

W. P. BUTLER.
Process for Manufacturing Glasses for Street and
Other Lamps.

No. 216,830.

Patented June 24, 1879.

Fig. 1.

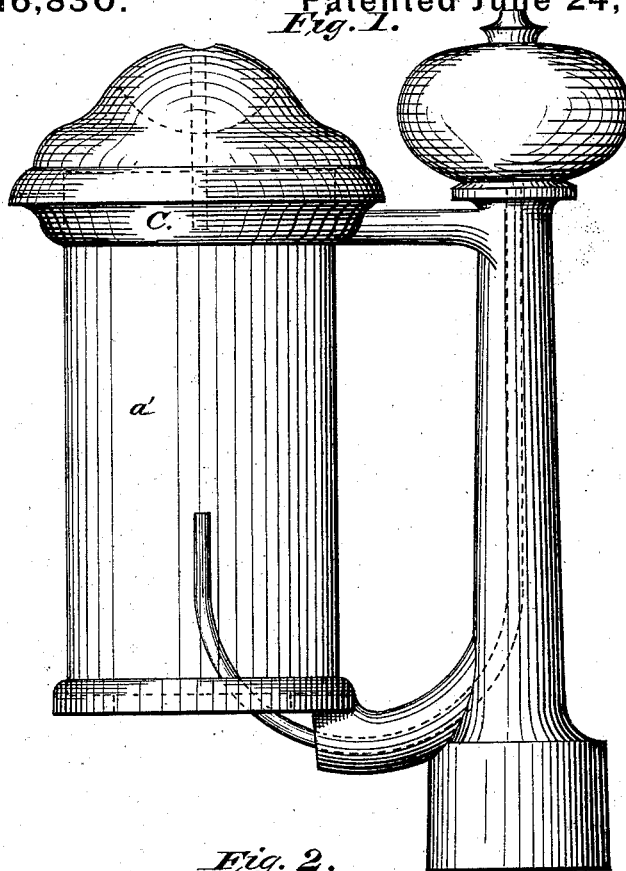


Fig. 2.

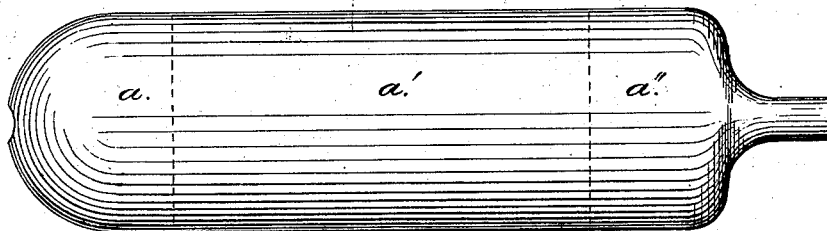
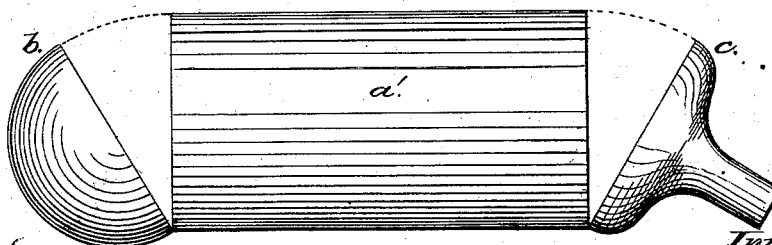


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM P. BUTLER, OF ROCK ISLAND, ILLINOIS.

IMPROVEMENT IN PROCESSES FOR MANUFACTURING GLASSES FOR STREET AND OTHER LAMPS.

Specification forming part of Letters Patent No. **216,830**, dated June 24, 1879; application filed January 10, 1879.

To all whom it may concern:

Be it known that I, WILLIAM P. BUTLER, of Rock Island, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Processes for Manufacturing Glasses for Street and other Lamps, of which the following is a specification.

This invention relates to certain improvements in the construction of glasses for street and other lamps.

It has heretofore been customary to construct such glasses of sheets cut from ordinary window or sheet glass, and mounted in suitable frames, or to mold the glass into proper shape for the purpose, both of which methods are objectionable, on account of expense.

In the manufacture of ordinary sheet or window glass, the molten material is blown by the blower into what is technically known as a "roller," consisting of a hollow cylinder, as shown in Figure 2 of the drawings, closed at one end, and having at the other a short neck, where it is broken off from the blower's pipe. The ends of said roller are then removed, as indicated at *b* and *c* in Fig. 3 of the drawings, and the roller is then cut longitudinally and flattened out into a sheet, the ends or caps being thrown aside as useless.

The object of my invention is to utilize the entire roller as it leaves the hands of the blower for the manufacture of lamp-glasses by cutting said roller into sections, so as to leave the end sections formed with caps, which are brought into the desired shape, and whereby no loss of material is incurred, and the various steps necessary to form the roller into sheets, and the subsequent cutting and mounting of such sheets to form the lamp-glass, are entirely obviated.

In the drawings, Fig. 1 represents an elevation, showing my invention applied to a street-lamp. Fig. 2 represents a view of the roller, and Fig. 3 a view of the roller with the caps removed.

In carrying out my invention, I take the roller as it comes from the hands of the blower, and by means of a thread of heated glass or

in any other suitable manner divide it into two or more sections, as indicated by the letters *a a' a''* in Fig. 2. These sections form the lamp-glasses, which may be mounted in any suitable manner, the end sections being employed without removing the caps, a suitable opening being made in the end of the closed caps for the escape of the products of combustion from the lamp.

As illustrated in Fig. 1 of the drawings, *a'* represents the lamp-glass, in this instance being the central section of the roller, which is a right cylinder open at both ends, the letter *C* representing a top of any suitable material and construction.

In case the end sections are employed, the top may be dispensed with or modified to correspond to the shape of the upper part of the glass.

By my improved method of construction the glasses are formed directly from the roller, thus dispensing with the steps necessary for converting the roller into sheet-glass, and in subsequently mounting said sheets, which, together with the utilization of the caps, renders the glasses much cheaper than heretofore made. Moreover, the glasses thus constructed will stand changes of temperature much better than the glasses heretofore constructed, and will be much more graceful in appearance.

Having thus fully described my invention, what I claim is—

1. The method herein described of utilizing the caps of the roller by cutting said roller into sections, whereby are formed glasses for street and other lamps.

2. The method herein described of utilizing the caps of the roller, by forming the cap of the lamp-glass from the same, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

WILLIAM P. BUTLER.

Witnesses:

G. L. EYSTER,
JOHN DAVIS.