

W. H. H. STINEMAN.  
Lamp.

No. 215,688.

Patented May 20, 1879.

FIG. I.

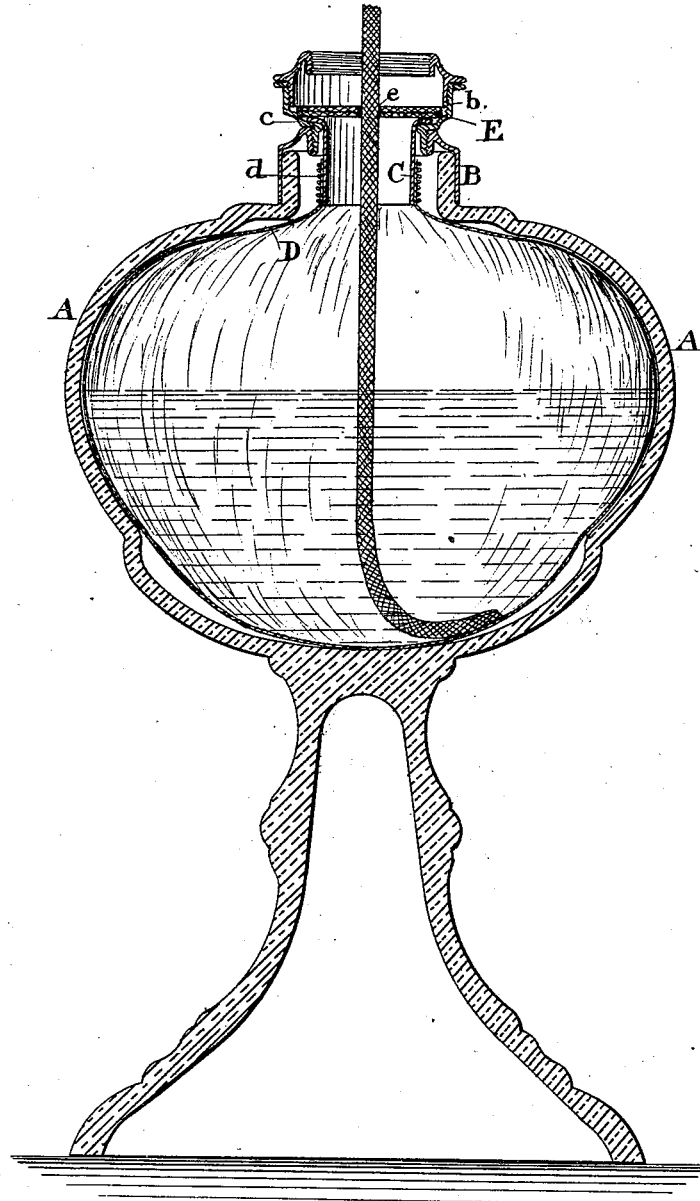
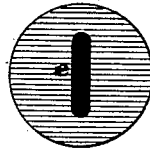


FIG. II.



WITNESSES

*Henry Meser*  
*C. Desch*

INVENTOR,

*William H. H. Stineman*

# UNITED STATES PATENT OFFICE.

WILLIAM H. H. STINEMAN, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF HIS RIGHT TO CASPER S. DESCH, OF SAME PLACE.

## IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **215,688**, dated May 20, 1879; application filed March 17, 1879.

*To all whom it may concern:*

Be it known that I, WM. H. H. STINEMAN, of Baltimore city, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Safety-Lamps; and I do hereby declare that the following is a full, clear, and exact description of the invention, 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 letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a lamp that is non-explosive and yet very simple in its construction; and it consists in forming a lining for lamps composed of the bladder of animals secured to a removable thimble.

It is a well-known fact that coal-oil or other burning-fluids generate gas when heated, and are liable to explode, and to prevent this I form a bag or suitable lining, fitting the bowl of the lamp as snugly as possible, from the bladder of animals, which material effectually prevents the escape of oil.

To prevent the flame when the lamp is burning from communicating its heat to the oil or gas below, I place a washer of felt or other suitable material, snugly fitting around the wick, in the neck of the lamp, as will be more fully described hereinafter.

In the accompanying drawings, Figure 1 is a vertical section of a lamp containing my improved lining. Fig. 2 is a top view of the felt washer.

In the drawings, A represents a lamp of any ordinary construction, having the usual neck B, into which the piece *b* is screwed. This piece *b* supports a thimble, C, having a flange, *c*, and to this thimble the lining D is secured by a thread or wire, *d*.

The lining D is made of the bladder of animals, and is of such size that when it is extended or filled with oil it fills the bowl of the lamp.

Upon the flange *c* of the thimble is placed the washer E, preferably made of felt; but it may be made of wire-cloth or other suitable material. This washer is provided with an

aperture, *e*, (shown in Fig. 2,) of such size that the washer fits closely around the wick F, and in this manner prevents the flame, when the lamp is lighted, from passing down to the oil and gas.

The thimble C may be made in one or more pieces, or may be attached to the burner.

The operation is as follows: The lining is first secured to the thimble by thread or wire and placed in the lamp-bowl. The oil is then poured into the lining, which will be extended and fill the entire space of the bowl. The wick may then be inserted, and the washer placed over the wick and down upon the thimble, and the burner screwed into its position.

The advantages of my improvements are that the lining will not allow any oil or other burning-fluid to pass through it. In case of breakage of the lamp-bowl the lining can be taken up and carried to a safe place, without danger of explosion. The flame of the lamp, when burning, cannot possibly pass down to the oil and gas, as is often the case when the ordinary lamp is suddenly raised. My device is very simple in construction and can be furnished at a very small cost.

I am aware that linings for lamps have been made of wire-cloth; but this cannot retain oil, and will also corrode by the action of the oil.

I am also aware that felt or other fibrous material has been used; but this will also not retain the oil, and is liable to become rotten.

I am also aware that an elastic bag or receptacle has been used within the body of a lamp, and has been lined with bladder or other suitable material, and has been secured to a flange attached to the wick-tube holder; but my invention differs from this in that I dispense with the elastic bag or receptacle, and employ a removable thimble, to which the lining, consisting of the bladder of animals alone, is secured, and this lining, with the thimble, can therefore be easily removed and replaced. I therefore do not broadly claim the lining made of the bladder of animals; but,

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of a lining made of the

bladder of animals with the thimble C and washer E, made of felt, arranged in a lamp substantially as shown and described.

2. As a new article of manufacture, a lining for lamps made of the bladder of animals and secured to a removable thimble, arranged substantially as shown, and for the purpose specified.

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

WILLIAM H. H. STINEMAN.

Witnesses:

HENRY NESER,  
C. L. DESCH.