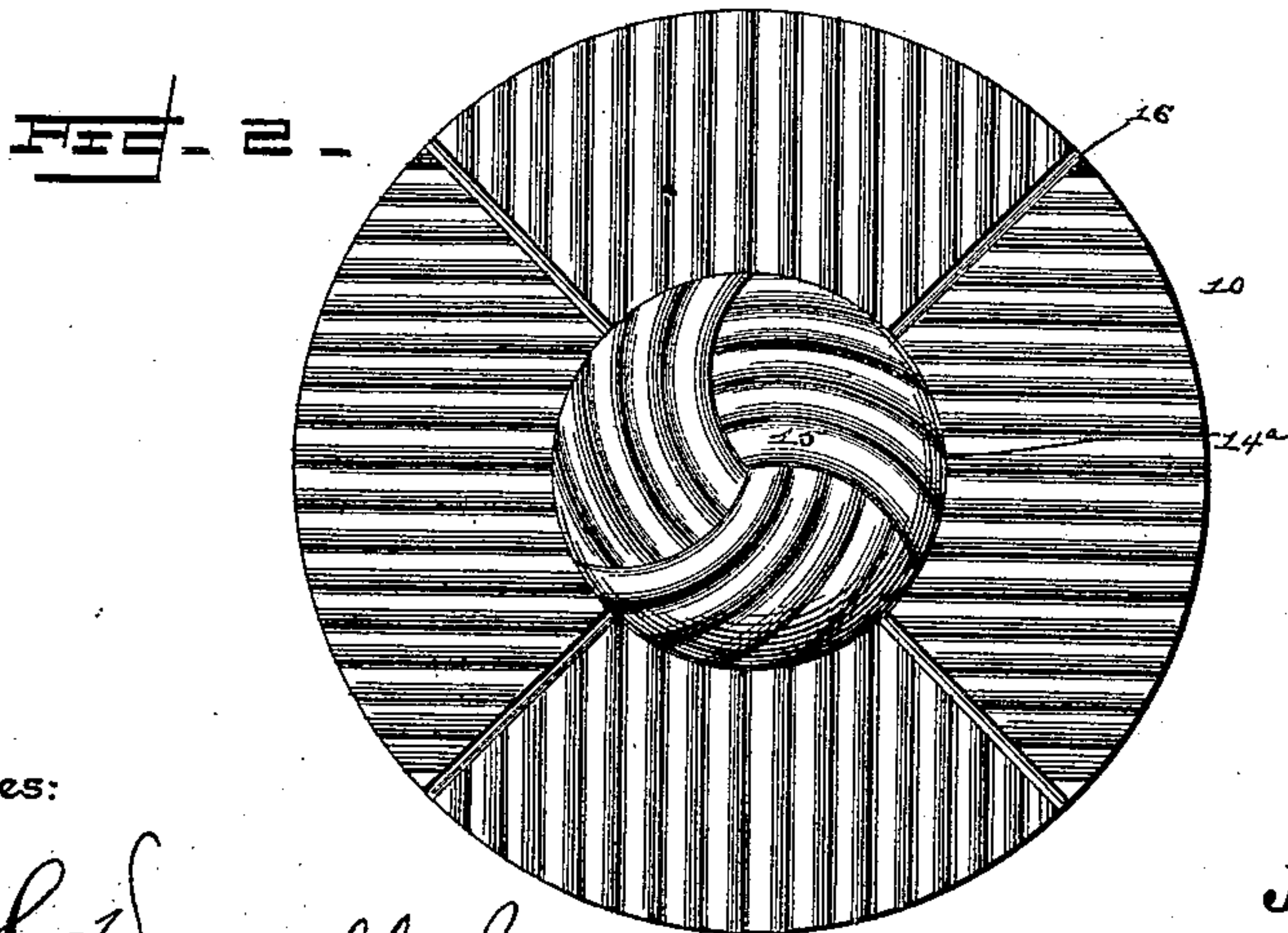
