J. H. LEWARS.

SAFETY-COLLARS FOR LAMPS.

No. 190,879. Patented May 15, 1877.

Fig 1.

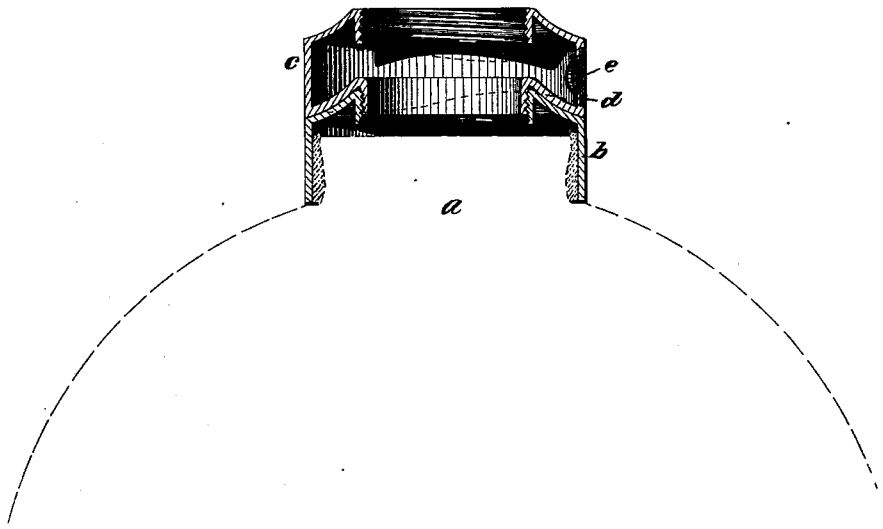
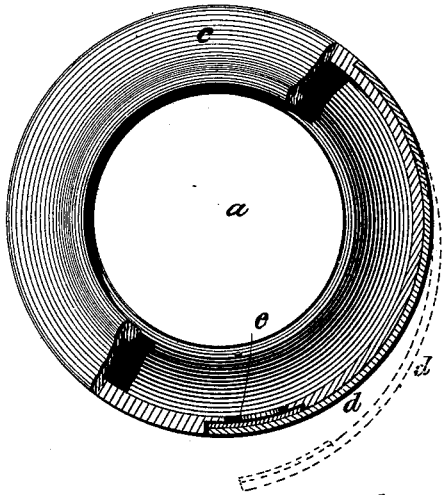


Fig 2.



Witnesses.

Harry King
per.
D. P. Lowe

Inventor:

John H. Lewars,
By his Attorneys,
Stansbury & Munn.

UNITED STATES PATENT OFFICE.

JOHN H. LEWARS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO DAVID McCARTY AND E. A. COLLINS, OF SAME PLACE.

IMPROVEMENT IN SAFETY-COLLARS FOR LAMPS.

Specification forming part of Letters Patent No. **190,879**, dated May 15, 1877; application filed March 31, 1877.

To all whom it may concern:

Be it known that I, JOHN H. LEWARS, of the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Safety-Collars for Lamps for burning explosive oils; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a vertical section of my improved lamp-collar screwed onto the fixed collar of a lamp. Fig. 2 is a top view of the same, partly in horizontal section, and on an enlarged scale, showing the spring-valve in place, its position when open being represented by dotted lines.

The same letters indicates the same part in both figures.

My invention relates to an improvement on the safety-lamp collar invented by Daniel McCarty and patented April, 1877, to said McCarty, Elwood A. Collins, and myself, and numbered 189,246. It consists in placing an improved safety-valve in an independent collar or gas chamber, made in sizes adapted to the various lamps in the market, and capable of being attached to them by being screwed on in the usual manner, thus making the invention readily applicable to any of the existing lamps without necessitating any alteration in their present construction.

The valve described in Patent No. 189,246, above referred to, stands out beyond the surface of the lamp-collar, and hence is liable to receive injury, and is difficult to clean. It is also expensive to make, owing to the hinge upon which it turns and the independent spring which actuates it.

My independent collar or gas-chamber is provided with a spring-valve made of a single piece of metal brazed or pinned to the collar, and either lying flat upon its surface or in a countersink of corresponding shape, which brings its surface flush with the surface of the collar, and presents no projection to render the valve liable to injury.

In the drawing, *a* marks the oil-chamber of a lamp; *b*, the fixed collar, permanently attached to the lamp, and tapped to receive the male screw of the independent collar or gas-chamber *c*. The collar *c* may be made of any desired diameter to suit the various sizes of lamps to which it is intended to apply it. It is provided with the valve *d*, made of a single piece of elastic sheet metal, pinned or brazed at one end to the collar, and by its other end covering a vent-hole, *e*, made in the side of the same. The upper opening of collar *c* is tapped to receive the burner of the lamp, which may be of any kind preferred, and be screwed onto the collar *c*.

The office of vent-hole *e* and its valve *d* is to provide a safe escape of explosive gases from the gas-chamber and lamp in case they become ignited.

The valve *d* is provided with a pad to close the vent *e* effectually, and is represented as lying in a countersunk recess, with its outer surface flush with the surface of the collar.

What I claim is—

For combination with the fixed collar of the oil-chamber of a lamp, the independent collar *c*, provided with a vent-hole, *e*, and valve *d*, the latter made of an elastic piece of sheet metal, and operating as described, the whole constructed as specified, for the purpose set set forth.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

JOHN H. LEWARS.

Witnesses:

GEO. F. GRAHAM,

CHAS. F. STANSBURY.