

(No Model.)

R. K. BURT.
WASHING MACHINE.

No. 482,295.

Patented Sept. 6, 1892.

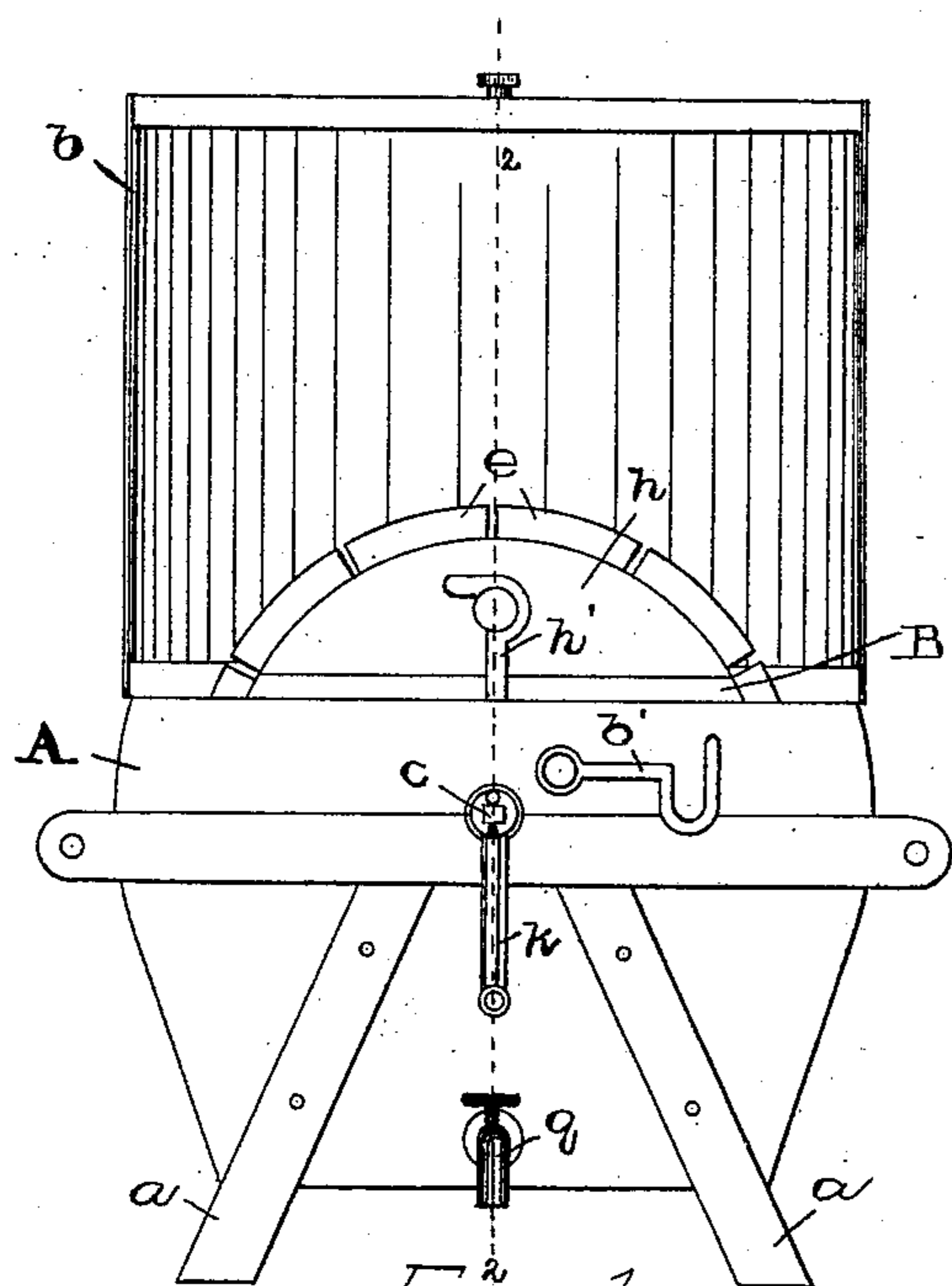


Fig. 1.

