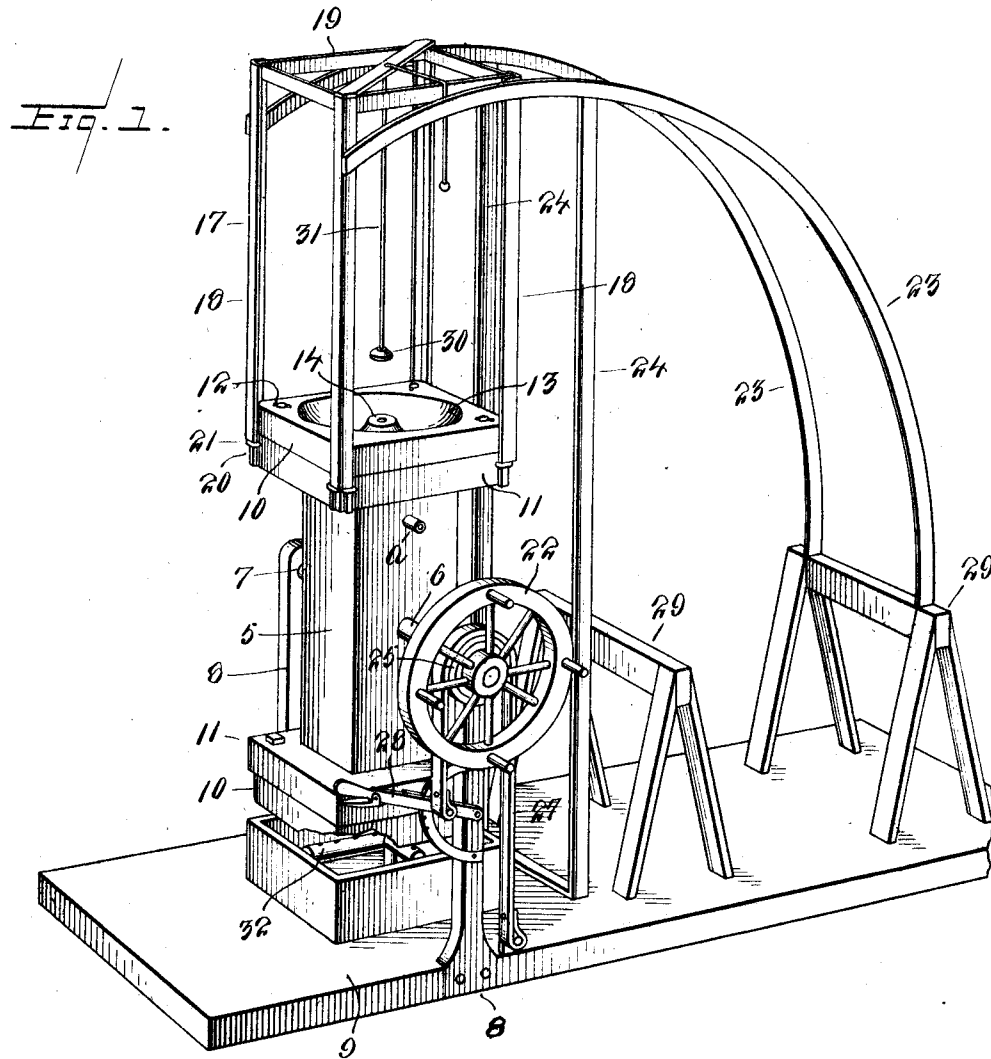


J. DIFFENBACHER.
GLASS MACHINE.
APPLICATION FILED JULY 1, 1911.

1,034,985.

Patented Aug. 6, 1912.
2 SHEETS-SHEET 1.



Witnesses
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John Anderson.

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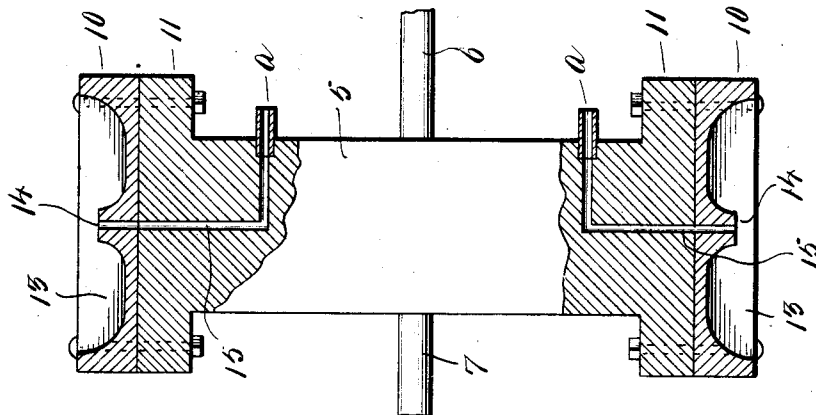
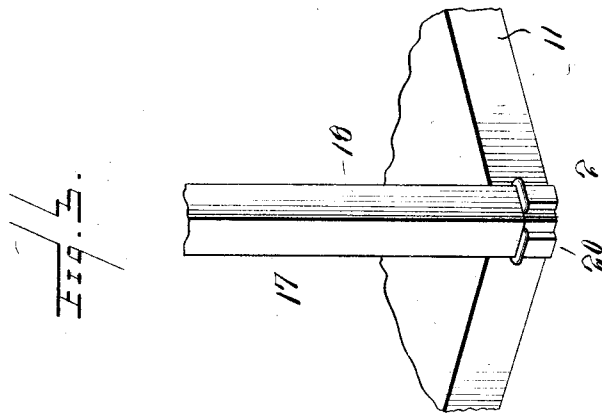


Fig. 4.

