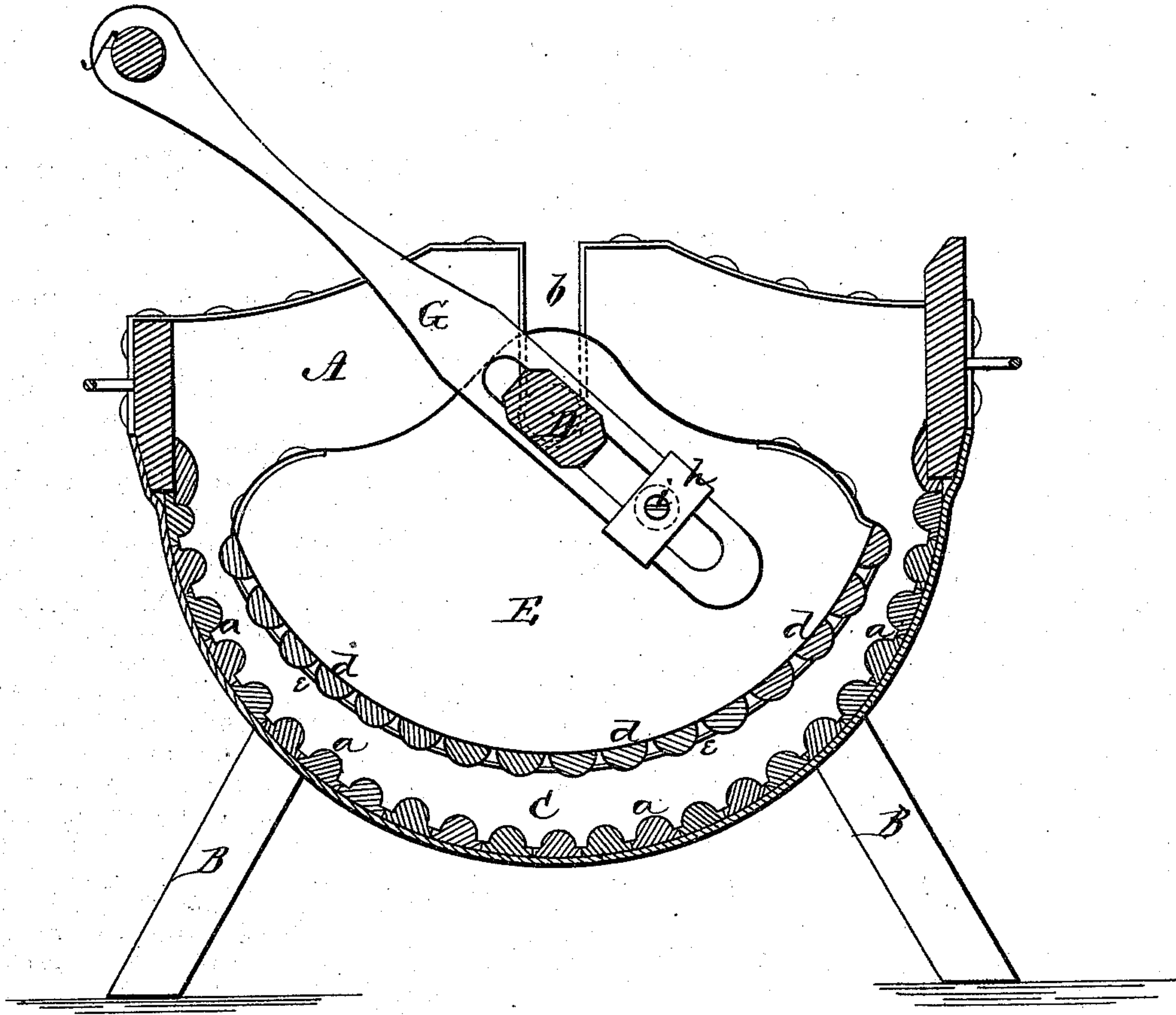


F. M. NIXON & E. N. BABCOCK.

Washing-Machines.

No. 143,709.

Patented Oct. 14, 1873.



WITNESSES  
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By

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# UNITED STATES PATENT OFFICE.

FRANCIS M. NIXON AND ENOCH N. BABCOCK, OF LENA, ILLINOIS.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **143,709**, dated October 14, 1873; application filed August 13, 1873.

*To all whom it may concern:*

Be it known that we, FRANCIS M. NIXON and ENOCH N. BABCOCK, of Lena, in the county of Stephenson and in the State of Illinois, have invented certain new and useful Improvements in Washing-Machine; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

Our invention relates to that class of washing-machines in which a rocking semicircular or segmental rubber is used to wash the clothes between it and the semicircular bottom of the tub in which the rubber is placed; and the nature of our invention consists in the construction and arrangements of the parts, as more fully hereinafter set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a longitudinal vertical section of our machine.

A represents the tub or box of our washing-machine, supported upon legs B B, and provided with a semicircular bottom, C. On this bottom are placed a series of half-round bars, *a a*, the sides of which are made flat, as shown, and when put together form an inverted arch. The top bar on each side of the arch is shouldered, and fastens under the lower edge of the end piece of the box or tub A, which secures all the bars firmly in position without the use of any nails, screws, or any other fastening. The side pieces of the tub or box A have each a vertical slot, *b*, in the center, and in these slots rest the ends of a shaft, D, to which the rubber is secured. This rubber consists of

segmental or semicircular side pieces E E, which are connected by half-round bars *d d* fastened by means of metal straps *e e*. The center of the circle of which the rubber forms a part is in the center of the shaft D, while the center of the circle of which the bottom C forms a part is a short distance below the lower end of the slot *b*, and the two circles passing through the outer surfaces of the bars *d* and the inner surfaces of the bars *a* have the same radius. From this construction and arrangement of the rubber and the bottom of the box it will be seen that a larger space is formed below the center of the rubber than at the ends. This causes the clothes to wash to the center when the machine is in motion, and prevents the clothes from working out at the ends. Over each end of the shaft D, inside of the rubber, is passed a slotted handle, G, the outer ends of which handles are connected by a round, *f*, and the lower ends held to the side pieces E of the rubber by screws *i* and washers *h*. By these means the handles G G may be lengthened or shortened at will to suit the convenience or size of the operator.

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

The combination of the handles G, slotted at their lower ends, washers *h*, and nuts *i* with the shaft D and rocking beater E, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 22d day of July, 1873.

FRANCIS M. NIXON.  
ENOCH N. BABCOCK.

Witnesses:

A. N. MARR,  
NEWTON LINSLEY.