

No. 824,435.

PATENTED JUNE 26, 1906.

J. S. PARRISH.

WASHING MACHINE.

APPLICATION FILED APR. 17, 1905.

Fig. 1.

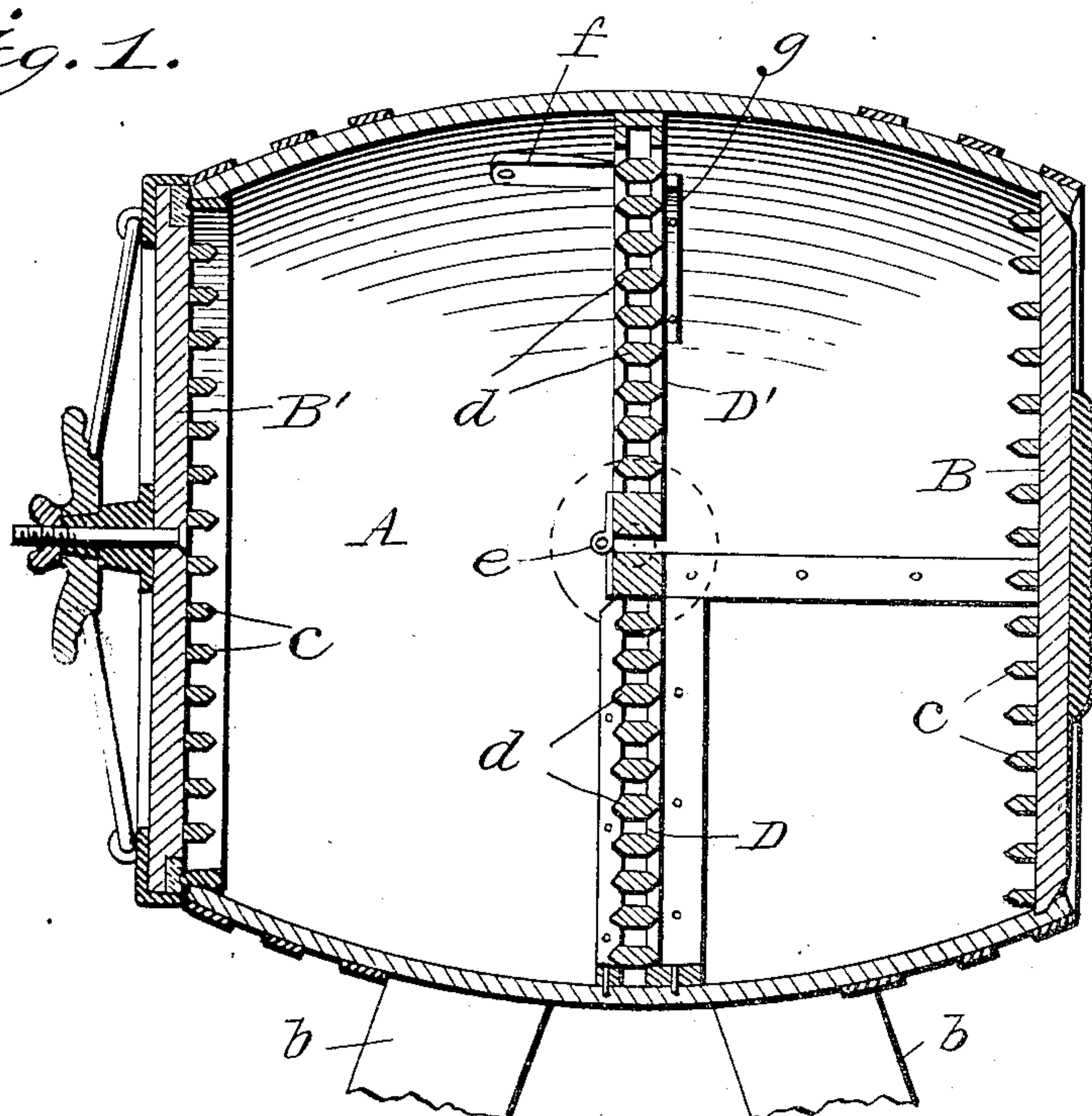


Fig. 2.

