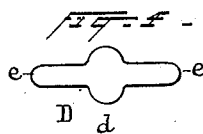
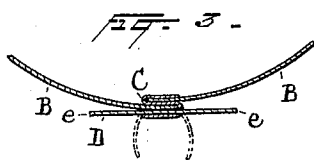
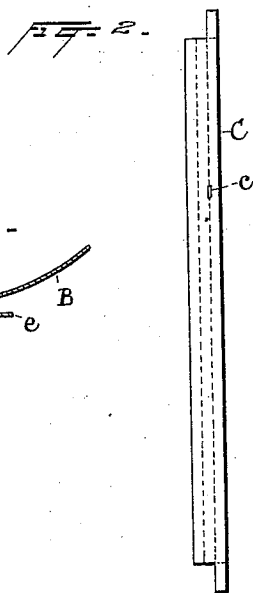
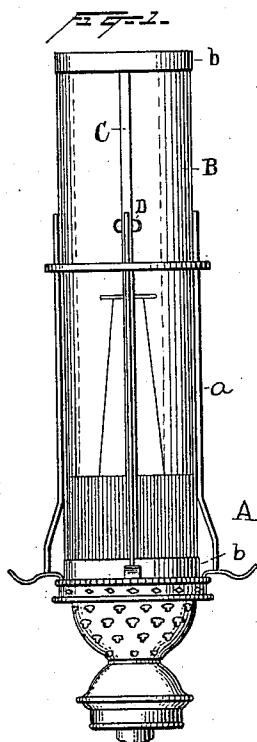


(No Model.)

A. P. STORRS.  
GAS LAMP.

No. 582,443.

Patented May 11, 1897.



Witnesses  
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# UNITED STATES PATENT OFFICE.

AARON P. STORRS, OF OWEGO, NEW YORK.

## GAS-LAMP.

SPECIFICATION forming part of Letters Patent No. 582,443, dated May 11, 1897.

Application filed October 5, 1896. Serial No. 607,874. (No model.)

*To all whom it may concern:*

Be it known that I, AARON P. STORRS, a citizen of the United States, residing at Owego, in the county of Tioga and State of New York, have invented a certain new and useful Improvement in Gas-Lamps, of which the following is a specification.

Incandescent gas-lamps, such as the Welsbach lamp, are provided with a number of standards (generally three) for supporting the shade. With these lamps there is largely used the mica chimney patented by me. This is constructed of one or several pieces of mica bent into a cylinder and covered at the ends of the cylinder with metal rings, the abutting edges of the mica being clamped in the folds of one or more metal strips extending longitudinally of the chimney. In the case of the mica chimney made in one piece there is only one of these strips. I also make these mica chimneys in two and three pieces, having two and three strips, respectively, for holding the abutting edges. I have found that these longitudinal metal strips on the mica chimneys interfere considerably with the light-giving capacity of the lamp, and hence that it is desirable that the strips on the chimney should be placed coincident with the standards of the shade-holder of the lamp. With a lamp having three shade-holder standards and a mica chimney made in three pieces, and hence having three longitudinal strips, the light-giving power of the lamp is perceptibly less when a set of double shadows is cast by the shade-holder standards and the longitudinal strips than when the standards and the strips are coincident.

The object of my invention is therefore to produce simple and effective means for maintaining the coincidence between the longitudinal strips of the mica chimney and the standards of the shade-holder.

In the accompanying drawings, forming a part hereof, Figure 1 is a side elevation of an incandescent gas-lamp having my improvement applied thereto. Fig. 2 is a view of one of the longitudinal metal strips of the mica chimney before it is folded, the dotted lines indicating the angles of the folds. Fig. 3 is a sectional view, on an enlarged scale, through the joint between one of the folded metal strips and the abutting edges of the

mica, showing in place the clip I employ for preventing the turning of the chimney; and Fig. 4 is an enlarged view of the preferred form of clip.

A is an incandescent gas lamp or burner provided with an illuminating-mantle, as usual, and having the shade-holder standards *a*.

B is the mica chimney, made of one or more sections of mica bent into a cylinder and held at the ends by metal rings *b*. The longitudinal seams formed by the abutting edges of the mica are covered and secured by longitudinal metal strips *C*. Each of these strips is formed of a flat piece of metal, as shown in Fig. 2, which is folded on two longitudinal lines, so as to have in cross-section a form approximating the letter **Z**. The abutting edges of the mica are placed in the angles of the folds of the strip, and the strip is then pressed down upon the mica, securely holding the same.

In applying my invention I cut a slot *c* through the plate *C* at the angle of one of the folds, as shown in Fig. 2. After the strip is folded I insert through this slot one end of the metal clip *D*, which is preferably a flat metal plate having an enlarged center *d* and projecting ends *e*. One of the ends *e* of the clip *D* is pushed through the slot *c* until the enlarged center *d* strikes the inner side of the angle, leaving the enlarged center between the folds of the strip *C*. The abutting edges of the mica being then inserted in the angles of the folds, the strip *C* is pressed down, holding the edges of the mica, and also firmly holding the clip *D* by clamping its enlarged center, while its ends are left projecting beyond the sides of the strip. This clip *D* is made preferably of pliable metal, such as soft brass, so that as the chimney is manufactured the ends of the clip projecting beyond the strip *C* will be bent flat against the sides of the chimney, so that the chimneys can be readily packed for shipment without danger of injury to the mica from the projecting ends of the clip. When the chimney is put into use, the ends *e* of the clip are bent outwardly by the fingers, as shown in dotted lines in Fig. 3. In the placing of the chimney on the lamp these outwardly-projecting ends of the clip will embrace the up-

per end of one of the shade-holder standards, preventing accidental rotation of the chimney and maintaining the particular strip to which the clip is applied in line with the shade-holder standard. If the other strips of the chimney (where the chimney is made in two or more pieces of mica) are located, as they preferably are, the same distance from the first strip as are the other shade-holder standards from the first shade-holder standard, all the chimney-strips will be coincident with all the shade-holder standards.

The clip being held by clamping between the folds of the longitudinal metal strip and without the employment of solder, it will withstand the high temperature of the burner without becoming loosened.

What I claim is—

1. In a gas-lamp, the combination with a shade-holder having standards, of a mica chimney provided with one or more vertical metal strips, and means preventing the accidental rotation of the chimney and maintaining the coincidence between the shade-holder standards and the chimney-strips, substantially as set forth.

2. A mica chimney for gas-lamps having one or more longitudinal metal strips for

holding the abutting edges of the mica, and a clip on a metal strip for maintaining the coincidence between the chimney-strips and the shade-holder standards, substantially as set forth.

3. A mica chimney for gas-lamps provided with a metal clip inserted in and held by a fold of the longitudinal metal strip which secures the abutting edges of the mica, substantially as set forth.

4. A mica chimney for gas-lamps, provided with a soft-metal clip for maintaining the coincidence between the shade-holder standards and the longitudinal metal strips of the chimney, such clip being adapted to be folded against the chimney for packing and to be bent outwardly for use, substantially as set forth.

5. The combination with the mica chimney B and the folded longitudinal strip C having the slot *c*, of the soft-metal clip D, substantially as set forth.

This specification signed and witnessed this 3d day of October, 1896.

AARON P. STORRS.

Witnesses:

S. O. EDMONDS,  
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