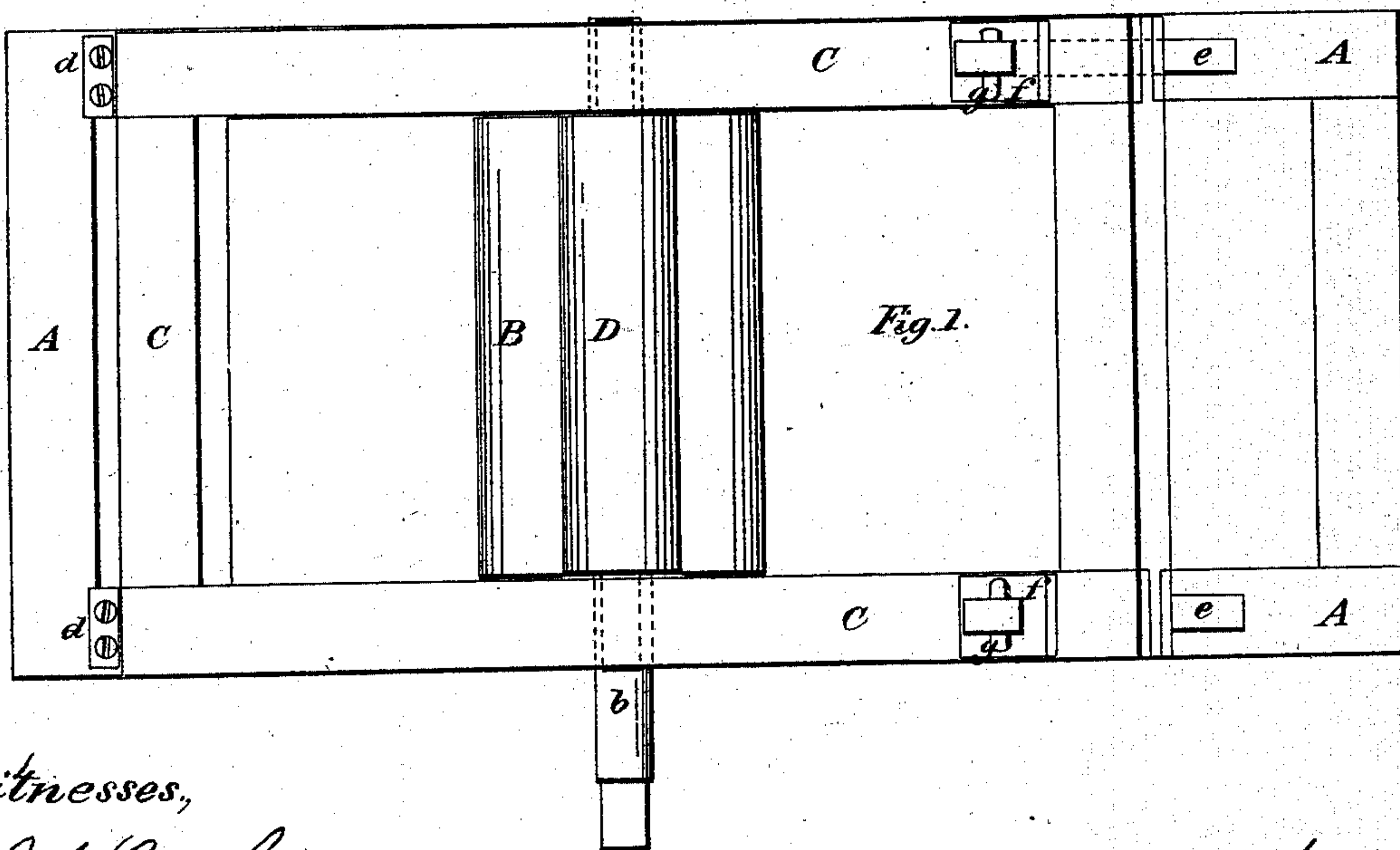
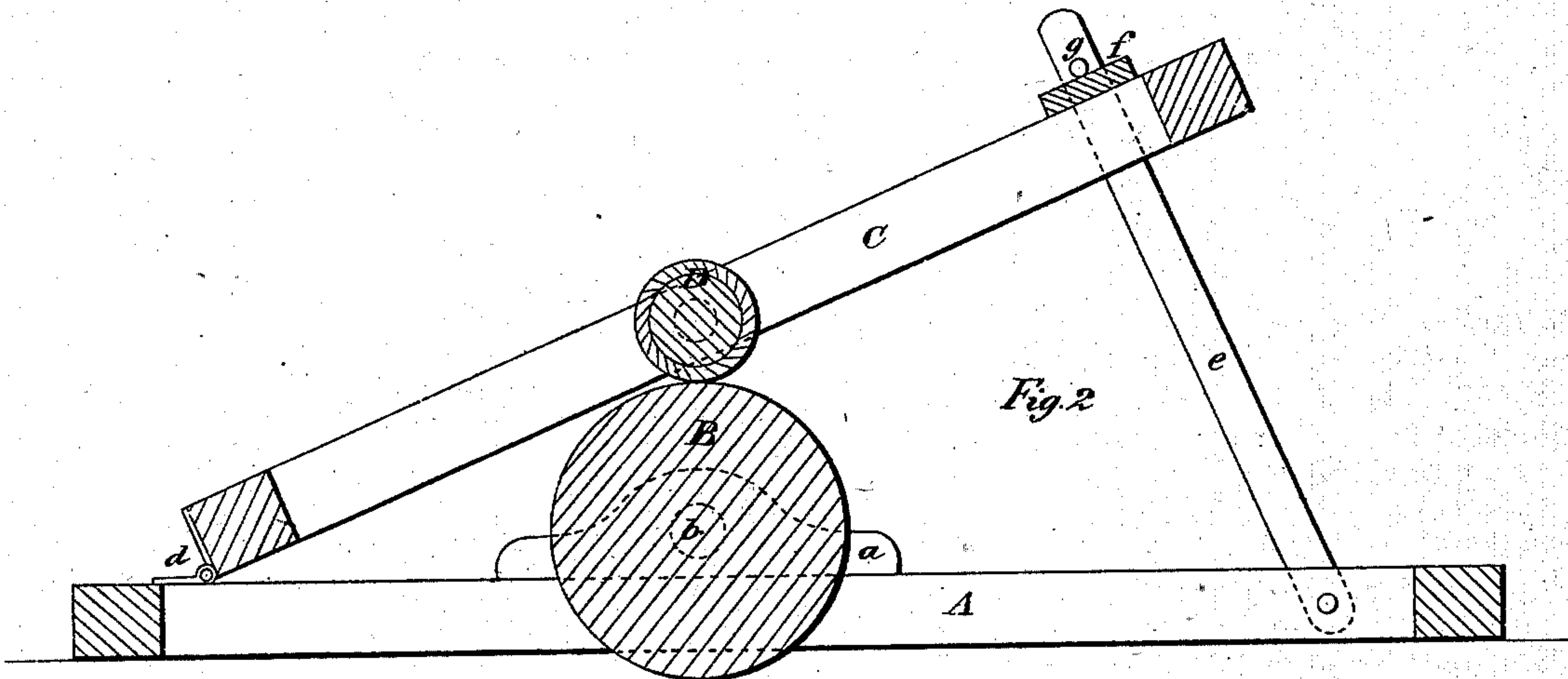


