

F. H. WHITCOMB & R. R. FAULKNER.
 WASHING MACHINE.

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953,078.

Patented Mar. 29, 1910.

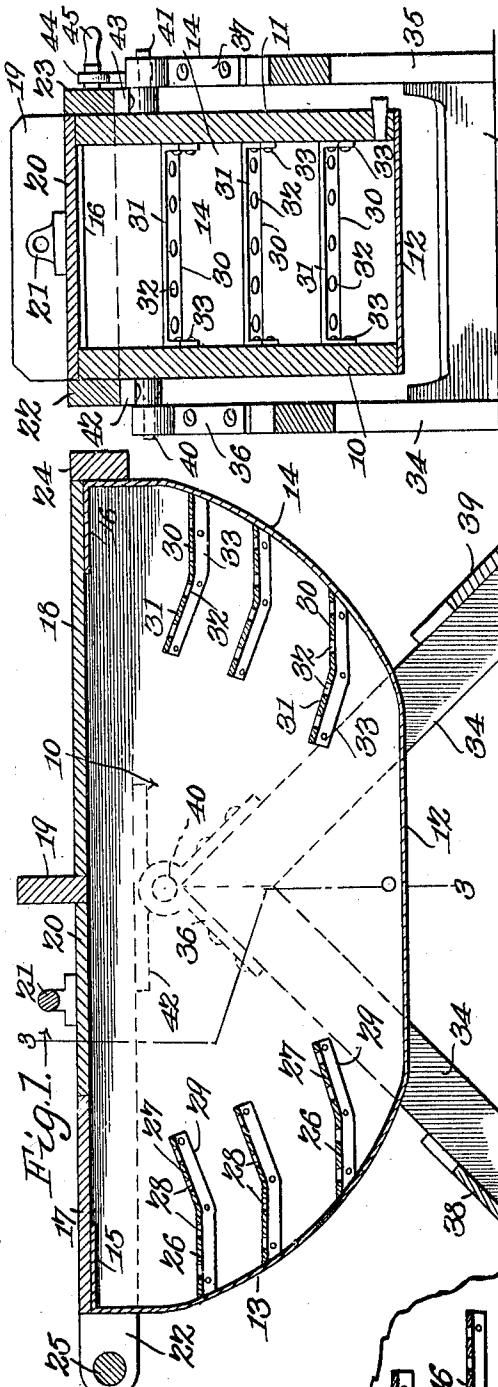


Fig. 1.

Fig. 3.

Fig. 2.

Fig. 5.

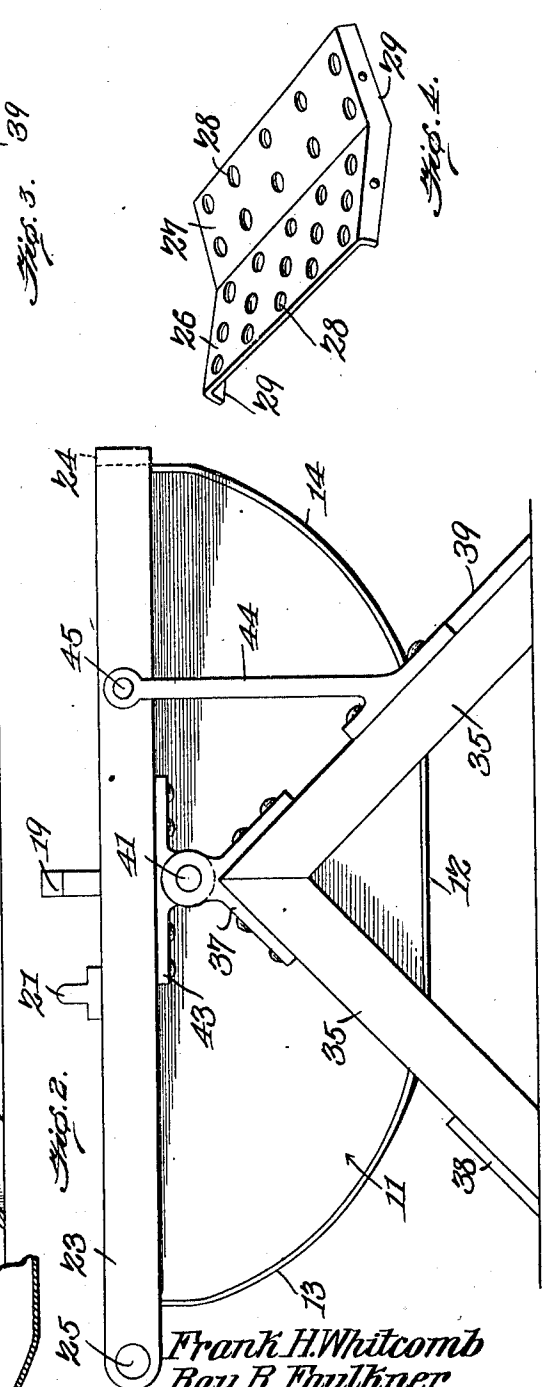


Fig. 3.

Fig. 2.

Fig. 5.

WITNESSES:
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UNITED STATES PATENT OFFICE.

FRANK H. WHITCOMB AND RAY R. FAULKNER, OF MARION, INDIANA, ASSIGNORS OF ONE-THIRD TO SAID WHITCOMB, ONE-THIRD TO JOSEPH E. FAULKNER, AND ONE-THIRD TO HARLEY O. FAULKNER.

