

No. 729,447.

PATENTED MAY 26, 1903.

A. H. STUMP.  
EXPANSIBLE AND CONTRACTIBLE LAMP CHIMNEY.

APPLICATION FILED JAN. 28, 1903.

NO MODEL.

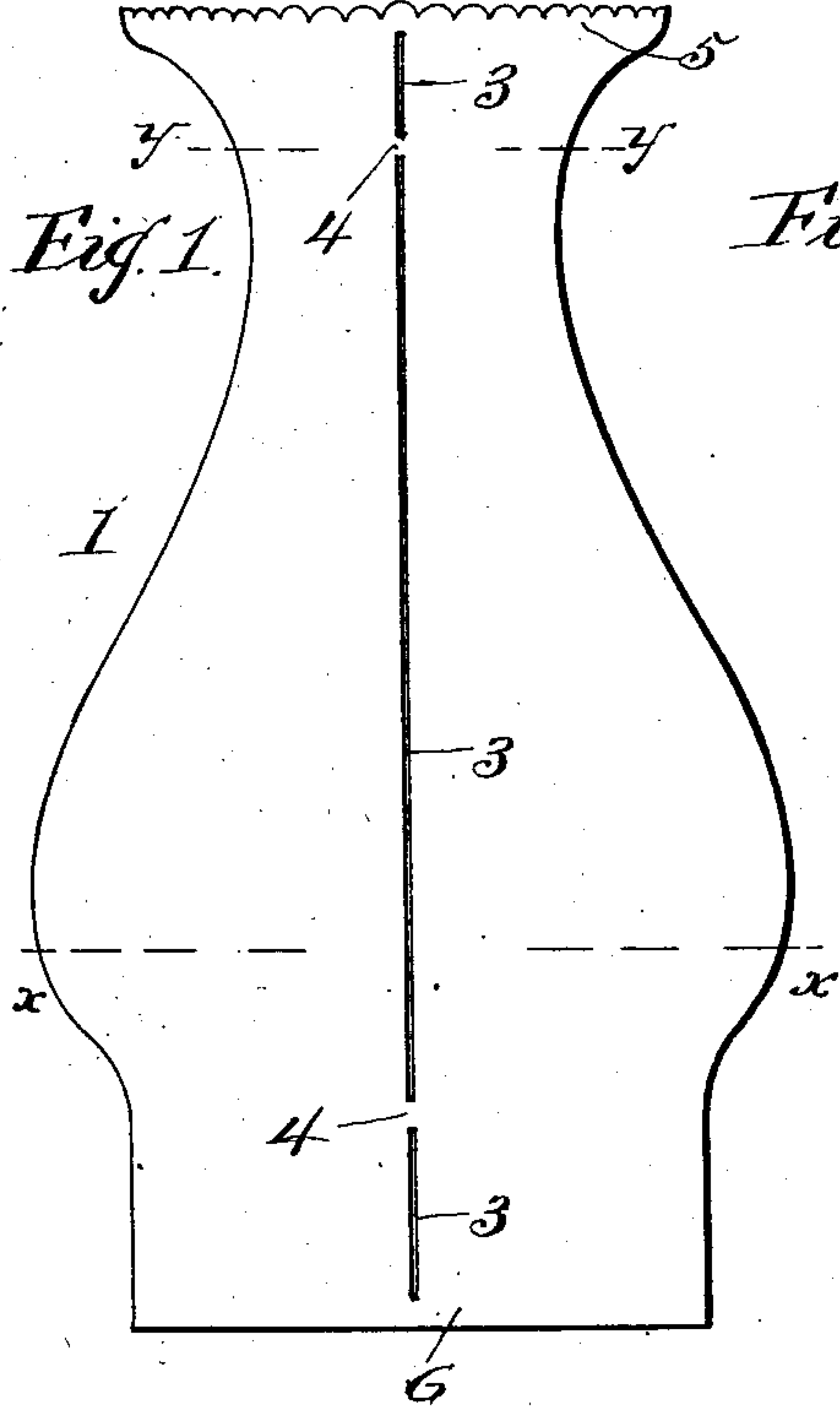


Fig. 1.

