J. HUGHES.

Lamp Extinguisher.

No. 103,048. Patented May 17, 1870.

Fig: 1.

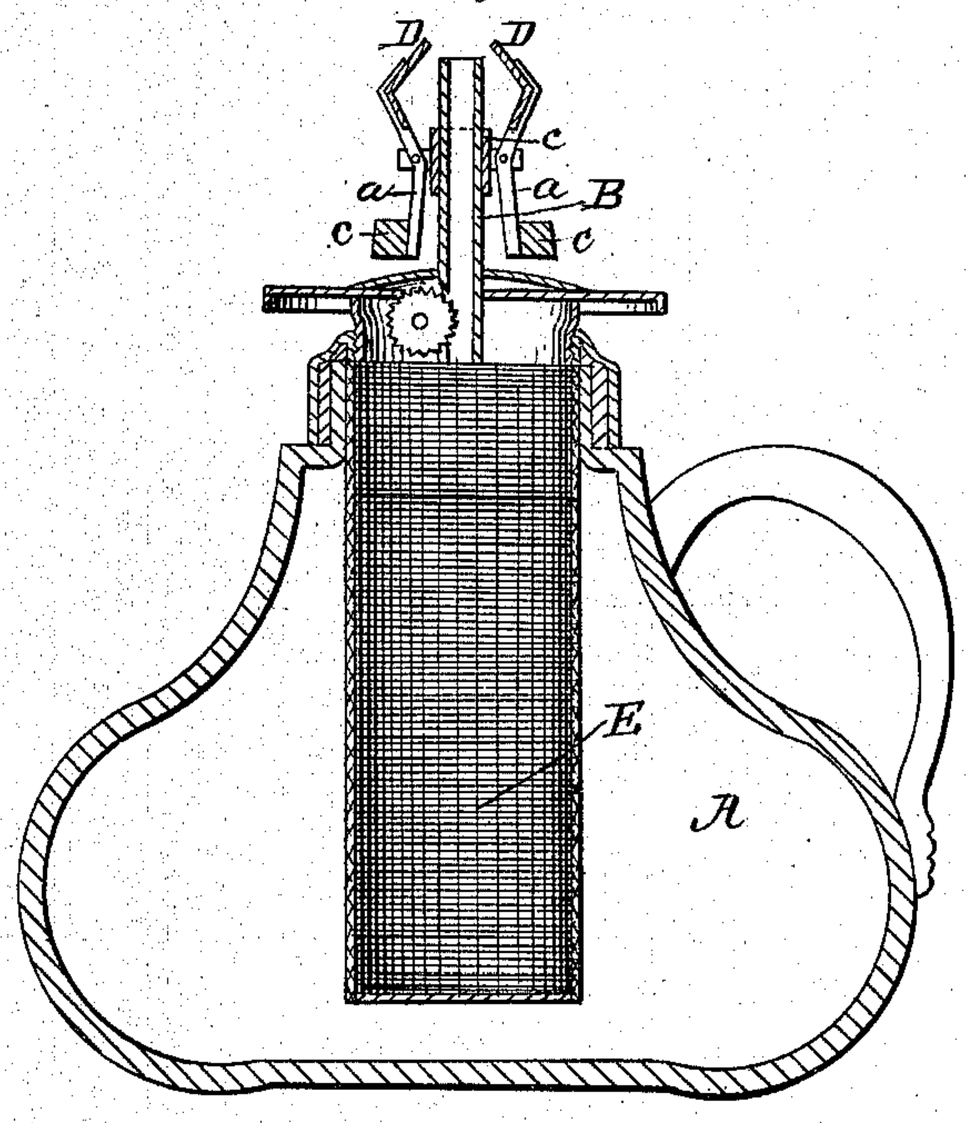
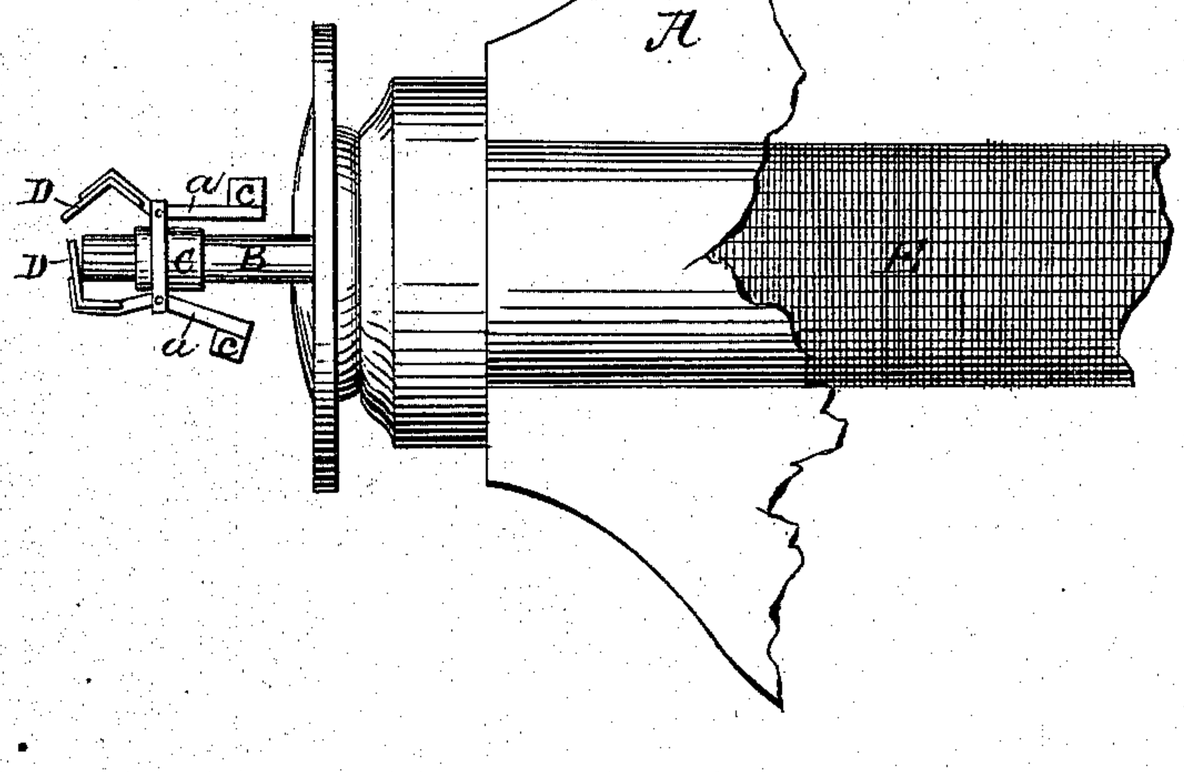


