

J. SCHLEY.

Lamp.

No. 29,324.

Patented July 24, 1860.

FIG. 1

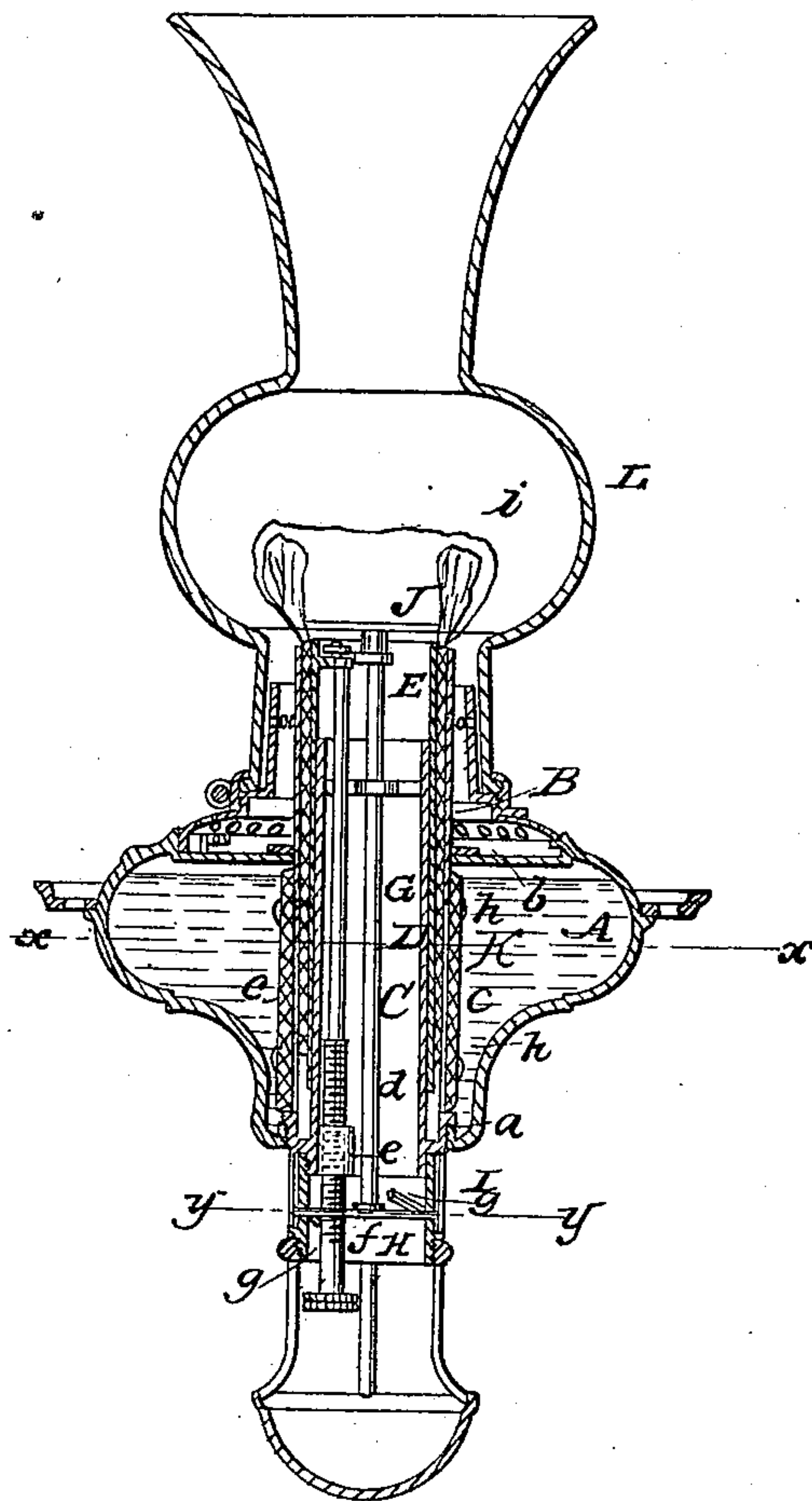


Fig. 3.

