SAMUEL B. H. VANCE.

Sliding Center-Light Extension Gasalier.

No. 126,241. Patented April 30, 1872.

Fig. 1.

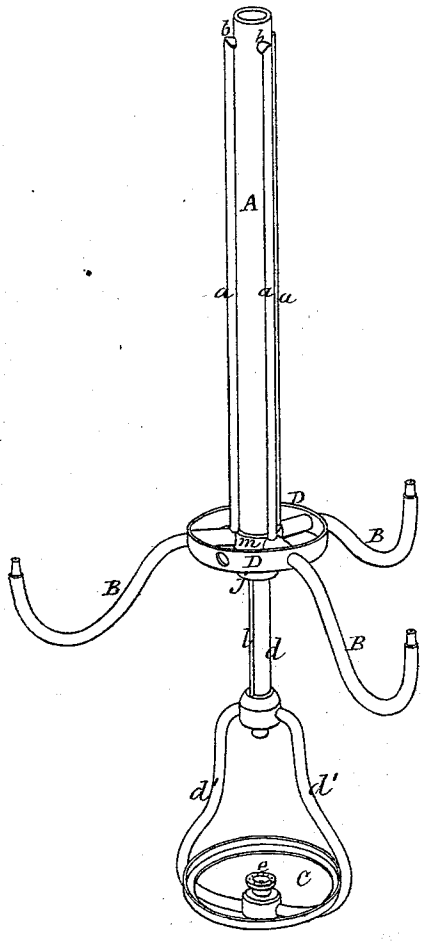


Fig. 3.

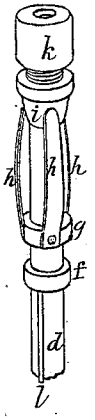
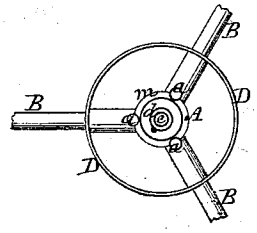


Fig. 2.

Fig. 4.



Witnesses.
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126,241

UNITED STATES PATENT OFFICE.

SAMUEL B. H. VANCE, OF NEW YORK, N. Y., ASSIGNOR TO MITCHELL, VANCE AND COMPANY, OF SAME PLACE.

IMPROVEMENT IN SLIDING CENTER-LIGHT EXTENSION GASALIERS.

Specification forming part of Letters Patent No. 126,241, dated April 30, 1872.

To all whom it may concern:

Be it known that I, SAMUEL B. H. VANCE, of the city, county, and State of New York, have invented certain new and useful Improvements in Sliding Center-Light Extension Gasaliers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents in perspective a gasalier with my improved center-light extension applied thereto. Fig. 2 represents a vertical section through the same. Fig. 3 represents in perspective, and detached, an interior portion of the extension mechanism not so clearly seen in the other figures. Fig. 4 represents a horizontal section through the suspension gas-pipes.

Similar letters of reference where they occur in the separate figures denote like parts of the gasalier in the drawing.

My invention consists in combining with the exterior stationary and the interior sliding tubes of an extension gasalier, a stuffing-box, screw-cap, and slot and reed, so that there may be no leakage or turning of the sliding tube as it is raised and lowered.

The outer or casing tube of the gasalier is shown at A, and to the lower end of this tube are connected the stationary burners B, of which there may be any desired number. The supply of gas for these stationary burners may be brought or carried through the small pipes or tubes *a*, which connect with the main gas-pipe or way, as at *b*. Within the outer or casing tube A, and secured centrally therein by its upper end, is a gas-tube, *c*, which connects with the main gas supply, and extends down to or somewhat below the lower end of said casing A.

The drop or extension burner is represented at C. It is furnished with gas through the pipe or tube *c*, and partially through the tube *d*, branch-tubes *d'*, and burner *e*. The tube *d* is made to slide up and down within the outer case A, and, that it may have a regulated friction so as to stop and hold at any given point in its descent, and yet be raised up without this friction, I construct and arrange the parts as follows: Above a collar, *f*, made fast on the tube *d*, or any other restraining device, is placed a sliding ring, *g*, to which are attached two or more springs, *h*, which extend upward along said tube, and the upper ends of which springs are free to move out or in, as may be desired or occasion require. Upon the tube *d*, and at or about the upper and free ends of the springs *h*, there is attached to said tube an inverted cone, *i*, so that as the points of the springs move up upon this cone they shall be pressed outward and against the inner surface of the outer case A, and with sufficient friction to hold itself and its appliances or attachments to said case; and when said points of the springs are moved downward upon the cone they will react and leave said inner surface of the outer case. The outer sides of the springs may be furnished with leather, or any other suitably soft material that possesses frictional properties without being hard enough to wear away the metal of the tube against which they are pressed.

When the drop or extension light is drawn down the springs catch against the case A, and the cone on the tube *d*, passing in and against said springs, force them out against the outer casing with sufficient pressure or friction to hold said drop-light in any desired position. When the drop-light is pushed up the cone leaves the points of the springs, and there is very little pressure or friction then, so that the drop or extension light is easily moved upward, but will stop and reliably hold itself at any position on being drawn downward.

On top of the tube *d* and within the outer case A there is a stuffing-box, *k*, in which any suitable packing may be placed, so as to pack the joint between the gas-tube *c* and the tube *d*, and prevent any escape of gas thereat. And as this stuffing box *k* is made removable by means of a screw-thread, so that the packing may be readily renewed when necessary, and would be liable to be unscrewed by any one turning the drop or extension light, in raising or lowering it, I have provided against such liability by making a slot in the screw-cap *j* underneath the stationary burners, and placing a flange, reed, or feather, *l*, on the tube *d*, and which moves up and down through said slot, and when the cap is put tightly on the

tube *d* cannot be turned owing to the slot and feather.

When the packing or the springs need any repairs or renewing, the cap *j* can be unscrewed, and then the tube *d* with its springs and packing-box may all be drawn out, and by corking the pipe *c* there will be no escape of gas while the repair or renewal is going on—the gas-tube *c* not in the least being disturbed thereby.

The stationary burners B may be braced by a ring, D, united through a collar, *m*, and furnished with stop-cocks in the usual way.

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

In combination with the outer case A, and tube *d*, sliding therein, the stuffing-box *k*, screw-cap *j*, and slot and feather or reed, for the purpose of packing the joints to prevent leakage, and also to prevent the inner or sliding tube from being turned while raising and lowering it, as described.

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Witnesses:
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