

G. H. LEE.  
 INCUBATOR LAMP CHIMNEY.  
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998,537.

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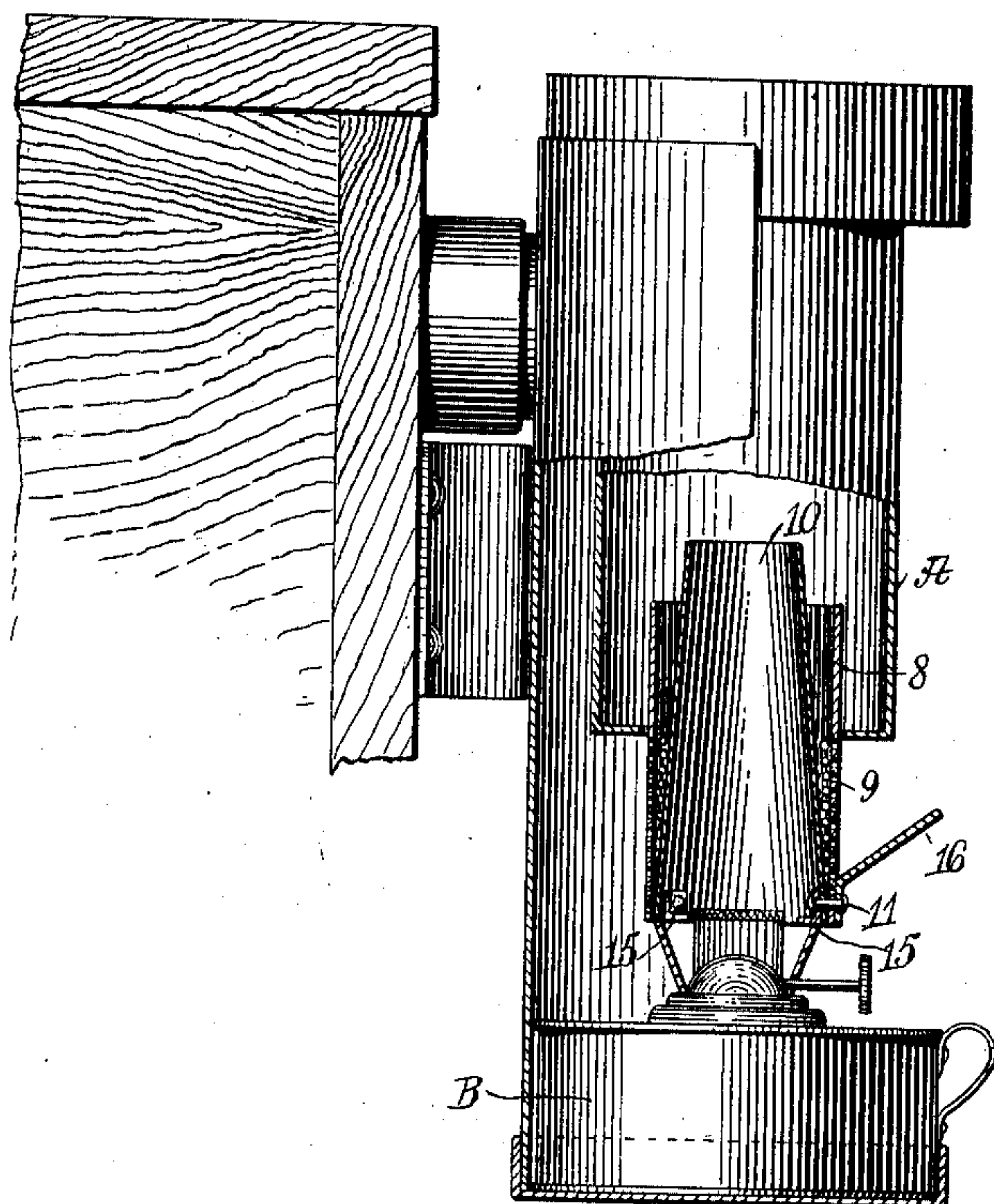


Fig. 1.

