Jan. 12, 1937. C. MORRISON 2,067,780

RINSER

Filed June 17, 1935

Fig. 1.

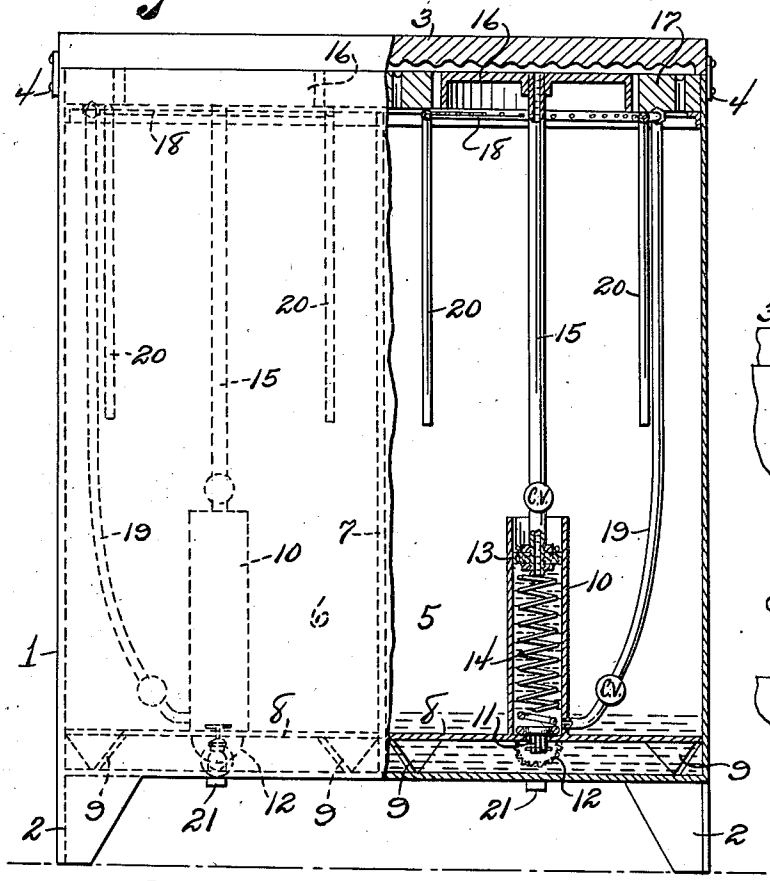


Fig. 3.

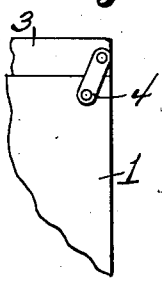


Fig. 4.

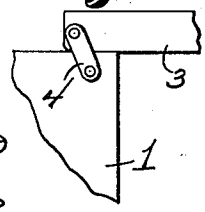


Fig. 2.

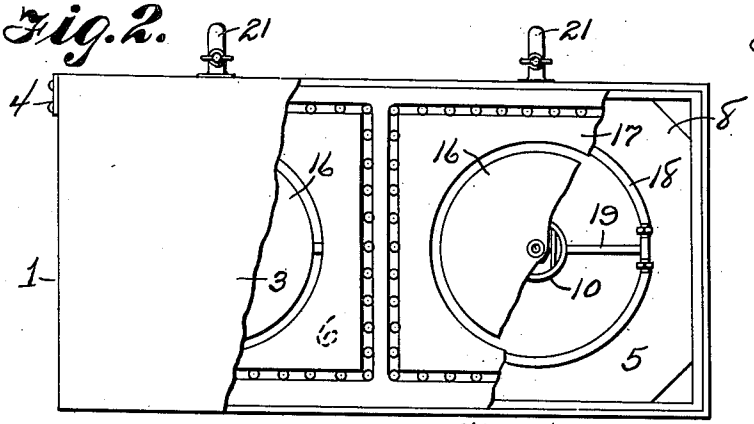
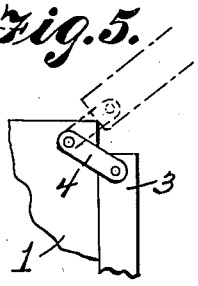


Fig. 5.



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RINSER

Clayton Morrison, Marshfield, Wis.

Application June 17, 1935, Serial No. 27,108

4 Claims. (Cl. 141—3)

This invention relates to rinsers especially adapted for cleaning drinking glasses of various sizes, and has for the primary object the provision of a portable device of this character which is efficient and easy to operate and is self-sustaining, that is, not requiring a water supply pressure system for its operation so that the device may be employed anywhere desired where water supply systems are unavailable and its construction is such that a glass may be first washed inside and out with a cleansing solution and then rinsed both inside and out.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which

Figure 1 is a side elevation, partly in section, illustrating a rinser constructed in accordance with my invention.

Figure 2 is a top plan view, partly broken away, showing the same.

Figure 3 is a fragmentary side elevation illustrating means for hinging the cover to the cabinet.

Figure 4 is a similar view to Figure 3, showing the cover in a position to act as a drain.

Figure 5 is a view similar to Figures 3 and 4 showing the cover occupying an open position and in parallelism with one of the vertical walls of the cabinet.

Referring in detail to the drawing, the numeral 1 indicates a suitable type of cabinet supported by legs 2 and open at its upper end and equipped with a cover 3 hinged thereto, as shown at 4, so that the cover may be positioned to close the cabinet, as shown in Figure 3, or positioned to act as a drain, as shown in Figure 4, or may assume a position as shown in Figure 5. The inner face of the cover is corrugated to provide a series of drain grooves. Drinking glasses may be positioned on the corrugated face of the cover and due to the grooves will readily drain and quickly dry.

