

(No Model.)

J. PEASE.

APPARATUS FOR FINISHING THE EDGES OF GLASS VESSELS.

No. 477,447.

Patented June 21, 1892.

Fig. 1.

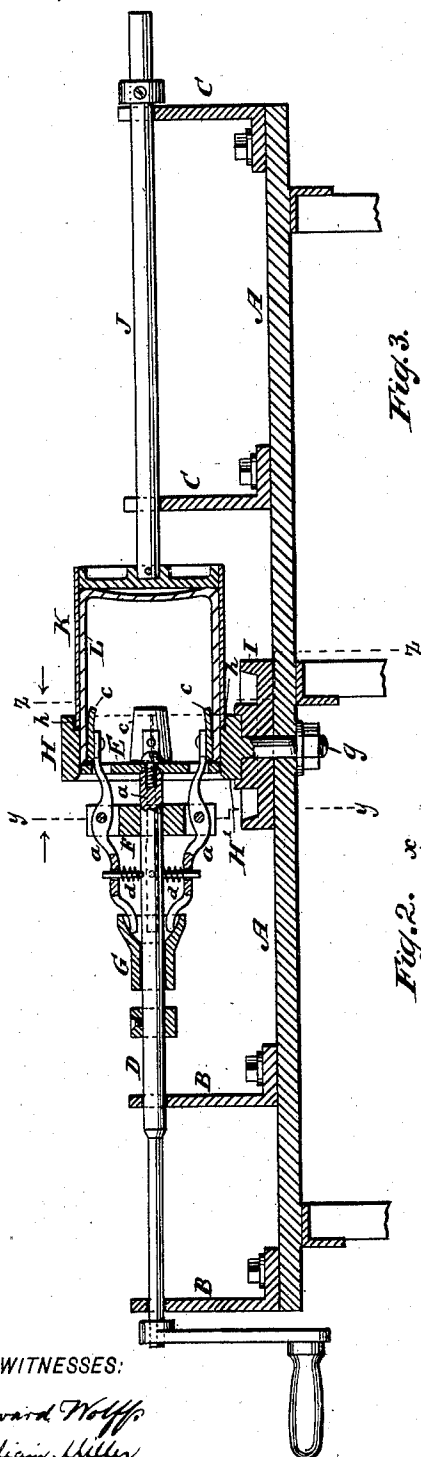


Fig. 3.

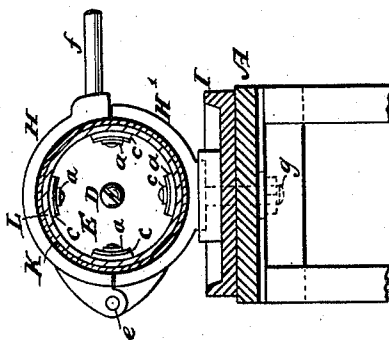
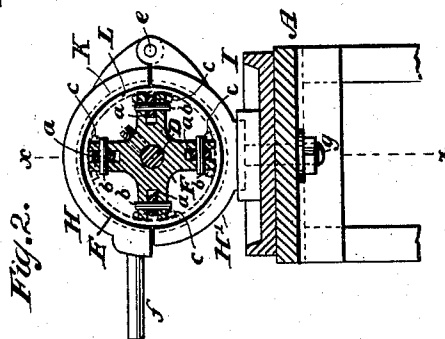


Fig. 2.



WITNESSES:

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APPARATUS FOR FINISHING THE EDGES OF GLASS VESSELS.

SPECIFICATION forming part of Letters Patent No. 477,447, dated June 21, 1892.

Application filed March 17, 1892. Serial No. 425,300. (No model.)

To all whom it may concern:

Be it known that I, JACOB PEASE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Apparatus for Finishing the Edges of Glass Vessels, of which the following is a specification.

This invention has for its object to provide novel, simple, and efficient means for finishing the edges of glass vessels; and it consists in the features of construction and the combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical section in the line $x x$, Fig. 2. Fig. 2 is a transverse section in the line $y y$, Fig. 1, and looking in the direction of the arrow opposite to that line. Fig. 3 is a transverse section in the line $z z$, Fig. 1, and looking in the direction of the arrow opposite to that line.

