

(No Model.)

2 Sheets—Sheet 1

H. P. ROBERTS.  
VAPORIZER.

No. 435,903.

Patented Sept. 2, 1890.

Fig. 1.

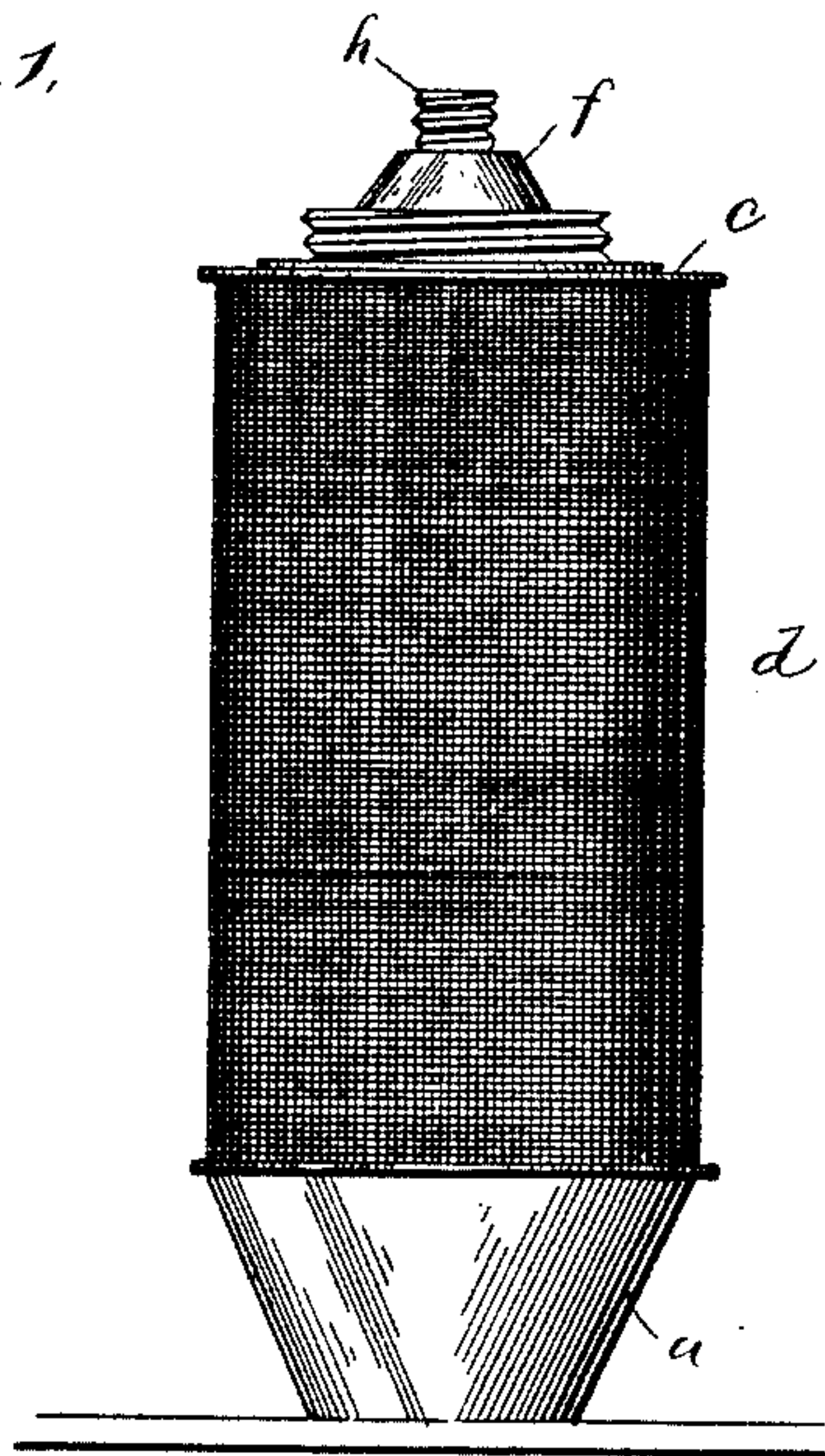


Fig. 2.