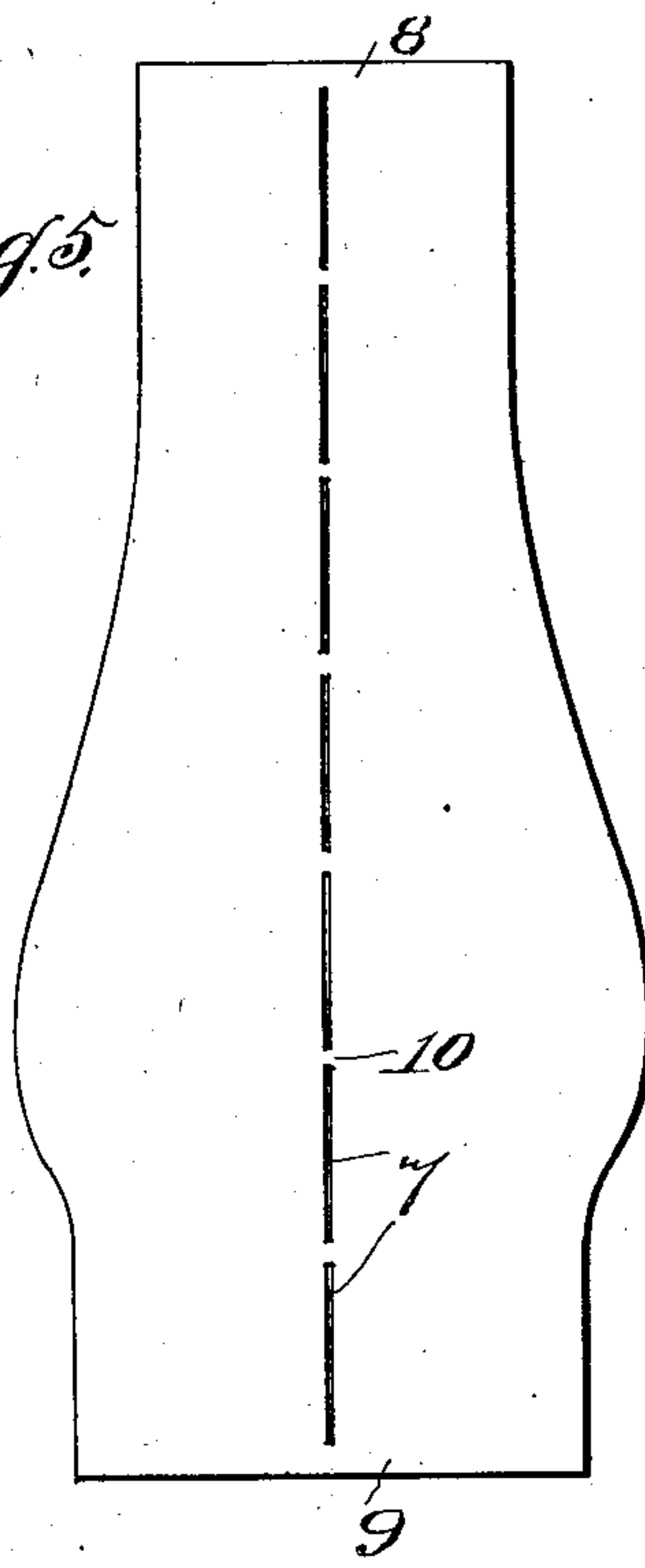


Fig. 5.

