

No. 681,265.

Patented Aug. 27, 1901.

T. RODERICK.  
MANTLE SUPPORT.

(Application filed Feb. 28, 1901.)

(No Model.)

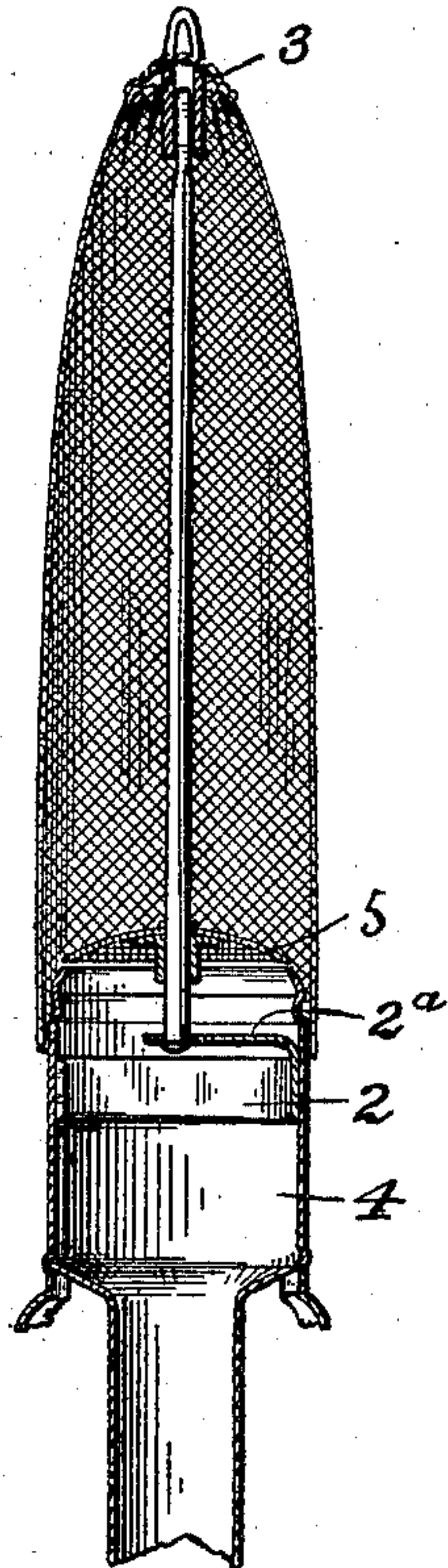


Fig. 1

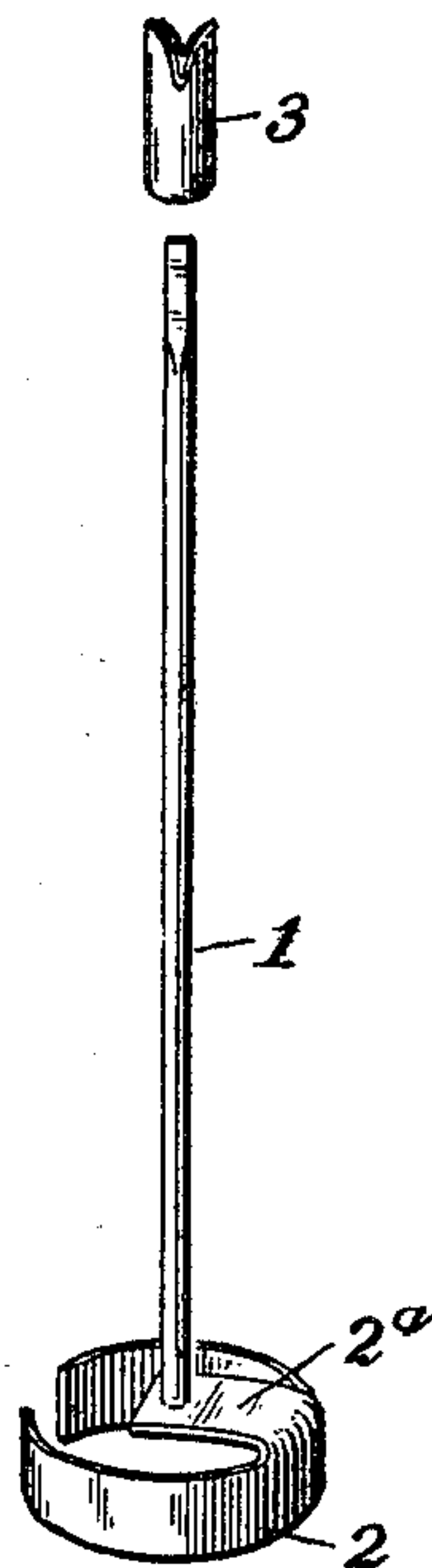


Fig. 2

WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS RODERICK, OF COLUMBUS, OHIO.

## MANTLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 681,265, dated August 27, 1901.

Application filed February 28, 1901. Serial No. 49,324. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS RODERICK, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Mantle-Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates more particularly to supports for gas-mantles that are adjustable vertically.

The object of the invention is to provide a simple and economically-constructed device that can be quickly adjusted without endangering the integrity of the mantle.

My invention consists, essentially, of a gas-burner provided with a vertically and directly movable mantle-support located centrally in the burner-tube, combined with a spring to frictionally hold said rod in any position to which it is adjusted, the rod being directly movable to effect the adjustment.

I am aware that it has been proposed to locate a mantle-supporting rod centrally with respect to the axis of the burner-tube and that it has been proposed to adjust such a rod vertically by means of screw-threads on the rod engaging a nut in the burner. Hence I do not claim, broadly, a centrally-located and vertically-adjustable mantle-supporting rod.

In the accompanying drawings, in which I have illustrated an embodiment of my invention, Figure 1 is an elevation, partially in section, of a burner equipped with my mantle-support. Fig. 2 is a perspective view of the support removed from the burner.

1 designates the mantle-supporting rod or standard.

2 designates a spring attached to the lower end of the rod. In the form shown the spring 2 is made in one piece with an inwardly and radially extending tongue 2<sup>a</sup>, to which the lower end of the support is riveted or otherwise secured. The upper end of the rod is furnished with a suitable hook or catch 3, on which the mantle is suspended. This hook or catch 3 is shown to be made frictionally attached, but removable, so that when removed the upper end of the rod can be passed through a central opening in the gauze tip 5.

The spring 2 is made so that it must be slightly compressed to be inserted into the burner-tube 4, and when so inserted this spring frictionally engages the inner sides of the burner-tube. By taking the upper or hook end of the supporting-rod between the fingers the rod can be adjusted up or down, the rod remaining at the place to which it is adjusted by virtue of the frictional engagement of the spring 2 with the inner sides of the burner-tube 4. As mantles are light in weight, very slight friction suffices to hold the supporting-rod in place.

Many of the mantle-supports now on the market are secured on the outer side of the burner-tube. In such cases the support is likely to "warp" or bend, thus throwing the mantle out of the vertical, thereby endangering the integrity of the mantle, to say nothing of the effect of this upon the character of the light. With my invention the mantle-support stands centrally within the mantle and there is less likelihood of any bending of the rod, because the weight of the mantle is supported along the entire axis of the rod and the heat is equal on all sides of the rod. The rods themselves can, however, be made of some refractory material, so that bending of the rod shall be impossible.

I do not wish it to be understood that I confine myself to the particular form shown in my drawings herewith, because the gist of the invention resides in the mantle-supporting rod with a spring to frictionally engage the interior side of a burner-tube, and it is quite obvious that this idea can be embodied in a multiplicity of forms.

What I claim, and desire to secure by Letters Patent, is—

1. In a gas-burner, a mantle-support comprising a rod constructed at its upper end to support a mantle, a spring attached to said rod to slidably bear against the inner side of the burner-tube, whereby the rod is adjustable vertically with a direct movement thereof, and is held in adjusted position in said tube, substantially as described.

2. A mantle-support for a gas-burner comprising in combination, a rod, a spring 2 of cylindric form having an inwardly and radially extending tongue 2<sup>a</sup> to which the rod is attached, said spring 2 adapted to slidably



5 bear upon the inner side of the burner-tube whereby the rod is adjustable vertically with a direct movement thereof, and is held in adjusted position in said tube, substantially as described.

10 3. In a gas-burner, a vertically-adjustable mantle-support located centrally in the burner-tube, said support comprising a rod constructed at its upper end to sustain a mantle, combined with a spring to frictionally hold said rod in any position to which it is adjustable in said burner-tube, the rod being adjustable with a direct vertical movement thereof, substantially as described.

15 4. In a gas-burner, the combination with a

burner-tube, a foraminous tip therefor, a central opening for the movement of a mantle-supporting rod in said tip, a mantle-supporting rod extending through the central opening in the tip, a spring to frictionally hold 20 said rod in any position to which it is adjustable in said burner-tube, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS RODERICK.

Witnesses:

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GEO. M. FINCKEL.