

C. JENSEN.
CYLINDER FOR WASHING MACHINES.
APPLICATION FILED JAN. 22, 1907.

943,682.

Patented Dec. 21, 1909.

Fig 1

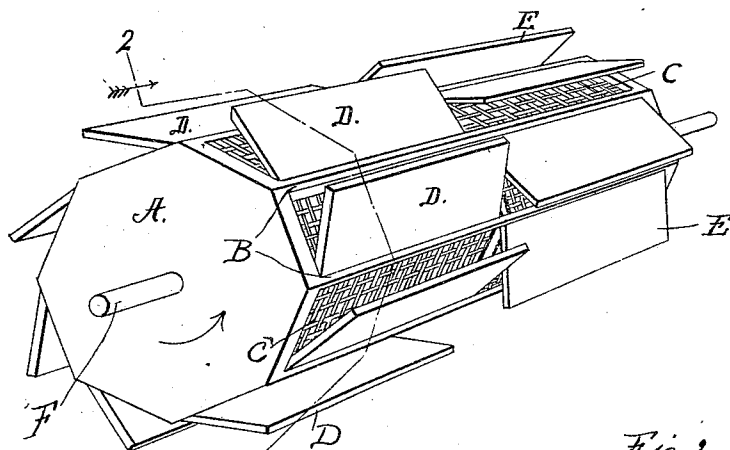
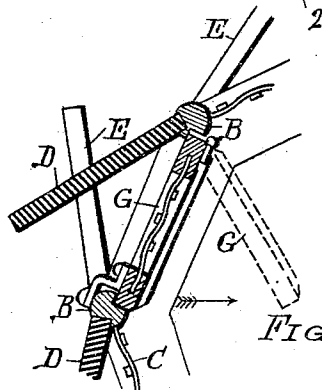
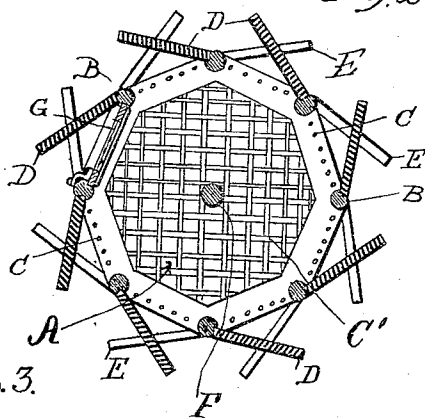


Fig. 2.



WITNESSES:-

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CYLINDER FOR WASHING-MACHINES.

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To all whom it may concern:

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

My invention relates to a new and useful improvement in cylinders for washing machines, and has for its object to provide an exceedingly simple and effective construction of cylinder or central revolving member to be used in a stationary casing, tank or cylinder of a washing machine and is especially adapted for use in connection with power operated washing machines and which will cause the volume of water to flow first in one direction and then in the opposite direction through the cylinder and the clothes or articles contained therein for the purpose of assisting in cleansing said articles.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a perspective of a cylinder made in accordance with my improvement; Fig. 2, is a transverse section on the line 2—2 of Fig. 1; Fig. 3 is a detail view showing one of the hinge door sections of the cylinder.

In carrying out my invention as here embodied A represents the heads of the cylinder which are connected together by the ribs B of any suitable shape, and between these ribs are secured the wire sections C permitting free access of water to the cylinder. A partition C' is located midway between the heads and is preferably a wire screen for the free passage of the water thus dividing the cylinder into two compartments.

D are a series of scoops or wings extending one-half of the length of the cylinder and set tangentially thereto, and E are a similar series of scoops or wings set at an opposite angle to the wings D and extending the length of the remaining half of the cylinder. The cylinder is secured upon the shaft F, the

latter being adapted to revolve in suitable bearings within the ordinary outer casing of the washing machine, any suitable means being used to revolve said shaft first in one direction then in the other in the well known manner of operating the cylinders of power washing machines.

In practice the articles to be washed are placed within the cylinder by the removal or opening of certain of the wire screens C which may be hinged for that purpose, and when the cylinder is revolved in the direction of the arrow marked thereon the series of wings D will scoop up the water contained in the tank in which the cylinder is being revolved, forcing it into the cylinder and causing it to flow through the same lengthwise of the same and through the openings between the wings E of the opposite series and after the cylinder has made the predetermined amount of revolutions in the direction of the arrow, forcing the water as just described, it will be reversed and revolved in the opposite direction during which time the wings E will scoop up the water forcing it in the opposite direction through the cylinder. As this operation is continuously repeated as long as the machine is in action it follows that the water will be forced through the cylinder and the articles contained therein first in one direction then in the opposite direction with considerable force by means of which the removal of the dirt from the clothes will be facilitated, and in practice I have found that a cylinder thus constructed and operated will wash clothing more thoroughly and in much less time than has heretofore been the case. Suitable doors G may be provided through which the clothes may be inserted and removed from the cylinder, as shown in Fig. 3 of the drawings.

Of course I do not desire to be limited in the exact construction shown in the drawings and herein described as the gist of my invention resides in the idea of constructing a cylinder for washing machines having screened openings and provided with means whereby the water in the machine will be caused to flow through the cylinder first in one direction and then in the other for the purposes above stated.

Having thus fully described my invention, what I claim as new and useful, is—

1. In a cylinder for washing machines, two cylinder heads an axle passing centrally

through said heads, a plurality of braces
attached to the cylinder heads near to their
circumference and parallel to the axle, said
braces spaced equally apart and dividing the
5 convex surface of the cylinder so formed
into a plurality of rectangular spaces, a
metallic openwork screen parallel to the
cylinder heads and midway between them,
10 metallic openwork screens covering each of
the rectangular spaces, means for removing
certain particular screens, a series of wings
tangentially disposed to the convex surface
of that portion of the cylinder lying between
15 the transverse screen and one of the heads
and adapted on rotation of the cylinder to
scoop water into said cylinder when prop-
erly inclosed and revolved in a counter clock-
wise direction, a series of wings similarly
20 placed on the opposite half of said cylinder
and adapted when properly inclosed and re-
volved in a clock-wise direction to scoop
water into said cylinder, substantially as
described.

2. In a cylinder for washing machines,
25 two cylinder heads, an axle passing centrally
through said heads, a series of braces spaced
equally apart and attached to the opposite
heads, a central division partition between
the heads parallel thereto, and having a cen-
30 trally disposed opening within said divi-
sional partition, an open-work wire screen
attached to the partition and to the spaces

bounded by the parallel braces, means of ac-
cess to the interior of the cylinder, tangen-
tially disposed wings in the first half of the 35
cylinder between the head and the central
partition, said wings of equal size and at-
tached to the corresponding long sides of
each rectangular space, similar wings simi-
larly disposed on the second half of the 40
cylinder and attached to the corresponding
opposite sides of the rectangular spaces, sub-
stantially as described.

3. A washing machine cylinder comprising
a rotatable frame of polygonal form in cross 45
section consisting of a pair of end closed
heads and a central perforated partition di-
viding the cylinder into two sections, said
frame having a series of openings along the
50 peripheral surface of each section, vanes co-
operatively held adjacent to said openings,
and arranged in sets, one for each section,
the vanes of one set being directed in the
same general direction while those of the
55 other set are oppositely directed, said vanes
being rigidly secured to said cylinder.

In testimony whereof, I have hereunto af-
fixed my signature in the presence of two
subscribing witnesses.

CHRISTIAN JENSEN.

Witnesses:

JOSEPH C. SMITH,
S. M. GALLAGHER.