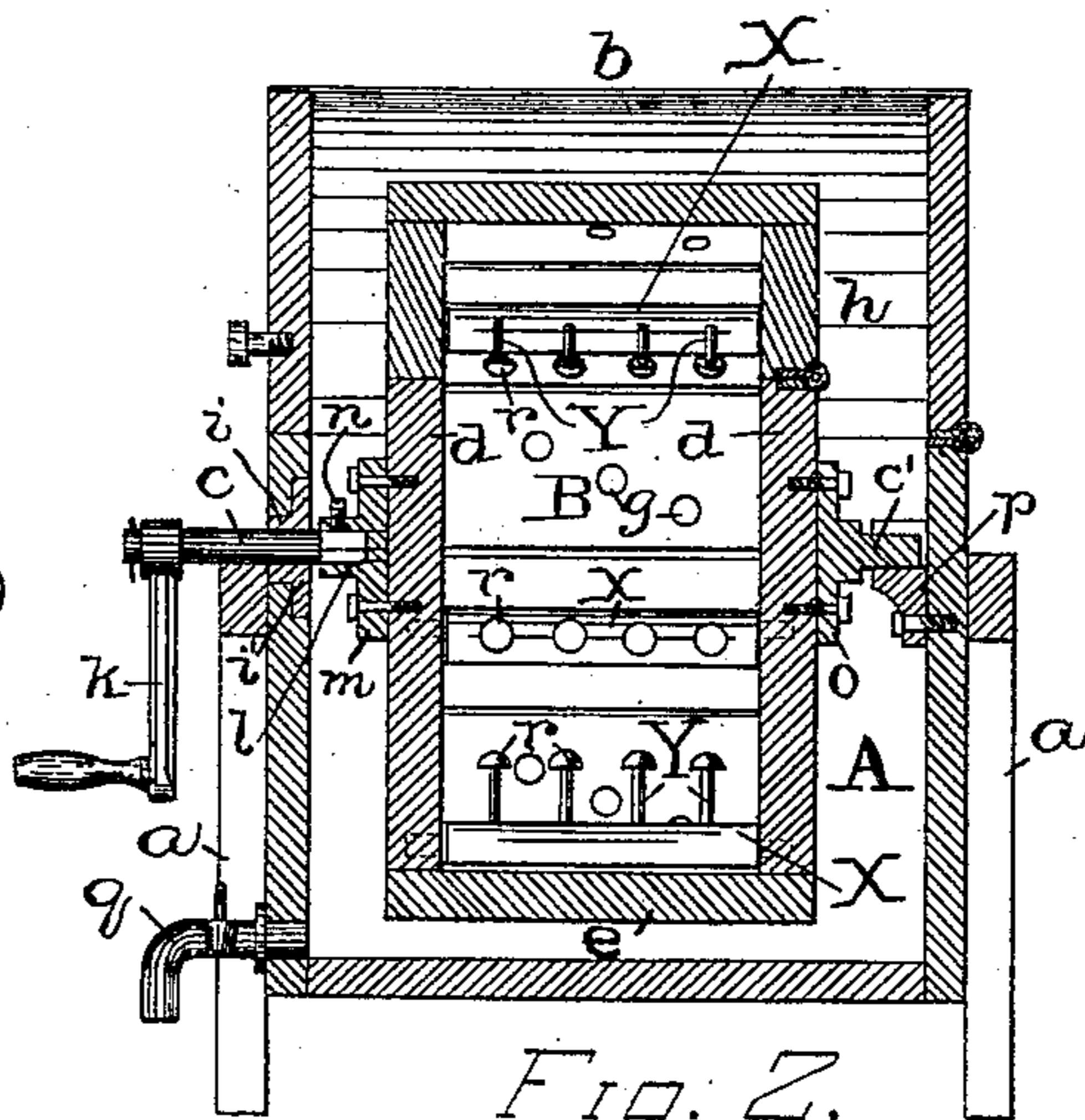


Fig. 2.

