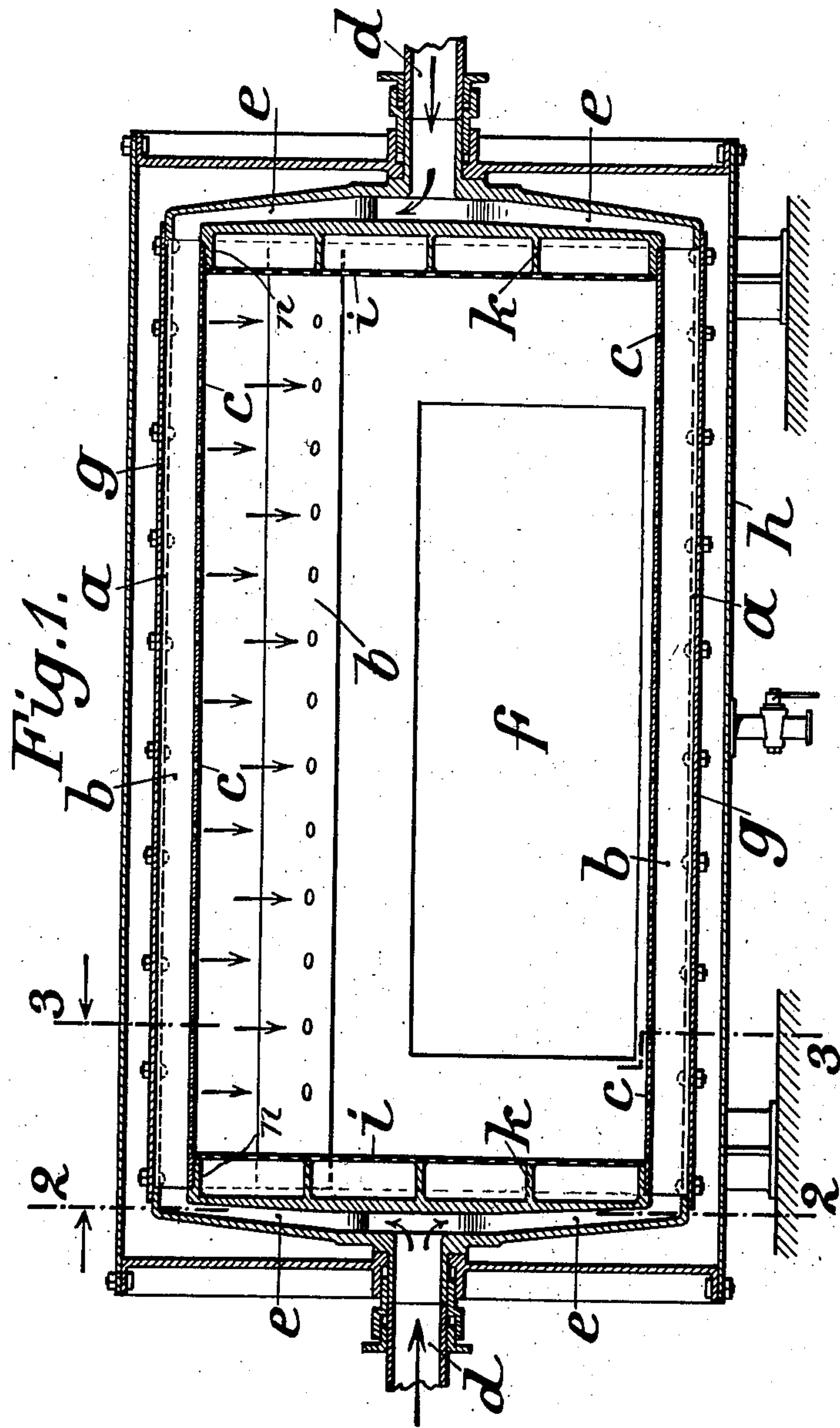


H. STITZEL.
 ROTARY WASHING MACHINE.
 APPLICATION FILED MAY 10, 1906.

925,525.

Patented June 22, 1909.