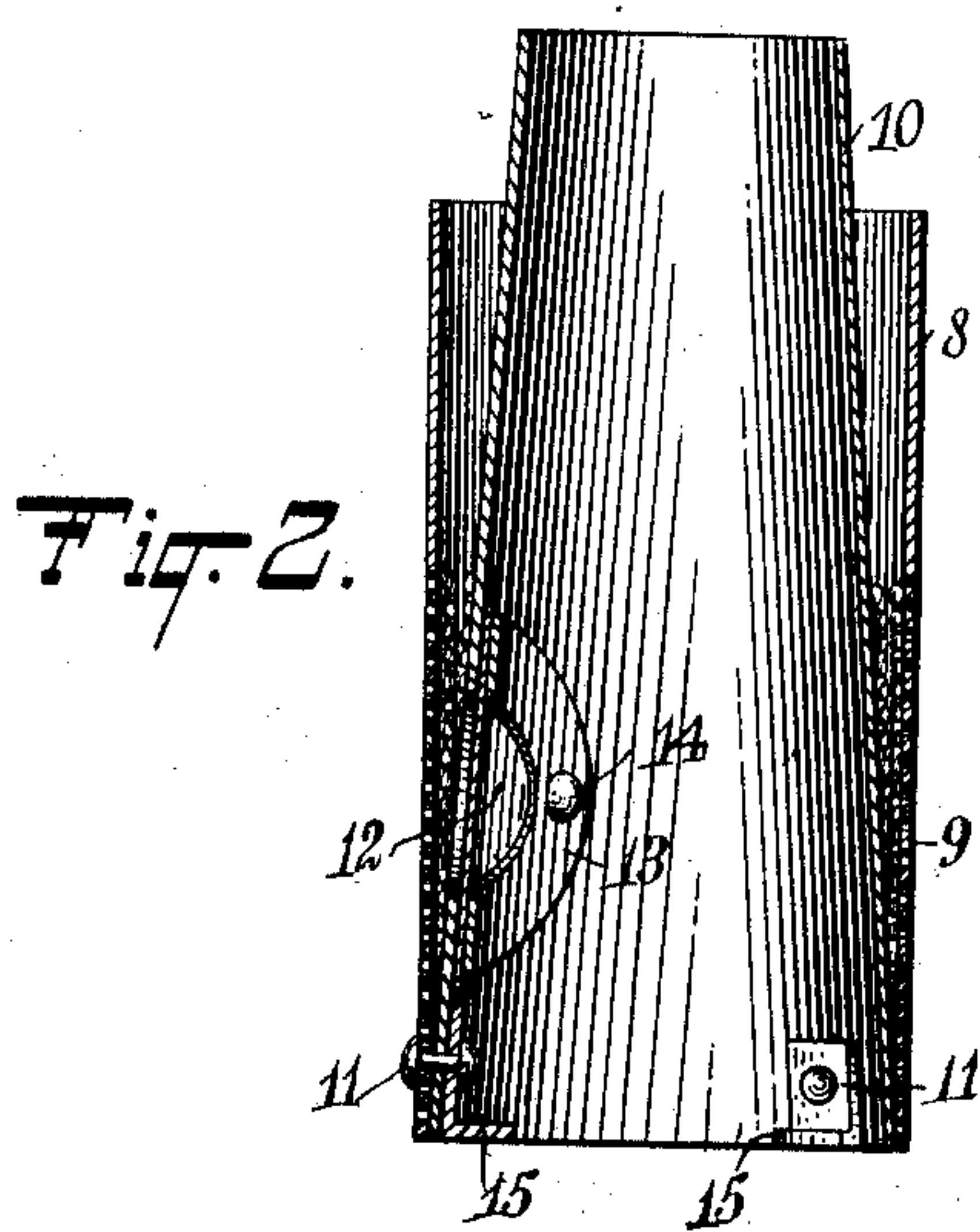