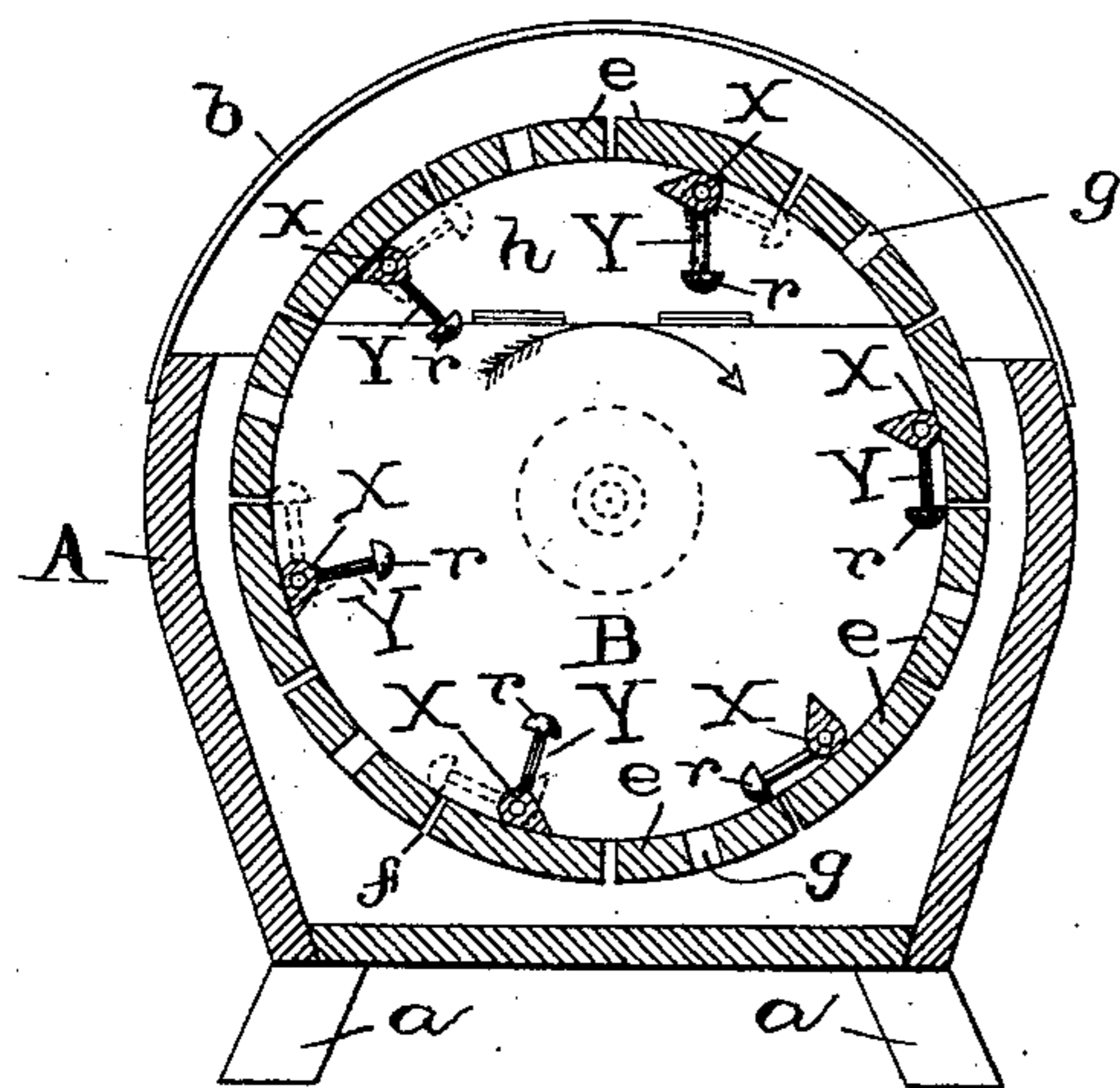


Fig. 3.

