(No Model.)

A. P. STORRS.

MICA CHIMNEY FOR GAS LAMPS.

No. 590,346. Patented Sept. 21, 1897.

Fig. 1.

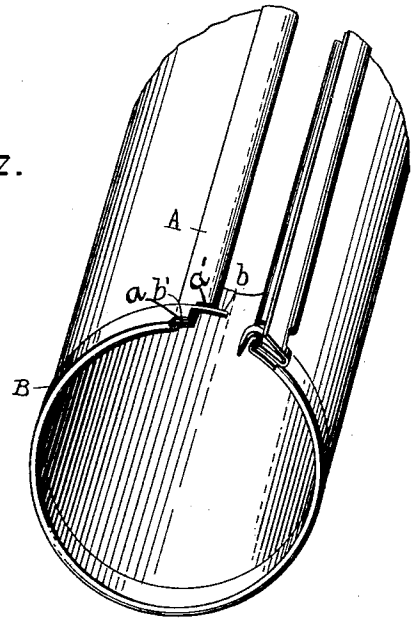


Fig. 2.

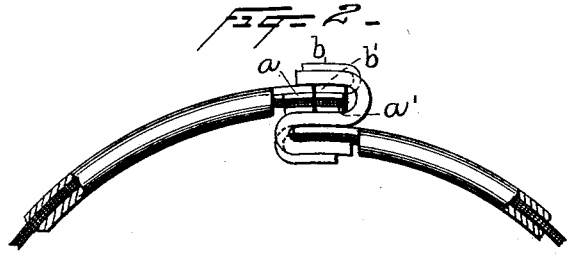


Fig. 3.

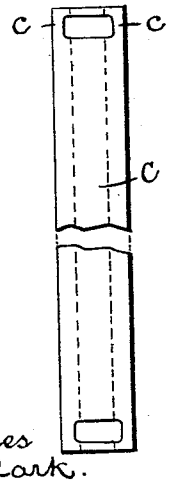


Fig. 4.

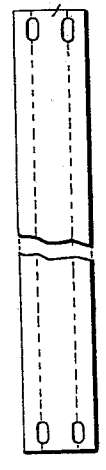
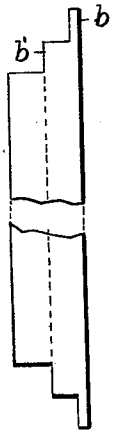


Fig. 5.



Witnesses
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MICA CHIMNEY FOR GAS-LAMPS.

SPECIFICATION forming part of Letters Patent No. 590,346, dated September 21, 1897.

Application filed May 28, 1897. Serial No. 638,511. (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 Mica Chimneys for Gas-Lamps, of which the following is a specification.

My invention relates to an improvement in mica chimneys; and the invention lies particularly in the method of fastening two sides of the mica sheet together so as to form a cylindrical chimney especially adapted for use with what are known as "Welsbach" burners. The method heretofore employed of fastening these mica sheets in cylindrical form has been to place opposite sides of the sheet together in the folds of an **S**-shaped strip and to put small rivets through the loops of the **S** to hold the edges of the sheet therein. The way in which I fasten the chimney in shape makes a chimney of neater appearance which is stronger and less expensive to manufacture.

The accompanying figures, where like letters of reference indicate similar parts, illustrate my improvement.

Figure 1 shows a perspective view of the chimney before it is closed into cylindrical form. Fig. 2 is a much-enlarged view showing the **S**-shaped side strip with the edge of the mica sheet in the loops thereof and locked in position by means of locking-clips. Figs. 3 and 4 show two forms of blanks for the **S**-shaped side strip, and Fig. 5 shows a blank of an end strip.

To form a chimney the strip A, formed of a strip of tin, is tightly folded over one edge of a sheet of mica of appropriate size. Each end of the strip A is cut away so as to form shoulder *a*, Fig. 2, so that the corners of the mica sheet are not bound, but are protected by one thickness of metal. The edge *a'* (shown in Fig. 2) shows the position of the part A, which does not come up to the corner of the mica sheet, being cut away and turned over the edge of the mica. The strip A may be omitted in the make-up of the chimney, but it is best to put it on to save the edge of the mica sheet while handling. Strips B (the blank being shown in Fig. 5) are folded upon the edges of the sheet of mica which are to become the top and bottom of the chimney. They are cut at each end, so as to have a thin projecting lug *b* extend beyond the edge of the mica sheet and a shoulder *b'*, which extends to the edge of the sheet when the strip is folded upon it. The end of each strip is cut away so as to form this shoulder *b'*, so as to prevent too many thicknesses of tin at the corners of the mica sheet when the chimney is locked, while having at least a portion of each strip extend to the corner of the sheet where the parts are locked together in order to secure a locking of each strip when the chimney is complete.

The **S**-shaped side strip C, which is preferably put upon one edge of the sheet, so as to embrace the edge within one of its folds before the end strips are shaped so as to hold the mica sheet in cylindrical form, is bent along the lines shown dotted in Figs. 3 and 4. This strip is formed of a thin sheet, like the other strips bent into the form of an **S**. This strip has an aperture cut in each end, through which the lugs *b* of the end strips B are designed to pass. When the edges of the chimney are brought within the fold of the **S**, these lugs or clips *b* pass through the aperture in each end and may be turned back upon the parts *c* of the **S**-shaped strip, and thus lock the chimney securely in form. The **S**-shaped piece may then be pressed, so as to make the joint as flat as possible.

If desired, the **S**-shaped strip C may have two apertures in each end, as is shown in Fig. 4, in which case the lugs *b* may be turned back upon the part *c'* of the strip lying between the holes, and thus be hidden from view in the folds of the strip when the chimney is complete. On account of its simpler construction the form preferred, however, is that shown in Fig. 3.

Having thus described my invention, what I claim is—

1. In a mica chimney for lamps, the combination of an **S**-shaped side strip holding the edges of the mica sheet in its folds and having an aperture or apertures in each end thereof, with end strips binding the top and bottom edges of the mica sheet and having projecting lugs extending beyond the edges of such sheet said lugs being passed through

said apertures and turned down upon said S-shaped strip, substantially as set forth.

2. In a mica chimney for lamps the combination of a strip binding one side of the mica sheet forming the chimney with an S-shaped side strip binding the opposite side of said sheet, said S-shaped strip having an aperture or apertures in each end thereof and being adapted to receive the first-named strip in its free fold, and end strips binding the top and bottom edges of the mica sheet and having projecting lugs extending beyond the edges of such sheet said lugs being passed through said apertures and turned down upon the said S-shaped strip, substantially as set forth.

3. In a mica chimney for lamps the combination of an S-shaped side strip C having apertures therein with end strips B having shoulders *b'* and lugs *b* at each end, substantially as set forth.

This specification signed and witnessed this 18th day of May, 1897.

AARON P. STORRS.

Witnesses:
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