2 Sheets—Sheet 1.

A. HARCUM.

GLASS-MELTING POTS.

No. 188,129. Patented March 6, 1877.

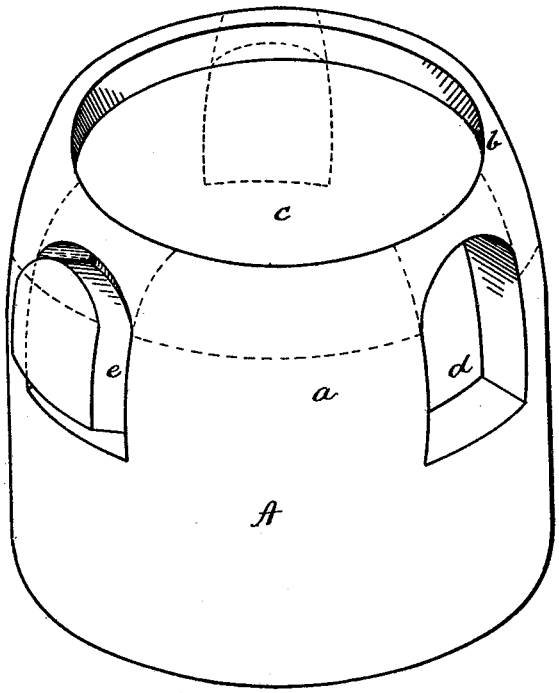

Fig. 1.

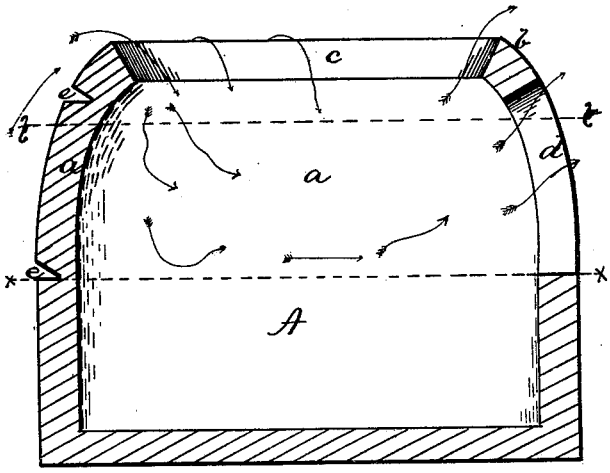

Fig. 2.

Witnesses.

R. D. Williamson
J. H. Smith

Inventor.

Andrew Harcum
by Bakewell & Kerr
Attys

2 Sheets—Sheet 2.

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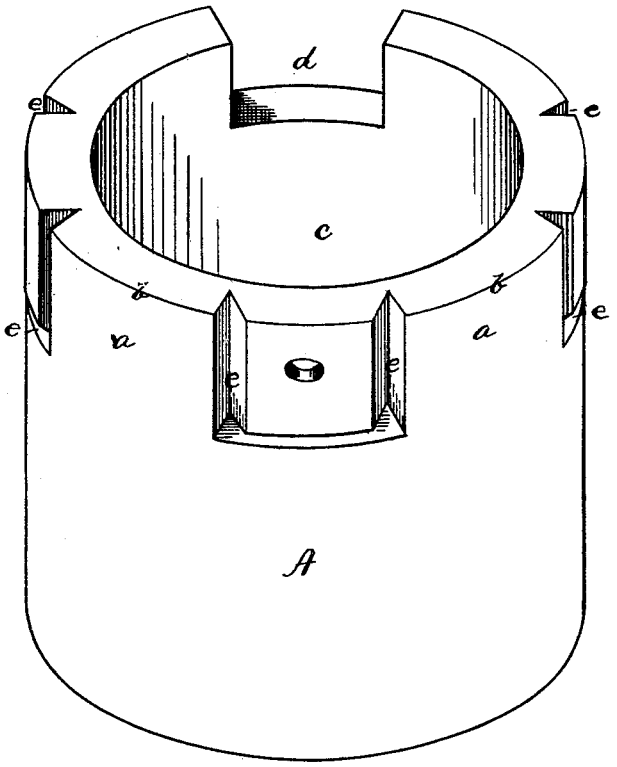

Fig. 3.