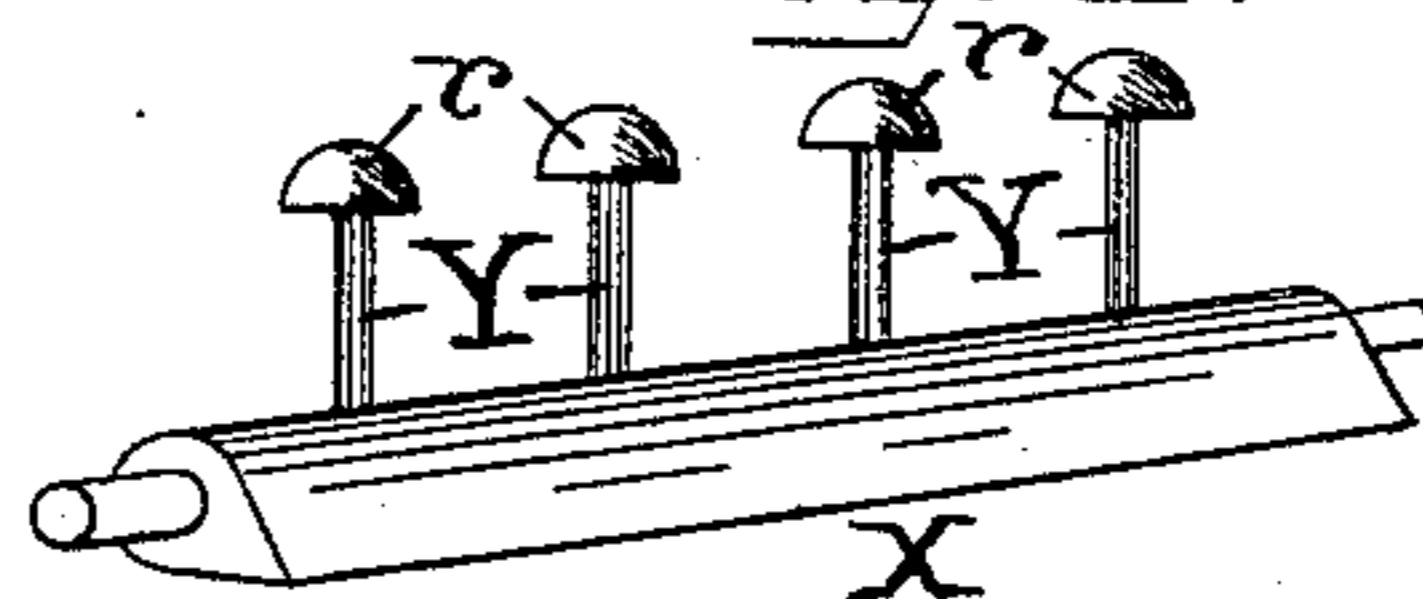


Fig. 4.

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UNITED STATES PATENT OFFICE.

RANSOM K. BURT, OF HADDAM, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 482,295, dated September 6, 1892.

Application filed February 20, 1892. Serial No. 422,215. (No model.)

To all whom it may concern:

Be it known that I, RANSOM K. BURT, a citizen of the United States, residing at Haddam, in the county of Washington and State of Kansas, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

The invention relates to an improvement in that class of washing-machines in which the clothes are washed in a revolving cylinder inclosed in a suitable case.

The object in view is a more thorough washing of the clothes than heretofore obtained in this class of machines.

To this end the invention consists in the novel features of construction and combination of parts hereinafter described and claimed.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a front view of the machine with the lid of the outer case raised. Fig. 2 shows a vertical cross-section through the center of the machine on line 2 2 of Fig. 1. Fig. 3 is a longitudinal section of the machine. Fig. 4 is a detail perspective view of one of the peg-carrying rock-bars mounted in the cylinder.

The letter A designates the outer case supported by legs *a*. The upper part of the case has a hinged lid *b*. This outer case may be of any desired shape, but preferably approximates a cylindrical. A revoluble cylinder B is supported in said outer case A by trunnions *c c'*. This revoluble cylinder is composed of two heads *d* and cross-pieces *e*, arranged side by side and attached to the heads with an open space *f* between each two. In addition to the open space *f* the cross-pieces *e* are provided with holes *g* to allow the water in the outer case A to pass into the revoluble cylinder and vice versa. The revoluble cylinder is also provided with a lid or hinged cover *h*, as shown in Figs. 1 and 2.