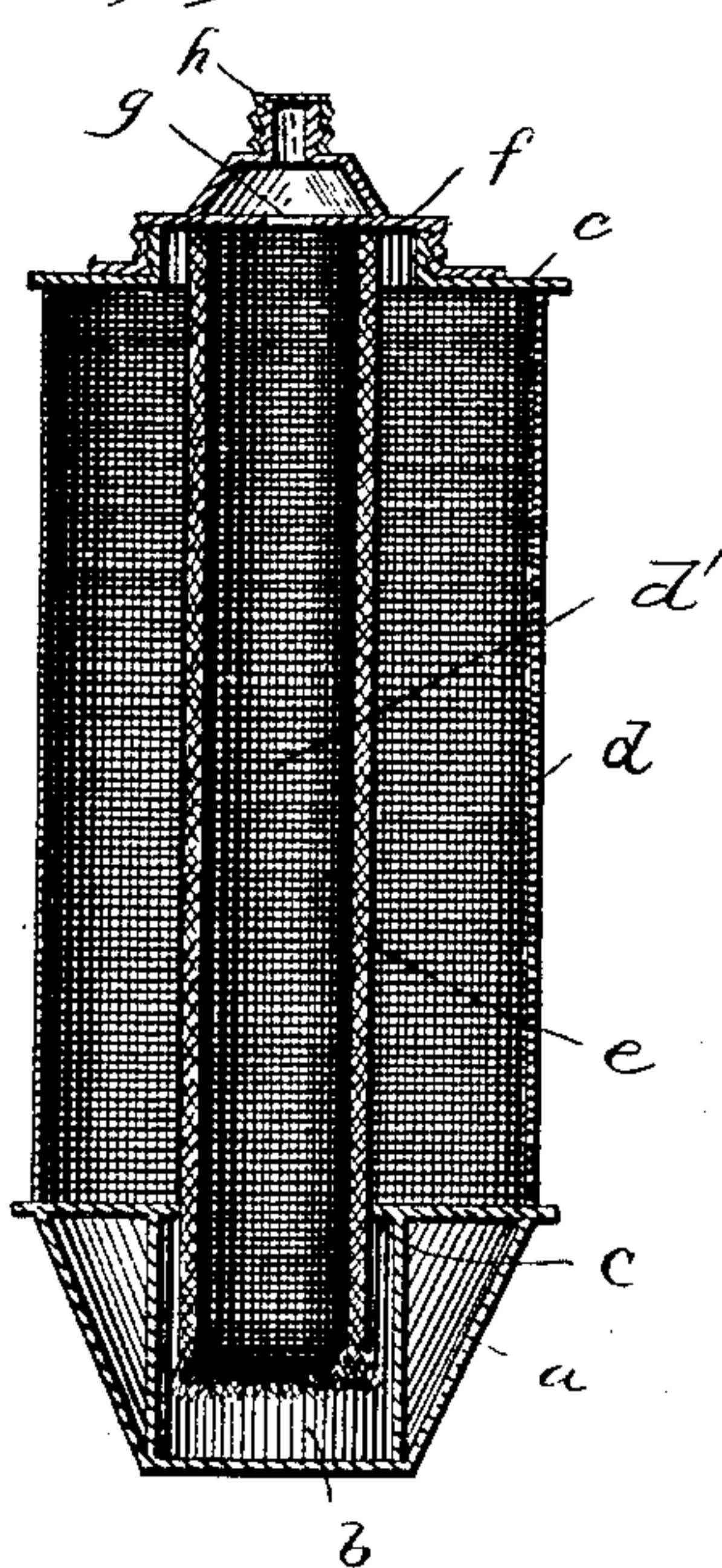


Fig. 4.