Witnesses.

R. C. Williams
J. K. Smith

Inventor.

Andrew Harcum
by Bakewell & Kerr
Attys

UNITED STATES PATENT OFFICE.

ANDREW HARCUM, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND PETER KUNZLER, OF SAME PLACE.

IMPROVEMENT IN GLASS-MELTING POTS.

Specification forming part of Letters Patent No. **188,129**, dated March 6, 1877; application filed February 12, 1877.

To all whom it may concern:

Be it known that I, ANDREW HARCUM, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Glass-Melting Pots; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a perspective view of a glass-melting pot embodying my invention. Fig. 2 is a vertical section of the same, and Fig. 3 is a modification thereof.

Like letters refer to like parts wherever they occur.

My invention relates to the construction of glass-melting pots employed in the manufacture of window, bottle, and similar glass; and consists, first, in extending the sides of the pot and forming a notch or ring-hole therein, to prevent or retard the burning down of the pot, and so prolong its life; second, in grooving the pot at several points in such a manner that notches or ring-holes may be formed from time to time, when it is desirable to change the position of the pot in the furnace.

Heretofore glass-melting pots for the manufacture of window and bottle glass have been made in form of a truncated cone from four feet to four feet six inches in depth, three feet four inches, or three feet six inches, in diameter at the top, and about three feet in diameter at the bottom, or in the form of cylinders averaging three feet in diameter, and of a height adapted to the furnace, and were so set in the furnace that the flame played over the edges of the pot and thence to the flues. The life of the best quality of such pots varied from six to nine weeks, by which time the mouth had so burned down that the pot would not hold enough glass for a "turn," or a day's work.

I will now proceed to describe my invention, so that others skilled in the art to which it appertains may apply the same.

In the drawing, A indicates a glass-melting pot, which may be built up, in the usual or any approved form, until the walls are as high as the dotted line *x x*, or the ordinary height of a window-glass pot. The walls are then extended up, as at *a*, being preferably slightly drawn in or curved, as in forming a crown or closed pot, until the point *b* is reached where the walls cease, forming the open mouth *c* of the pot. During the building of the walls the notch or ring-hole *d* is left, and at the same time, or subsequently, if preferred, the grooves or channels *e* are formed at one or more points in the walls, and at the same height as the hole *d*, so that from time to time, as required, additional ring-holes may be made by knocking through the wall of the pot at the points *e*.

When employed, the pot A may be set in the usual manner, with the ring-hole *d* opposite the usual opening or ring-hole of the furnace. The flame from the furnace will take the line indicated by the arrow in Fig. 2—that is, over the mouth of the pot, down on the glass therein, and thence through the ring-hole *d* to the flue. The additional height given to the pot, as specified, retards its destruction, and any burning away at the ring-hole can be remedied by patching. Where the curved wall is adopted it serves to deflect the flame, somewhat prolonging the life of the pot, and prevents any obstruction to the draft of the furnace.

It frequently happens that a pot is slightly defective, cracked, or has less strength at one point; or the pot may crack after it has been set. In either case a notch or ring-hole may be formed on that side of the pot by knocking out the wall inclosed by the nearest groove *e*, and the pot set, or reset, with the defect against the walls of the furnace, and away from the direct action of the flame.

The advantages arising from my invention are, the greater length of time pots remain serviceable, and the avoidance of the great labor incident to the frequent setting of pots.

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

1. The open-top glass-melting pot, having the extended walls and the notch or ring-

hole, substantially as and for the purpose specified.

2. A glass-melting pot having a ring-hole and open top curved at the mouth, substantially as and for the purpose specified.

3. The glass-melting pot having grooved walls for forming extra notches or ring-holes, substantially as specified.

In testimony whereof I, the said ANDREW HARCUM, have hereunto set my hand.

ANDREW HARCUM.

Witnesses:
J. K. SMITH,
F. W. RITTER, Jr.