M. C. FRANK.

WASHBOARD HOLDER.

APPLICATION FILED OCT. 9, 1916.

1,287,948.

Patented Dec. 17, 1918.

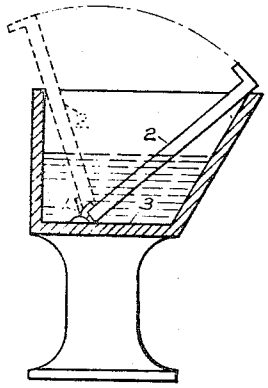


Fig. 1

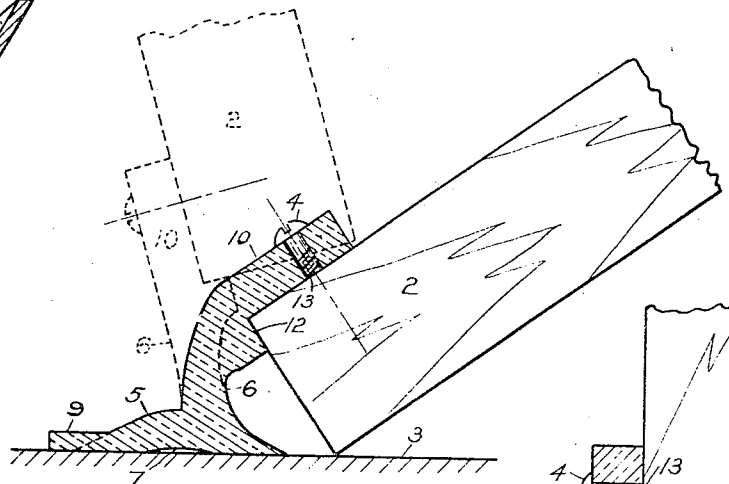


Fig. 4

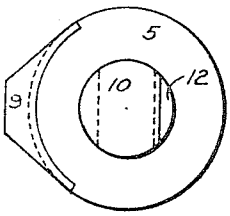


Fig. 7

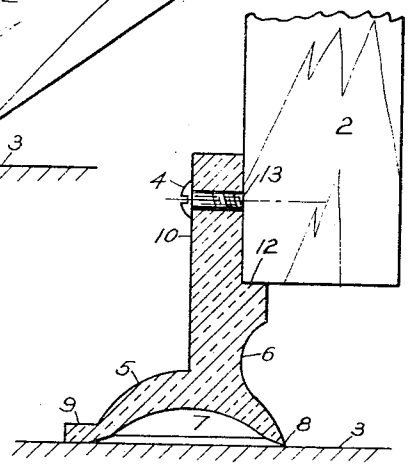


Fig. 2

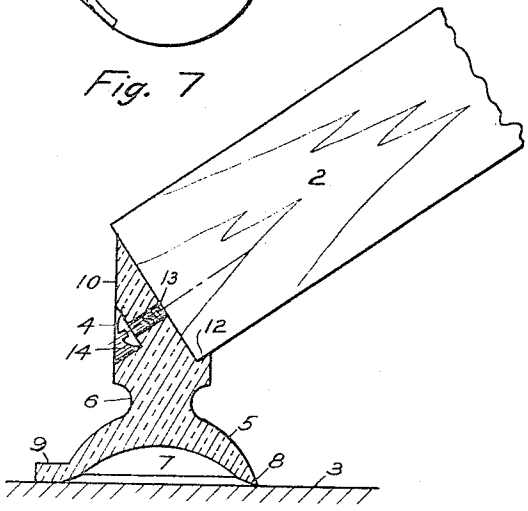


Fig. 6

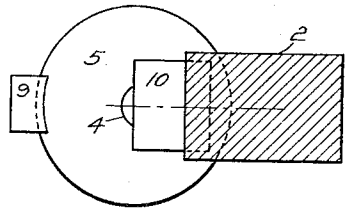


Fig. 3

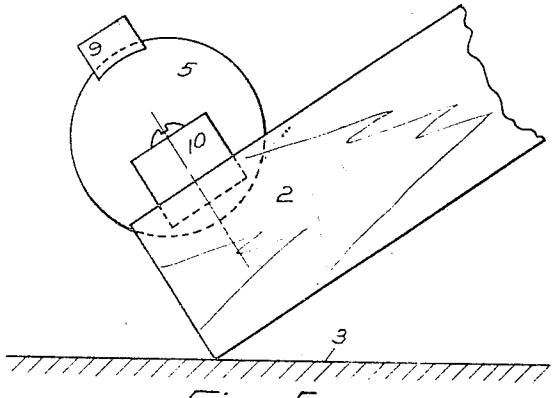


Fig. 5

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MAXWELL C. FRANK, OF PIEDMONT, CALIFORNIA.

WASHBOARD-HOLDER.

1,287,948. Specification of Letters Patent. Patented Dec. 17, 1918.

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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 Wash-board-Holders, of which the following is a specification.

My invention relates generally to that class of articles, having suction means for retaining objects in position and in particular, to a vacuum appliance for holding the wash-board in position, in the wash-tub at any desired angle which is most convenient and suitable to the user while washing.

The primary objects of my invention are, first, to provide a holder for the board for removing the constant annoyance caused by the wash-board in moving toward, then from the washer while washing, according to the drawing-upward movement of the clothes over the face of the wash-board, or the downward rubbing movement thereon. Second, the present normal position of the wash-board is where the legs of the board rest in the angle of the tub, formed by its bottom and side; this position is not the most efficient one for all the persons having access to the given washing unit, such as in a boarding-house, therefore, my second object provides, that when the vacuum appliance is combined with the legs of the wash-board, the whole can be adapted to be removably secured in any position in the tub with respect to the user, such that the angle of the board can be set in the most suitable position for efficient washing and also allow the desired clearance space between the top of the board and the washer. Third, to provide the holder with means such, that although the board will be held firmly to the bottom of the tub, it will also be held pivotal so that the user can raise and lower the board for the customary inspection of the tub as at present. Fourth, to provide a simple, inexpensive wash-board holder, that will be durable in use, efficient in operation and one that the average housekeeper can easily secure to the wash-board and operate.

