

D. Hanna,
Washing Machine.

N^o 68,981.

Patented Sep. 17, 1867.

Fig 1.

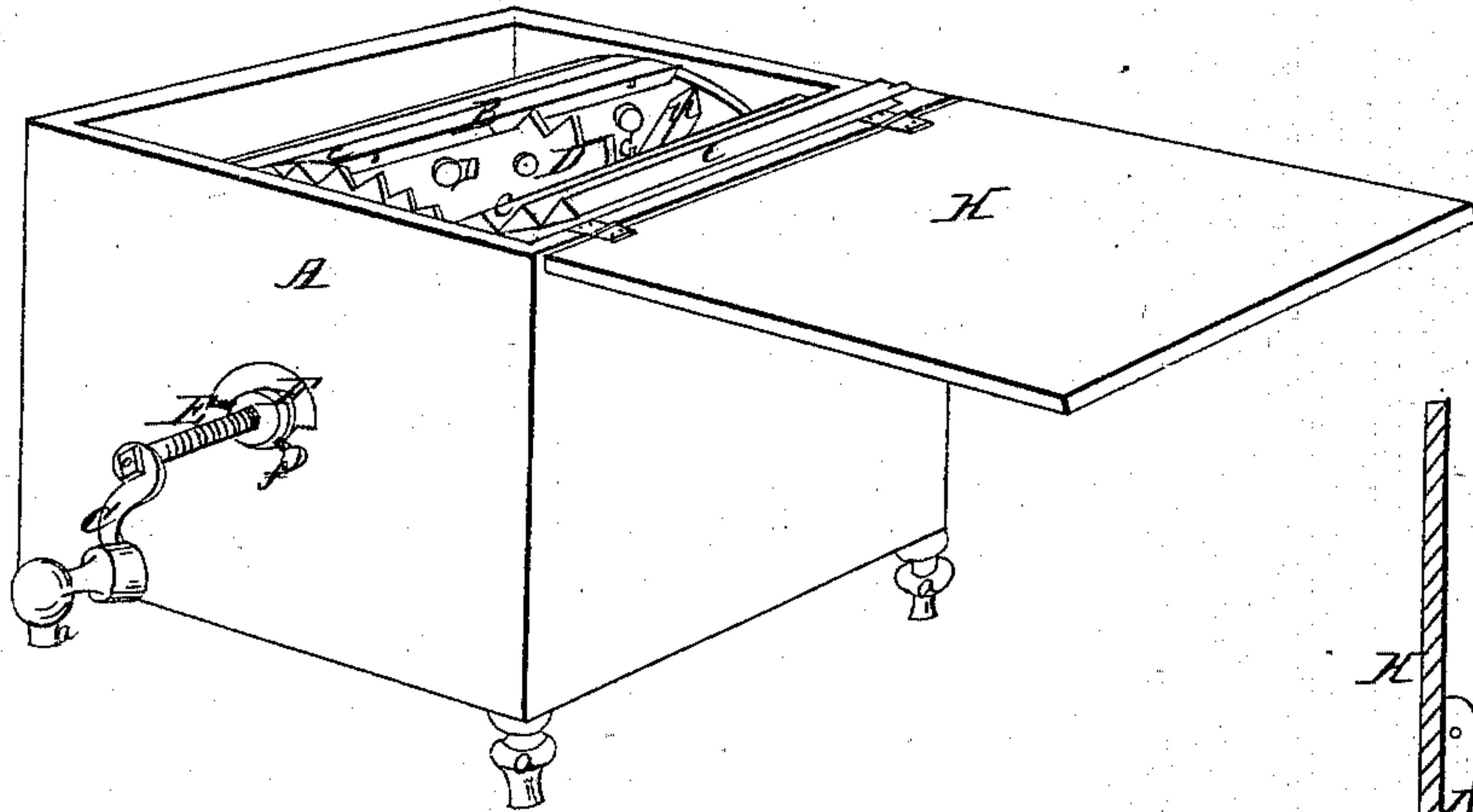


Fig 2.