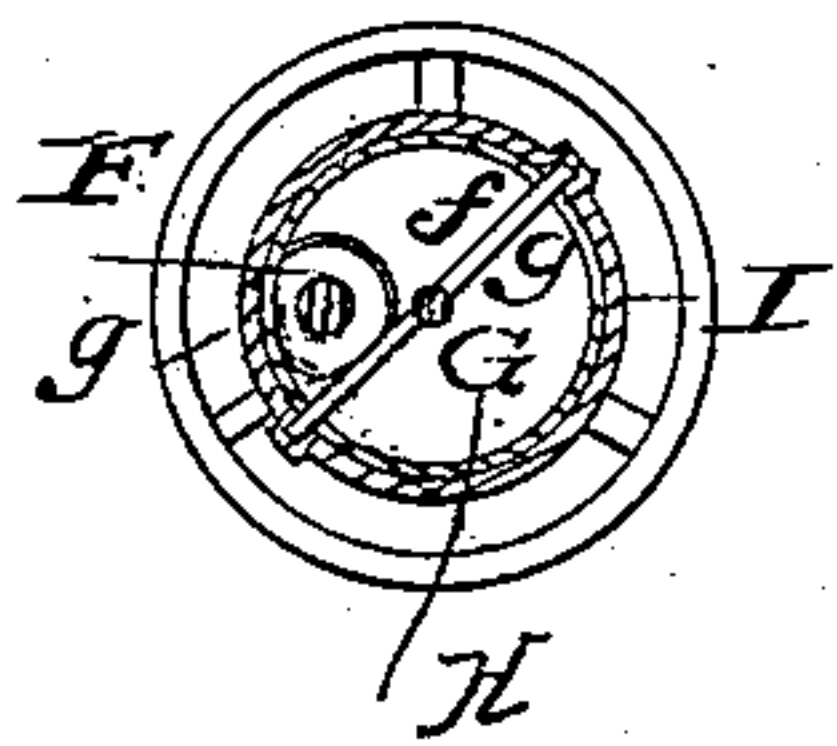
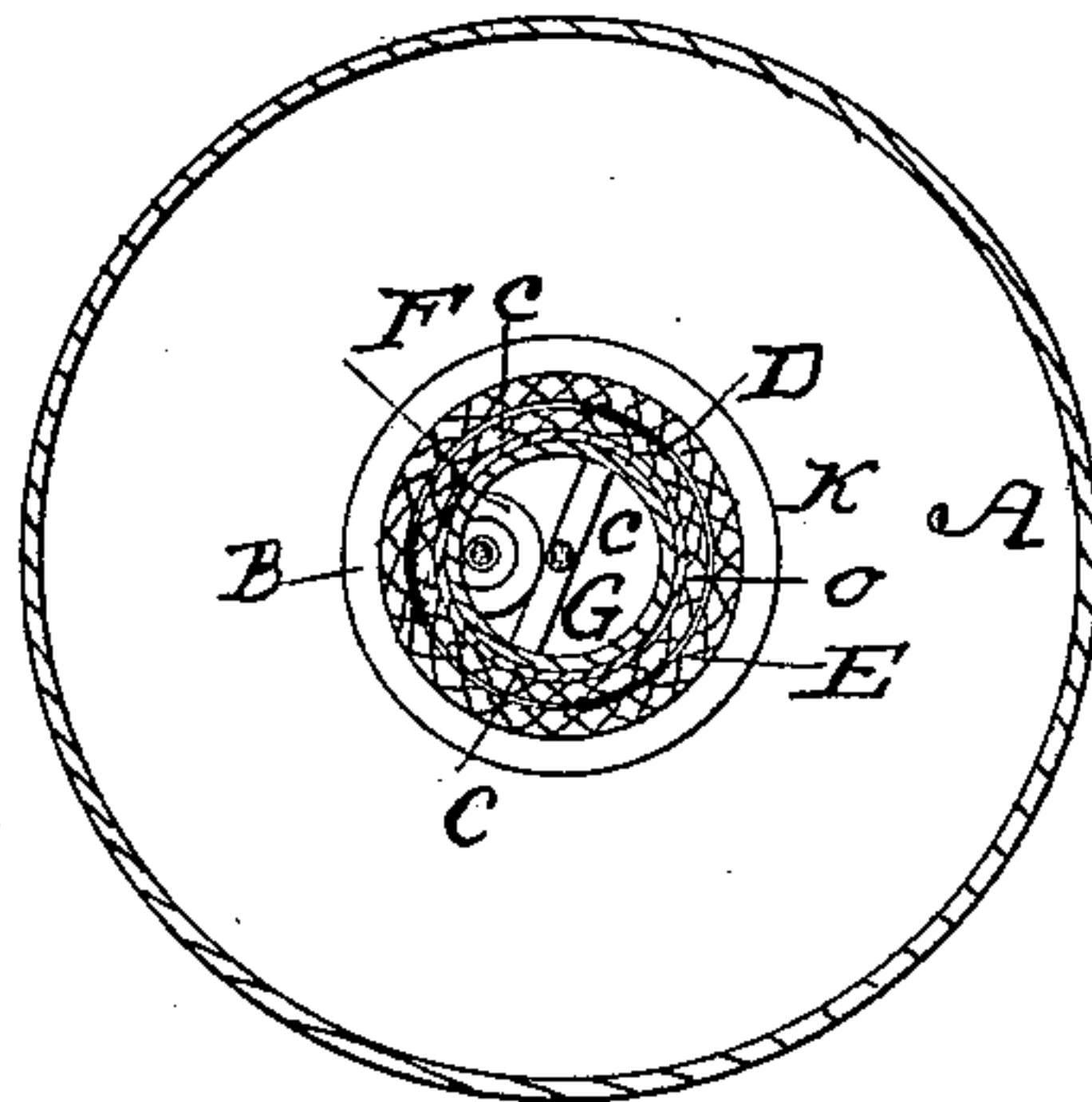


Fig. 2



Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOHN SCHLEY, OF SAVANNAH, GEORGIA.