With these and other objects in view my invention consists of a substantially integral structure, comprising a vacuum cup of rubber or equivalent material, surmounted by a pliable stud, or suitable connecting means and adapted to be secured to the leg of a wash-board and is hereinafter described in combination with a wash-board, as an ideal application of my invention to the class of articles to which it relates. A couple of embodiments of my device are shown in the forms in the accompanying sheet of drawings, in which—

Figure 1 is a side elevation of a wash-tub in section and shows the leg of a wash-board equipped with one of my holders. The full lines represent the board in the chosen position for washing and the dotted lines represent the board raised.

Fig. 2 is a sectional elevation of the holder secured to the leg of a wash-board and ready to be depressed and Fig. 3 is a plan of it showing the leg in section.

Fig. 4 is a sectional elevation of the holder showing the cup depressed and the board resting in the inclined washing position; the dotted lines represent the board raised.

Fig. 5 shows the wash-board holder rotated from its normal position on the board, thus disengaging the vacuum cup from service.

Fig. 6 is a sectional elevation of another embodiment of my invention, in which the attachment is secured to the end of a leg of a wash-board and is ready to be depressed and Fig. 7 is a plan of it with the board removed.

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

1 in Fig. 1, is my holder secured to one of the legs of the ordinary wash-board 2 at its base. The combination is removably attached to the bottom of the partially filled wash-tub 3, by means of the suction cup which is depressed, and the dotted lines represent the wash-board raised showing that the flexible neck has yielded to accommodate the lifting of the board for the customary inspecting or the putting in of more wash and the adjusting and distribution of same. In Fig. 2 the holder consists of the suction cup 5 made preferably of rubber, having a concavity 7 on its bearing side and a thin circumferential edge 8, also having at its circumference preferably on the side opposite the wash-board leg a projection 9, for breaking or releasing the suction hold. On the convex side of the cup is the connecting member to the wash-board, preferably in the form of a solid stud 10 connected to the cup by the flexible neck 6 and may be set off the center of the cup 5 as shown

