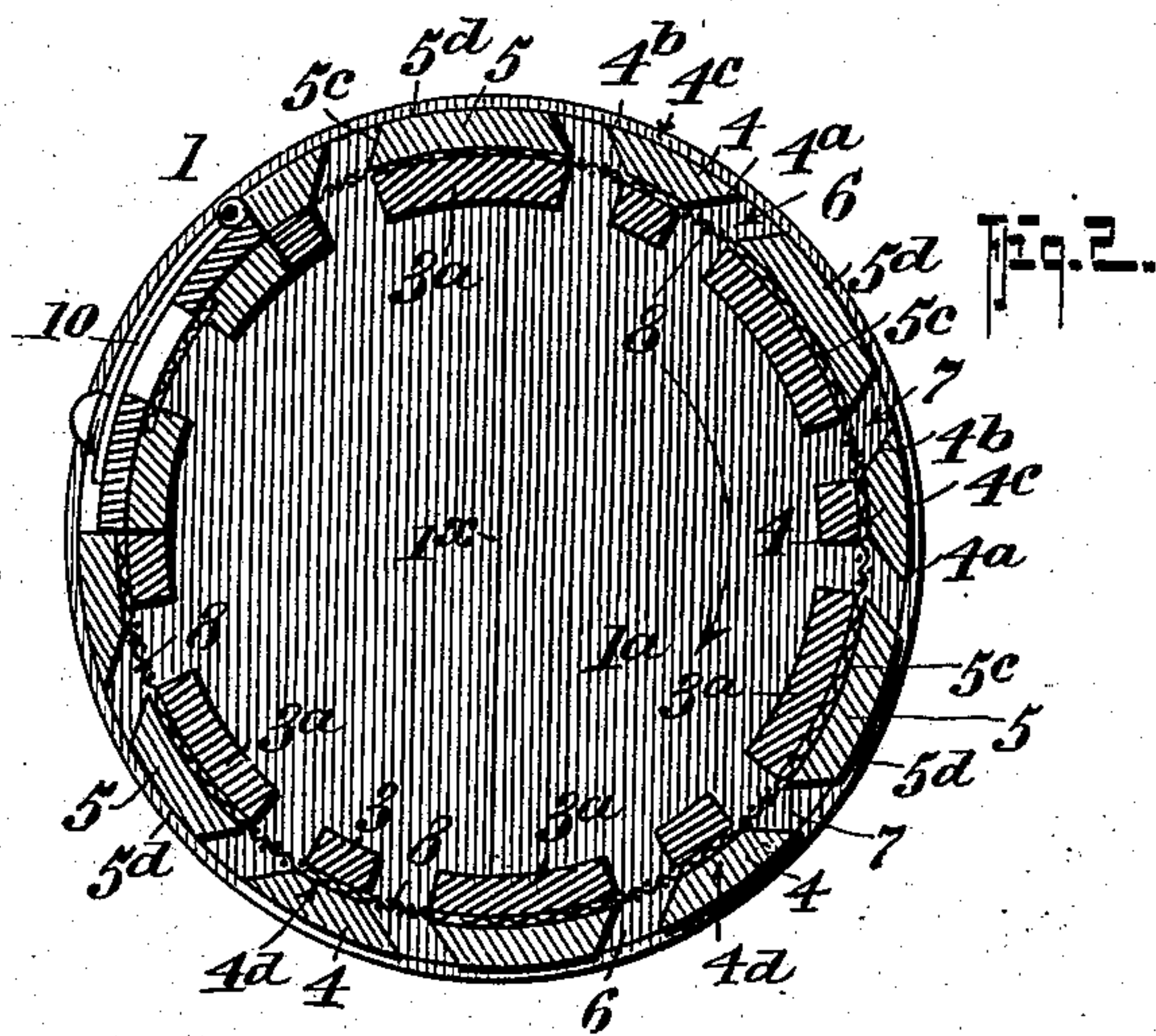
