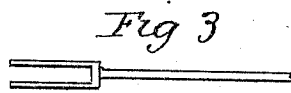
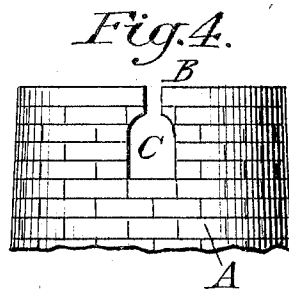
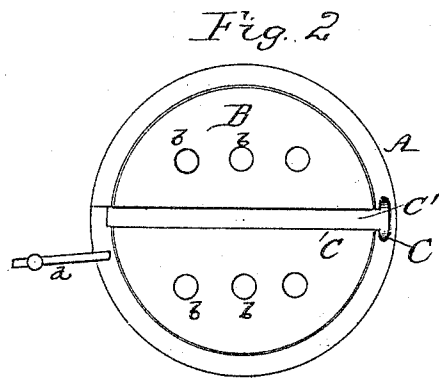
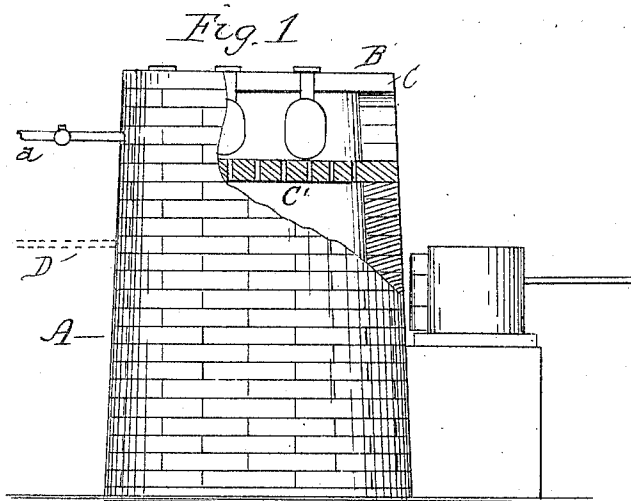


No. 789,583.

PATENTED MAY 9, 1905.

F. J. ARBOGAST.  
REHEATING FURNACE OR GLORY HOLE FOR GLASS.  
APPLICATION FILED JAN. 19, 1904.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FRANCIS J. ARBOGAST, OF ELVERSON, PENNSYLVANIA.

## REHEATING-FURNACE OR GLORY-HOLE FOR GLASS.

SPECIFICATION forming part of Letters Patent No. 789,583, dated May 9, 1905.

Application filed January 19, 1904. Serial No. 189,719.

*To all whom it may concern:*

Be it known that I, FRANCIS J. ARBOGAST, a citizen of the United States, residing at Elverson, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Reheating-Furnaces or Glory-Holes for Glass; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to the manufacture of glassware, particularly to such articles as require reheating after pressing or molding to give them the final finish.

As is well known to any one skilled in the art of manufacturing articles of glass, there are a large number of articles—such as cylinders, bottles, dishes, decanters, cruets, shades, &c.—which are blown or pressed in molds, but that must be finally finished by hand, and for this final manipulation it is requisite that the articles be reheated. Under the ordinary and well-known methods of treatment while reheating the articles are either held in a horizontal position in a snap or clamp or else attached to a punty while being reheated in the glory-hole. This reheating is not alone a slow process, but it also requires considerable skill, and partially-finished articles are frequently destroyed and thrown into the cullet through the lack of skill of the reheater. To overcome these difficulties and to entirely dispense with the use of the snap, punty, or clamp, I have devised a novel method of reheating which not alone dispenses with all skilled labor or machinery in the reheating, but will enable the ordinary laborer or boy to reheat glass in a manner much more satisfactory than has been possible heretofore, as by my improved reheating-furnace or glory-hole the unfinished article is permanently retained in a vertical position while being reheated and does not require any skill in placing it in position or removing it and does not require any manipulation during the reheating.

With these objects in view my invention consists in the provision of a reheater or

glory-hole of a novel construction in which the articles can be placed and from which they can be removed by unskilled labor.

My invention further consists in the construction, combination, and arrangement of parts, more fully described hereinafter and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a partially-sectional side view or elevation of my reheating-furnace; Fig. 2, a top view of the same; Fig. 3, a view of a glass-fork; and Fig. 4 is a side view of part of the furnace, showing open-ended slot in top.

A represents the body of the furnace, which is built of fire-brick or other suitable material, and B the top or cover for the same, which is also preferably made of fire-brick and is formed with several openings *b b* and an orifice or slot C. A short distance below the top B is a shelf C', of fire-brick or asbestos. Suitable means for heating are provided, such as gas-jets *d d*, &c., entering the sides of the structure between the plates B and C' and also entering below the plate C', as indicated at D, and rising through suitable perforations in C'.

In the operation of the device the articles to be reheated are taken from the press or mold by means of the fork (shown in Fig. 3) and placed in one of the holes *b b* or in the slot C in the plate B either resting on the plate C' or else held in a sufficiently-elevated position by means of the fork. After being sufficiently reheated they are removed and finished. In a certain class of hollow glass, such as bottles, where the preliminary step consists in pressing a blank and after reheating or warming-in the article is finished by blowing in a mold I have found that the finishing step can be greatly accelerated by placing the mold, for instance, at one end of the slot in the top plate and as the blanks are sufficiently heated for the final step passing them into the mold and by means of compressed air finishing the article.

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

A warming-in oven or glory-hole, for re-  
heating partially - finished articles of glass-  
ware, consisting of an upright structure, a  
horizontal perforated and slotted top plate, an  
5 auxiliary shelf perforated for the passage of  
flame and means for supplying fuel below and  
above said shelf, the slot in said shelf being  
open at both ends for the insertion and re-

moval of said articles, substantially as de-  
scribed. 10

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

FRANCIS J. ARBOGAST.

Witnesses:

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