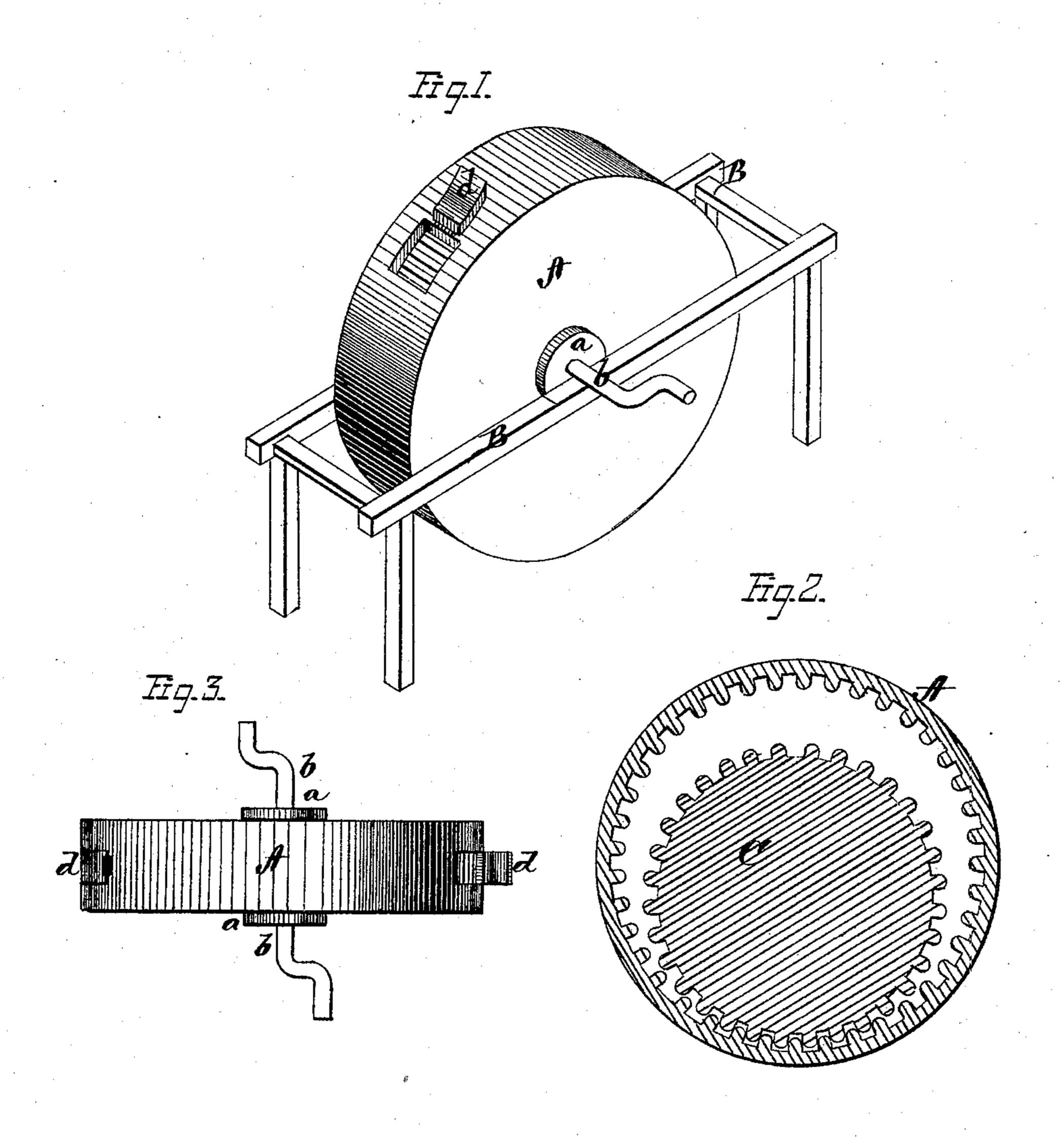
## M. E. BINFORD.

Improvement in Washing-Machines.

No. 130,691.

Patented Aug. 20, 1872.



WITNESSES
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## UNITED STATES PATENT OFFICE.

MARTHA E. BINFORD, OF JACKSON, TENNESSEE.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 130,691, dated August 20, 1872.

To all whom it may concern:

Be it known that I, Martha Eleanor Binford, of Jackson, in the county of Madison and in the State of Tennessee, have invented certain new and useful Improvements in Clothes-Washing Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "washing-machine," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my washing-machine. Fig. 2 is a vertical section through the cylinders, and Fig. 3 is a plan view of the same.

A represents a hollow cylinder of any suitable dimensions, having a circular plate, a, in the center of each side or head. From each plate a projects a journal, b, with a crank formed upon or attached to each outer end. These journals rest in suitable bearings upon the sides of the frame B, in which said cylinder is to revolve. A balance-wheel for the easier running of the machine might also be added on one of the journals, if desirable. The cylinder A is upon its circumference provided with two doors, d d, placed or located opposite each other, as shown in Fig. 3. Within this cylinder A is placed a smaller solid cylinder, C, which is provided with cogs all around

its circumference; and similar cogs are formed all around the inner circumference of the outer cylinder A. These cogs are made with such precision as to work in each other when the outer cylinder is empty, so that when the said outer cylinder is turned on its journals the inside cylinder C will roll with perfect freedom, preserving the same position in relation to the outside cylinder as shown in Fig. 2.

The clothes are put in through one of the doors d into the space between the two cylinders, then the door fastened, and the cylinder A turned till the other door d comes in convenient position. This second door is then opened, and if there is not already a sufficient quantity of clothing put in it can easily be done through this door. When thus filled the water is poured in and the door closed. The outer cylinder A is then turned by means of its crank, and the clothes will soon become cleansed by the free and independent action of the interior cylinder rotating within the outer revolving cylinder.

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

The combination of the cylinder A, revolving upon journals b, and having interior cogs, with the interior cylinder C provided with exterior cogs, and rotating free and independent within the exterior cylinder, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of May, 1872.

M. E. BINFORD.

Witnesses:

L. T. LINDSEY, H. L. BINFORD.