2 SHEETS—SHEET 1.



WITNESSES

R. C. Carter
J. M. Thenn

INVENTOR

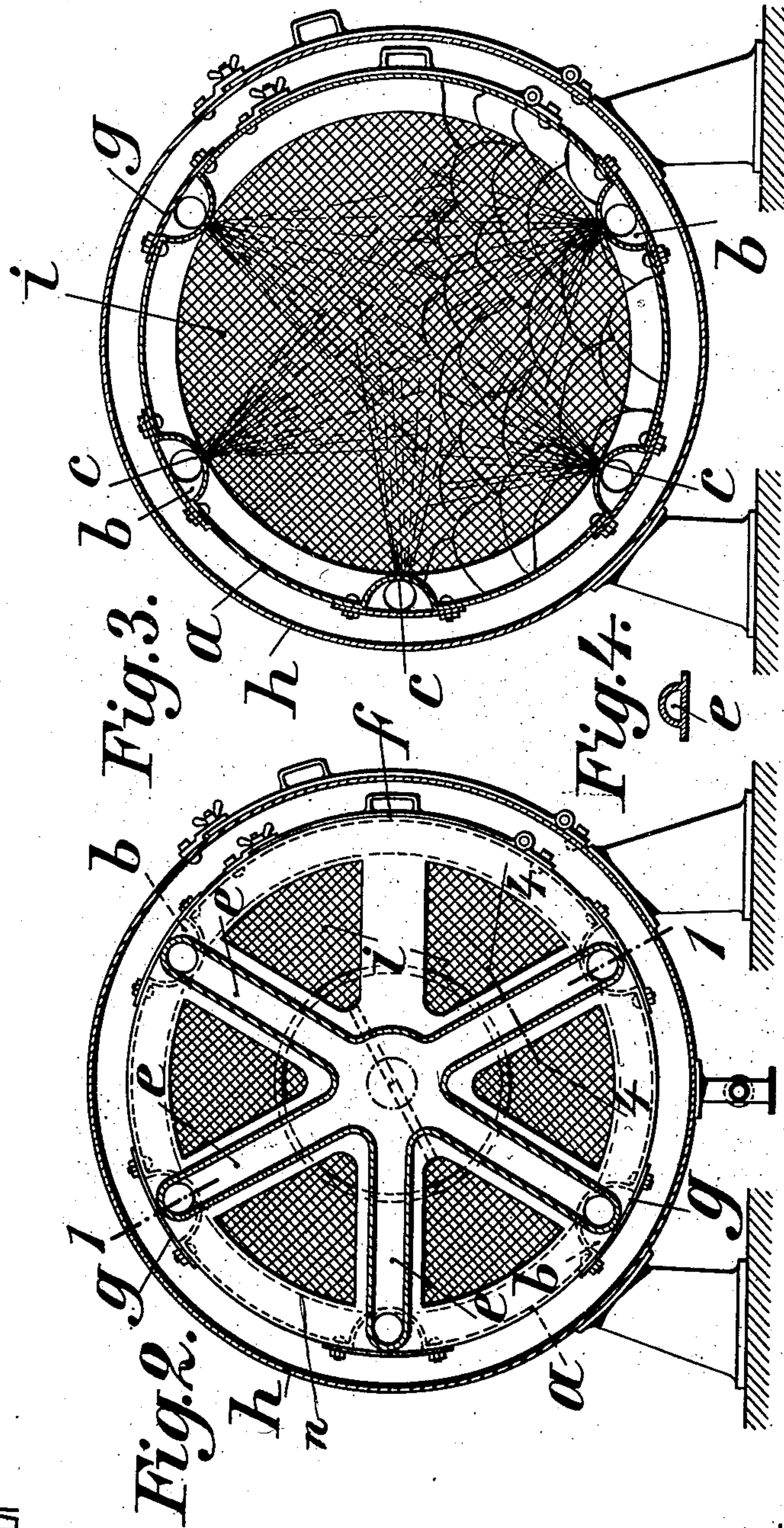
Hugo Stitzel
 by *Vernie & Goldsmith*
 ATTORNEYS

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INVENTOR

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UNITED STATES PATENT OFFICE.

HUGO STITZEL, OF ZURICH, SWITZERLAND.

ROTARY WASHING-MACHINE.

No. 925,525.

Specification of Letters Patent.

Patented June 22, 1909.

Application filed May 10, 1906. Serial No. 316,212.