In the drawings the letter A designates a base plate or frame, from which rise the standards B B and C C. The standards B B form the bearings of an arbor D, to the inner end of which is firmly secured a metallic plate or disk E, and which can be moved in its bearings in the direction of its axis and also rotated by hand or otherwise. On said arbor is mounted a head F, which carries a series of levers a . Four such levers are shown; but this number may be changed as may be desirable. These levers are connected to the head F by pivots b , and on their outer ends are secured shoes c , while their inner ends are exposed to the action of springs d , which have a tendency to throw the shoes c inward toward the center of the arbor D.

G is a sleeve, which slides on the arbor D and is provided with a bell-shaped mouth to engage the levers a . If this sleeve is moved into the position shown in Fig. 1, the shoes c are carried away from the center of the arbor D and retained in position against the action of the springs d .

H H' are two jaws, which are connected by a pivot e and form a clamp, hereinafter designated by the letters H H'. From the jaw

H extends a handle f , and from the jaw H' extends a stud g , which is firmly secured to the plate A. Between the jaw H' and the plate A is situated a trough I, so that when the nut at the lower end of the stud g is drawn up tight said trough is retained in position.

The standards C C form the bearings for a rod J, to the inner end of which is secured the punty K, which is intended to receive and hold the glass vessel L during the operation of finishing its edge. Of course the cross-section of the punty corresponds to the cross-section of the vessel which it is to receive, and the depth of the punty is such that when the vessel is inserted into the punty its edge extends some distance beyond the edge of the punty, as shown in Fig. 1.

The apparatus illustrated in the drawings is intended for cylindrical vessels with a circular cross-section, and in that case the diameter of the finishing-disk E is such that it can pass into the clamp H H' and revolve therein. In the clamp is formed a recess h , which corresponds in depth to the thickness of the body of the punty K, so that when the clamp is closed upon the punty its inner surface is in line with or a continuation of the inner surface of the punty. Before or after the vessel is adjusted in the punty its edge is heated to a red heat. The shaft D is moved inward so as to bring the disk E in contact with heated edge of the vessel, and at the same time the shoes c are spread so as to hold that portion of the vessel which projects beyond the punty in contact with the inner surface of the clamp H H', and then the shaft D is rotated and pressed inward, so that by the action of the disk E the heated edge of the vessel is finished. In order to prevent this edge from cooling too quickly, the trough I is filled with alcohol, which is ignited so as to raise the temperature of all those parts which are brought in contact with the front portion of the glass vessel. Of course any other suitable heat-generating agent may be used in place of alcohol ignited in the trough I.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a frame A and a rod J, carrying a punty K, of a clamp sup-

ported by the frame and composed of two sections H H', pivoted together at one end and adapted to embrace the mouth of a vessel contained within the punty, a lengthwise movable and rotary shaft D, carrying a finishing-disk E and a head F, a series of levers *a*, pivoted between their extremities to the head and having one extremity extending through the finishing-disk and provided with shoes *c*, the springs *d*, acting on the tail ends of the levers to press them in a direction away from each other, and a sleeve G, sliding on the shaft and having a bell-mouth which receives the tail ends of the pivoted levers to press the same toward each other against the tension of the springs, substantially as described.

2. The combination, with a frame A and a rod J, carrying a punty K, of a trough I, adapted to contain a combustible fluid, a clamp located above the trough and composed of two sections H H', pivoted together at one

end and adapted to embrace the mouth of a vessel contained in the punty, a lengthwise movable and rotary shaft D, carrying a finishing-disk E and a head F, a series of levers *a*, pivoted between their extremities to the head and having one extremity extending through the finishing-disk and provided with shoes *c*, the springs *d*, acting on the tail ends of the levers to press them in a direction away from each other, and a sleeve G, sliding on the shaft and having a bell-mouth which receives the tail ends of the pivoted levers to press the same toward each other against the tension of the springs, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JACOB PEASE.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.