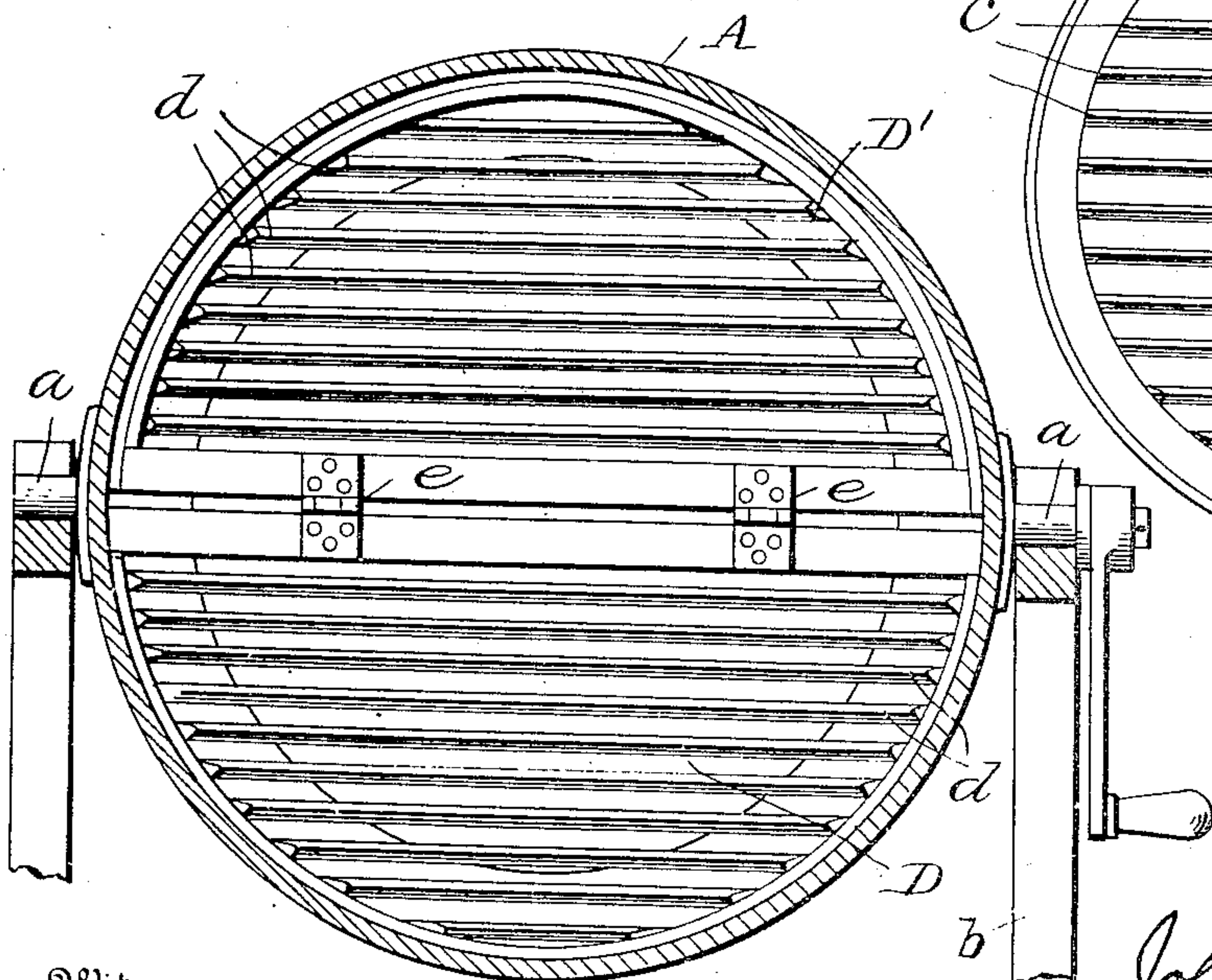
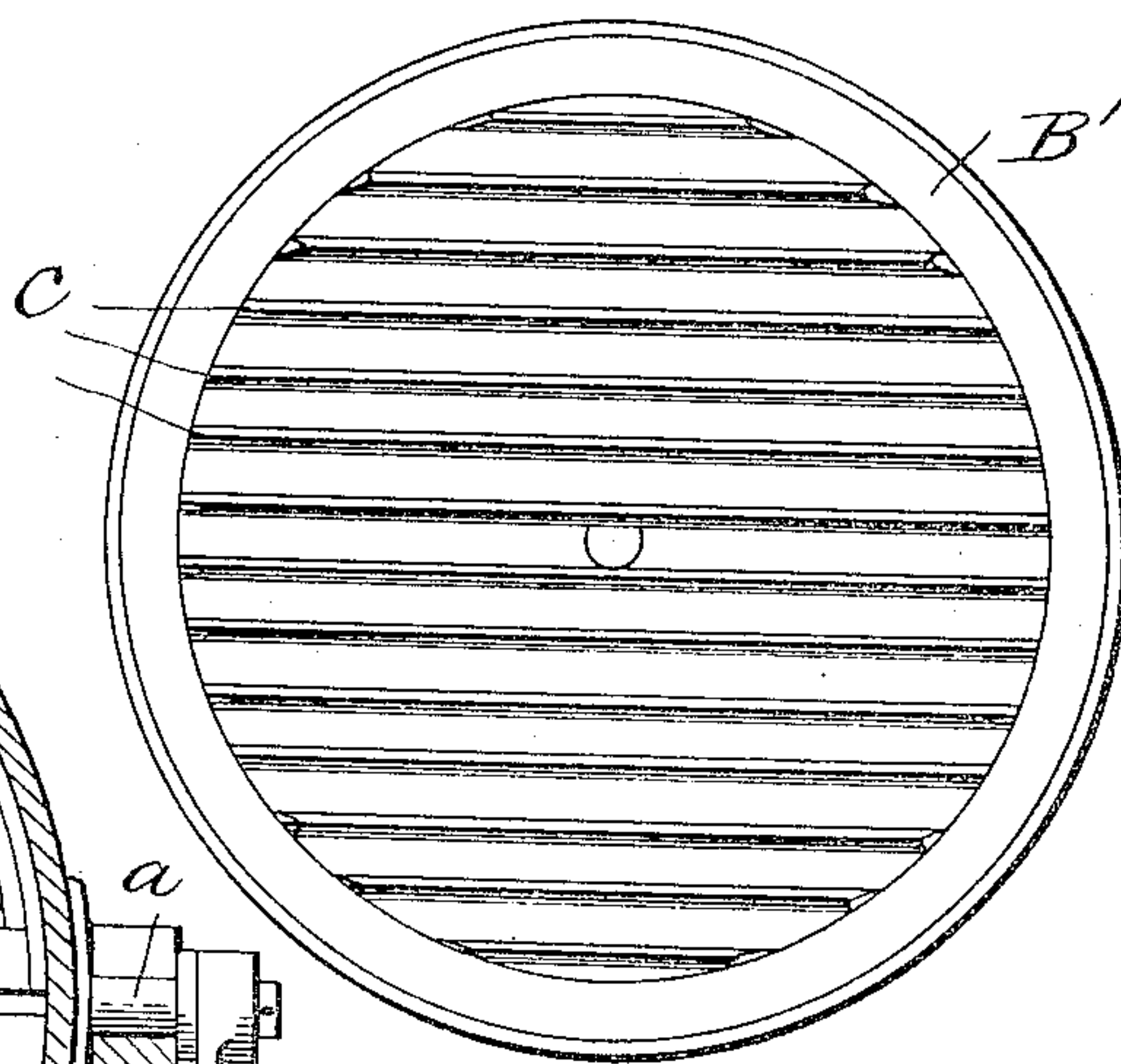


