

A. KADOW.  
 METHOD AND APPARATUS FOR MARVERING GLASS.  
 APPLICATION FILED JUNE 18, 1909.

991,623.

Patented May 9, 1911.

Fig. 1.

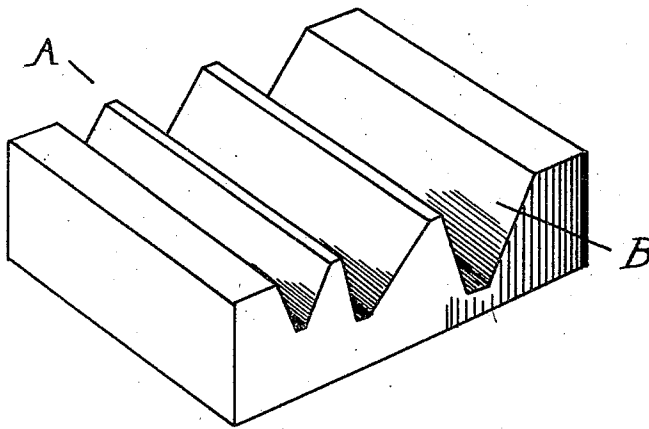


Fig. 2.

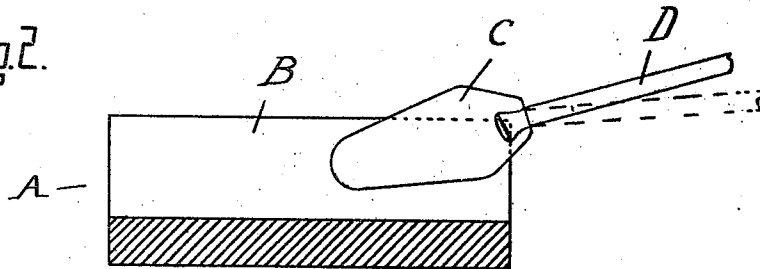
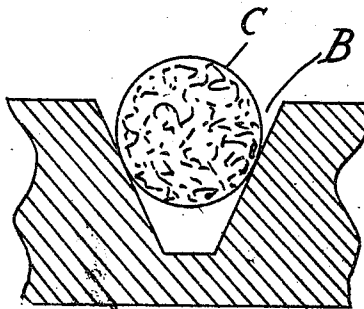


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## METHOD AND APPARATUS FOR MARVERING GLASS.

991,623.

Specification of Letters Patent.

Patented May 9, 1911.

Application filed June 18, 1909. Serial No. 502,916.

*To all whom it may concern:*

Be it known that I, AUGUST KADOW, a citizen of the United States of America, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Methods and Apparatus for Marvering Glass, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to the manufacture of blown glassware, and has particular reference to the method of preparing the gathered glass for blowing, and to the construction of the apparatus employed for this purpose. In the present state of the art, it is usual to prepare the blanks for blowing by a process known as "marvering," which consists in rolling and otherwise manipulating the gather on the blow pipe upon a flat slab. The purpose of this operation is to properly fashion the blank, and also to produce a comparatively hard skin on the outer surface of the glass, which will retain the more fluid portions. It is, however, an operation which can only be successfully performed by a skilled workman.

It is the particular object of the present invention to substitute for the usual marvering an operation requiring less skill on the part of the workmen to facilitate this operation by the use of a peculiar construction of apparatus.

In the drawings—Figure 1 is a perspective view of my improved construction of plate for marvering; Fig. 2 is a longitudinal section through the plate illustrating the method of manipulating the glass thereon; and Fig. 3 is a cross section of Fig. 2.

As has been already stated, the usual apparatus employed for marvering is a flat slab. In place of this, I employ a grooved

plate A, the grooves B of which are of V-shape cross section, and may be of varying size, as illustrated. By the use of this simple apparatus a gather of glass C may be readily marvered in the following manner. The workman, after gathering the glass on his blow pipe D, drops it into one of the grooves, and then twists or rotates the pipe. This will fashion the blank against the angling sides of the groove and by raising or lowering the blow pipe, so as to change its angular relation to the plate, any desired form may be produced.

It will be noted that the operation performed by the workman differs from that in the usual process of marvering, as in the latter the blank travels over the surface of the slab, but with the present invention the blank is held by the groove at a fixed point, and is caused to slide over the surface of the groove. Experience has demonstrated that this operation may be readily performed by a comparatively unskilled workman.

What I claim as my invention is:

1. A device for marvering glass, consisting of a plate having a V-shaped groove therein.

2. A device for marvering glass, consisting of a plate having a plurality of V-shaped grooves therein of different size.

3. The process of marvering glass, which consists in gathering the blank upon a blow pipe, in revolving the blank while upon the blow pipe in a grooved plate and varying the angle of the blow pipe in relation to said plate.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUST KADOW.

Witnesses:

C. W. WEST,  
H. W. FRASER.