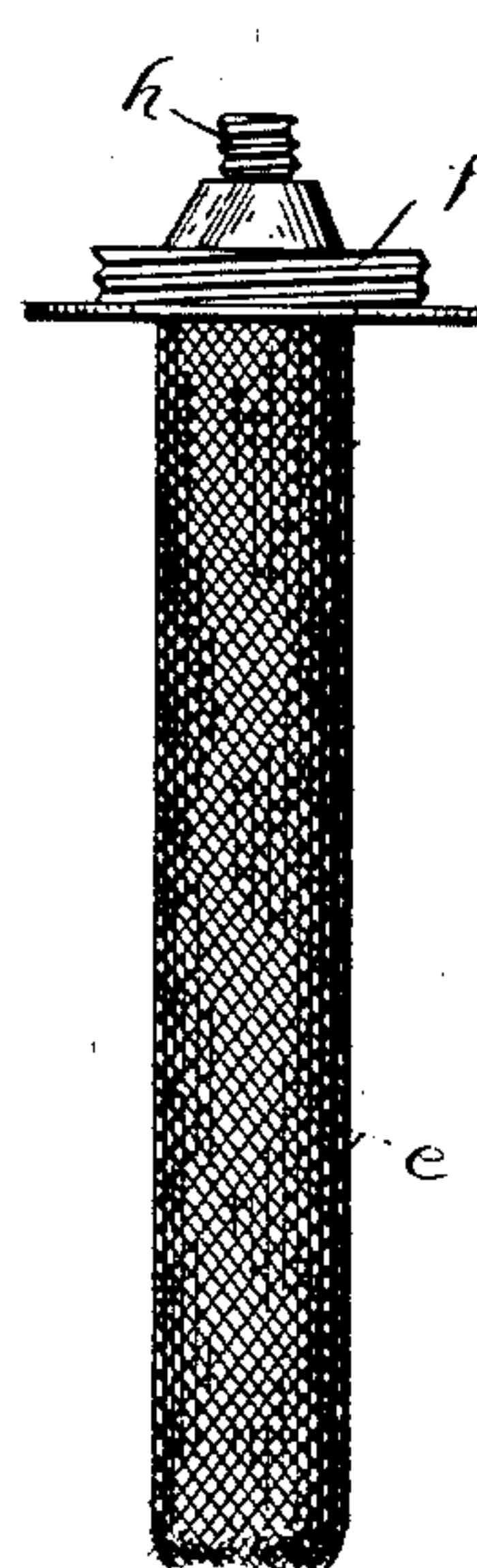
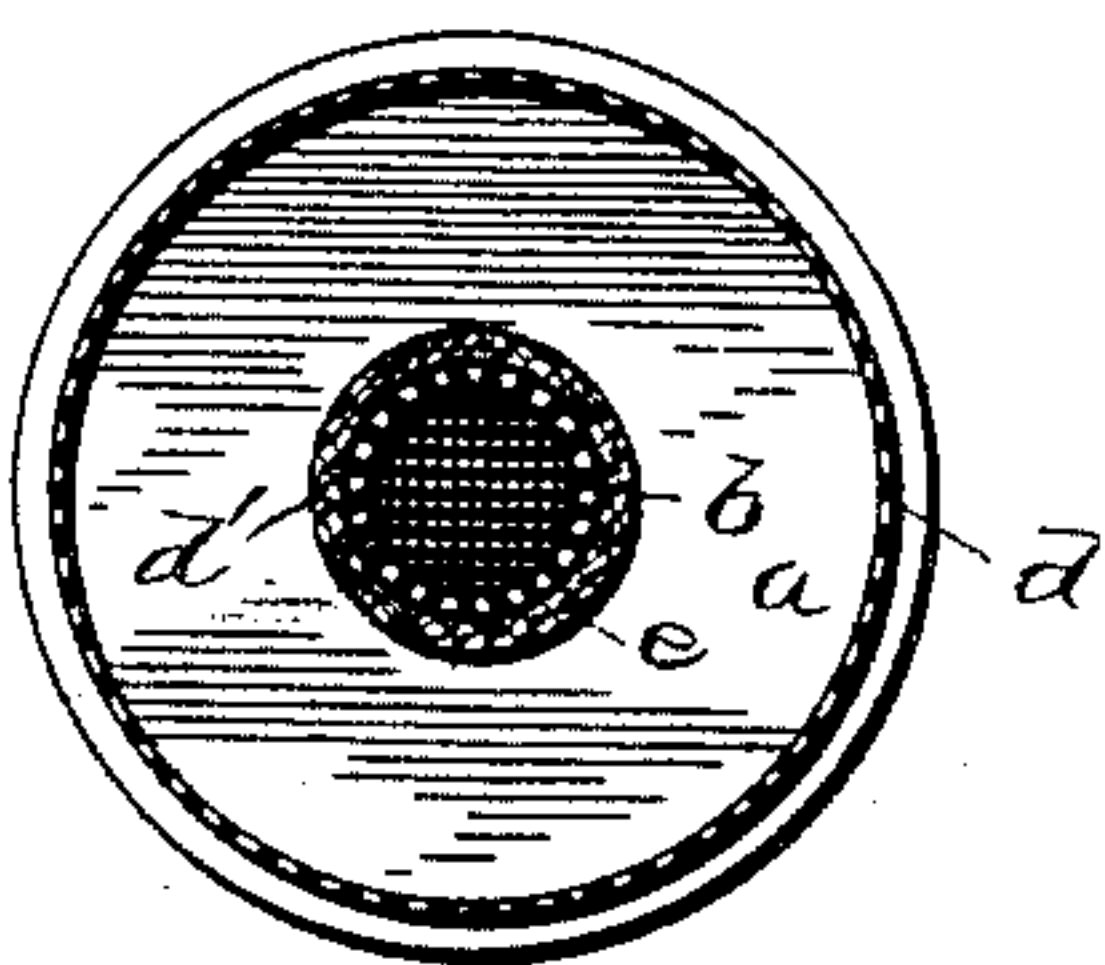


