neck and shows the quantity of oil in the fount.

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

1. The combination, with a lamp fount and burner, of a cap for covering the wick-tube, a rod for holding the cap from the wick-tube, a float through which said rod loosely passes, and devices for locking the rod on the float at any desired point of the rod, substantially as herein shown and described.

2. The combination, with a lamp fount and burner, of a cap covering the top of the wick-tube, a weight or spring acting on the said cap, a rod for holding the cap off of the wick-tube, a float in the fount, through which float the rod loosely passes, and of mechanism for locking the float on the rod at any desired point of the rod, substantially as herein shown and described.

3. The combination, with a lamp-burner, of a float in the fount and a rod projecting upward from said float, the cap M, pivoted on the wick-tube, the guide lug K on the wick-tube, the lug N on the cap, and a weight or spring acting on the cap, substantially as herein shown and described.

4. The combination, with a lamp-fount, a burner, a pivoted cap provided with a lug, N, and a weight or spring for actuating the said cap, of the float C, provided with the aperture D, the spring E, rod H, and the handle J, on the upper end of the said rod, substantially as herein shown and described.

5. The combination, with a lamp-fount, of a burner, the pivoted cap M, the rod H, having its lower part flattened, the float C, the spring E, and a spring or weight for actuating the cap, and projections or catches on the cap, which projections or catches can engage the rod H, substantially as herein shown and described.

6. The combination, with a lamp-fount, of a burner, the pivoted cap M, a weight or spring for actuating the same, the float C, having the aperture D, the funnel F, the spring E, the rod H, and catches or projections on the cap for engaging the rod H, substantially as herein shown and described.

7. The combination, with the fount A, of the rods B, the float C, a burner on the fount, the cap M, the rod H, a spring for locking the rod on the float, and projections on the cap M, which projections can engage the rod H when raised, substantially as herein shown and described.

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Witnesses.

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