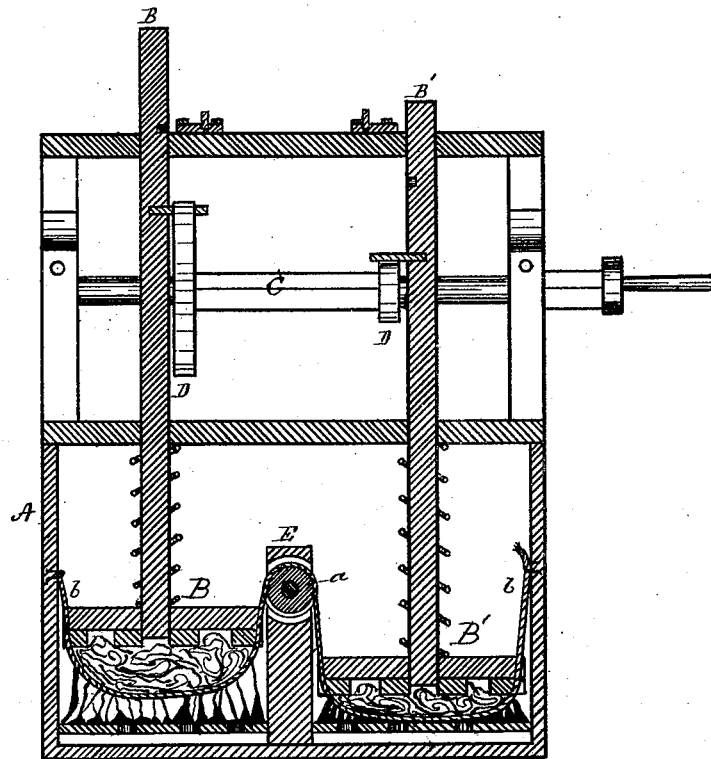


A. B. WROTH.  
WASHING-MACHINE.

No. 180,406.

Patented July 25, 1876.



WITNESSES—  
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# UNITED STATES PATENT OFFICE.

ALFRED B. WROTH, OF WINTERSSET, IOWA.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **180,406**, dated July 25, 1876; application filed June 29, 1876.

*To all whom it may concern:*

Be it known that I, ALFRED B. WROTH, of Wintersset, Iowa, have invented an Improvement in Washing-Machines, especially improvement on patent granted to me July 27, 1875, No. 165,969; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which the figure is a vertical cross-section.

The object of my invention is to obtain a more complete agitation of the clothes than was produced in my former invention; and it consists in a transverse cord or cords passing over a roller in a partition, and automatically operated by the alternate beaters, as herein-after more fully set forth.

In the said drawings, A is the body of the machine, and B B' the beaters, alternately operated by the shaft C and cams D. Between the beaters is a partition, E, in which is placed transversely a pulley, *a*. On this pulley, and having its ends attached to the inner sides of the body A, is a cord, *b*, of such a length that when the loop on one side of the partition is pressed down by the stroke of the beater, the cord is raised on the opposite side of the par-

tion. This operation is alternate, as the strokes of the beater are alternate. The clothes are placed on top of the cord or cords *b*, and it is evident that as the plunger comes down in one compartment it shortens the loop in the other, and the cord raises the clothes up from the bottom and suspends them until another stroke forces them down. This gives a thorough agitation to the clothes, and keeps them from packing in the bottom, each stroke loosening up the clothes in the adjoining compartment.

It is evident that any desirable number of cords may be used, or a broad belt of cloth or netting could be used without departing from the spirit of my invention.

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

In a washing-machine provided with alternate beaters B B', the partition E, pulley *a*, and cord *b*, substantially as and for the purpose set forth.

ALFRED B. WROTH.

Witnesses:

DANIEL BAXTER,  
J. O. BARE.