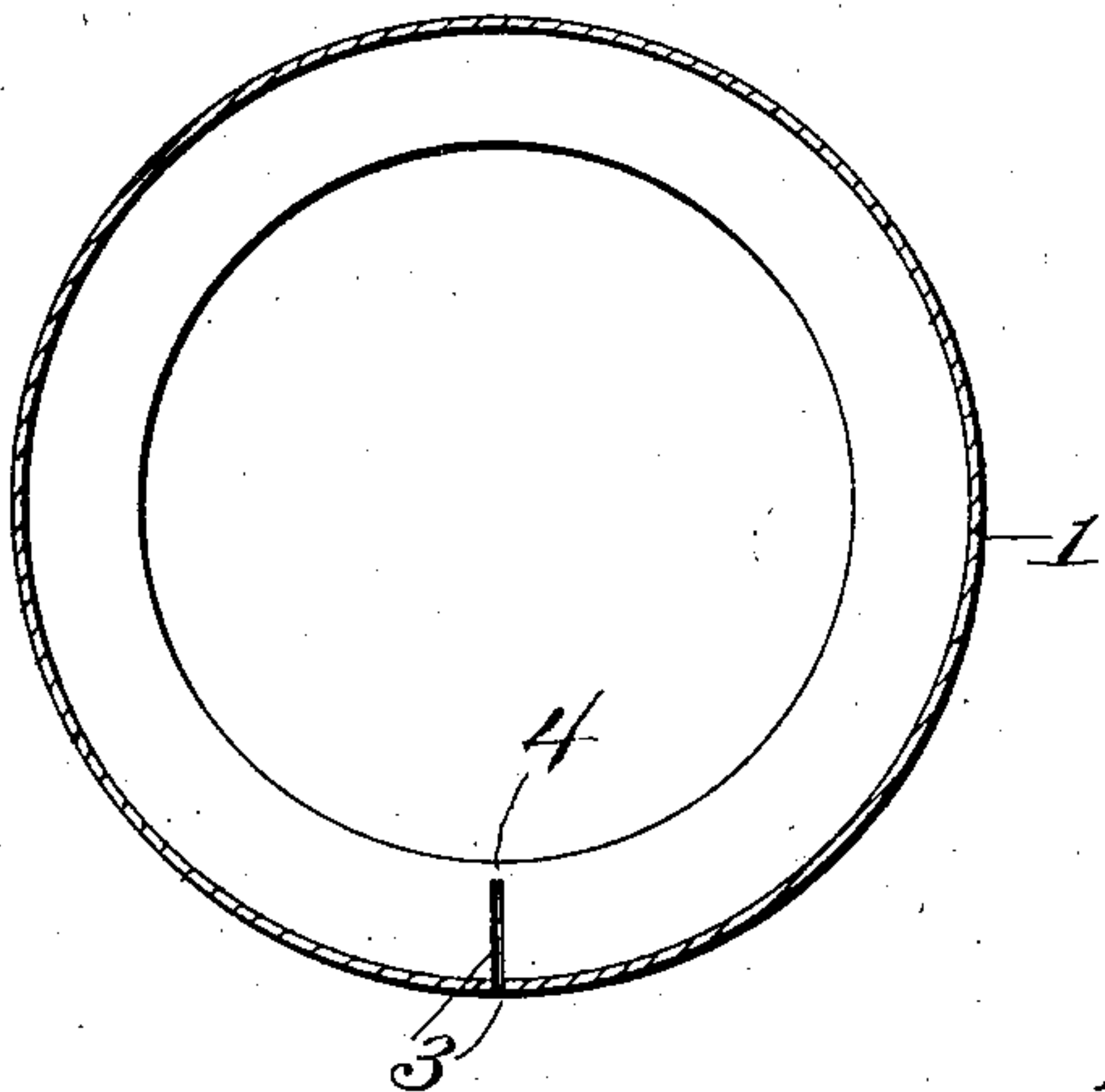


Fig. 2.

