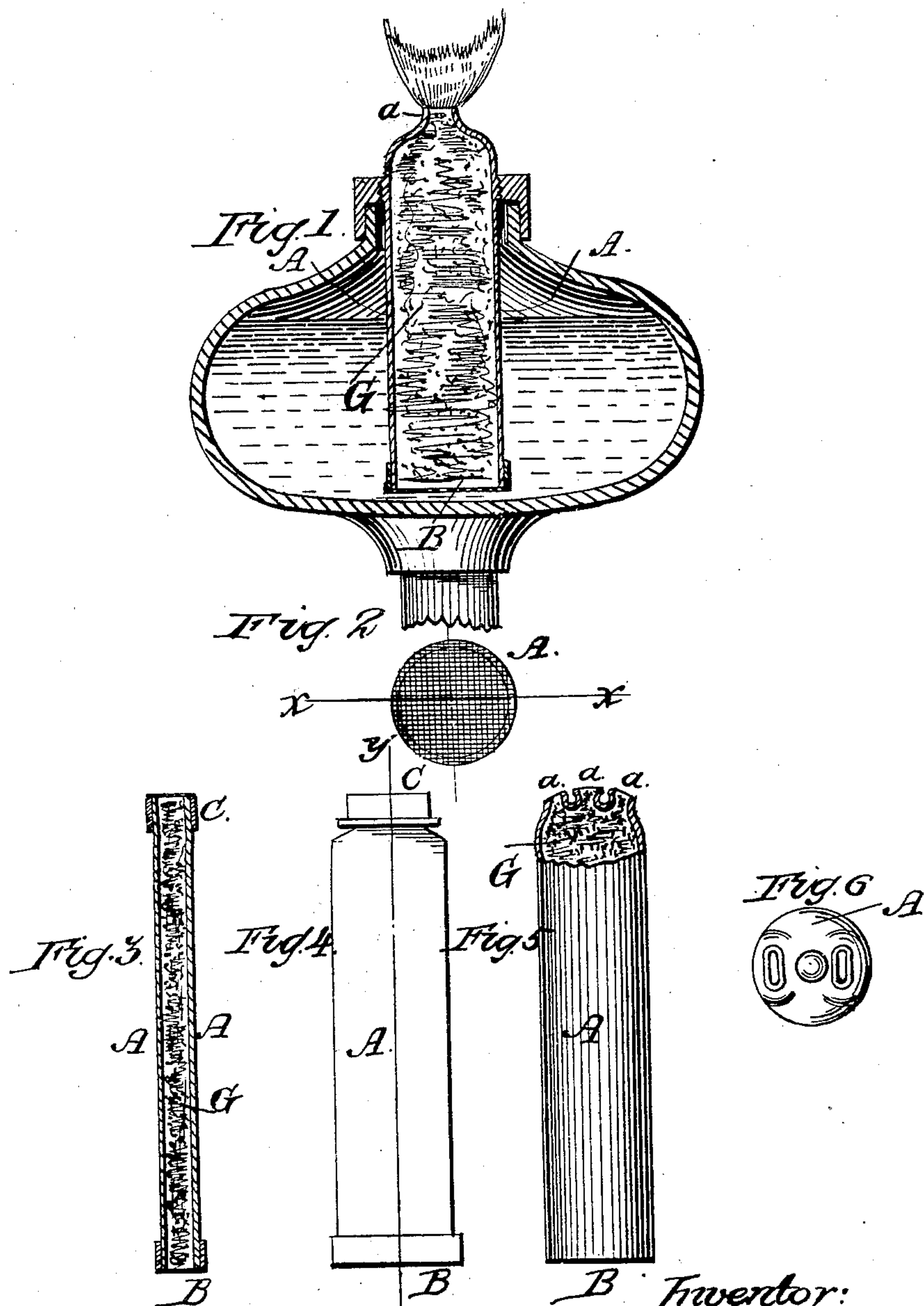


E. D. BOYD.

Lamp Wick.

No. 94,707.

Patented Sept. 14, 1869.



Witnesses:  
C. A. Pettit  
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# UNITED STATES PATENT OFFICE

EDWARD D. BOYD, OF HELENA, ARKANSAS.

## IMPROVEMENT IN LAMP-WICKS.

Specification forming part of Letters Patent No. 94,707, dated September 14, 1869.

*To all whom it may concern:*

Be it known that I, E. D. BOYD, of Helena, in the county of Phillips and State of Arkansas, have invented a new and useful Improvement in Burners for Coal-Oil, &c.; 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 accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section, taken in line of the longest diameter. Fig. 2 is a horizontal section. Fig. 3 is a vertical section, taken in line of the shortest diameter. Fig. 4 is a side view. Fig. 5 is a side view, showing a modified form of the device, a portion being broken away near the upper end. Fig. 6 is a top view of the modified construction represented in Fig. 5.

The object of this invention is to provide a simple and cheap perpetual wick for lamps.

This object is accomplished by the employment of a tube filled with pulverized gypsum or plaster-of-paris, or other equivalent material, to conduct the oil, and provided with burner-orifices, and with sieves or strainers, to prevent foreign particles from mingling with the plaster and choking the tube.

In the drawings, A is the tube, which may be of metal, glass, or any other suitable material, and may be of any desired form and size. This tube is provided with a wire-gauze or foraminated bottom, B, which strains out any impurity from the oil before it passes up into the tube. Other strainers may be arranged at suitable points, if preferred. The top of the tube is slightly contracted, and is provided with one or more orifices, *a a a*, which may be circular, oblong, or of any other form, their function being simply to allow

proper combustion of the oil at the top of the tube. The tube is filled with finely granulated or pulverized gypsum G, which rests upon the bottom B, and, by capillary attraction, draws the oil up from the reservoir, and allows it to burn at *a a a*. A cap-extinguisher, C, may be used in connection with the tube, and any kind of slotted cap for deflecting the air properly upon the flame, so as to increase its intensity, may be employed, as in the ordinary kerosene and Argand lamps.

For filling the tube, ground plaster-of-paris is perhaps the best material, although any other ground stone, mineral, or metal, sufficiently refractory for the purpose, might be employed in lieu thereof.

This device constitutes a perpetual wick, which may be employed in connection with any form of lamp. It will operate to good advantage, and oftentimes very conveniently, when made entirely independent of the lamp, and used in connection with oil placed in a cup, tumbler, bottle, or any other vessel that may be at hand.

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

A perpetual wick or burner consisting essentially of the tube A, having a strainer, B, and an opening or openings, *a a*, and partially or wholly filled with ground or pulverized mineral substance G, substantially as and for the purposes herein set forth.

To the above specification of my invention I have signed my hand this 6th day of August, 1869.

EDWARD D. BOYD.

Witnesses:

CHAS. A. PETTIT,  
S. C. KEMON.