Jan. 21, 1930. H. A. DORR 1,744,215

HOLDER FOR CARBOYS AND THE LIKE

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Fig. 2.

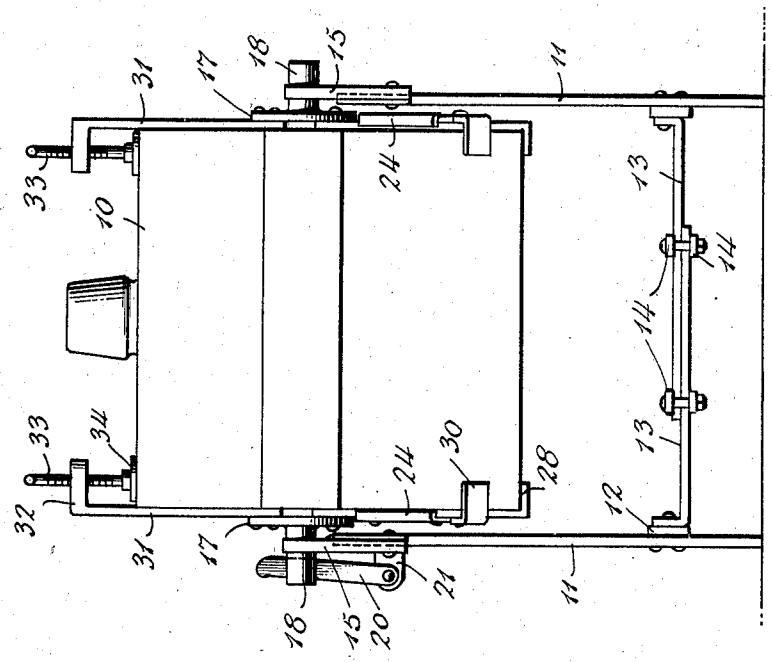
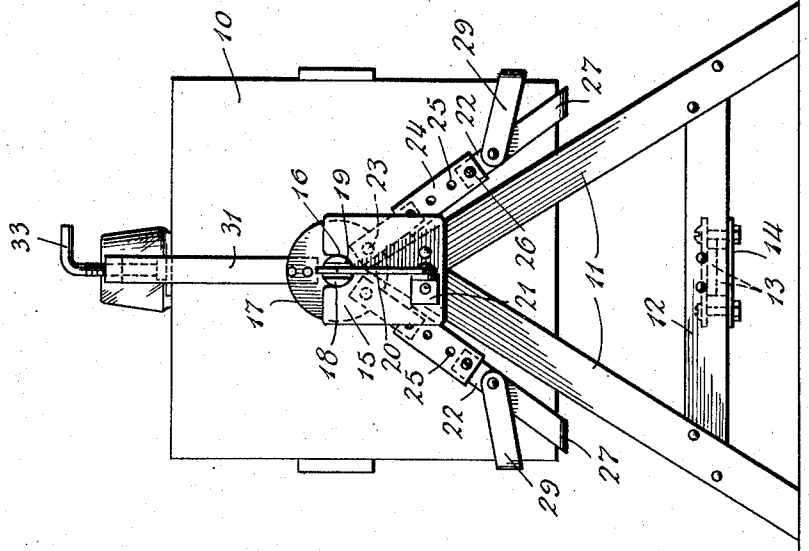


Fig. 1.



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Fig. 4.