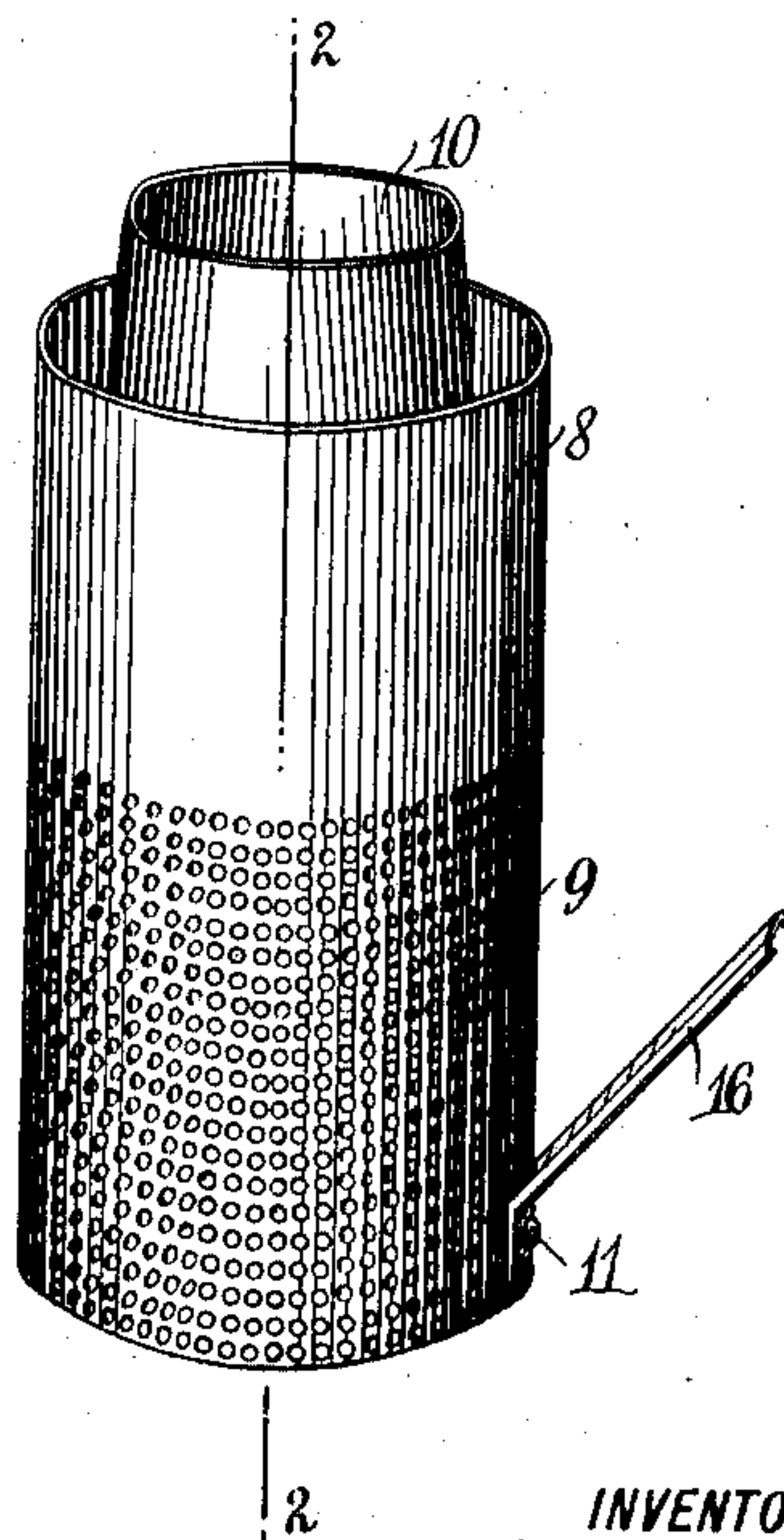