## LAMP.

Specification of Letters Patent No. 29,324, dated July 24, 1860.

*To all whom it may concern:*

Be it known that I, JOHN SCHLEY, of Savannah, in the county of Chatham and State of Georgia, have invented a new and Improved Lamp; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical central section of my invention. Fig. 2, a horizontal section of the same taken in the line  $x, x$ , Fig. 1. Fig. 3 a horizontal section of the same taken in the line  $y, y$ , Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a lamp, for burning for illuminating purposes, coal oil, and consists in a combination of parts arranged in such a way as to supply the flame with a requisite quantity of oil and oxygen so as to obtain a brilliant illuminating flame. Coal oil as is well known contains a large proportion of carbon and consequently the flame requires to be supplied with a corresponding proportion of oxygen to support a proper combustion for illuminating purposes. It is also well known that the heavier grades of coal oil are not sufficiently fluid to ascend the wick freely, capillarity being checked by their viscosity and the flow of the oil requires to be aided by other means, than the capillarity of the ordinary wick in order to properly supply the flame.

The object of the within described invention is to obtain a lamp that will effect the above results by a simple combination and arrangement of means.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents the body of the lamp which may be constructed in any of the known forms, and, B, is a tube which is fitted centrally in the body A, and screwed into its lower end as shown at  $a$ , in Fig. 1. The tube B, has secured within it concentrically a tube C, which extends to the bottom of the tube B, but does not extend to its upper end and sufficient space is allowed between the two tubes B, C, to receive the wick tube D, on which the wick E, is placed. The tube B, has a flanch  $b$ , attached to its outer side which flanch projects over the orifice in the upper end of the body of the lamp, through which orifice the tube B, passes.

The lower part of the tube B, below the flanch  $b$ , is slotted vertically as shown at  $c$ , so that when the wicks are not applied to the tubes B, D, a communication is formed between the body A, of the lamp and the space between the tubes B, D.

To the inner side of the wick tube D, at its upper end a rod F, is attached and the lower end of this rod has a screw  $d$ , on it which screw works in a nut  $e$ , secured to the inner side of the lower part of tube C. It will therefore be seen that by turning the rod F, the wick tube D, and its wick E, may be raised and lowered, as desired.

G, is a rod which is placed centrally within the tube C, and has its lower end attached to the center of a cross bar  $f$ , the ends of which pass through oblique or spiral slots  $g$ , in a band H, which is screwed on the lower end of the tube C, the ends of the bar  $f$ , are attached to a collar I, which is fitted loosely on the band H. On the upper end of the rod G, a button J, is fitted said button being just above the tube B. It will be seen that by turning the collar I, the button may be raised and lowered as desired. By this arrangement which admits the wick E, being raised and lowered as well as the button J, the height or volume of flame may be graduated and the flame spread as may be required to produce the best results from different qualities of oil, the button of course spreading the flame while its height is regulated by adjusting the wick tube D.

Around the lower part of the tube B, a supplemental or auxiliary wick K, is placed and secured by threads  $h$ , wrapped around it at its top and bottom. This wick K, may be termed a feeder and it may be thicker or heavier than the wick E, in order to insure a copious supply of oil to the latter. This wick K, is stationary and consequently admits of the wick E, being raised within it to nearly the extent of the height of wick K. The flame therefore will always be supplied with oil so long as any remains in the lamp, as the lower part of K, is in contact with the bottom of the lamp, and as the wick K, extends the whole height of the lamp and is of considerable thickness the oil is fed more generously to the flame, than if the supply depended solely on the wick tube E. The oil therefore will be freely supplied to the flame so long as any remains in the body A.

L, is a glass shade and chimney combined.



This shade and chimney has a spherical chamber *i*, at its lower part, which chamber encompasses the flame as shown clearly in Fig. 1. The lower part of the shade and chimney has a metal flanch *M*, attached, and this flanch is perforated as shown at *j*, and is fitted on the body *A*, in the usual or in any proper manner.

In consequence of having the shade and chimney formed at its lower part with a spherical chamber *i*, the air in its passage through it is deflected and made to impinge against the flame and the latter is kept surrounded by a volume of warm oxygen which while feeding the flame has no tendency to cool it.

I am aware that glass shades and chimneys for lamps have been previously com-

bined, and I am also aware that supplemental or auxiliary wicks have been used; but, I am not aware that the parts herein described have ever been combined and arranged to effect the result specified. I do not claim therefore any of the parts herein described when separately considered, but

I do claim as new and desire to secure by Letters Patent—

The combination and arrangement of the tubes *B*, *C*, *D*, with the two wicks *E*, *K*, button *J*, and body *A*, with or without the shade and chimney *L*, as and for the purpose set forth.

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Witnesses:

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