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UNITED STATES PATENT OFFICE.

JAMES DIFFENBACHER, OF BURROWS, PENNSYLVANIA.

GLASS-MACHINE.

1,034,985.

Specification of Letters Patent.

Patented Aug. 6, 1912.

Application filed July 1, 1911. Serial No. 636,325.

To all whom it may concern:

Be it known that I, JAMES DIFFENBACHER, a citizen of the United States, residing at Burrows, in the county of McKean and State of Pennsylvania, have invented new and useful Improvements in Glass-Machines, of which the following is a specification.

The general objects of the invention are to facilitate the removal of blown hollow glass articles from the apparatus in which they are formed; and to reduce the cost of maintenance of glass blowing apparatus by rendering the glass holding pots detachable therefrom.

Other objects will appear and be better understood from the following description taken in connection with the accompanying drawings, in which,

Figure 1 is a perspective of the device a part thereof being broken away and disclosing the burner. Fig. 2 is a detail side elevation partly in section of the pedestal also showing the pots in vertical section. Fig. 3 is a detail elevation partly in section of one corner of the pedestal and the frame.

The pedestal 5 has trunnions 6 and 7 bearing on uprights 8 carried by the base 9.

The earthenware pots 10 for holding the molten glass are detachably secured to the enlarged rectangular-shaped opposite ends 11 of the receptacle in any preferred manner such as by bolts and nuts, the former passing through oval-shaped openings 12 in the pots, whereby, cubical expansion of the said pots is permitted without danger of breakage. The pots are formed with circular chambers 13 and central bosses 14 through which extend the vertical side portions 15 of blow pipes *a*, set into the opposite end portions of the pedestal 5, the horizontal portions of said blow pipes extending laterally beyond the pedestal and adapted for connection to a tube (not shown) of a suitable blower (not shown).

The skeleton guard or cage 17 has its uprights 18 preferably formed of angle iron and connected by means of the cross pieces 19. The lower end portions of the uprights having sockets 20 adapted to receive the corner portions 21 of the rectangular-shaped opposite ends 11. The pedestal is turned by a hand-wheel 22 on one of the trunnions such as the trunnion 6 and a curved guide 23 suitably supported such as by uprights

24 is arranged to receive the frame 17 as the same moves downwardly.

A friction brake including a drum 25 arranged on one of the trunnions such as the trunnion 6 and a flexible band 27 secured at one end to the support and at its opposite end to a lever 28, serves to prevent movement of the pedestal during the formation of the cylinder or when the frame has been lowered onto the supports 29 for the purpose of removing the frame and snapping off the cylinder.

In use a quantity of molten glass is placed into the upper pot 10. Before the glass is introduced a metal cap or bait 30 connected with a flexible element 31 is lowered over the opening of the boss 14, to prevent the molten glass from entering the blow pipe *a*. Air is then admitted through the blow pipe *a* and the cap or bait pulled upwardly so as to "start" the cylinder. The blowing continues until the cylinder is formed within the frame or guard after which the pedestal is turned by means of the hand-wheel 22 as previously described. The skeleton frame or guard 17, when lowered onto the support 29 prevents contact between the cylinder and support while the cylinder is cooling. The cylinder when sufficiently cool is snapped from the pot and the guard or frame detached from the pedestal. The frame or guard then provides a convenient hand-hold for lifting the cylinder onto the floor. After the detachment of the frame and cylinder from the pedestal, the pedestal is rotated until the pot from which the cylinder has been snapped is over the burner 32 whereupon the pot at the opposite end of the cylinder will be upright and ready to receive a charge of molten glass. During the formation of the second cylinder the glass in the lower pot is melted by the flame from the burner 32 so that when the second cylinder has been snapped the lower pot will be in condition to receive a charge of molten glass when turned to upright position. By virtue of the detachable connection between the pots and pedestal either pot, in the event of breakage thereof, may be readily removed and replaced with a new one. It will be understood that the bait or cap is disposed slowly from the bed of molten glass so as to leave no opening therein.

Although I have shown and described one

embodiment of my invention it is to be understood that I am not to be limited to the specific structure shown and described nor to the particular arrangement of the parts, since it will be seen that various changes will be made, in the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

10 What I claim as new is:

1. A glass making machine comprising a base, a burner on the base, upright supports connected to the base, a pedestal rotatably mounted on the supports, pots on the oppo-

site ends of the pedestal, and a skeleton 15 frame or guard adapted to be detachably secured to either end of the pedestal.

2. In a device for forming hollow glass articles, the combination of a support, a pedestal rotatable thereon, a skeleton frame or 20 guard detachably secured to the pedestal, and a guide for the frame.

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

JAMES DIFFENBACHER.

Witnesses:

GEO. J. SCHRIEBER,

W. A. BAKER.