Fig. 3.



Witnesses:  
E. C. Ruffy  
H. E. Peck

Inventor  
H. P. Roberts  
per O. E. Ruffy  
Attorney

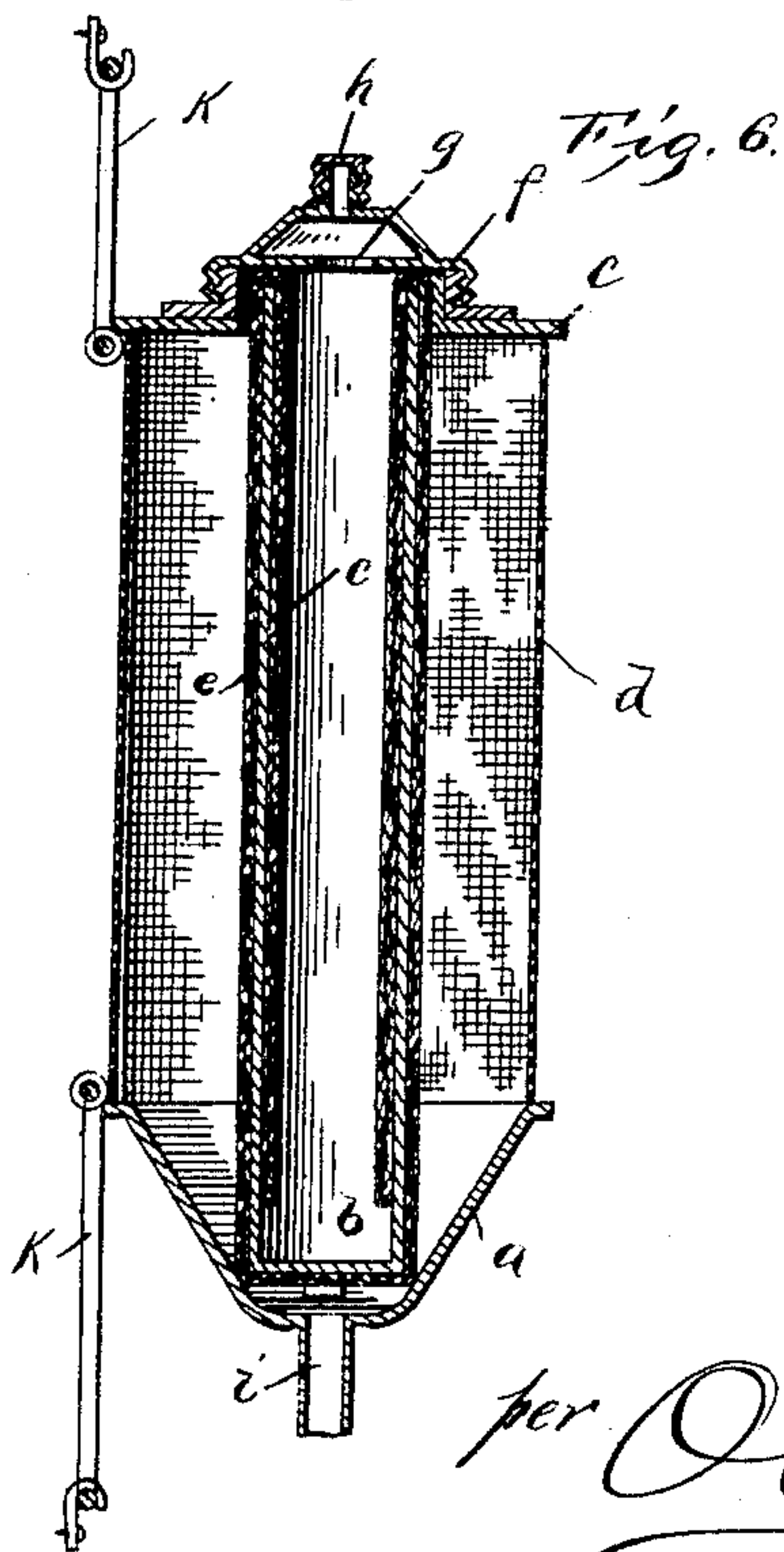
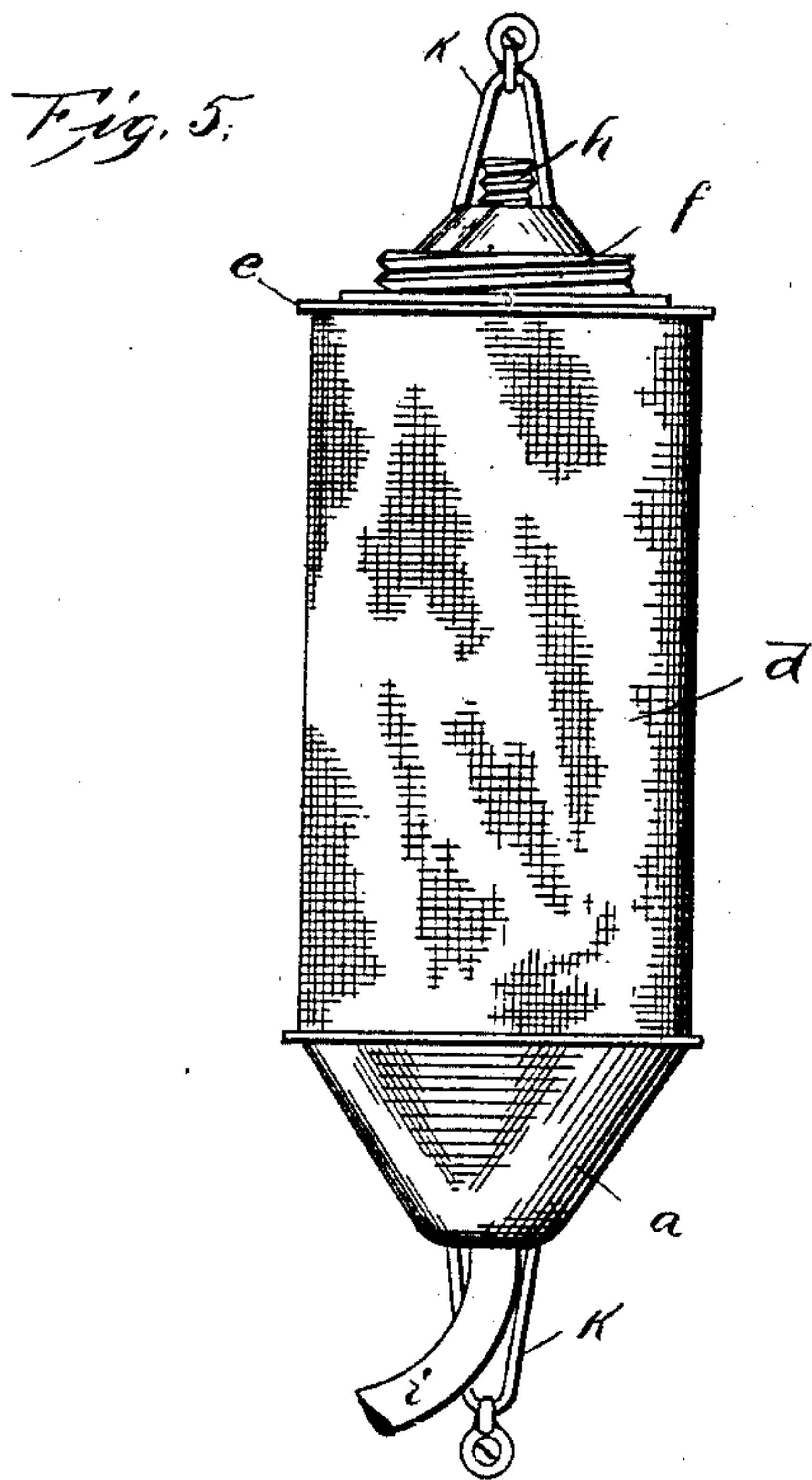
(No Model.)