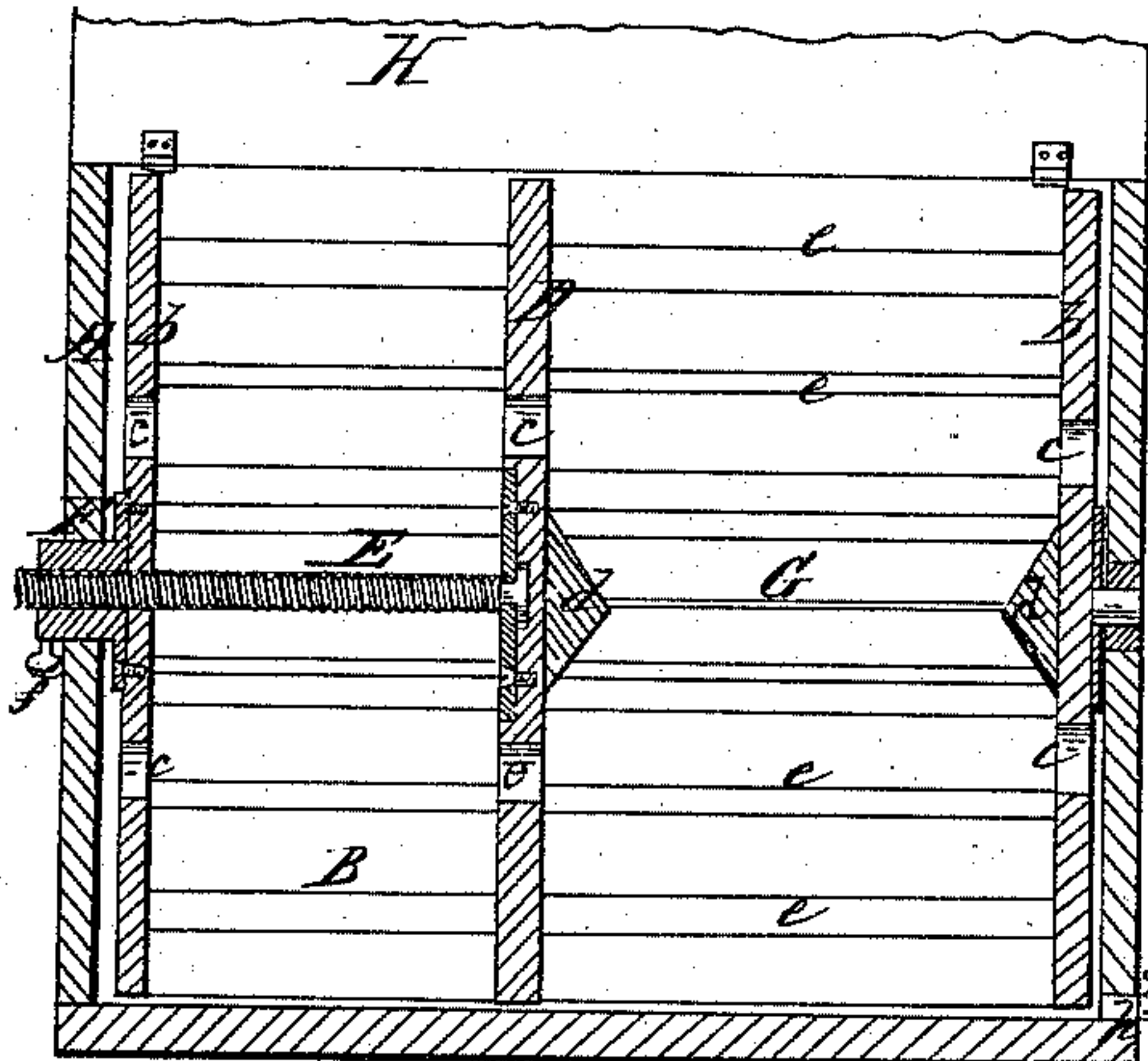
