W. A. PAINTER.

METHOD OF MAKING GALLERY LIFT TUBES.

APPLICATION FILED JAN, 11, 1904.

NO MODEL.



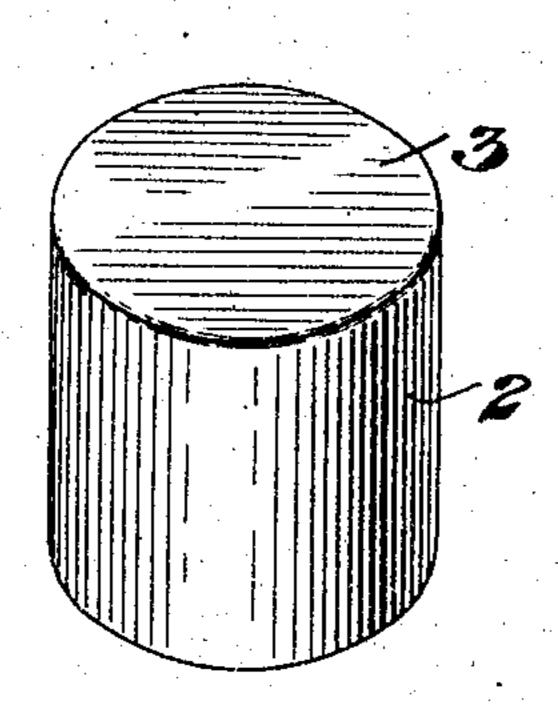


Fig. 2.

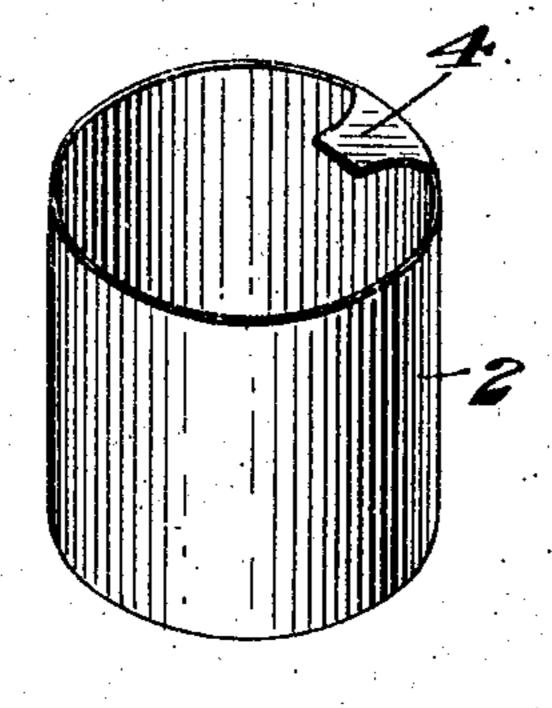


Fig. 3.

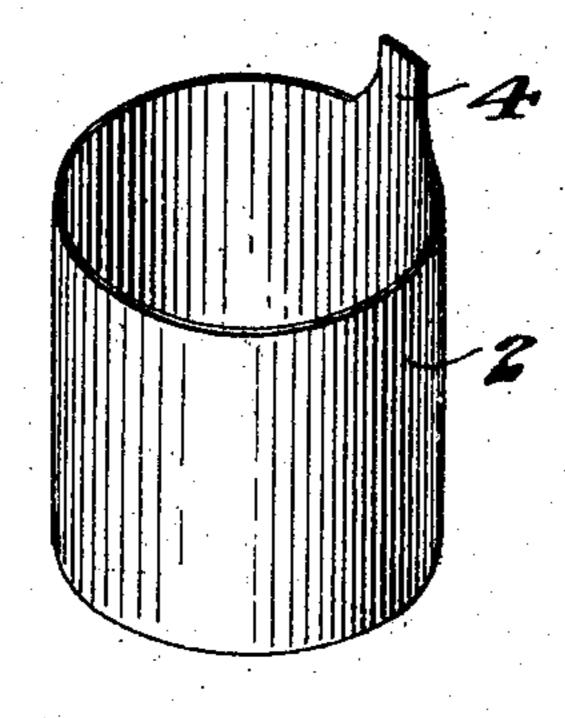
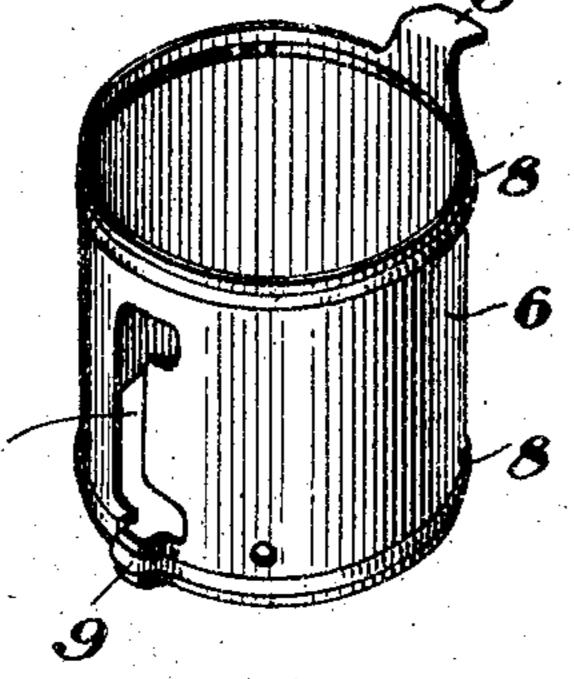