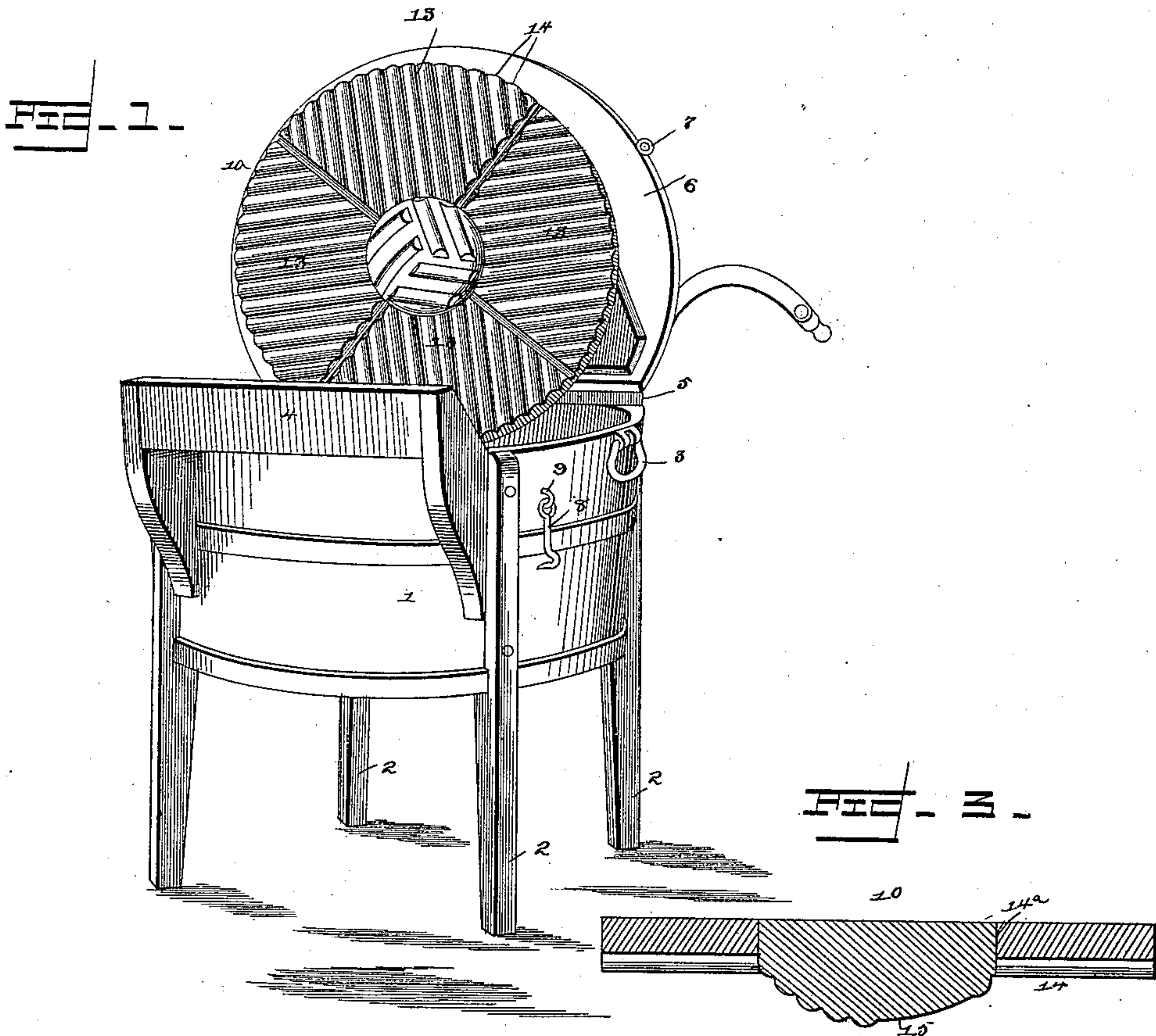