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN S. PARRISH, OF SHADWELL, VIRGINIA.

WASHING-MACHINE.

No. 824,435.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed April 17, 1905. Serial No. 256,114.

To all whom it may concern:

Be it known that I, JOHN S. PARRISH, a citizen of the United States of America, and a resident of Shadwell, county of Albemarle, State of Virginia, have invented certain new and useful Improvements in Washing-Machines, of which the following is a full and clear specification, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section taken centrally through the casing. Fig. 2 is a vertical transverse section, and Fig. 3 a detail view, showing the inner face of one of the heads or end walls of the casing.

This invention has reference to that class of washing-machines in which the casing is rotatably mounted on trunnions and is substantially cylindrical or barrel-like in shape, the trunnions being attached to the casing about midway its ends and one of the heads or ends being removable, as is well understood.

The object of my improvement is to provide an apparatus which shall be exceedingly simple in construction and which at the same time shall provide the maximum rubbing-surface, and thereby not only increase the efficiency of the apparatus, but also reduce the time required to effect a thorough cleaning of the clothing, as more fully herein-after set forth.

To the accomplishment of this object and such others as may hereinafter appear, the invention consists of the parts and combination of parts hereinafter fully described, and particularly pointed out in the appended claims, reference being had to the accompanying drawings, forming a part of this specification, in which the same reference characters designate like parts throughout the several views.

Referring to the drawings by letters, A designates a barrel-shape casing mounted upon the trunnions *a*, which are journaled in any suitable manner in a supporting-frame *b*. I prefer using a folding frame of the well-known type; but it is obvious that I may employ a supporting-frame of any construction. The trunnions are, as usual, fastened to the exterior of the casing about midway its ends.

One of the heads *B* is, as usual, fastened stationarily in the end of the casing, while the other head *B'* is removably fastened in place by any of the well-known clamp devices. Each head is provided with a series of parallel rubbing-bars *c*, fastened on its in-

ner face and lying parallel with the axis of rotation of the casing. The projecting edges of these bars *c* are beveled, as shown, to increase the rubbing action on the clothes.