Fig.4.



WITNESSES

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INVENTOR

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United States Patent Office.

WILLIAM A. PAINTER, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR TO PITTSBURGH LAMP, BRASS & GLASS COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

METHOD OF MAKING GALLERY LIFT-TUBES.

SPECIFICATION forming part of Letters Patent No. 778,141, dated December 20, 1904.

Application filed January 11, 1904. Serial No. 188,463.

To all whom it may concern:

Be it known that I, WILLIAM A. PAINTER, of Allegheny, Allegheny county, Pennsylvania, have invented a new and useful Method of Making Gallery Lift-Tubes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figures 1, 2, 3, and 4 are perspective views showing the successive steps of shaping the blank according to my invention.

My invention relates to the forming of gallery lift-tubes for lamp-burners, and more especially to the projecting flange or rim, which acts as a fender for the rack of the wick-lifter. Heretofore this flange or projecting rim has been formed from the side portion of a drawn tube—that is, a cup or tube was formed of

20 greater length than the final lift-tube, and the end portion of this tube was then flanged out to form the fender.

My invention reduces the amount of material used, and hence gives an economy in the manufacture of these lift-tubes.

The invention consists in forming a drawn cup or tube with a closed bottom, then cutting out a portion of this bottom and bending the remainder of the bottom outwardly to form the lateral projecting lug or flange, which acts as the fender.

It further consists in the series of steps hereinafter described and claimed and also in the article thus produced.

In the drawings I show in Fig. 1 a drawn brass cup or tube 2, having a closed end or bottom 3. This tube is of substantially the same length as the final lift-tube, and after forming it I cut out, preferably, the major portion of the bottom, leaving a part 4 thereof, as shown in Fig. 2. In the next operation this part 4 is bent into the plane of the side 2 of the tube, as shown in Fig. 3. In the next operation the part 4 or a portion thereof

is bent outwardly to form the fender 5. 45 (Shown in Fig. 4.) The lift-tube 6 is also preferably formed with a double-head bayonet-locking slot 7, the horizontal upper and lower legs of the slot being of such length that when in locking position the fender 5 50 will be in endwise alinement with the rack of the wick-lifter. It therefore acts as a stop for the wick-lifter, and by causing it to register therewith when the lift-tube is locked I avoid the necessity for a fender of annular 55 form extending around the lift-tube.

Another feature of the invention is that the bottom portion cut from the cup can be utilized for cutting out other portions of the lamp-burner.

The lift-tube is preferably formed with annular beads 8 near the top and bottom and with a projecting portion 9, which allows the locking-pin to enter the bayonet-slot.

The advantages of my invention arise from 65 the economy in the material resulting from forming the fender from the bottom of the drawn cup, also from the lug shape of the fender, which allows a larger blank to be cut from the bottom and utilized for other parts, 70 and, further, from the locking device, which causes the lug to register with the wick-lifting rack.

Many variations may be made in the shape and size of the gallery lift-tube and the fen- 75 der without departing from my invention.

I claim—

1. The method of forming a gallery lift-tube consisting in drawing a cup with a closed end, cutting out a portion of the end or bottom and 80 then shaping the remaining portion into a laterally-projecting fender; substantially as described.

2. The method of forming gallery lift-tubes consisting in cutting out a portion of the bot- 85 tom of a drawn cup, bending the remaining portion of the bottom substantially into the plane of the side, and then bending such por-

tion outwardly to form a laterally-projecting | fender; substantially as described.

3. The method of forming gallery lift-tubes consisting in cutting out the entire bottom of a drawn cup excepting a small lug portion and then bending said lug portion outwardly to form a fender; substantially as described.

In testimony whereof I have hereunto set my hand.

WILLIAM A. PAINTER.

Witnesses:

GEO. B. BLEMING, C. P. BYRNES.