

R. Nutting,

Lamp.

No. 111,237.

Patented Jan. 24, 1871.

Fig. 2.

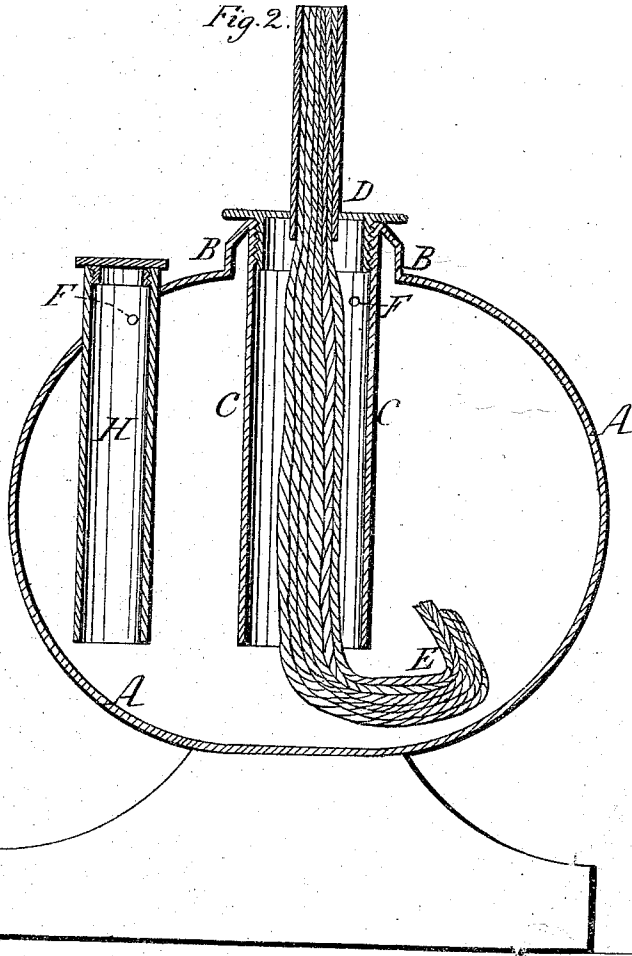
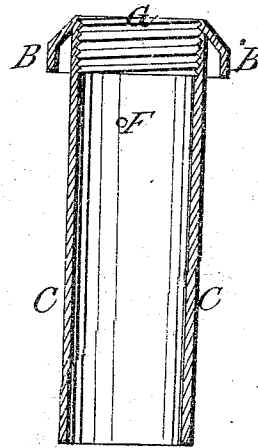


Fig. 1.



Witnesses.

J. H. Nutting.  
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# United States Patent Office.

RUFUS NUTTING, OF RANDOLPH, VERMONT.

Letters Patent No. 111,237, dated January 24, 1871.

## IMPROVEMENT IN LAMPS.

The Schedule referred to in these Letters Patent and making part of the same.

I, RUFUS NUTTING, of Randolph, county of Orange and State of Vermont, have invented certain Improvements in Lamps, of which the following is a specification.

The nature of my invention consists in the construction of lamp-collars, (as an article of manufacture and commerce, independent of founts, and adapted alike to glass, composition, or metal lamps,) with an extension downward (called a guard-tube extension) of that part in which is cut the female screw for receiving the male screw of the burner-base so far as may be, and yet leave sufficient space between its open lower end and the bottom of the lamp-fount in which it is used for extra length of wick to lie promiscuously thereon, and also allow space for convenient washing out, the same having a small hole a proper distance from the top, the objects of which extension being to prevent the splashing up of the oil or fluid and leaking out around the joint between the base of the burner and collar when agitated, and somewhat to operate as a preventive against explosions, and as a reflector of light which enables the one filling the lamp to see much better how full the lamp is getting (in case of metallic lamps) than when there is no such tube, and the fount is consequently dark within, while the hole affords a chance of escape for the air while filling the lamp, and also a permanent mask to facilitate the filling of the lamp to a proper fullness, in case of metallic lamps, which cannot be seen through like glass lamps.

The drawing No. 1 represents a vertical transverse section of the collar B and the guard-tube extension C, showing the female screw G and the gauge or vent-hole F.

The drawing No. 2 shows a vertical transverse section of a common globular lamp-fount, A, the collar B, guard-tube extension C, fluid-burner D, wick E, gauge or vent-hole F, and a filling tube, H.

A is made in any approved form and manner, and B may be made in the usual form and manner, (i. e., by being "dropped," "swaged," pressed, drawn, or cut quickly from a single piece of metal,) excepting that it is extended downwardly from the bottom of the female screw G two inches, more or less, according to the depth of the fount for which it is designed, and as near the bottom of the fount as may be, and allow of sufficient room for extra length of wick to lie promiscuously on the bottom of the fount and for convenient washing, for which objects the bottom must not be closed.

F is a small hole about half an inch lower than the outside of the collar B, for the purpose of a permanent

mask for the filling of the lamp to a proper fullness, (when in a metallic or composition lamp, which cannot be seen through like glass,) and also to afford egress of the air from the fount when being filled, or explosive gases which may have formed in the fount.

This guard-tube extension C is designed to be made of various lengths, according to the different depths of the various styles of lamp-founts for which it is designed, and its operation is to prevent all the fluid or oil in the fount, outside of it, from coming in contact with the generally not liquid-tight joint between the male screw of the burner D and the female screw G of the collar, and thus prevents the usual leaking out upon the top of the lamp (and danger of igniting when light oils are used) when the lamp is carried unsteadily, so as to agitate the fluid. It also acts, when applied to metallic founts or any that are not transparent, as a reflector or condenser of the light falling into the collar when the lamp is being filled, and greatly facilitates the filling of it to a proper fullness.

I am aware of the various devices that have been adopted to prevent the explosion or spilling of lamps, including various kinds of double and single, conical, parallel, and globular tubes, in part or wholly perforated, or made of gauze, with more or less complicated fixtures within, and situated in the center of the fount, and connected to the fount or collar, or both; but I am not aware that there have been any made having tubes similar to mine in construction and objects, and constituting a part of the collar, to be struck, cut, dropped, drawn, or pressed quickly and cheaply of one piece of metal, as the common collars for glass lamps have heretofore been; therefore I do not claim the construction of lamp-founts having gauze, perforated, or tight tubes extending downward from the collar to or near the bottom of the fount, or lamp-collars having these fixtures attached to them; but

I claim as my invention—

The construction of lamp-collars of a single piece of metal as an article of manufacture, alike adapted to glass, composition, or metallic lamps, of whatever size, style, or construction, having a downward extension forming a metallic tight tube, open only at the top and bottom, and having a lateral hole near the top, substantially as and for the purposes set forth.

RUFUS NUTTING.

Witnesses:

JOHN D. NUTTING,  
I. H. NUTTING.