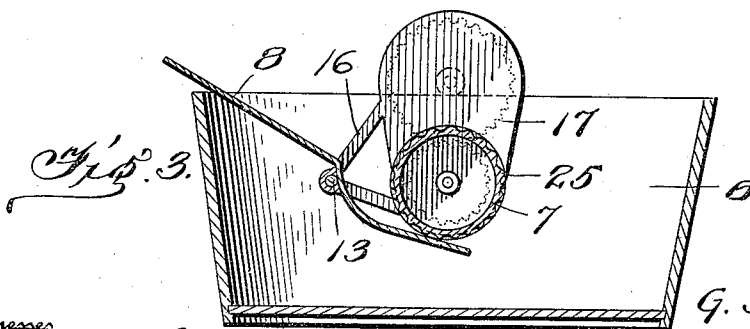
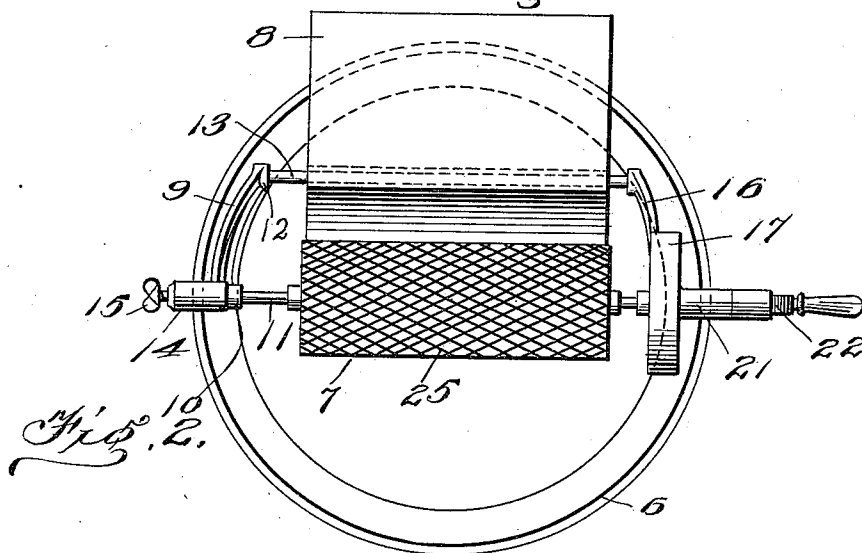
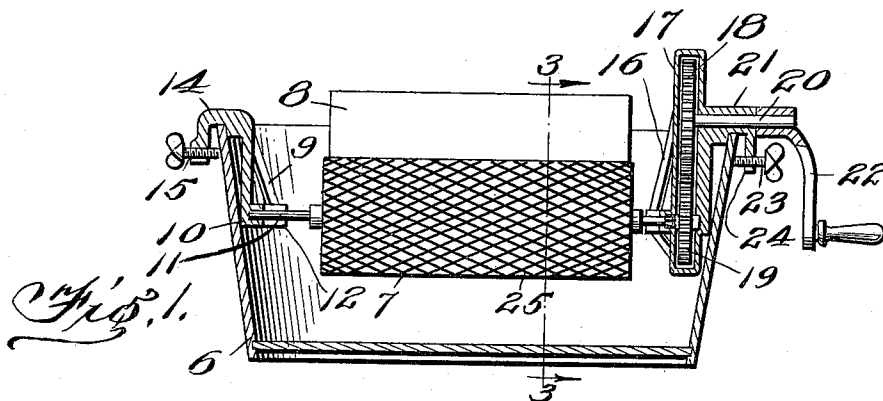


G. S. WINANT.  
WASHING MACHINE.  
APPLICATION FILED MAY 15, 1909.

960,473.

Patented June 7, 1910.



Witnesses  
*Geo L. Thoms*  
*M. J. Morton*

Inventor  
*G. S. Winant.*  
By *W. E. Jew*  
Attorney

# UNITED STATES PATENT OFFICE.

GILBERT S. WINANT, OF ROCHESTER, NEW YORK, ASSIGNOR TO SAVER MANUFACTURING CO., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## WASHING-MACHINE.

960,473.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed May 15, 1909. Serial No. 496,149.

*To all whom it may concern:*

Be it known that I, GILBERT S. WINANT, citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to washing machines of that type having a roller and a bed or board which coöperates therewith, the articles being washed by the coöperative action of the roller and the board.

