

(No Model.)

W. T. OTTO & J. H. FOX.

GLASS POT.

No. 298,772.

Patented May 20, 1884.

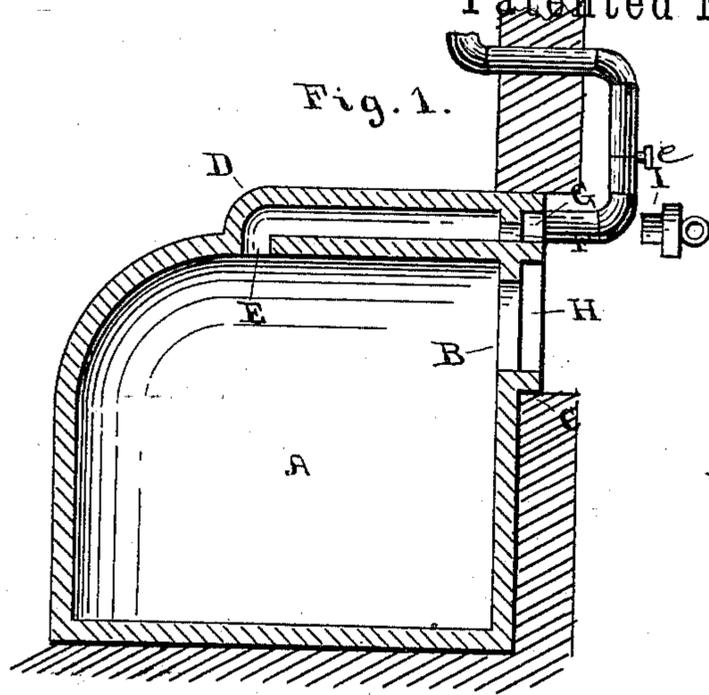
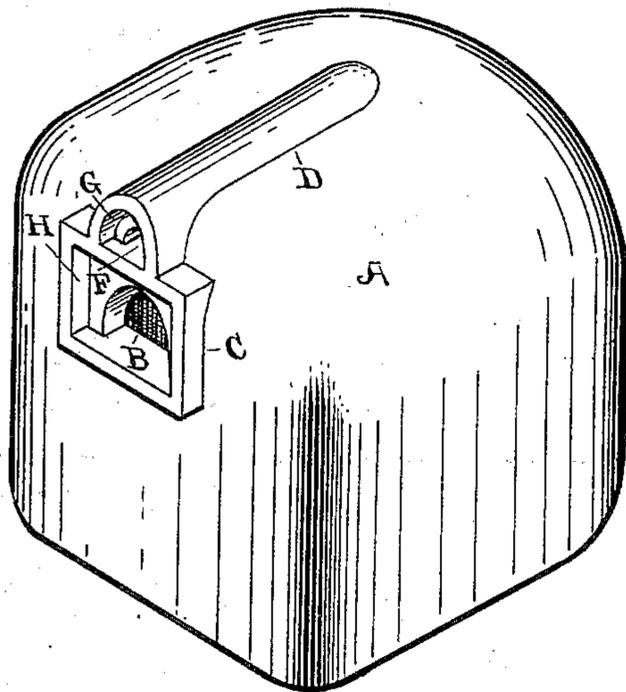


Fig. 2.



WITNESSES.

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GLASS-POT.

SPECIFICATION forming part of Letters Patent, No. 298,772, dated May 20, 1884.

Application filed December 8, 1883. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM T. OTTO and JOSEPH H. FOX, residents of Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Glass-Pots; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Our invention relates specially to the clay pots used in glass-manufactories for melting glass, commonly called "glass-pots."

It is well known to glass-workers and others versed in the art that the molten glass must be reduced to a certain temperature below that required to melt the mixture in the pot in order to be in proper condition for working, and in the pots in general use it is impossible to regulate the heat when it becomes excessive, except by opening the mouth of the pot and allowing the cold air to enter, which only partially serves to cool the glass to the desired consistency, owing to the fact that there is no draft through the body of the pot by means of which the cool air could be distributed over the surface of the glass.