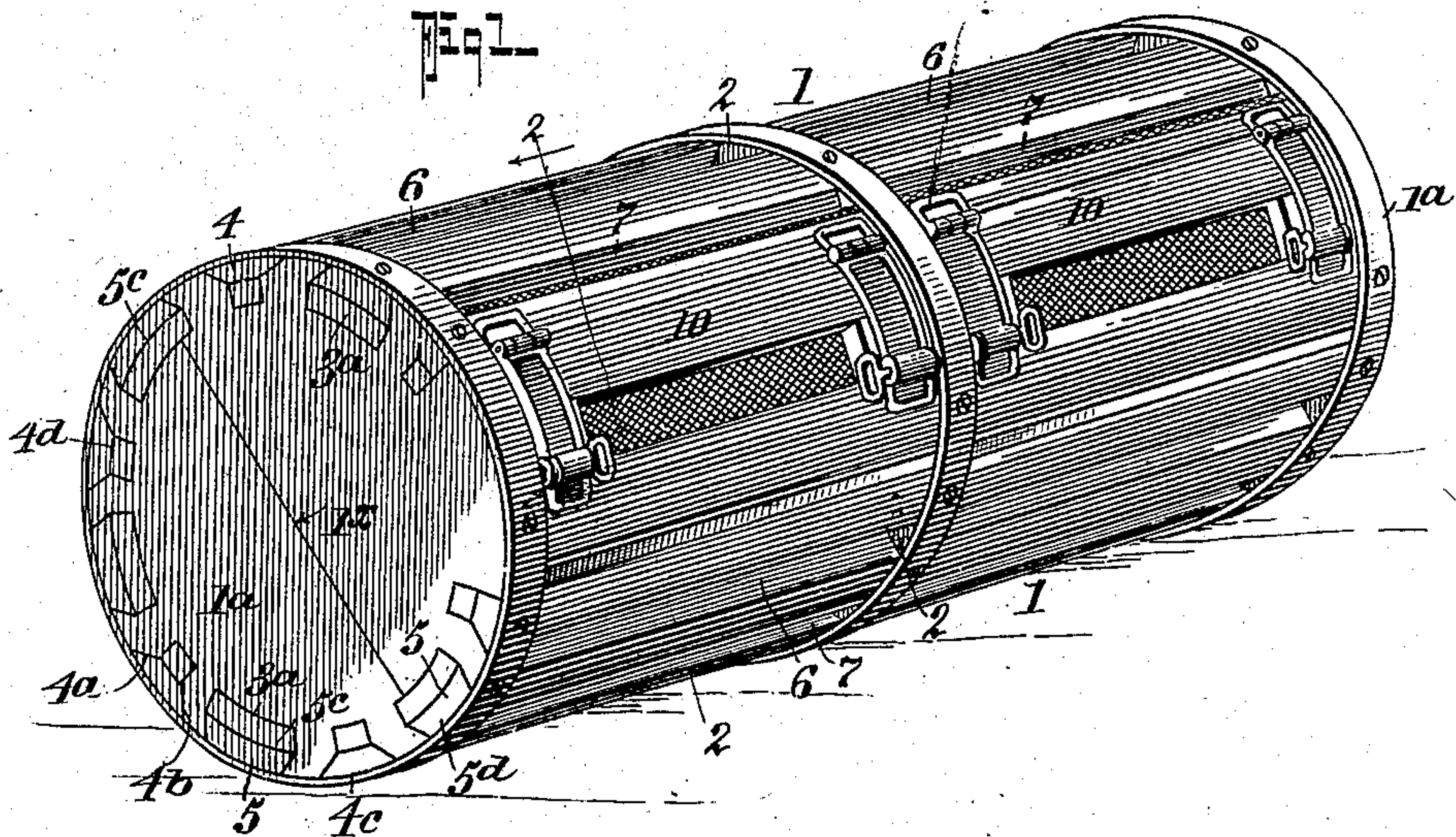