The cabinet is divided into chambers 5 and 6 by a partition 7. One of the chambers may be elected to contain a cleansing solution while the other chamber may be elected to contain a rinsing liquid, such as clean water. The mechanisms located in the chambers for the washing of drinking glasses are identical in construction and reference to one specifically is thought sufficient.

Located in the chamber is a base 8 contacting the walls of the chamber and having its corners bent to form depending legs 9 that engage the bottom of the cabinet and support the base in spaced relation thereto to form a liquid chamber. A cylinder 10 rises from the base and is in communication with the liquid chamber by a port controlled by a standing valve 11. Positioned about the port within the chamber is a screen 12. A plunger 13 operates in the cylinder 10 and is normally urged into an uppermost position by a coil spring 14. A tubular stem 15 is connected to the plunger and extends upwardly and is secured to a glass rest 16 in the form of a flanged plate with the flange directed downwardly. The stem 15 opens outwardly through the top face of the rest 16.

Located in the upper portion of the cabinet in the chamber thereof is a perforated board 17 having an opening through which the rest 16 operates. The spring 14 positions the rest 16 so that the top face thereof is flush with the top face of the board. A spray ring 18 is supported by the board 17 and its diameter is such that the rest 16 may move therethrough. A solution supply pipe 19 is connected to the spray ring and to the cylinder 10 adjacent the latter's closed end.

In operation, a drinking glass is inverted and brought against the rest 16 with force, pushing the latter downwardly causing the plunger 13 to displace liquid in the cylinder both through the tube 19 and spray ring 18 and the stem 15 so that the glass will be bathed in the solution both interiorly and exteriorly. As soon as pressure is released on the glass the spring 14 returns the rest 16 to its initial position and the plunger 13 moving upwardly draws solution into the cylinder 10, placing the device in condition for cleansing the next glass.

Check valves are provided in the plunger stem 15 and in the tube 19 which will permit the solution to pass out of the cylinder but which will close and prevent entrance of air to the cylinder during the upward movement of said plunger. Depending from the board 17 are guides 20 for guiding the movement of the rest 16. The chambers 5 and 6 are provided with drain valves 21, whereby said chambers may be emptied of their solution as desired.

Having described the invention, I claim:

1. A rinser comprising a cabinet adapted to contain a solution, guides mounted in said cabi-

net, a glass rest slidably supported in the cabinet for up and down movement and guided by the guides, a tubular stem connected to and opening outwardly through the top face of the rest, a plunger connected to the stem, a cylinder in communication with the cabinet to receive solution therefrom and slidably receiving the plunger, a spring engaging the plunger and acting to position the plunger and rest in their uppermost position and to draw solution into said cylinder from the cabinet, a spray ring supported in the cabinet and having the rest movable therethrough with a glass thereon, and means connecting the spray ring with the cylinder.

2. A rinser comprising a cabinet adapted to contain a solution, guides mounted in said cabinet, a glass rest slidably supported in the cabinet for up and down movement and guided by the guides, a tubular stem connected to and opening outwardly through the top face of the rest, a plunger connected to the stem, a cylinder in communication with the cabinet to receive solution therefrom and slidably receiving the plunger, a spring engaging the plunger and acting to position the plunger and rest in their uppermost position and to draw solution into said cylinder from the cabinet, a spray ring supported in the cabinet and having the rest movable therethrough with a glass thereon, means connecting the spray ring with the cylinder, a board located in the upper portion of the cabinet and having drain openings therethrough and provided with an opening to receive the rest.

3. A rinser comprising a cabinet adapted to contain a solution, guides mounted in said cabinet, a glass rest slidably supported in the cabinet for up and down movement and guided by the guides, a tubular stem connected to and opening outwardly through the top face of the rest, a plunger connected to the stem, a cylinder in communication with the cabinet to receive solution therefrom and slidably receiving the plunger, a spring engaging the plunger and acting to position the plunger and rest in their uppermost position and to draw solution into said cylinder from the cabinet, a spray ring supported in the cabinet and having the rest movable therethrough with a glass thereon, means connecting the spray ring with the cylinder, a board located in the upper portion of the cabinet and having drain openings therethrough and provided with an opening to receive the rest, and a cover hinged to the cabinet and capable of being positioned to act as a drain board for washed glasses.

4. A rinser comprising a cabinet adapted to contain a solution, guides mounted in said cabinet, a glass rest slidably mounted in the cabinet for up and down movement and guided by said guides, a tubular stem connected to and opening outwardly through the top face of the rest, a plunger connected to the stem, a cylinder slidably receiving the plunger, a base located in the cabinet and spaced from the bottom thereof to form a solution chamber between said base and bottom and providing a support for said cylinder, said cylinder having communication with said solution chamber to receive solution therefrom, a spring engaging the plunger and acting to position the plunger and rest in their uppermost position and to draw solution into the cylinder from said chamber, a spray ring supported in the cabinet and having the rest movable therethrough with a glass thereon, means connecting the spray ring with the cylinder, a board located in the upper portion of the cabinet and having drain openings therethrough and provided with an opening to receive the rest, and a cover hinged to the cabinet and capable of being positioned to act as a drain board for washed glasses.

CLAYTON MORRISON.