Fig. 2.

Fig. 3.



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# UNITED STATES PATENT OFFICE.

GEORGE HOWARD LEE, OF OMAHA, NEBRASKA.

INCUBATOR-LAMP CHIMNEY.

998,537.

Specification of Letters Patent.

Patented July 18, 1911.

Application filed August 2, 1910. Serial No. 575,086.

*To all whom it may concern:*

Be it known that I, GEORGE H. LEE, a citizen of the United States, and a resident of Omaha, in the county of Douglas and State of Nebraska, have invented a new and Improved Incubator-Lamp Chimney, of which the following is a full, clear, and exact description.

Among the principal objects which the present invention has in view are: to provide a cover for a lamp chimney, constructed to control the circulation of air in connection therewith to prevent heat loss by radiation; and to provide a cover for a lamp chimney, so constructed as to extinguish the said lamp when same is caused to smoke to excess.

One embodiment of the present invention is disclosed in the structure illustrated in the accompanying drawings, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a vertical section of an incubator lamp and heater, having applied thereto a chimney constructed and arranged in accordance with the present invention; Fig. 2 is a vertical section of the chimney, constructed and arranged in accordance with the present invention; and Fig. 3 is a perspective view of the chimney, constructed and arranged in accordance with the present invention.

The heater illustrated in Fig. 1 of the drawings is provided with a drum A. In the lower end of the drum A there is provided a circular opening formed to the size of the outer cover 8 of the improved chimney. The cover 8 is cylindrical in form to slide in the said opening in the bottom of the drum A. The lower portion 9 of the cover 8 is perforated, as shown best in Fig. 3 of the drawings. The perforations are numerous enough and fine enough to form a screen wall adapted to admit air from the outer side to the space between the cover 8 and the chimney 10. The chimney 10 is slightly conical in shape, as shown best in Fig. 2 of the drawings, and is secured by means of rivets 11, 11 to the cover 8. The chimney is provided with a peep-hole orifice in the side thereof, disposed, as shown, opposite the flame of the lamp B. The orifice is covered by a transparent material, such as isinglass 12. The isinglass 12 is held in position on the chimney 10 by means of a ring 13, secured to the said chimney by

rivets 14. The chimney and cover thus united are mounted upon the lamp B by means of internally extended lug feet 15, 15. The chimney and cover are manipulated by means of a handle 16.

When it is desired to remove the lamp B, the chimney and cover are raised into the drum A of the heater, and there held while the lamp is raised from the socket A provided for the same, and removed. If desired, the chimney and cover may then be lowered until the cover passes out of guiding contact with the opening in the bottom of the drum A.

In its operation the cover admits the outer air through the perforations with which it is provided in the lower section of the heated metal chimney 10. The heat immediately rises to the less congested space at the upper end of the cover 8, where the walls are solid, from which space the air is heated as delivered into the drum A of the heater. It will be seen that a constant upward draft is thus produced, avoiding all back drafts which might prove dangerous to the light of the lamp. It will also be seen that radiation of heat from the chimney 10 into the open air is thus avoided, the surrounding air being guided upward and delivered into the heating drum A. The heat generated by the lamp B is thus conserved and delivered to the point desired.

A further service performed by the cover 8 is that when, as is liable to occur, the lamp has burned sufficiently high to smoke inordinately, the soot or smoke thus given off falls within the cover 8 and clogs the perforations therein, thus terminating the upward draft around the chimney 10. Without the draft thus upwardly produced about the outside of the chimney 10, the flame of the lamp B fails of nourishment and will lower and die.

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

1. An incubator lamp chimney comprising a conical metal tube having an orifice in the side thereof disposed opposite the flame of the chimney; a suitable transparent cover for said orifice fixedly mounted on said tube; a cover for said tube rigidly connected therewith at the lower end thereof, said cover being separated from said tube at the upper end thereof to form a passage surrounding said tube, said passage increasing

in diameter to the upper end thereof, said cover being provided in the lower portion thereof with a plurality of perforations; and a plurality of supporting members radially disposed and internally extended from said tube to rest on the lamp with which the said chimney is provided.

2. An incubator lamp chimney comprising a conical metal tube; a cylindrical metal tube rigidly connected with said conical metal tube at the lower end thereof to form in conjunction with said conical metal tube an annular upwardly opening wedge-shaped

space surrounding said conical tube; said cylindrical tube being perforated in the lower section thereof; and a heating chamber surrounding the upper portion of said cylindrical tube in the upper section thereof above the said perforated section thereof.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE HOWARD LEE.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."