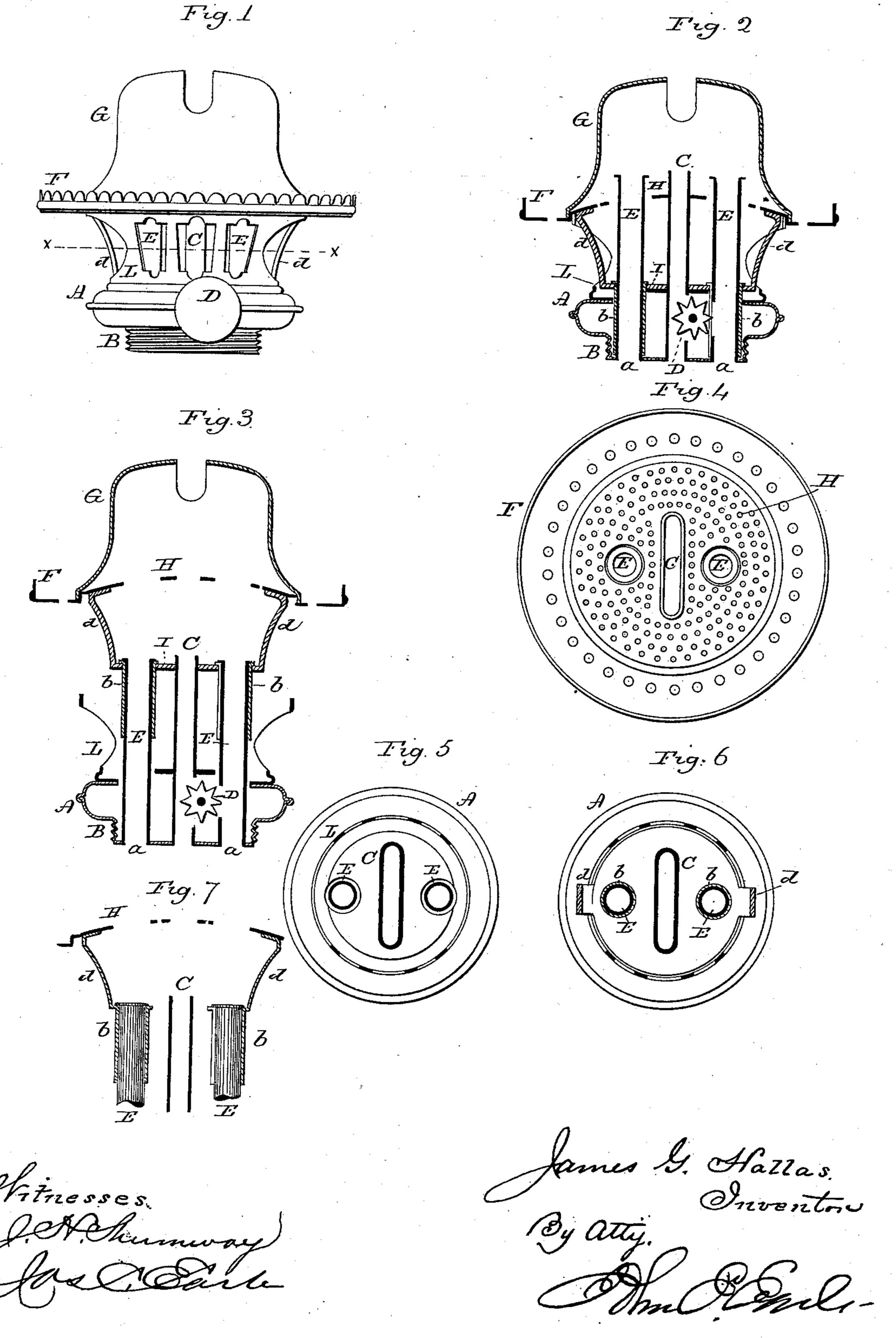
## J. G. HALLAS.

LAMP BURNER.

No. 308,608.

Patented Dec. 2, 1884.



## United States Patent Office.

JAMES G. HALLAS, OF WATERBURY, CONN., ASSIGNOR TO THE BENEDICT & BURNHAM MANUFACTURING COMPANY, OF SAME PLACE.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 308,608, dated December 2, 1884.

Application filed April 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. HALLAS, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Im-5 provement in Lamp-Burners; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which 10 said drawings constitute part of this specifi-

cation, and represent, in—

Figure 1, a side view of the burner complete; Fig. 2, a vertical central section showing the chimney-rest in its down position; Fig. 3, the 15 same section as Fig. 2, showing the chimneyrest, &c., in its elevated position; Fig. 4, a top view of the burner, the deflector removed; Fig. 5, a horizontal section on line xx, looking down; Fig. 6, a horizontal section on the same 20 line x x, the movable part of the burner removed, showing only the top of the base and section of the tubes; Fig. 7, a modification.

This invention relates to an improvement in that class of lamp-burners in which a flat 25 wick is employed, and in which the deflector and chimney-rest are arranged to be moved up and down, so as to expose the top of the wick below the chimney-rest for convenience of trimming or lighting without removing the 30. chimney from the burner; and the invention consists in the construction, as hereinafter described, and more particularly recited in the claims.