H. P. ROBERTS.  
VAPORIZER.

2 Sheets—Sheet 2.

No. 435,903.

Patented Sept. 2, 1890.



Witnesses:  
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Attorney



# UNITED STATES PATENT OFFICE.

HENRY P. ROBERTS, OF JAMESTOWN, NEW YORK.

## VAPORIZER.

SPECIFICATION forming part of Letters Patent No. 435,903, dated September 2, 1890.

Application filed May 31, 1890. Serial No. 353,819. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY P. ROBERTS, of Jamestown, in the county of Chautauqua and State of New York, have invented certain  
5 new and useful Improvements in Vaporizers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and  
10 use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to a certain new and improved vaporizer.

The object of the invention is to provide an improved vaporizer exceedingly simple, cheap, durable, and compact in construction, and adapted for use in sick-rooms, bedrooms,  
20 water-closets, railroad-cars, &c. These objects are accomplished by and this invention consists in certain novel features of construction and in combinations of parts more fully described hereinafter, and particularly  
25 pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is an elevation. Fig. 2 is a central longitudinal section. Fig. 3 is a cross-section. Fig. 4 is a detached elevation of the  
30 wick and its carrier. Fig. 5 is an elevation of a somewhat modified construction of the vaporizer. Fig. 6 is a longitudinal section.

