M. C. FRANK.

WASHBOARD HOLDER.

APPLICATION FILED SEPT. 10, 1917.

1,331,427. Patented Feb. 17, 1920.

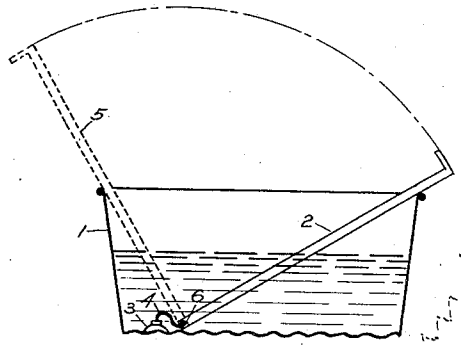


Fig. 1

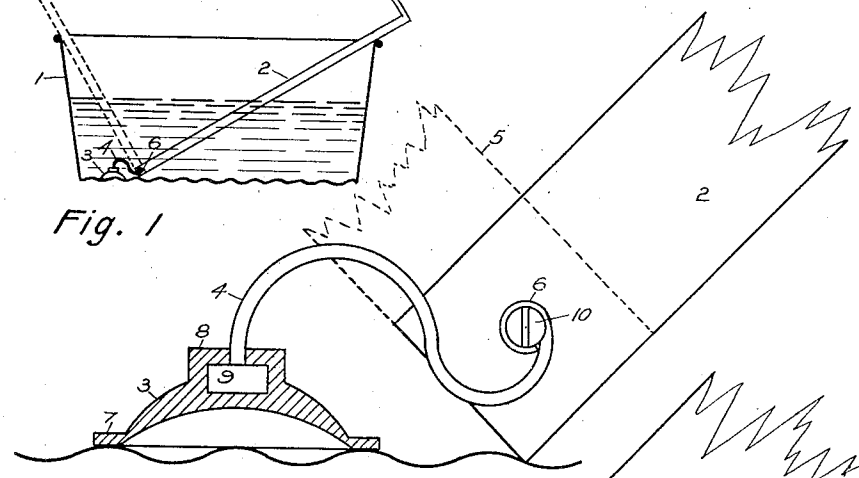


Fig. 2

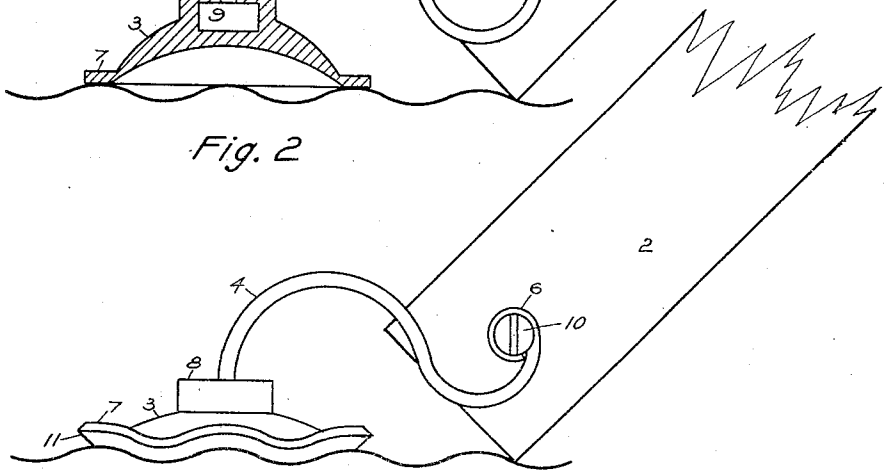


Fig. 3

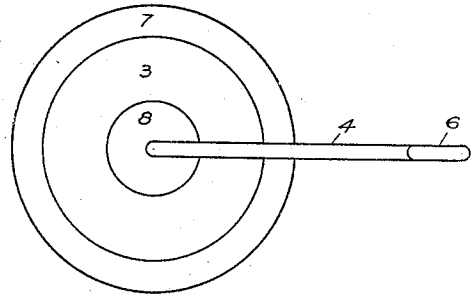


Fig. 4

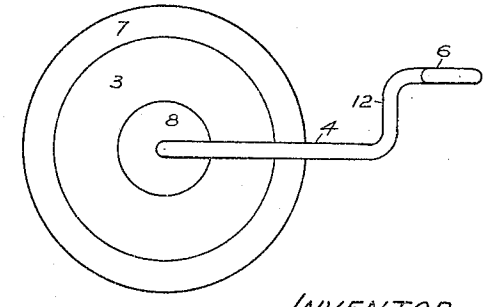


Fig. 5

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WASHBOARD-HOLDER.

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To all whom it may concern:

Be it known that I, MAXWELL C. FRANK, a citizen of the United States, residing at Piedmont, in the county of Alameda and State of California, have invented certain new and useful Improvements in Washboard-Holders, of which the following is a specification.

My invention relates to washboard holders, in which, the means employed to hold the washboard to the washtub is by atmospheric pressure, induced by a vacuum.