in this figure and also in Fig. 3, to increase the holding power of the suction force by virtue of the wash-board 2 positioned on the seat 12 compressing on the off-center portion and increasing the tension on the adjacent portion, which unequal tension also prevents all slipping. Near the top of the stud is formed a seat or shoulder 12 positioned on same in fixed relation to the vacuum cup for the leg of the wash-board 2 as shown and spaced between the seat and the top of the stud is a hole 13, having engaged therein a screw 4, or other means securing the device to the board. The combination is ready to be depressed by downward pressure on the board or by direct pressure applied to the vacuum cup 5. The seat is so positioned that the line of intersection of its faces falls back of the axis of the stud and at right angles thereto as the holder is positioned for use. The face of the seat which contacts with the sides of the wash-board leg is so disposed that when the holder is in use a line projecting from this face would fall substantially within the material forming the holder. This construction eliminates the tendency of the stud to bend under the strain of use, as the stress due to use of the wash-board is taken up by compression of the material rather than by bending.

The cup 5 in Fig. 4 is shown depressed, thereby reducing the cavity or vacuum space 7 to a minimum and the device is thus held firmly to the bottom of the tub 3, by virtue of the excess pressure on its exterior horizontally projected surface due to the atmospheric pressure and the weight of water on it when in service. The board may be inclined to the desired slope as shown by the yielding of the flexible neck 6 acting as a hinge, and the foot of the board is shown having one edge contacting the tub 3. The board positioned thus is very stable and the to and fro movement of the wash-board by the respective washing strokes is eliminated by the firm hold of the suction cup. To remove the board from the tub the cup must be released; this is acomplished by simply raising the release lip or projection 9 until the vacuum breaks. The dotted lines show the position of the stud 10 and board 2 when the latter is raised similar to that shown in Fig. 1.

If it is desired to do a little wash without the use of the holder, the latter may be turned about the pin or screw 4, as shown in Fig. 5, thus disengaging the cup and allowing the leg of the board to rest on the bottom of the tub 3. The yieldability of the rubber or stud material is sufficient to allow the rotation from the seat 12. The embodiment of Fig. 6 may also be turned to be brought out of service. In Fig. 6 the neck 6 and stud 10 may be constructed concentric with the vacuum cup 5 and the device is secured to the bottom of the wash-board leg 2 by means such as a screw 4, instead of to the top side of the board as shown in Fig. 4, the head of the screw occupying the recess 14 on the stud 10 thereby sinking the head below the stud surface, so that the possible catching of any wash on it is removed. The seat 12 on the stud serves the purpose as a guide to secure the device to the board also to act as a rest for the board while in service, similar to the form of Fig. 2.

My invention is serviceable on wooden, cement, metal, corrugated and other wash-tubs and the embodiments shown and described perform equivalent functions, though they vary in structure, but it is to be understood that my invention covers all other variations in structure, which come within the spirit of the invention, and which are within the scope of the claims.

What I claim and desire to secure by Letters Patent of the United States, is the following, to wit:—

1. A holding device for the legs of wash-boards, comprising a vacuum cup, a stud formed integrally on said cup, and a seat formed on the outer end of said stud having a pair of angularly disposed faces for the reception of said leg; the line of intersection of said faces being at right angles to the axis of said stud for the alinement of said washboard on said device.

2. A holding device comprising a vacuum cup having a body which tapers to its peripheral edge, a releasing lip formed integrally with said edge and forming a continuation thereof and an outstanding stud on the back of said cup, provided with a seat adapted for engagement with the leg of a wash-board.

3. A holding device for the leg of a wash-board, comprising a vacuum cup of rubber, an integral outstanding stud mounted eccentrically on the back of said cup and provided with a seat formed at its outer end for positioning said leg and adapted to be secured thereto.

4. A holding device for the legs of wash-boards comprising a vacuum cup, a stud formed integrally on said cup, a seat formed on the outer end of said stud having angularly disposed faces, the line of intersection of said faces being off the axis of said stud toward the direction from which the stress is impressed on the stud by said wash-board legs.

MAXWELL C. FRANK.

Witnesses:
LAURA F. FRANK,
CHARLES A. REED.