To all whom it may concern:

Be it known that I, HUGO STITZEL, manager, a subject of the German Emperor, residing at Zurich, V Höschgasse 72, Switzerland, have invented certain new and useful Improvements in or Relating to Rotary Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to produce an improved double drum washing machine which will have the advantage, characteristic of such machines, that the height of the water may be controlled by properly placing the inlet and outlet in the outer drum, and at the same time a machine in which the destruction of the clothes which is incident to their beating against the perforated inner drum commonly used in such machines, is avoided. To this end I employ a closed outer drum of the construction commonly employed in double drum washing machines and I substitute for the perforated drum commonly used as the inner drum of such machines an inner drum having a generally smooth and imperforate wall carrying a few hollow ribs containing spraying holes for introducing the liquid into the inner drum and onto the clothes. The ends of the inner drum are open from the inner drum into the outer drum to establish communication between the inner drum and the outer drum, the clothes being held within the inner drum by screens supported near the two ends thereof.

An embodiment of the invention is shown on the accompanying drawing in which—
Figure 1 is a longitudinal section on the line 1—1 of Fig. 2. Figs. 2 and 3 are cross sections on the lines 2—2 and 3—3 respectively of Fig. 1. Fig. 4 is a cross section on the line 4—4 of Fig. 2.

The inner washing drum *a* consists of a perfectly smooth non-perforated cylinder which is provided at a few places of its circumference with hollow ribs *b* which are provided at the highest point with perforations *c*. These hollow ribs receive the washing liquid from the hollow spindles *d* through the hollow spokes *e* of the wheel-like drum heads. Owing to the lye or rinsing liquid being supplied through both hollow spindles of the inner drum, the whole contents of the drum are moistened in a uniform manner.

One of the spokes in each head is not hollow (Fig. 2) as at this point of the drum the cover *f* is arranged so that a hollow rib *b* at that point would be in the way. The ribs *b* are formed as shown in Fig. 2, by forcing in or hammering in from the outside the middle of the wall of the drum, the hollow thus produced being covered outside by plates *g*.

The discharge of the dirty water is effected according to this invention, through the front or end walls of the drum, as already stated. In the construction shown in the drawing the liquid flows between the spokes of the wheel-shaped drum heads and passes into the outer drum *h* from which it can be discharged by means of a drain cock. In order to prevent the washing from being carried away during the discharge of the dirty liquid, a sieve *i* is arranged in front of each wheel shaped drum head, and is held at a certain distance from the drum head by means of ribs *k* on the spokes, and by the flange *n* on the drum head by means of which flange the peripheral edge of the sieve or screen *i* is supported for the purpose of utilizing the whole area of the sieve.

Owing to the fact that the drum wall is not perforated, the articles being washed are amply protected. The small spraying holes on the upper edge of the hollow ribs do not prevent favorable action as the ribs themselves serve for raising the articles being washed during the rotation of the drum, and the articles then fall down from the ribs.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare, that what I claim is:

1. A washing machine, comprising an outer closed casing, an inner revolving drum having perforated, hollow ribs at intervals on its periphery for the introduction of the liquid, wheel-like heads to which the ends of the drum are secured and by which they are supported, hollow journals by means of which said heads are supported in the outer casing, and hollow spokes in the heads connecting the journals with the perforated ribs in the drum, the walls of the drum between the ribs being imperforate, and the ends of the drum having openings between the spokes of the head for the outlet of the liquid.

2. A washing machine, comprising an outer closed casing, an inner revolving drum having

perforated ribs at intervals on its inner periphery, wheel-like heads to which the ends of the drum are secured and by which they are supported, hollow journals supporting
5 the heads in the outer casing, hollow spokes in the heads connecting the journals with the perforated ribs in the drum, the walls of the drum between the ribs being imperforate, and the ends of the drums being open
10 between the spokes of the heads for the outlet of the liquid, and reticulated screens in the ends of the drum to prevent the goods from falling out.

3. In a double drum washing machine, an
15 inner imperforate drum having hollow ribs provided with spraying holes arranged at

intervals on its periphery and an open spider supporting said inner drum in the outer drum, said spider being made up of hollow radial arms separated by open spaces, said
20 arms forming inlet pipes for the said hollow ribs, whereby the washing fluid sprayed into the inner drum from the hollow ribs flows freely between the arms of the spider,
25 substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

HUGO STITZEL.

Witnesses:

FR. POHLMANN,
T. WITZ.