The object of this invention is to supplement my copending application, Serial Number 124,590, relating also to washboard holders, to overcome the following deficiencies that were found to exist when the latter washboard holder was applied to circular portable washtubs, and particularly so, if the latter tub had a corrugated bottom, therefore, my special objects in this application are, first, to provide a holder that will freely allow the washboard to incline in any chosen washing position in the washtub, and recline against the rim of the tub when raised, without exerting any stress on the depressed vacuum cup, thereby removing all tendency of the vacuum cup to lift from the corrugated bottom. Second, to provide resilient offset means on the holder to remove direct thrust on the depressed cup while washing, and thus eliminate the riding or slipping of the cup over the ridge of a corrugation. Third, to provide continuous releasing means on the holder that can be gripped effectively by the fingers, regardless of the suction position of the cup on the corrugations of the bottom of the tub.

It is to be noted that stationary washtubs are generally placed and secured against a vertical wall, while portable circular tubs are generally set on a wash-bench with free room all around, and that when the washboard equipped with holders of my copending application is raised in the latter tub, it projects way over the edge of the tub and this overhanging position past the perpendicular axis of the stud on the cup, overstresses the vacuum cup and lifts it from the surface of the tub, and thus nullifies the suction hold of the holder when used in this type of tub. This objection is efficiently overcome in this application by making provision for the feet of the washboard to rest directly on the bottom of the tub and be spaced apart from the suction cup, but pivotally connected thereto by a resilient shank.

In the accompanying sheet of drawings, the invention is illustrated, in which

Figure 1 is a cross-section of a circular washtub, showing therein my invention applied to its corrugated bottom and to a washboard; the dotted portion represents the board raised.

Fig. 2 is an enlarged partial sectional elevation of the holder attached to a washboard leg.

Fig. 3 is a side elevation of the holder of Fig. 2 showing the vacuum cup depressed.

Fig. 4 is a plan view of the holder of Fig. 2.

Fig. 5 is a plan view of the cup of Fig. 2 with a modified form of shank.

Similar numerals of reference indicate corresponding parts in all the figures, in which

1, in Fig. 1, represents a circular portable washtub provided with a corrugated bottom and partially filled with water, and 2, an ordinary washboard set in the tub at any desired sloping position most suitable to the person washing. 3 is a vacuum cup, preferably made of rubber and is here shown depressed ready for service. 4 is a resilient shank or arm and is the connecting link between the cup and the washboard. 5 shown by the dotted lines, represents the washboard 2 raised from its inclined washing position and resting in a reclining position against the edge of the tub, affording open space to the tub and allowing the free use of both hands for access to the wash. Thus, neither position causes any stress on the vacuum cup as the feet of the board rest on the bottom of the tub and pivotally turn at the eyelet or aperture 6 of the shank 4.

In Fig. 2, the vacuum cup 3 comprised of a body having a concave bearing side and a convex top side is resting in its normal undepressed state on the corrugated bottom of the tub, and 7 is preferably a continuous outflaring flange at the circumferential edge of the cup, for the purpose of releasing the vacuum cup from service from the depressed state. 8 is a supporting stud surmounting the convex side of the cup 3, and embedded in the structure is the enlarged or anchor end 9 of the connecting shank 4. The shank 4 made of resilient material such as wire, spring-brass or the like, suspends from the

stud and is preferably shaped with a reverse curvature to receive and absorb the stresses from the washboard due to the rubbing thereon, and the free end terminated into an aperture or eyelet 6 for the insertion of a screw 10, or other suitable pivotal attaching means to the board 2.

In Fig. 3 the cup is shown depressed and it is to be noted in particular, the position the releasing flange 7 assumes on depression, with respect to the corrugated surface. Always some part of the flange will be free from contact with the surface of a corrugation and incline upwardly as at 11, and can be easily engaged by the fingers to lift the adjacent portion of the cup from the tub sufficiently to break its suction hold thereon, and release the holder from service.

The plan view of the holder shown in Fig. 4, shows the releasing flange 7, also the shank 4. The latter is here shown constructed in one plane.

In the embodiment of my invention shown in Fig. 5, the shank 4 is constructed in more than one plane. The additional offset 12 has the advantage of being more resilient in effect than the shank of Fig. 4, and the thrusts on the washboard when in service produce a slight turning effect on the cup, which causes the cup to grip more firmly on a smooth surface and minimize slipping.

Having described my invention and an embodiment of it, it is to be understood that the same covers other variations, which come within the spirit of the invention and which are within the scope of the claims, therefore, being aware that prior to my invention, washboard holders have been made in various ways, I do not claim broadly such; but what I claim is—

1. A holding device comprising a suction cup and an integral shank, one end of said shank embedded in the material of said cup and the outer free end formed with an aperture adapted for the insertion of securing means, the shank being formed with a reverse curvature for resilient effect to prevent said cup from receiving direct stresses on same.

2. A washboard holding device comprising a vacuum cup and a shank, one end of said shank embedded in the material of said cup and the outer free end provided with means for securing said device to said washboard, said shank being of resilient material and curved to receive and absorb the working stresses due to the use of said board, thereby eliminating slippage of said cup, and said cup provided with outstanding means at its circumferential edge adapted to be gripped by the fingers when said cup is depressed, for releasing same.

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Witnesses:
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