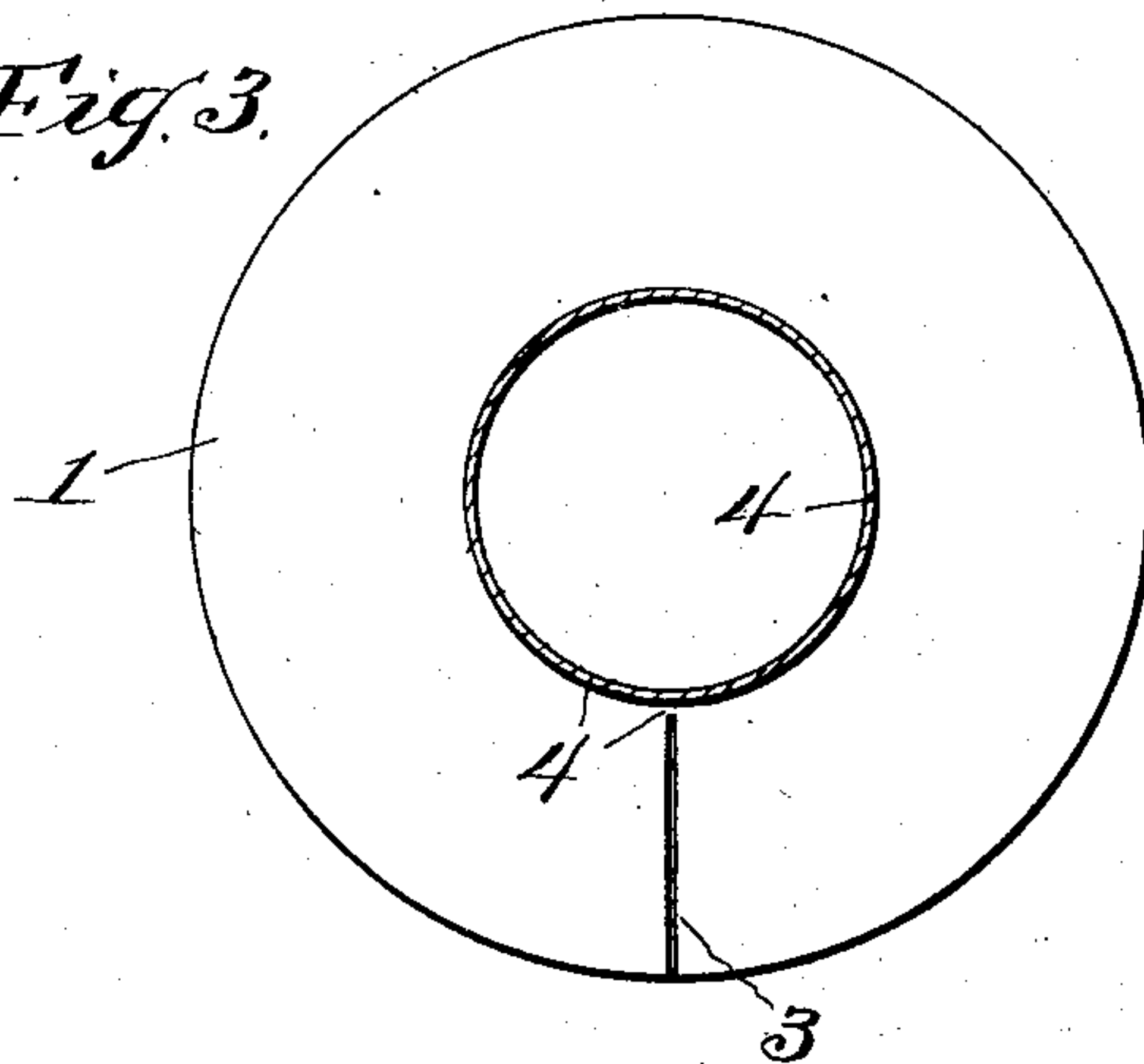
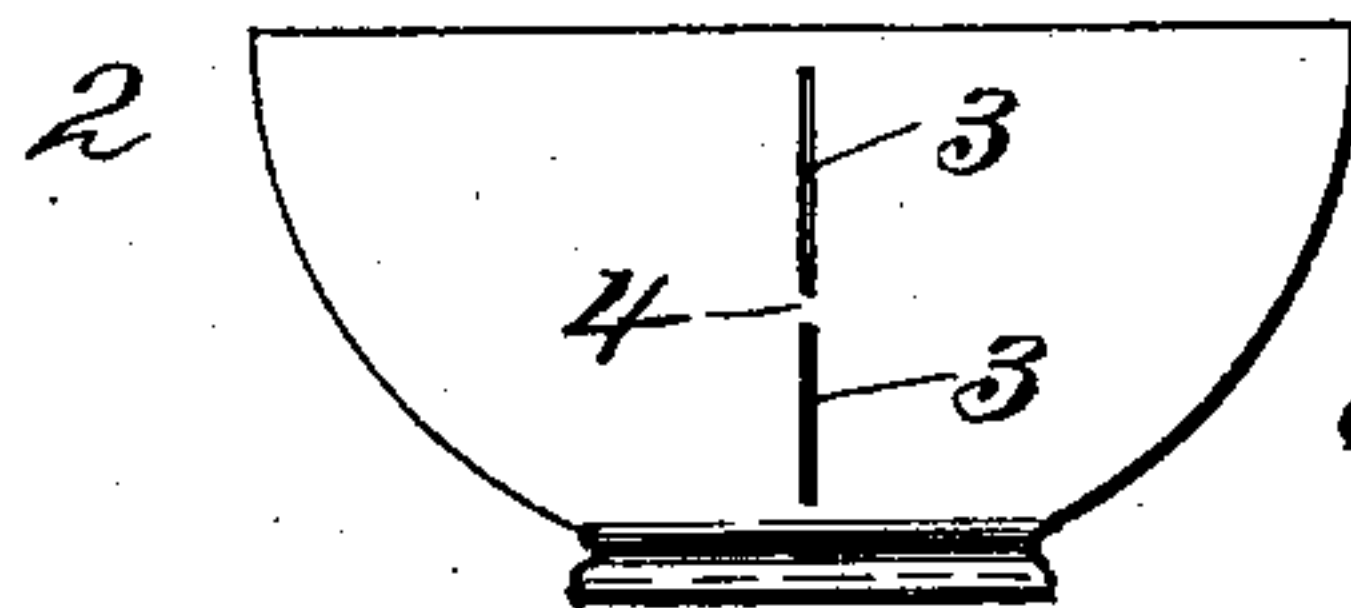


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

ALEXANDER H. STUMP, OF BALTIMORE, MARYLAND.