To remedy this difficulty is the object of our invention; and to this end our invention consists of the combination, with the body or crown of the pot, of an air vent or flue extending from a point near the back part of the pot to the front of the same, as will be hereinafter more fully explained in detail, for the purpose of exhausting the hot air, creating a draft, and thereby reducing the temperature of the molten glass to the proper consistency for successful working.

In the drawings, Figure 1 is a vertical central section, and Fig. 2 an exterior view, of a glass-pot embodying our improvement.

Like letters of reference refer to like parts.

The letter A represents the body of the pot, which can be of any convenient size and shape.

B is the mouth of the pot.

C is a projecting frame or hood around the mouth or opening B, and extends through the wall of the furnace when the pot is in position

inside. This frame or hood C is somewhat larger than the mouth B of the pot, and thus forms a recess, H, for the receipt of a stopper when it is desirable to close the mouth of the pot.

E is a hot-air vent or flue formed in the crown of the pot, extending from the front of the pot, just above the mouth of the same, along the top to a point near the back part, where the curved portion of the crown joins with the level or straight part, which in the form of pot herein shown is thought to be the hottest part.

D represents the flue on the outside, formed integral with the crown of the pot.

F is the mouth of the flue.

G is a recess in which a stopper or register, I, can be placed to open or close the flue.

It is our intention to have the flue formed in the crown of the pot while the pot is being made, and in this way it becomes an integral part of the same; but in some cases it may be desirable to construct the flue separate and place it on the outside of the pot in the manner of a squirrel-tail on an oven. When applied in this way, it may be secured in position to the pot by means of grooves or channels formed in the top of the crown, adapted to receive the sides of the box or flue. Connection would be made with the flue thus formed by making a suitable hole into it through the crown of the pot at such a point as would be found to be the most suitable for the purpose intended. A pipe may be attached to the mouth of the flue and then connected to an exhaust-fan or furnace-stack, for the purpose of exhausting the hot air.

In using a pot of this kind all that is necessary to be done in order to reduce the temperature of the glass to the proper consistency to work freely is to remove the stopper from the end of the hot-air vent or flue. The hot air will exhaust itself through this flue and create a draft, and the cold air will rush in the mouth of the pot and distribute itself over the surface of the glass, reducing the temperature and cooling it sufficiently for working purposes. After the glass is in proper working condition, the air-vent can be closed until again needed. In cases where it is desirable to cool the glass rapidly a pipe can be connected at

one end to the mouth of the air-flue and have the other end either inserted in the furnace-stack or attached to an exhaust-fan, for the purpose of exhausting the hot air and creating a draft through the door of the pot, and thus cooling the glass.

The advantages derived from being able to cool the glass in a few moments and regulate the degree of heat at will are obvious, and need not specially be referred to.

Having described our invention, what we claim, and desire to secure by Letters Patent of the United States, is—

1. The glass-pot herein shown and described, consisting of the body A, provided with the mouth B and hood C, whereby a recess, H, is formed adapted to receive a stopper, the crown-flue D, communicating with an opening in the pot, as shown, the outer end of said flue being provided with a recess, and the

stopper I, in combination with an air-vent extending from the back of the pot along the crown of the same to the front of the pot, and means for regulating the same, substantially as described and for the purposes set forth.

2. The combination, with a glass-pot embodying in its construction an air vent or flue, substantially as herein shown, of a pipe attached to the mouth of the flue, and connected to an exhaust-fan or furnace-stack for the purpose of exhausting the hot air, substantially as herein described.

In testimony that we claim the foregoing as our own we hereto affix our signatures in presence of two witnesses.

WM. T. OTTO.
JOSEPH H. FOX.

Witnesses:

W. D. JOHNSON,
THOS. C. MORRIS.