WASHING-MACHINE.

953,078.

Specification of Letters Patent. Patented Mar. 29, 1910.

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To all whom it may concern:

Be it known that we, FRANK H. WHITCOMB and RAY R. FAULKNER, citizens of the United States, residing at Marion, in the county of Grant and State of Indiana, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to washing machines of that type utilizing oscillatory tubs or receptacles, and its object is to provide the tub with rubbers or deflectors of novel form designed during the oscillation of the tub to retard the movement of the fabrics therein and at the same time permit the moving body of water to pass through the fabric and rubbers.

A further object is to provide rubbers so shaped as to deflect portions of the water dashed thereagainst so that the same will be directed upon the fabrics contained within the machine.

Another object is to provide a tub so shaped that the bottom thereof constitutes throwing means for directing the water against the rubbers at either end thereof, the top of the tub being so positioned that it will in no sense interfere with the movement of the water while being thrown in the manner stated.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claim.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a vertical longitudinal section through the machine. Fig. 2 is a side elevation thereof. Fig. 3 is a section on line 3—3, Fig. 1. Fig. 4 is a detail view of one of the rubbers. Fig. 5 is a section through one end portion of the tub and showing rubbers of modified construction in position therein.

Referring to the figures by characters of reference, 10 designates a tub made up of side walls 11, a bottom 12, and end walls 13 and 14. The sides are preferably parallel and the bottom is flat and merges into the end walls which are curved along lines slightly eccentric to trunnions 40 and 41 extending from brackets 42 and 43 which are fastened to side rails 22 and 23 arranged

along the upper edges of the sides 11 and 55 connected at one end by a cross bar 24 while their other ends extend beyond the tub and are connected by a handle 25. Trunnions 40 and 41 bear within brackets 36 and 37 which are mounted on legs 34 and 35 respectively which are in turn braced transversely by means of cross strips 38 and 39. An arm 44 is secured upon and extends upward from one of the legs 35 and its upper end has an eye designed to receive a locking pin 45 which is insertible into one of the side strips 23 when the tub is in a predetermined position. Said tub can thus be locked against movement relative to the rails. The ends 13 and 14 of the tub are 70 turned inwardly at their upper edges as shown at 15 and 16 to constitute supports for top sections 17 and 18. These top sections are designed to rest upon the sides 11 and to be retained against horizontal displacement by the strips 22, 23 and 24. An upstanding cross strip 19 is located upon the tub adjacent its center and is designed to be engaged by a clothes wringer. A removable cover 20 is interposed between this strip 80 19 and top section 17 and has a handle 21 whereby it can be readily raised from position. Arranged upon the inner face of the end wall 13 are metal plates 26 extending throughout the width of the tub and having 85 their inner portions bent upward as indicated at 27, there being a plurality of apertures 28 within each plate so as to permit water to freely pass therethrough. End flanges 29 are formed integral with each 90 plate and are fastened to the side walls 11 so as to securely hold the plates in position. These plates constitute rubbers and are used in the manner hereinafter set forth and corresponding plates 30 having upturned ends 95 31 are arranged upon the inner face of wall 14 and provided with end flanges 33 for attachment to the walls 11. These plates 30 are also provided with apertures 32 similar to the openings 28. 100

As shown in Fig. 1 preferably three rubbers are employed within each end of the tub, the two upper rubbers of each set being arranged along parallel lines while the lower rubber is disposed at an angle thereto. 105 The upturned portion of this lower rubber overhangs the flat bottom of the tub and the corresponding portions of the upper

rubbers are stepped relatively thereto. The angle to the horizontal of the upturned portions 27 of the upper rubbers is greater than that of the corresponding portion of the lower rubbers as clearly indicated in Fig. 1. In using the machine herein described the fabrics to be cleaned are placed within the tub with a suitable quantity of water after which the operator rocks the machine upon trunnions 40 and 41. The flat bottom 12 will operate to throw a portion of the water upwardly toward the upper end of the tub and a large portion of the water will also be thrown with the fabrics against those of the rubbers adjacent the bottom end of the tub. The clothes will be held against further movement by the rubbers while the water will freely pass through them and through the openings in the rubbers, thus removing dirt from them. By upturning the inner ends of the rubbers they act as deflectors for a portion of the water thrown against them and serve to direct the water inwardly onto the clothes while a portion of the water is passing through the clothes and rubbers. It will be noted that the top of the tub is flat and arranged out of the path of the water thrown by the flat bottom 12. It is to be understood that, when de-

sired, the rubbers can be made flat and parallel as indicated at 46 in Fig. 5 although this construction will not have the advantages incident to the arrangement and construction shown in Fig. 1.

What is claimed is:

A washing machine including a supporting structure, a tub mounted thereon and consisting of side walls, trunnions outstanding therefrom and mounted on the structure, a bottom and end walls, said bottom merging into the end walls and said end walls being curved along lines eccentric to the trunnions, apertured plates arranged between the side walls and against said end walls, said plates being disposed one above the other and having end flanges secured to the side walls, each plate having its inner portion inclined upwardly toward the top of the tub, said inclined portion constituting water deflecting means.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

FRANK H. WHITCOMB.
RAY R. FAULKNER.

Witnesses:

E. F. FERREE,
OSCAR N. BOYD.