The object of the invention is to provide improved brackets or hangers for supporting the board and roller and the gearing associated with the latter, which brackets or hangers can be applied to any ordinary tub, so that a special tub is not necessary and the usefulness of the device is correspondingly increased.

The invention is illustrated in the accompanying drawings in which—

Figure 1 is a side elevation of the machine, the tub being shown in section. Fig. 2 is a top plan view. Fig. 3 is a sectional view on the line 3—3 of Fig. 1.

Referring specifically to the drawings, 6 indicates a standard circular portable tub, which may be constructed of either wood or metal. The roller is indicated at 7 and the swinging board at 8, constructed to operate on clothes fed between the board and the roller. For supporting the roller and board detachable hangers are provided. The hanger at one end consists of a substantially triangular frame 9 having a bearing at 10 for the journal 11 of the roller 7 and another bearing at 12 for the pivot rod 13 on which the board 8 rocks or swings. At the top the hanger is bent over or hooked as illustrated at 14, to engage over the edge of the tub, and is provided with a set screw 15 to fasten the same to the tub. The bracket 9 is curved or dished so that the bars thereof will fit snugly against the side of the tub, the amount of the curvature being substantially the same as that of the wall of the tub, as well as being set at an inclination to give a proper fit. The hanger 16 at the opposite side is similarly constructed with respect to the means for hold-

ing the shaft of the roller and the pivot rod of the board, but in addition is provided with a hollow portion or casing 17 which incloses the gear wheels 18 and 19. The former is mounted on the inner end of a crank shaft 20 which extends through a bearing sleeve 21 which rests on the upper edge of the tub and forms part of the hook to hold the hanger in place. The gear 19 meshes with the gear 18 and is located in position to receive the squared end of the shaft 11 of the roller. The gear is held in its place in the casing, but the roller shaft may be pulled out thereof whenever desired. The crank shaft 20 is provided at its outer end with a handle 22 whereby it may be turned, and a set screw 23 extends through a depending hook part 24 of the hanger under consideration, for holding said hanger to its place on the tub.

The board 8 may be constructed substantially as disclosed in my pending application, No. 485,933. It retains the feature thereof whereby a recess is formed between a shoulder on the board and the roller, in which recess the washing action is effected under certain conditions.

With respect to the roller 7, instead of a roller built up of wood and metal rods, as heretofore disclosed, the roller is made of sheet metal, stamped or formed by press operation, with criss-cross corrugations. Instead of making the roller of metal or similar stamped material, it may be made of glass or other material molded or pressed to the desired shape, and with the corrugations described. The board may also be made of glass or other molded or pressed material, instead of wood or metal. In fact the invention is not intended to be limited to any special material for producing a roller and board of the requisite shape or configuration. The corrugations or grooves form diamond shaped figures on the face of the roller.

The hangers shown and described may be made to fit the standard sizes of tubs, and are capable of being quickly applied thereto or removed therefrom. The parts may be separated by slipping the journals of the roller and board out of the bearings in the hangers, so the machine can be stored in a

very small space when it is not in use. When it is desired to use the same the roller and board are set in position between the hangers which are then placed on the tub  
5 and clamped in position.

I claim:

1. A portable washing machine attachment for a tub, comprising, in combination, opposite hangers attachable to the rim of the  
10 tub at opposite sides thereof, and when attached depending within the tub, a roller and board supported by and between said hangers, and means to operate the roller.

2. A portable and removable washing machine applicable to a tub, comprising opposite hangers each of which is hooked at the  
15 top to engage over the rim of the tub, and has an inner depending part provided with bearings, a board and a roller mounted in said bearings, between the hangers, and a  
20 power shaft and gearing mounted on one of

said hangers and operatively connected to the roller.

3. A portable and removable washing machine applicable to a tub, comprising opposite  
25 hangers each having a triangular frame shaped on one side to fit the side of the tub, means at the upper corner of the frame to attach the same to the rim of the tub, whereby the frame will depend within the tub,  
30 each frame having spaced bearings on the side thereof opposite to that which fits against the tub, said bearings being located in substantially horizontal alinement at the  
35 lower corners of the frame, and washing devices supported on the said bearings.

In testimony whereof, I affix my signature in presence of two witnesses.

GILBERT S. WINANT.

Witnesses:

ARTHUR B. NORRIS,  
JOSEPH B. HONE.