Fig: 2.



Witnesses

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JOHN HUGHES, OF NEW BERNE, NORTH CAROLINA.

Letters Patent No. 103,048, *dated May* 17, 1870.

IMPROVEMENT IN LAMP-EXTINGUISHERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN HUGHES, of New Berne, in the county of Craven and State of North Carolina, have invented a new and valuable Improvement in Lamps; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a central vertical section of my improved safety-attachment.

Figure 2 is an external view thereof.

My invention relates to safety attachments for hydrocarbon-lamps, and consists, mainly, in the construction of automatic extinguishers, pivoted at the side of the wick-tube, and operated by weights, in such a manner as to cause the flame to be immediately extinguished when the lamp is thrown down or upset.

The letter A of the drawings designates the bowl of a lamp.

B, the wick-tube, to which is attached a collar, C.

D D represent the extinguishing-caps, attached to the bent levers *a*, to the lower ends of which are secured the weights *c c*.

The levers *a* bend outward and upward from the pivot, in such a manner that, when the lamp is in an upright position, the pendent weights will cause the caps to fall away from the wick-tube. In small lamps, these caps will serve the purpose of a burner. Should the lamp, however, receive a fall, or be overset, one or both of the caps will be thrown over the top of the wick, extinguishing the flame.

E represents the gauge-chamber, enveloping the wick, within the bowl of the lamp, and designed to prevent the access of flame thereto.

When this chamber is combined with the automatic extinguishing-caps above described, it is thought that the lamp will be rendered perfectly safe, even though the bowl should be broken to pieces.

Sometimes I design to dispense with the sliding collar on the wick-tube, attaching the bent levers immediately to the latter.

Where the sliding collar is used, a small set-screw is inserted through it, designed to secure the collar to the wick-tube when it is adjusted to the proper height.

By placing the weights below the fulcrum-pin, there is no danger of either cap falling inward over the wick and putting out the flame, unless the lamp be intentionally very much inclined, or subject to a considerable shock. The ordinary shaking of a railroad car, or unsteadiness in the hand of the person carrying the lamp, will not throw the cap over the lamp. Further, by placing the weight below, a greater leverage may be obtained without diminishing the distance from the center of gravity.

I am aware that the extinguishing-caps have been weighted above the fulcrum, and, therefore, I do not broadly claim such caps; but

What I claim as my invention, and desire to secure by Letters Patent, is—

In a lamp-burner, the arrangement of the extinguishing-caps D D, bent levers *a a*, and pendent weights *c c*, as and for the purposes herein shown and described.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

JNO. HUGHES.

Witnesses:

J. A. GUION,

G. H. ROBERTS.