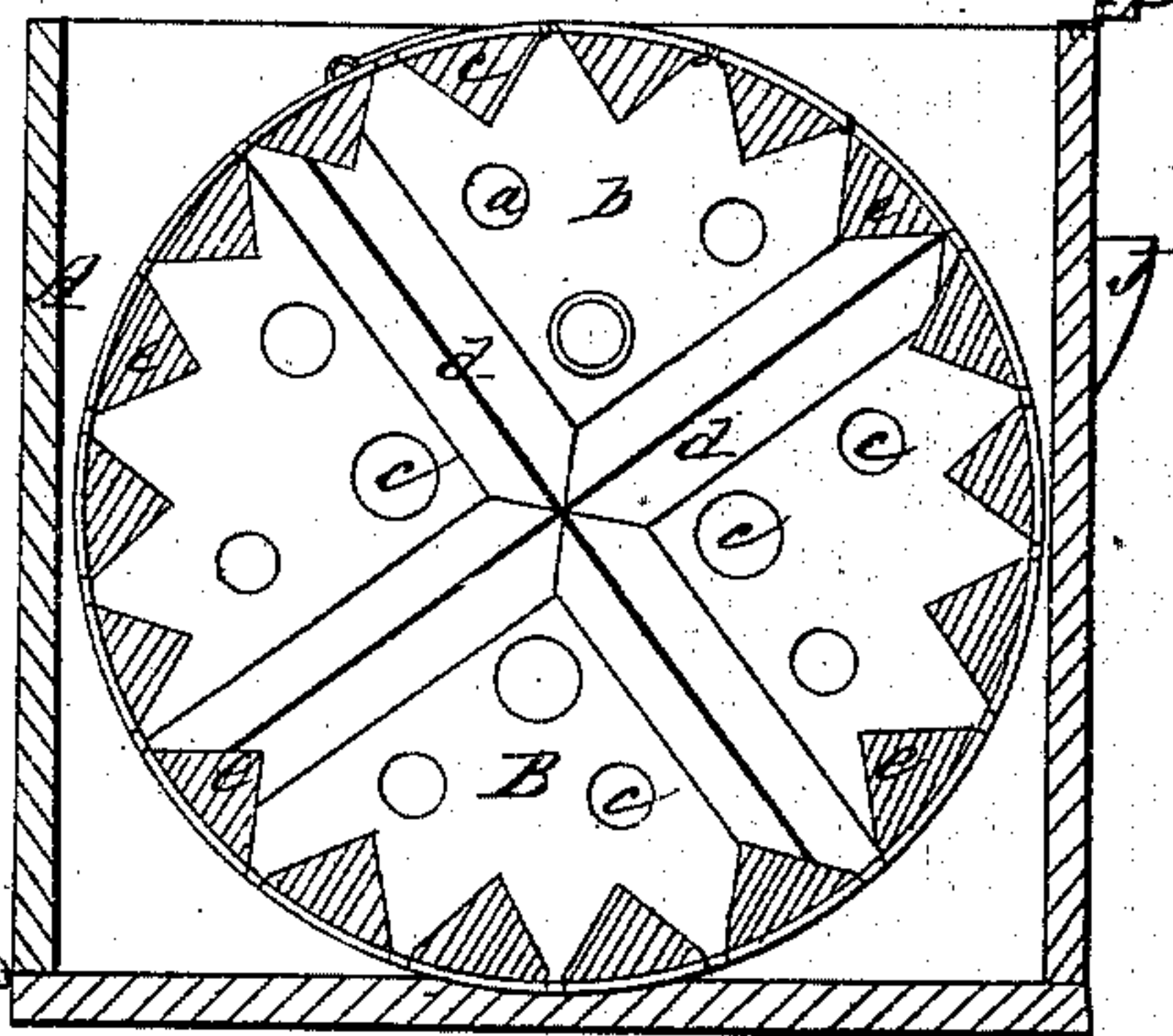