The trunnion *c*, which is on the side to which the crank-lever is attached, has both ends square and is rounded in the center. This trunnion passes through a bearing *i* in the wall of the outer case A, and one end engages with the crank-lever *k* and the other end engages in a square socket *l* in the plate *m*, which is attached to the head of the cyl-

inder. A set-screw *n* in the plate-socket keeps the trunnion *c* in the square socket. The other trunnion *c'*, which is on the opposite side of the revoluble cylinder, is attached to the head of the cylinder by means of a plate or flange *o*, and this trunnion is seated in a U-shaped bearing *p*, which is attached to the inside wall of the outer case. This particular construction of the trunnions *c c'* and bearings will permit the easy removal of the revoluble cylinder from the outer case. It will also permit of the trunnions being placed below the top of the walls of the case, thus making a deeper vessel and placing the joint between the case and cover so near the top that there will be less liability of the suds being thrown up and out when the machine is operated.

Another advantage arises from the fact that by employing a closed or cylindrical bearing for the trunnion to which the crank is secured there is less liability of the trunnion being lifted out of its bearing by pressure upon the handle in rotating the cylinder, and it also affords more stability to the trunnion and avoids the use of any locking-gab, barbed head, or other means of securing it, as would be required to secure a short trunnion in an open or semi cylindrical bearing. By making the bearing *i* round it can be secured to the machine by simply boring a hole through the wall of the case in which the bearing will fit, while the flat plate *i'* upon its inner end is secured to the interior of the wall, overlapping the joint between the wall and bearing, which prevents the escape of water at that point.

As the inner end of the trunnion is prismatic, it takes all the strain of rotating the cylinder, and the set-screw is only required to hold the trunnion from moving longitudinally out of the socket. This is a stronger construction than if the trunnion extended entirely through the cylinder and the set-screw had to bear the strain of rotating the cylinder with its load of clothes.

A cock or spigot *q* projects from the bottom part of the outer case A, and is for drawing off water therein contained.

Within the cylinder a number of rock-bars X extend across, fitting close against the cross-pieces *e* and journaled at their opposite ends

in the heads *d*. Each rock-bar is rounded on one side to permit it to turn in its bearings and on the opposite side extends to form a stop and prevents the bar turning in the opposite direction by coming against the cylinder-wall. Each bar carries a number of projecting pegs *Y*, having large heads *r*.

The operation of the machine is as follows: The lids being raised, the articles to be washed are made wet and soaped and then placed within the revoluble cylinder *B* and hot water is poured into the case *A*. Both lids are then securely fastened down by their respective fastenings or hooks *h' b'*. As the operator turns the crank-lever *k*, the cylinder *B* will revolve and the clothes will be caught on the heads of the pegs *Y*, which are at the bottom, and carried up thereby to the top, when the clothes drop off the peg-heads to the bottom and are again caught by the pegs, swept through the suds and water, and carried to the top. The rock-bar extensions hold the pegs out rigidly. The continual revolving of the cylinder *B* will cause the cloth articles to constantly change position and will produce an action of the suds that will cleanse them in every part. When the clothes have been

cleansed and it is desired to remove them, the cylinder is revolved in the opposite direction, which causes the pegs to turn against the cylinder sides, assuming the position indicated in dotted lines in Fig. 3, the rock-bars by their construction permitting this movement. A few turns of the cylinder will now release the clothes from the pegs, when they can be readily removed through the lids *b h*.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a cylinder washing-machine, the combination of an outside casing, a revoluble cylinder within said casing and provided with suitable openings, a rock-bar journaled in said cylinder and having an extension to stop against the peripheral wall of the cylinder, and projecting pegs fastened to said rock-bar.

In testimony whereof I affix my signature in presence of two witnesses.

RANSOM K. BURT.

Witnesses:

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