C. JENSEN.
CYLINDER FOR WASHING MACHINES.
APPLICATION FILED MAR. 6, 1908.

899,988.

Patented Sept. 29, 1908.



WITNESSES:

John T. Schrott
Hayward Woodard

INVENTOR

Christian Jensen.

BY

Fred G. Peterson & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHRISTIAN JENSEN, OF PALMYRA, NEW JERSEY.

CYLINDER FOR WASHING-MACHINES.

No. 899,988.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed March 6, 1908. Serial No. 419,549.

To all whom it may concern:

Be it known that I, CHRISTIAN JENSEN, residing at Palmyra, in the county of Burlington and State of New Jersey, have invented certain new and useful Improvements in Cylinders for Washing-Machines, of which the following is a specification.

My invention relates to certain new and useful improvements in cylinders for washing machines and the like and it primarily has for its object to provide certain improvements on the type of washing machine cylinder disclosed in my copending application filed August 30, 1907, Serial No. 390,756.

In its generic nature my present invention consists in providing a cylinder having a pair of heads and an intermediate partition joined by a series of peripherally arranged ribs or bars spaced apart to permit passage of the water therebetween, said bars carrying a series of staves having both edges beveled into a dove-tailed form in cross section and intermediate bars of corresponding form to cooperate with the staves to form water scoops.

Other details of construction which will be hereinafter fully described, also form a part of my invention.

In the drawings,—Figure 1, is a perspective view of a cylinder embodying my invention. Fig. 2, is a cross section on the line 2—2 of Fig. 1, showing the construction of the ribs and scoops on an enlarged scale.

Referring now to the accompanying drawings in which like letters and numerals of reference indicate like parts in all of the figures 1 represents the cylinder which is composed of the end heads 1^a—1^a and the intermediate partition 2. The partition 2 is connected with the end heads 1^a by the cross bars or ribs 3 arranged equi-distant from the center 1^x of the cylinder and to which the staves 4 and the intermediate bars 5 are secured. The staves 4 and bars 5 have their outer surfaces arranged in the arc of a circle having as its center the ends of the cylinder and each stave 4 in my present invention consists of a bar of substantially dove tail-shape in cross section to provide the beveled portions 4^a—4^b on the side edges of the stave, the outer surface 4^c being of greater length in cross section than the inner surface 4^d which is adjacent to the bars or ribs 3.

Alternate ribs 3^a may be made of greater width than the remaining ribs 3, if desired, and to these alternate ribs 3^a the intermedi-

ate bars 5 are secured, the bars 5 being of corresponding shape in cross section to the scoop bars 4 and arranged with their face 5^a of least area at the periphery of the cylinder, while their face 5^c of greatest area lies adjacent to the rib 3^a.

The bars 4 and 5 alternating serve to provide water passages 6 and 7 extending in different directions into the cylinder so that as the cylinder is rotated in the direction of the arrow in Fig. 2, water will be scooped up into the cylinder through the passages 6 and ejected through the passages 7, and when rotated in the opposite direction to the arrow shown in Fig. 2, water will be taken into the passages 7 and ejected through the passages 6, thus allowing the cylinder to be operated in either direction as may be found desirable and rendering the operation of washing and rinsing the clothes, which are introduced into the cylinder, very effective.

The staves 4 and ribs 3 together with the bars 5 and ribs 3^a, serve to clamp the screen sections 8 between them to form screen closures for the passages 6 and 7 to prevent the clothes passing therethrough and at the same time permit the water to pass through the screens.

Each compartment of the cylinder may be provided with a door 10, of any approved type, through which the clothes may be introduced to the cylinder, or removed therefrom, as desired.

In the practical application of my invention, the cylinder is revolved first in one direction, and then in the other, causing the water to become agitated, due to the circulation through the cylinder and passages 6 and 7, it being understood that the cylinder disclosed in the accompanying drawings, is rotatably mounted in the usual water tank, (not shown).