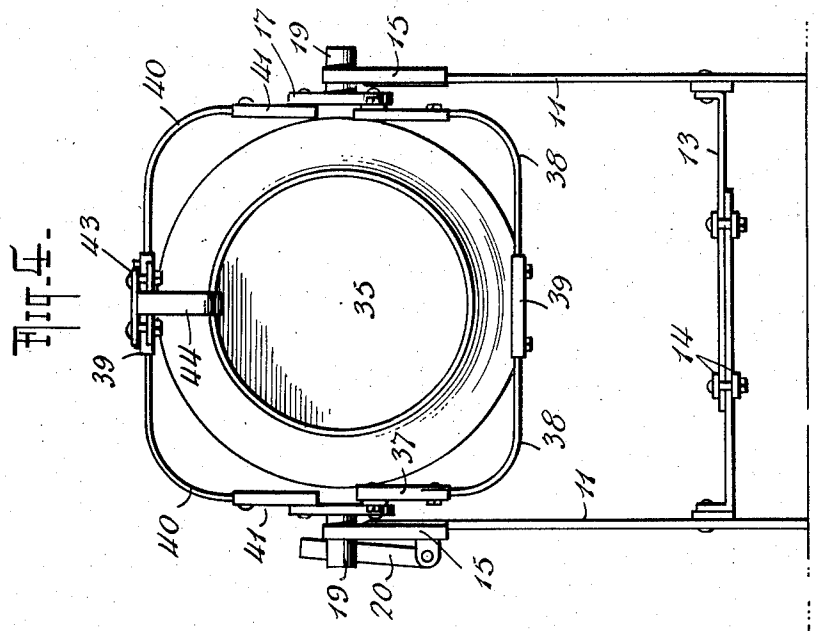
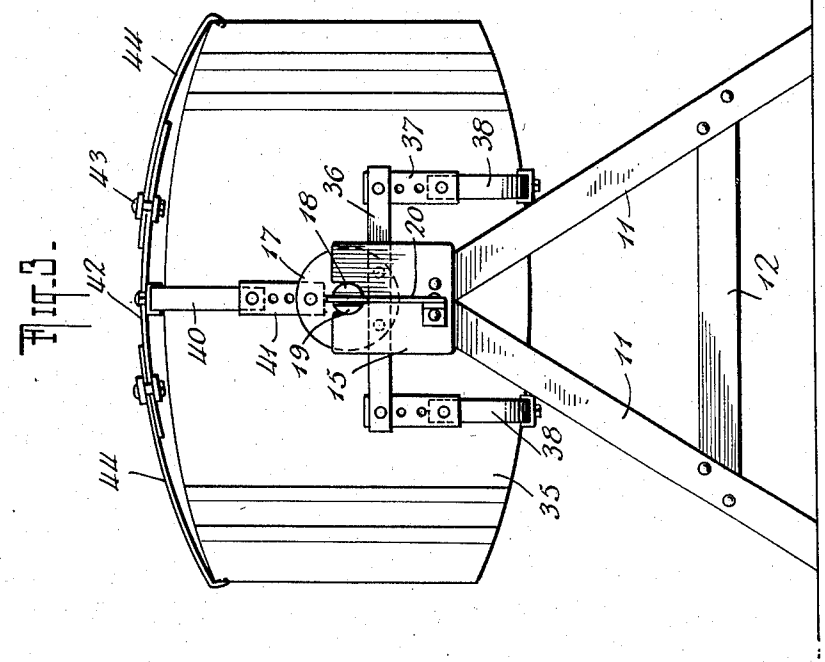


Fig. 3.



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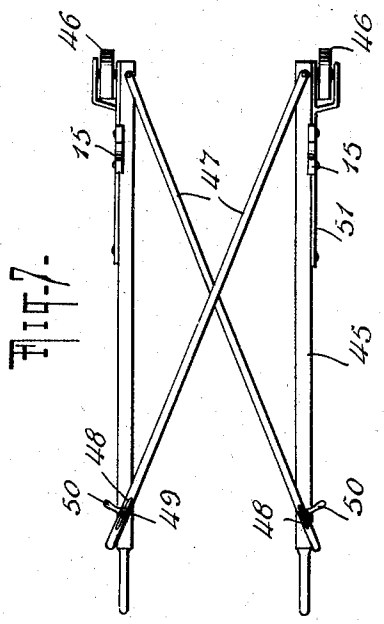


FIG. 7.

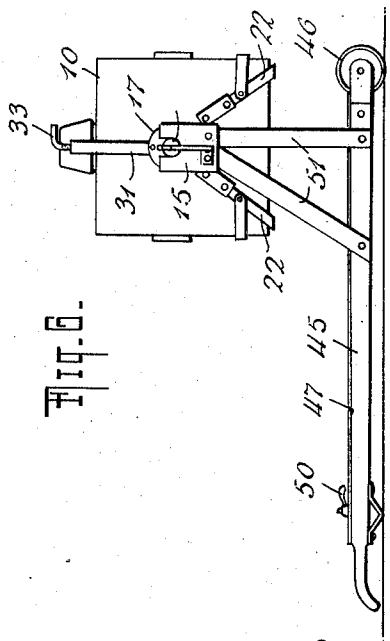


FIG. 6.

