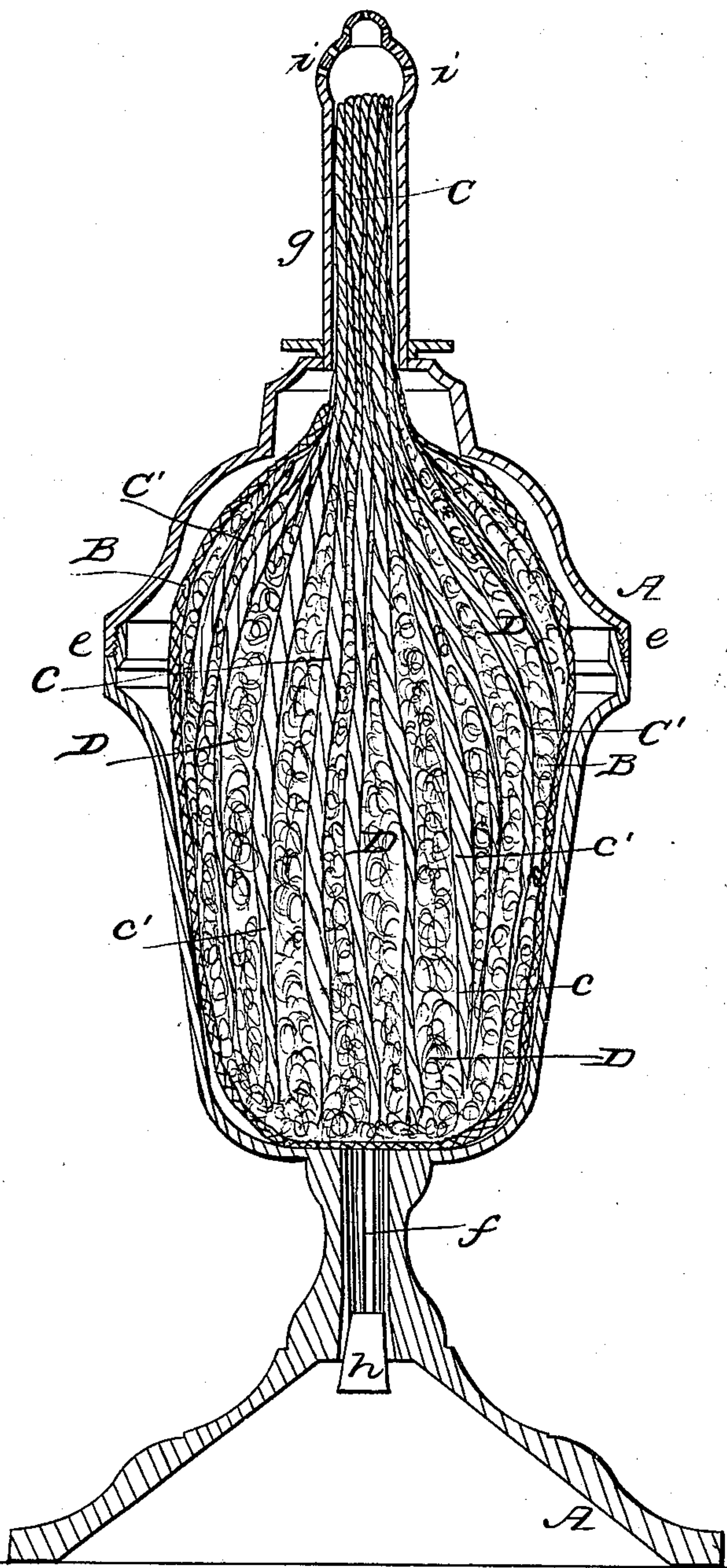


S. W. LOWE.

Vapor Lamp.

No. 28,536.

Patented May 29, 1860.



Witnesses
My Attorney
George Pfeiffer

Inventor
S. W. Lowe

UNITED STATES PATENT OFFICE.

SAMUEL W. LOWE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF, CHARLES WINGMAN, AND. D. S. JOHNSON, OF SAME PLACE.

VAPOR-LAMP.

Specification of Letters Patent No. 28,536, dated May 29, 1860.

To all whom it may concern:

Be it known that I, SAMUEL W. LOWE, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in what are usually called Fluid or Vapor Burning 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 drawing, making part of this specification, and to the letters of reference marked thereon.

In the drawing A, represents a vertical longitudinal section of the lamp; B, a like section of the woven-wire bag or absorbent case; and C, D, of the wick and absorbent material within the lamp.

The lamp may be constructed in any of the usual, or other, forms, but for convenience in inserting the wick (C), and the bag or case (B), with its absorbing material, the bowl of the lamp should be made in two separate parts adjustable together by a screw-joint at *e*, substantially as shown in the drawing; and also, to prevent the dangerous experiment of attempting to pour the fluid into the lamp while it is lighted, the supply-tube *f*, should be, as in this instance, placed beneath the bowl so that it shall be necessary to extinguish the flame and turn the lamp upside down before the fluid can be introduced. The absorbent holder, in this instance, is a bag (B) made of woven-wire and of such a size and form as, when packed with raw cotton or other suitable absorbing material intermingled with the separated strands *c'*—*c'*, of the lower part of the wick (C), substantially as shown in the drawing, will nearly fill the internal capacity of the bowl of the lamp. The upper part of the wick (C) extends up into and fills the tube, *g*, nearly to its orifices *i*, *i*, in the usual manner—an opening being left through the upper end of the bag (B), as shown, for the purpose.

Operation: The absorbing material and wick branches having been packed, moderately tight, in the retaining case or bag (B), and the upper end of the wick inserted into the tube (*g*), as described, the two parts of the bowl of the lamp are screwed accurately and tightly together, then turned upside down, the cork *h*, withdrawn and the usual fluid

poured in until the bowl is filled and the contents of the case or bag (B) saturated therewith. The lamp is now reversed and the excess, or free fluid, poured out and returned to the filling can, and the cork (*h*) replaced in the tube *f*. The lamp is now ready for being lighted. This is effected by inclining the lamp into a nearly horizontal position and holding a lighted match under the perforated bulb or tube (*g*) for a few moments, or until the thus generated and escaping vapor of the fluid is inflamed as heretofore. A lamp thus provided, and of a capacity equal to about three gills, or half a pint, will produce a beautiful, clear and strong light for five or six hours; and should it, while so "burning," become broken open by a fall, or, possibly, explode, no spreading of flame from scattering fluid, as heretofore, can take place, because there does not exist any free fluid in the lamp, but all the inflammable material being confined to the absorbent in the case or bag (B), the flame will therefore be confined to the surface of the latter, and of course can be easily extinguished, or the bag disposed of without danger or difficulty.

The nature of my invention consists in providing a fluid burning lamp with a woven-wire bag or case (of about the form and capacity of the interior of the bowl of the lamp), packed with raw cotton, or other equivalent fibrous material, in connection with the wick of the lamp; whereby, the fluid being absorbed and held suspended within the wire gauze case, all danger of scattering the inflammable contents is prevented, should the lamp become accidentally broken or, possibly, exploded.

Having thus fully described my improvement in lamps, and pointed out its utility, what I claim as new therein of my invention, and desire to secure by Letters Patent is—

The woven-wire bag or case (B), the fibrous packing (D) and the wick (C), when the same are arranged and combined together in a lamp substantially as and for the purpose set forth and described.

S. W. LOWE.

Witnesses:

BENJ. MORITON,
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