The article illustrated in the first sheet of the drawings is particularly adapted to rest  
35 on some object and allow the deodorizing-liquid to evaporate and diffuse throughout the air of the apartment. The base *a* of the article is preferably flat on the bottom. This base has a central cylindrical receptacle *b*  
40 open at the top.

*c* is the top or upper end of the article, and *d* is the reticulated outer cylindrical casing extending between and rigidly secured to said base and upper cap *c*.

45 *d'* is the tubular, preferably reticulated, wick-carrier, the exterior of which is covered by the tubular wick *e* stretched thereon. This carrier extends through a circular opening in the top cap *c*, with its lower end surrounded by the wick extending into vessel *b*.  
50 The opening in the upper cap is surrounded by an annular threaded flange, and the wick-

carrier is rigidly secured to and depends from a screw-cap *f* covering the opening and screwed on said flange of the cap *c*. This  
55 cover is provided with an opening *g* into the upper open end of the wick-carrier, and this opening is normally closed by the removable screw-closure *h*. Any suitable volatile deodorizing-liquid is poured through opening *g*  
60 and the wick-holder into vessel *b*, the closure *h* is then secured in place and the article located in the place it is desired to deodorize. The deodorizing-liquid is drawn up by the  
65 wick extending into the vessel *b*, and by capillary action saturates the entire wick and is thereby diffused throughout the air of the room as it passes through the perforated casing in contact with the wick.

The article of Sheet 2 is particularly adapted  
70 for securing to the walls of the water-closets of railroad-cars or other places, and comprises the same essential features as the article shown on Sheet 1. A pipe *i* extends  
75 from the bottom of the lower cap, which forms a receptacle to the urinal.

The wick-carrier instead of being perforated and open at the bottom is imperforate and closed at the bottom to form the vessel  
80 *b*, and a long strip of wick *e* is employed with its two ends extending from the top down into the interior of the wick-carrier or vessel from opposite sides, and the wick extending  
85 longitudinally on the exterior of the carrier and across the bottom of the same. The liquid being placed within the wick-carrier or vessel, as before described, the wick becomes saturated and some of the liquid drops  
90 into the bottom cap and, together with the fumes thereof, passes down into the urinal and deodorizes and purifies the air around the same.

*k k* are rings or supporting-brackets secured to opposite ends of the article to support the same.

95 It is evident that various changes might be made in the form and arrangements of the parts described without departing from the spirit and scope of my invention; hence I do not wish to limit myself to the precise  
100 construction herein set forth.

What I claim is—

1. A vaporizer comprising a vessel to contain the liquid, one or more wicks held ex-



tending into said vessel, and a reticulated casing surrounding the wick and allowing the air free access thereto, as set forth.

2. As a new article of manufacture, a vaporizer comprising the reticulated casing, end caps for the same, a removable wick-support in the casing, and a wick on the exterior of the carrier extending into the liquid-vessel, as set forth.

3. As an article of manufacture, a vaporizer comprising a vessel to contain the liquid, a wick extending into said vessel and exposed to the air throughout its entire or substantially its entire length, a support for and upon the exterior of which the wick is located, and an outer open casing, substantially as described.

4. As an article of manufacture, a vaporizer consisting of the rigidly-connected end caps, the liquid-receptacle being in the lower cap, the hollow wick-carrier between and supported by one or both of said caps, and a wick on the exterior of said carrier extend-

ing into the liquid-receptacle, substantially as described.

5. In combination, the perforated casing, end caps therefor, a hollow wick-carrier depending from the upper cap, a wick on the exterior of said carrier extending into the liquid-vessel, and a cap for closing the vessel, substantially as described.

6. In a vaporizer, the combination of the liquid-holding vessel, the hollow wick extending thereinto, a receptacle in the bottom of the vaporizer beneath said wick, the pipe extending down from and draining said receptacle, and the securing rings or brackets for supporting the article, for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY P. ROBERTS.

Witnesses:

A. C. JOHNSTON,  
J. L. LYTLE.