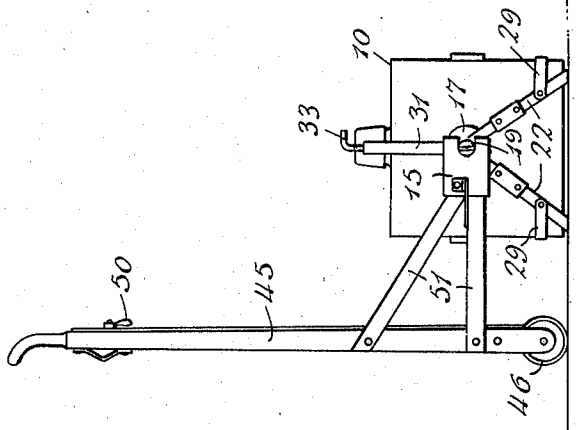


FIG. 5.

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UNITED STATES PATENT OFFICE

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HOLDER FOR CARBOYS AND THE LIKE

Application filed June 7, 1928. Serial No. 283,496.

This invention relates to improvements in supports for dispensing receptacles, and has particular reference to a holder for carboys, barrels, drums and the like.

An object of the invention is to provide an improved holder of simple and practical construction, in which a carboy or other receptacles may be easily mounted and securely held in position therein.

Another object is to provide a holder in which a receptacle may be suspended and moved to various positions to dispense the contents thereof and wherein said receptacle may be locked in certain positions, such as in the draining position thereof.

A still further object is the provision of a holder, the cradle and other parts of which may be adjusted to accommodate receptacles of different sizes.

The above and other objects will appear more clearly from the following detailed description, when taken in connection with the accompanying drawings, which illustrate preferred embodiments of the inventive idea.

In the drawings—

Figure 1 is a side elevation of one form of holder adapted for supporting a carboy;

Figure 2 is a front elevation thereof;

Figure 3 is a side elevation of a slightly different form of holder adapted for supporting a barrel or a drum;

Figure 4 is a front or end elevation;

Figure 5 is a side elevation of a different form of supporting frame, the same being shown in a position preparatory to mounting the carboy and holder thereon;

Figure 6 is a side elevation showing the carboy in suspended position above the frame; and

Figure 7 is a plan view of the supporting frame.

The holder of the present invention is primarily designed for use with carboys, barrels and drums employed as containers for acids, chemicals and paints, although it is not limited to such use within the spirit or scope of the invention, and one if its main features is to permit of the dispensation of the contents of the container with a minimum danger of spilling and possible injury to the operator.

The holder illustrated in Figures 1 and 2 is particularly adapted for supporting a carboy 10, of usual construction, in such manner that the same may be tilted from its upright position to various positions of inclination until the carboy is completely inverted, so that it may be drained. The holder comprises a supporting frame consisting of two pairs of upwardly converging end members 11, the members of each pair being connected adjacent their lower ends by the braces 12. Joining the intermediate portions of the braces 12 is a sectionalized cross brace consisting of complemental members 13 having their outer extremities secured to said braces 12 and their inner ends arranged in overlapping relation and fastened together by straps 14. By loosening the straps 14 the effective length of the cross brace may be adjusted so that the distance between the end members 11 may be varied to accommodate carboys of different sizes.

Associated with each pair of the end members 11 is a bearing plate 15 of rectangular form recessed in its inner face to receive the upper converging ends of the members 11 to which said plate is secured. The upper edge of each plate 15 is formed therein with a recess or bearing 16 for a purpose which will presently appear.

The holder further comprises a cradle including disk-like plates 17 arranged on opposite sides thereof and each provided with a trunnion 18 adapted to engage in the recess 16 of the adjacent bearing plate 15 so as to form an axis of rotation for the carboy. The outer end of one trunnion 18 is provided with a longitudinal slot 19 which is vertically disposed when the carboy 10 is in its upright or draining positions. Means are provided for locking the carboy in said positions and this means is shown in the form of a lever 20 pivoted to a bracket 21 secured to one of the plates 15 so as to swing outwardly from the plate and inwardly toward the trunnion, in which latter position the lever engages in the slot 19 of said trunnion.