## EXPANSIBLE AND CONTRACTIBLE LAMP-CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 729,447, dated May 26, 1903.

Application filed January 28, 1903. Serial No. 140,881. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER H. STUMP, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Expansible and Contractible Lamp-Chimneys, of which the following is a specification.

This invention relates to lamp-chimneys, and pertains particularly to the class of integral lamp chimneys or globes.

The object of the invention is to provide a peculiar chimney or globe capable of contraction and expansion under varying conditions of heat without destroying or rendering the chimney or globe useless.

A further object of the invention is to provide a chimney or globe the body of which being capable of contraction and expansion without breaking to such an extent as to render the chimney or globe useless and to predetermine or fix certain points or places to be broken by such contraction and expansion without impairing the usefulness of the chimney.

Chimneys and globes having a diamond-cut groove partly through the glass and chimneys have been cut vertically in two parts to provide for expansion and contraction; but such provisions are not sufficient, and besides the inconvenience of diamond-cutting and of adjusting the two-part chimney they are otherwise objectionable, particularly in packing, storing, transporting, and applying them. Shades or reflectors perforated throughout have been provided; but the cracking and breaking thereof under expansion and contraction is not fixed or controlled, and therefore it is unlimited and invariably disables the article. It is therefore the purpose and intent of this invention to overcome such objections and disadvantages and to provide a chimney or globe capable of being packed, stored, and transported as are the ordinary solid chimneys commonly used, yet of such form and design in the manufacture thereof that they have full and sufficient capacity for expansion and contraction.

In the accompanying drawings, forming part of this application, Figure 1 is an elevation. Fig. 2 is a cross-section on the line  $x x$ , Fig. 1. Fig. 3 is a cross-section on the line  $y y$ , Fig. 1. Fig. 4 is an elevation of a shade or

globe, showing my invention. Fig. 5 is an elevation of a modification.

The same numeral references denote the same parts in the several views of the drawings.

The chimney 1 and globe or shade 2 are of the usual shape, or they may be made in any desired shape and form, having formed therein in any suitable manner, but preferably in the blowing or manufacture of the chimney or globe, two or more slits 3, having a solid interval 4 of the chimney or globe material intervening or separating the slits. These slits extend throughout the length of the chimney, except through the top and bottom rims 5 and 6, respectively, thereof. The slits nearest the said rims terminate within a short distance of the rims, so as to leave the latter intact, or they may extend through the rims, if desired. The glass intervals 4 are preferably located at the juncture of the enlarged portion of the chimney and the top and bottom necks thereof to make the chimney intact at these points where the chimney is most effected by heat, so that the said intervals 4 may only be broken, without injury to the chimney.

Referring to the modification shown in Fig. 5, a series of slits 7 of equal length extend from the top to the bottom of the chimney and terminate in rims 8 and 9. These slits are separated by a series of chimney material 10, so that the latter and the slits alternate through the length of the chimney. It will be understood that the slits are of such slight width that they appear as a broken line in the chimney and that the intervals of glass or chimney material intervening between the slits are of such limited length as to readily crack or break from one slit to the other in case of unusual contraction and expansion.

It is obvious that while contraction and expansion is fully provided for the chimney will not break, except between the slits or openings, like the ordinary solid chimney, the two-part chimney, or like the perforated shade or reflector, and that in applying the chimney there is no interference as of a grooved rim or of a two-part chimney.

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



1. A chimney, globe or shade having a single line of openings at intervals therein to admit of contraction and expansion, and terminating short of the chimney ends to leave  
5 the latter intact.

2. A contractible and expansible chimney having a series of slits vertically in line one with the other, a series of intact portions separating the slits, the latter and the said por-

tions alternating to permit contraction and expansion.

In witness whereof I hereunto set my hand in the presence of two witnesses.

ALEXANDER H. STUMP.

Witnesses:

FRANK S. APPLEMAN,  
G. A. LEHMANN.