A represents the base, provided with the 35 screw B, as in the usual construction of burners: C, the flat-wick tube arranged centrally in the burner in the usual manner, and provided with the usual wick-adjuster, D. In the base at each side of the wick-tube is a verti-40 cal tube, E, these two tubes standing parallel with the wick-tube. These tubes extend through the base and open below, as at a, so as to make an open communication into the lamp-fount.

45 F is the usual chimney-rest, provided with the usual deflector, G, and air-distributer H, extending across beneath the deflector below the top of the wick-tube, as seen in Fig. 2. This distributer is perforated in the usual 50 manner, except that openings are made for

the upper end of the tubes E E to extend through, as seen in Fig. 2. These tubes, therefore, open from the lamp-fount into the combustion-chamber—that is to say, the chamber within the deflector, and of which the perfo- 55 rated air-distributer forms the bottom.

Around each of the tubes E is a sleeve, b. These sleeves fit their respective tubes closely, but so as to be moved up and down thereon. The opening in the top of the base around the 60 tubes is larger than the tubes, and so as to permit the sleeves to pass down into the base, as seen in Fig. 1. To the upper end of these sleeves b a horizontal plate or disk, I, is fixed, having an opening for the wick-tube, and so 65 that the plate I may move up and down upon the tubes E E as guides, as from the position seen in Fig. 2 to that seen in Fig. 3. From the plate I arms d extend up and are attached to the chimney-rest, and so as to carry and 70 support the chimney-rest with the deflector and chimney thereon; hence, by taking hold of the chimney-rest, it, together with the deflector and chimney thereon and the plate I, may be raised, as from the position seen in 75 Fig. 2 to that in Fig. 3, or returned, the sleeves b b not only serving as guides for such vertical movement, but also to firmly support the movable portion of the burner, the friction between the sleeves and their tubes being suf- 80 ficient to hold the chimney-rest and all it carries at any desired point of elevation within the extreme limits. From the base a screen, L, extends upward in flaring shape to meet the chimney-rest, as shown, which gives to the 85 burner the appearance of the usual construction of burners, and substantially hides the tubes within. When the chimney-rest is raised, as seen in Fig. 3, the wick-tube is exposed above for lighting, extinguishing, or other 90 purposes. When down, as seen in Fig. 2, the burner operates as do burners of usual construction. The tubes EE, however, serve for the escape of gas which may generate in the fount and conduct it to the combustion-cham- 95 ber above. The tubes E E being small in diameter, the short sleeves b b, which can only be in length equal to about the depth of the base, form a bearing so proportionately long that no difficulty arises from cramping in the 100 up-and-down movement of the burner, as in burners where a large cylindrical guide is arranged, and in which the sleeve in proportion to the diameter of the cylindrical guide is nec-5 essarily short.

From the foregoing it will be evident that I do not make claim, broadly, to a vertically-adjustable chimney-rest, neither do I claim, broadly, a tube arranged in the burner to conduct the gas from the fount to the combustion-chamber, as this I am aware is not new.

Instead of attaching the two sleeves by the plate I and connecting the plate to the chimney-rest, the plate may be omitted and an arm extend up from each sleeve to the chimney-rest, as seen in Fig. 7. I however prefer to employ the plate I and thereby connect the two sleeves. I therefore do not wish to be understood as limiting the invention to the connection of the two sleeves independent of their connection with the chimney-rest.

While I prefer to make the guides E E tubular—first, because it is cheaper than the solid guide, and second, because in such construction they may perform the double office of guides and gas-conductors—they may be made solid, as seen in Fig. 7.

I am aware that lamp-burners have been constructed in which the gallery and other parts of the burner have been made adjustable with relation to, or so as to be elevated from, the base, and in which such adjustment was made by means of tubular guides—such, for illustration, as Patents Nos. 35,664 and 274,326—35 butinsuch construction there is necessarily considerable extension made below the base of the burner, whereas in this invention the adjusting devices are entirely within the burner, and in no way extend the burner beyond what would be occupied by the same class of burner were it not made adjustable, or so that the

chimney-rest could be elevated.

I claim nothing shown or described in either of the above-mentioned patents.

I claim—

1. In a lamp-burner, the combination of the wick-tube, two vertical guides, E, parallel with the wick-tube, one upon each side, fixed in the base and extending upward, sleeves B B, one upon each of said guides, the chimney-rest supported from said tubes, and so as to be movable, with all it carries, up and down from the base, the said guides E E serving to govern such vertical movement, substantially as described.

2. In a lamp-burner, the combination of the wick-tube, the two vertical guide-tubes E E, parallel with the wick-tube, one upon each side, fixed in the base and extending upward, sleeves b b, one upon each of said tubes, and 60 carrying the plate I, the chimney-rest supported from said plate I, and so as to be movable, with all it carries, up and down from the base, the said tubes E E serving as guides for such vertical movement, substantially as described.

3. In a lamp-burner, the combination of the wick-tube, the two vertical guide-tubes E E, parallel with the wick-tube, one upon each side, fixed in the base, but opening into the fount 70 below and extending upward and opening into the combustion-chamber, sleeves b b, one upon each side of said tubes, and carrying the plate I, the chimney-rest supported from the said plate I, and so as to be movable, with all it carries, up and down from said base, the said tubes E E serving as guides for such vertical movement, and as conductors for the guides from the fount to the combustion-chamber, substantially as described.

JAMES G. HALLAS.

Witnesses:

ROSWELL H. BUCK, F. S. LEWIS.