On small washing machines a single compartment cylinder may be desired, and in that event the central partition 2 would be omitted.

By providing the bars 5 of similar form in cross section to that of the staves 4, but mounted on the ribs reversely to the staves, the passages 6 and 7 will be provided the walls 4^a and 5^a of which will lie parallel to one another, while alternate passages 6 and 7 will be directed in opposite directions with respect to the cylinder. It should also be observed that the screen sections 8 lie in the same cylindrical circumference while the

outer surfaces 4^c and 5^a of the staves 4 and bars 5 lie in one and the same cylindrical circumference, thereby eliminating any projecting edges beyond the plane of rotation of the surfaces 4^c and 5^a and thus obviating the danger of damaging the cylinder should obstructions be encountered during the rotation of the cylinder.

From the foregoing description taken in connection with the accompanying drawings it is thought the complete construction, operation and advantages of my invention will be readily understood by those skilled in the art to which the invention appertains.

What I claim is:

1. A washing machine consisting of a pair of heads, a series of ribs connecting said heads and spaced apart, a series of staves connected to said ribs, and likewise spaced apart, said staves being dove-tailed in cross section, intermediate bars of substantially like form in cross section to the staves, interposed between said staves and spaced therefrom to form water passages between the bars and staves, said staves having their surface of greatest area at the outside of the cylinder, and said bars having their surface of greatest area on the inside of the cylinder, substantially as shown and described.

2. A washing machine consisting of a pair of heads, a series of ribs connecting said heads and spaced apart, a series of staves connected to said ribs, said staves being dove-tailed in cross section, intermediate bars of substantially like form in cross section to the staves, interposed between said staves and spaced therefrom to form water passages between the bars and staves, said staves having their surface of greatest area at the outside of the cylinder, and said bars having their surface of greatest area on the inside of the cylinder, and wire screens secured between said bars and staves to form screen closures for the water passages.

3. A washing machine cylinder comprising end heads, a series of staves mounted between said heads and parallel with the axis of the cylinder, said staves being spaced apart, and of substantially dove-tailed form in cross section and intermediate bars of like form to the staves mounted between said cylinder heads but parallel with said staves,

said bars being spaced from adjacent staves to leave water passages therebetween and wire screens mounted in said water passages.

4. A washing machine cylinder comprising end heads, a series of staves mounted between said heads and parallel with the axis of the cylinder, said staves being spaced apart, and of substantially dove-tailed form in cross section and intermediate bars of like form to the staves mounted between said cylinder heads but parallel with said staves, said bars being spaced from adjacent staves to leave water passages therebetween, wire screens mounted in said water passages, said bars being arranged with their surface of least area at the outside of the cylinder to form in connection with adjacent staves water passages, that on one side of each bar being directed in a direction opposite to that on the other side of the respective bar, substantially as shown and described.

5. In a washing machine cylinder, the end heads and the connecting ribs therebetween, said ribs being spaced apart combined with staves secured to alternate ribs and provided with bevels on each of their longitudinal edges diverging from the ribs, bars secured to alternate ribs and provided with bevels on each of their longitudinal edges converging from the ribs to form in connection with the staves water passages between adjacent bars and staves, said water passages alternating in direction and a wire screen held between the ribs and the staves and the bars.

6. In a washing machine cylinder, the end heads and the connecting ribs therebetween, said ribs being spaced apart, combined with staves secured to alternate ribs and provided with bevels on each of their longitudinal edges diverging from the ribs, bars secured to alternate ribs and provided with bevels on each of their longitudinal edges converging from the ribs to form in connection with the staves water passages between adjacent bars and staves, said water passages alternating in direction, and wire screens held in said water passages.

CHRISTIAN JENSEN.

Witnesses:

ALBERT E. DIETERICH,
MAE E. IMMICH.