Fig 3.



Witnesses:

Chas H Poole
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Inventor:

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By Atty. J. B. Woodruff
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United States Patent Office.

DAVID HANNA, OF HORNELLSVILLE, NEW YORK.

Letters Patent No. 68,981, dated September 17, 1867.

IMPROVED WASHING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, DAVID HANNA, of Hornellsville, in the county of Steuben, in the State of New York, have invented certain new and useful improvements in Washing Machines; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of the machine open, for putting in or taking out the clothes.

Figure 2 shows a longitudinal section through the box and revolving cylinder.

Figure 3 shows a cross-section of the same.

The object of my invention is the cleansing of clothes or any textile fabrics which become soiled and dirty by use, either in large or small quantities, without in the least injuring the articles or rubbing them more than by constantly changing their position while the process of cleansing is going on.

My invention consists in a revolving cylinder, with internal cone-shaped slat-covering, and a movable cross-head, made adjustable by a screw, to which the crank-handle is attached, so that the space or area of the cylinder may be varied in size, according to the number of articles or quantity of clothing to be cleansed, and also be used to compress and squeeze the suds and water out of the clothes before they are wrung out to be placed in the boiler for boiling.

To enable others to make and use my invention, I will proceed to describe it more fully, referring to the drawings and to the letters marked thereon.

A square or oblong box, A, of any desired size, and supported on four legs *a a a a*, may be made in the usual manner. A cylinder, B, large enough to fill the box A, is fitted into it, so that it can be turned by a crank, C, at the end. The cylinder B is made of hard wood, the heads *b b* having holes *c c c c* through them, and projecting ribs *d d* at right angles from the centre. A movable head or follower, D, constructed in like manner, is placed in the cylinder, so as to be moved from end to end by a screw, E, which extends through the nut F, which forms one of the journals for the cylinder to hang on. A thumb-screw, *f*, is fitted into the journal F, on the outside of the box A, for the purpose of setting against the screw E and holding it in the journal-nut F, so that the cylinder B can be revolved by it and the crank-handle C attached to the screw at its outer end. The internal portion of the slats *e e e e*, which cover the cylinder B, is made with right-angled corners, pointing to the centre, so that the clothes, as they are being tumbled from side to side, as the cylinder, revolving, lifts them out of the water, are slightly chafed on the sharp edges of the slats, and their position changed, so that the dirt is easily removed when the clothes are compressed by the action of the screw E forcing the follower D toward the left-hand end of the cylinder B.

When a few number of pieces, or a small washing, is to be done, by loosening the thumb-screw *f* the screw E may be turned in, so that the space G in the cylinder, between the head *b* and the follower D, will be in proportion to the quantity; and when a large washing is to be done, the follower D may be brought to near the right-hand end. The thumb-screw *f* being tightened, the crank C operates to revolve the cylinder in any position the follower may be placed, and when the thumb-screw is turned back, and the cylinder held from revolving, by turning the crank C the follower D compresses the clothes and squeezes the dirty water out of them, which is drawn off at the spigot *h* at the bottom of the box. The clothes are then in the best condition to be wrung out for boiling.

A very good substitute for boiling is to put the clothes back again into the cylinder, after they have been wrung out once, and put into the machine boiling water, and turn the cylinder five or ten minutes, which will cleanse them more than half an hour's boiling.

The advantages of my improved washing machine, constructed and operated in the manner above described, are very great over others in use that have ever come to my knowledge, it having been practically demonstrated that from one to twenty dozen pieces can be washed equally well with the machine, by adjusting the follower, making the space in the cylinder to conform to the quantity or bulk of the articles. The finest fabrics will not be drawn, or in the least injured, and the dirtiest clothes can be thoroughly cleansed in from thirty minutes to one hour's operation.

The lid H of the box may be supported in a horizontal position, open, by the prop-stick I, resting on the ledge J, so as to form a table on which to lay the clothes to be placed in, or when taken out of the cylinder, in

which a sufficient number of slats are hinged to form an opening, and when closed are secured by hooks or buttons, so that the articles are confined inside of the cylinder, and are cleansed by the operation of turning the cylinder, and expressing the dirty suds and water from them, in the manner herein described.

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

The cylinder B, covered with slats *e e e e*, constructed in the manner described, when combined with a movable head or follower, D, and an adjustable screw, E, nut-journal F, thumb-screw *f*, and operated by a crank, C, in the manner herein described, for the purposes set forth.

In testimony whereof I subscribe my name in the presence of—

DAVID HANNA.

Witnesses:

S. M. THACHER,

C. B. LAMB.