The cradle for the carboy 10 further in-

cludes a pair of main clamping arms 22 associated with each of the plates 17. Each of the arms 22 is formed of a plurality of sections, the innermost of which is pivotally connected at 23 to the plate 17. The intermediate section 24 of each arm is provided with a plurality of openings 25 therein for receiving fastening means 26 to permit of attachment of the inner section and outer section 27 to said intermediate section whereby adjustments in the length of the arm may be secured. The outer extremity of the section 27 of each arm is inturned, as indicated at 28, so as to engage the bottom of the carboy to aid in supporting the same. Each section 27 of the various arms has pivoted thereto an auxiliary clamping arm 29, the free extremity 30 of which is also inturned to engage one of the side walls of the carboy. The elements 27 and 29 cooperate to maintain the carboy suspended within the holder.

Further means are provided for additionally securing the carboy within the holder, especially when the same is tilted or completely inverted to dispense the contents therefrom. This means is in the form of an upper clamping arm 31 for each plate 17 secured at its lower end to said plate and having its upper end 32 bent inwardly and provided with a screw threaded aperture to receive a retaining member or clamp 33. By adjusting the members 33 vertically the bases 34 thereof may be engaged with the top of the carboy and tightened thereagainst so as to secure the same within the holder and prevent its detachment therefrom when tilting or inverting the carboy.

The form of the invention shown in Figures 3 and 4 is especially adapted for the mounting of a barrel or drum 35. The supporting frame, bearing plates 15 and plates 17 are of the same construction as previously described, while the cradle in which the barrel 35 is suspended is of a slightly different construction. In the instant form, this cradle comprises a longitudinal strap 36 on each side of the holder and secured at intermediate portions to the adjacent plate 17. Adjustably fastened to each end of each strap 36 is a section 37 corresponding to the intermediate section 24 of each of the main clamping arms in the form previously described. Also adjustably secured to each of the sections 37 is one end of a lower supporting arm 38. This arm is formed in two curved sections joined at their adjacent ends by a coupling 39 so as to permit of an adjustment of the effective width of the supporting arm to accommodate barrels of different sizes. Cooperating with the two lower supporting arms 38 is an upper arm 40 of the same construction which extends over the upper portion of the barrel and which has its ends adjustably secured to the sections 41 which are in turn secured to the plates 17. A retaining means is provided for the barrel 35 having the same function as the arms 31 and clamps 33. This means comprises an intermediate strap 42 extending lengthwise of the barrel and secured to the arm 40. Adjustably secured to said strap 42, by means of bolts 43, are the clamping arms 44, the free extremities of which are bent to engage the ends of the barrel so as to securely retain the same within the holder when said barrel is tilted to be emptied of its contents.

In Figures 5 to 7, a different form of supporting frame is shown. In this instance, the frame is constructed somewhat in the nature of a truck and comprises longitudinal side members 45 provided at adjacent ends with the rollers 46 which permit of the frame or truck and carboy being easily transported. Intersecting cross braces 47 are pivoted to the forward end of the side members 45 and have their opposite ends provided with slots 48 to receive bolts 49 carried by said side members and upon which are threaded the clamps 50. This construction permits of the side members 45 being adjustable laterally to vary the width of the frame to accommodate carboys of different sizes and when the proper adjustment has been obtained the clamps 50 may be tightened to retain the side members in their relative positions. The frame further comprises the braces 51 which are the equivalent of the end members 11 of the supporting frames previously described and carried by the outer ends of said braces are the bearing plates 15. When mounting the carboy 10 in its cradle upon the frame or truck the latter is first positioned as shown in Figure 5, and then holding the carboy to assure the engagement of the trunnions with the bearing plates the truck may be swung downwardly to the position shown in Figure 6, at the same time elevating the carboy so as to be suspended above the truck.

What is claimed is:

A holder for carboys and the like, comprising a supporting frame, a cradle for revolution therein and capable of supporting a carboy, said cradle including trunnions rotatably supported by said frame with one of said trunnions provided with a slot therein, lower supporting arms engageable with the bottom portion of the carboy to suspend the same in upright and tilted positions within the frame, and a latching member pivotally connected to said frame and engageable in said slot to lock the carboy in upright and draining positions.

In testimony whereof I have affixed my signature.

HARRY A. DORR.