(No Model.)

J. A. & A. M. WESTON.  
WASHING MACHINE.

No. 464,181.

Patented Dec. 1, 1891.



Witnesses:

E. S. Suvall Jr.  
W. S. Suvall

By their Attorneys,

C. A. Snow & Co.

Inventors

J. A. Weston and  
A. M. Weston.



# UNITED STATES PATENT OFFICE.

JAMES A. WESTON AND AUSTIN M. WESTON, OF FRANKFORT, KANSAS.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 464,181, dated December 1, 1891.

Application filed June 13, 1891. Serial No. 396,122. (No model.)

*To all whom it may concern:*

Be it known that we, JAMES A. WESTON and AUSTIN M. WESTON, citizens of the United States, residing at Frankfort, in the county of Marshall and State of Kansas, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to improvements in that class of washing-machines commonly known as "rotary rubbers;" and the invention has special reference to the construction of rubber.

The objects of the invention are to so construct the rubber as to obviate the central non-operative space usually found therein, and which by reason of its location fails to properly wash or manipulate the articles which congregate at this point.

With the above objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a perspective of a washer constructed in accordance with my invention, the lid being swung back and exposing the bottom of the rubber. Fig. 2 is a bottom view of a modified construction of rubber. Fig. 3 is a radial section of the same.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the suds-box or tub, which, it will be observed, is in this instance cylindrical and is supported by the four legs 2, located at suitable distances apart and secured to the sides of the box or tub. The tub is provided with the usual swinging handles 3, by which it may be conveniently carried, and at one side with the wringer attachment 4. To the fixed portion 5 of the cover is hinged the removable portion 6 thereof, which latter is provided at one side with an eye 7, which when the cover is closed is located in the path of and adapted to be engaged by the free end of a hook 8, loosely connected by a staple 9 to the body or box of the washing-machine, whereby said lid may be locked in a closed position.

In constructing the rubber or head 10 we employ a series of quadrant-shaped sections 13, which upon their under sides are corru-

gated from their converging sides or edges to their bases, as shown at 14, so that when assembled the corrugations of one section will be at a right angle to those of the adjacent sections. At the center of the rubber thus formed there is left an opening 14<sup>a</sup>, said opening being about one-third of the diameter of the rubber, and in the opening is set the central rubbing-head 15. The rubbing-head 15 has its lower or working face convexed and is corrugated or ribbed, as shown.

In Fig. 1 we have shown our preferred form of corrugations, and it will be observed that said corrugations consist of three groups disposed over the face of the head. In the instance shown in Fig. 1 the corrugations of each group are spaced apart, and while running parallel to each other those of one group are at an angle to those of the remaining groups. In Fig. 2, however, we employ the three groups, but curve the corrugations and arrange them close to each other. The effect of this arrangement, however, is practically the same as that shown in Fig. 1, though by experience we have found that better results are obtained.

In operation the convexed head 15 operates upon the articles which happen to be located directly under the center of the rubber, and all articles not thrown or worked by said head toward the outer edge of the rubber are thoroughly washed, as if operated upon by said rubber. The head, it will be understood, is preferably formed of metal, though the rubber itself be formed of wood, and in assembling the sections composing the rubber spaces 16 are left at the meeting edges of the sections, so as to provide for the swelling and shrinkage of the parts.

From the foregoing description it will be apparent that we have provided a rubber so constructed as to avoid the undesirable non-operative dead-center usually occurring in rotary rubbers of this class and that said rubber is as well enabled to cleanse and properly manipulate articles at its center as at its outer edges.

Having described our invention, what we claim is—

In a washing-machine of the class described, a corrugated disk having a convexed

rubbing-head, the face of which is provided  
with independent series of rubbing corruga-  
tions, the corrugations of each series being  
parallel to each other at an angle to those  
5 of the remaining series and disposed tangen-  
tially to the head, substantially as specified.

In testimony that we claim the foregoing

as our own we have hereto affixed our signa-  
tures in presence of two witnesses.

JAMES A. WESTON.  
AUSTIN M. WESTON.

Witnesses:

STEVE. OSBORN,  
FRANK KEENEY.