*J. E. Atwood,*

*Washing Machine,*

*N<sup>o</sup> 49,360.*

*Patented Aug. 15, 1865.*



*Witnesses,*  
*J. H. Cornish*  
*G. W. Reed*

*Inventor,*  
*James E. Atwood*



# UNITED STATES PATENT OFFICE.

JAMES E. ATWOOD, OF LYNN, MASSACHUSETTS.

## WASHING-MACHINE.

Specification forming part of Letters Patent No. 49,360, dated August 15, 1865.

*To all whom it may concern:*

Be it known that I, JAMES E. ATWOOD, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and Improved Washing-Machine; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan of a washing-machine constructed according to my new and improved plan, and Fig. 2 is a longitudinal central section of the same.

Similar letters indicate corresponding parts of the machine in both figures of the drawings.

The object of my invention is to produce an efficient, cheap, and simple washing-machine, which can be used in a common wash-tub, and which can easily be removed, and occupies but very little room.

To enable others to make and use my invention, I will now describe its construction and operation with reference to the drawings.

A is an oblong frame of proper dimensions, having secured to it, near the middle of its length, the journal-boxes for the shaft *b* of a cylinder or drum, B, of wood or other hard material. One end of the shaft *b*, Fig. 1, projects beyond the frame A far enough so that a hand-crank can be attached thereto.

C is a frame of the same width as the frame A, but somewhat shorter. This frame C is provided centrally with a roller, D, covered with india-rubber. One end of the frame C is hinged to the frame A near one end thereof, as shown at *d*, and the roller D, resting upon the cylinder B, causes the other end of the frame C to be elevated. (See Fig. 2.) Two braces, *ee*, one on each side, are attached to the frame A, and the upper ends of said braces pass through the side pieces of the frame C near the elevated end, and above this through a piece of india-rubber, *f*, which acts as a spring. By means of a pin or bolt, *g*, through the upper end of

each of the braces *ee*, above the india-rubber, the two frames are kept in proper position relatively.

When this machine is to be used it is placed, with the roller D downward, upon the top of the tub or other vessel which contains the clothes to be washed, so that the water will cover the said roller D. One end of the clothes is inserted between the cylinder B and roller D, and the cylinder turned by means of the crank to draw in the clothes between the cylinder and roller. The crank is then moved to turn the cylinder backward and forward and keep moving the clothes back and forth between the cylinder and roller. This will squeeze all the dirt out of the clothes very quickly. The machine is afterward turned over, so that the roller D will be on top, and the crank is then turned to run the clothes through between the cylinder and the roller without letting them drop into the water, and the water is thus expressed from the clothes as by a wringer.

During the operation of the machine the elasticity of the india-rubber covering of the roller D, that of the india-rubber springs *ff*, and the side pieces of the frames A and C all combine to permit the cylinder B and roller C to separate far enough to permit the passage between them of the thicker articles or parts of articles and yet cause the thinner parts or articles to be squeezed in passing between the cylinder and roller.

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

The frames A C, connected directly together at one end, and connected at the opposite end by braces *e* and springs *f*, in combination with the cylinder or drum B and roller D, substantially as herein specified.

JAMES E. ATWOOD.

Witnesses:

J. W. COOMBS,  
G. W. REED.