The casing is divided into two compartments by a central partition consisting of separated bars *d*, whose opposite edges are beveled off to increase the rubbing action on the clothes. These bars lie parallel with the bars *c* on the heads. This partition is divided into two semicircular sections *D D'*, hinged together at *e*, the hinges being located on the side nearer to the removable head *B'*. The section *D* is fixed stationarily to the inner side of the casing-wall, while the hinge-section *D'* is locked in place by turn-buttons *F*, pivoted on the inner side of the casing and adapted to clamp this hinge-section against a stop-strip *g*, fastened to the casing. Of course any other suitable locking or latching devices may be employed, if desired.

In charging the machine sufficient suds is poured into the casing to fill its lower section about three-fourths full. Then the hinge-section *D'* is raised and about one-half of the batch of clothing that is to be operated on is dropped into the lower compartment, and the hinge-section is then closed and latched in place. The remaining half of the clothing is then dropped in upon the partition, and the removable head is then clamped tightly in place. The machine is then rotated on its trunnions at a moderate speed about six or eight minutes, which usually suffices to thoroughly clean a batch of clothing of the average character. As the machine is turned over and over the two separated batches of clothing are tumbled about, being thrown first against the rubbing-surfaces on the heads and then against the rubbing-surfaces of the partition, thereby subjecting the clothing to a thorough but uninjurious pounding and rubbing. As the two batches of clothing alternately strike against the partition the soapy water will be dashed through the meshes of the fabrics in the act of passing from one compartment to the other. The centrifugal force given to the batches of clothing by the rotation of the barrel at a moderate speed is not sufficient to overcome the gravity of the suds and the clothing, so that the batches of clothing will strike the opposite sides of the partition with considerable force.

The rubbing action of the bars is materially increased by having them parallel with the axis of rotation, as is apparent, and by

dividing up the clothing into two separated batches the loaded apparatus is approximately evenly balanced, thereby contributing to ease of operation.

5 As will be observed, the essential feature of the invention lies in alternately dashing the water through the clothing as the water and the clothing strike the partition, this operation being kept up continually during the
10 rotation of the casing. In this way the clothing is quickly cleansed without subjecting it to injurious rubbing. In order to obtain the best results, the clothing to be washed should be soaked in cold water from one to two
15 hours at least before placing it in the machine. Water of medium temperature is used, and a suitable quantity of soap is cut up fine and dropped into the water. Then by rotating the casing a few times sufficient suds will
20 be produced. As stated, six or eight minutes rotation at moderate speed will accomplish the washing of the clothing. The suds is then drawn off through a suitable cock, and then the same amount of hot water with-
25 out soap is put in. The clothing is removed before this hot water is poured in and is wrung out and is then put back in the casing. Then the casing is again rotated for a sufficient time to thoroughly rinse the fabrics.
30 Of course the apparatus may be used in any other manner the exigencies of the case may require.

It will be apparent to those skilled in the art that various mechanical embodiments of
35 the invention are possible, and I therefore do not wish to be limited to the exact arrangement and construction shown.

What I claim, and desire to secure by Letters Patent, is—

40 1. In a washing-machine of the type described, the combination of a support, a barrel-like casing pivotally mounted thereon about midway its length, one of the heads of this casing being removably fastened in place
45 and both heads being provided on their inner

sides with rubbing devices, a central partition in the casing constructed of two semicircular sections, one being stationary and the other being hinged to this stationary section, and both sections consisting of spaced bars, 50 said hinged section being adapted to swing toward the removable head, and means for locking the hinged section in place, for the purpose set forth.

2. In a washing-machine of the type set 55 forth, the combination of a support, a cylindrical casing mounted thereon upon trunnions attached to the interior of the casing about midway its length, one of the heads of the casing being removably fastened in 60 place and both the heads being provided with rubbing projections on their inner faces, a central partition in the casing provided with numerous water-passages and rubbing projections on its opposite faces, a part of this 65 partition being movable toward the removable head, and means for locking this movable section in place.

3. In combination with a rotatable casing, the casing being substantially cylindrical and 70 the axis of rotation transversely through the center thereof about midway the length of the casing, said casing being provided with under walls or heads one of which is removable, and a partition extending across the interior of the casing approximately in line 75 with its axis of rotation, this partition consisting of numerous slats or bars having water-passages between them, a part of the section being movably held in place, whereby 80 access may be had to the clothes-chamber on the opposite side of the partition from the removable head, substantially as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses 85 this 12th day of April, 1905.

JOHN S. PARRISH.

Witnesses:

FRANCES E. TERRY,
A. P. BIBB.