

(No Model.)

J. F. WOOD.
WASHING MACHINE.

No. 327,507.

Patented Sept. 29, 1885.

Fig. 1.

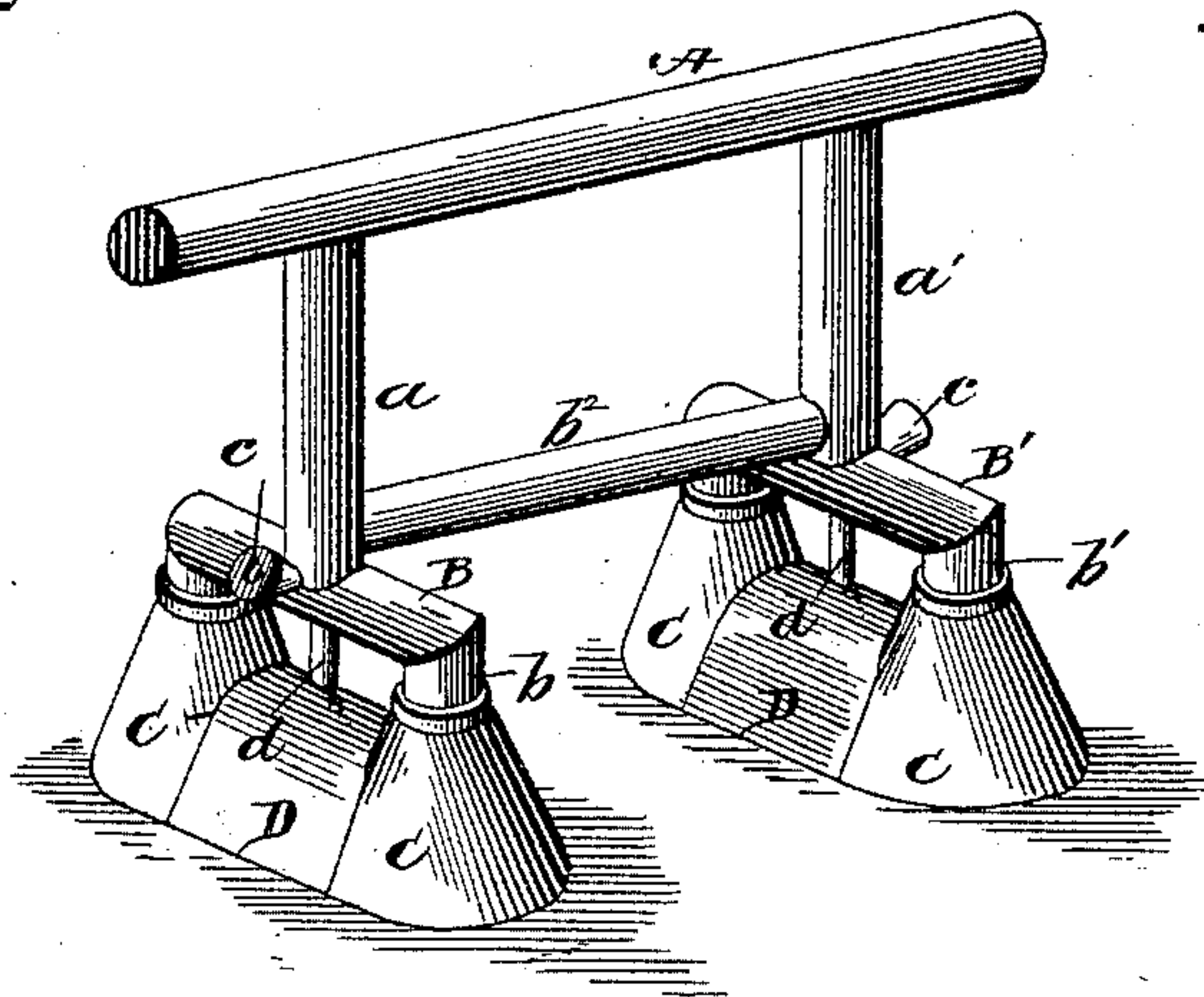


Fig. 2.

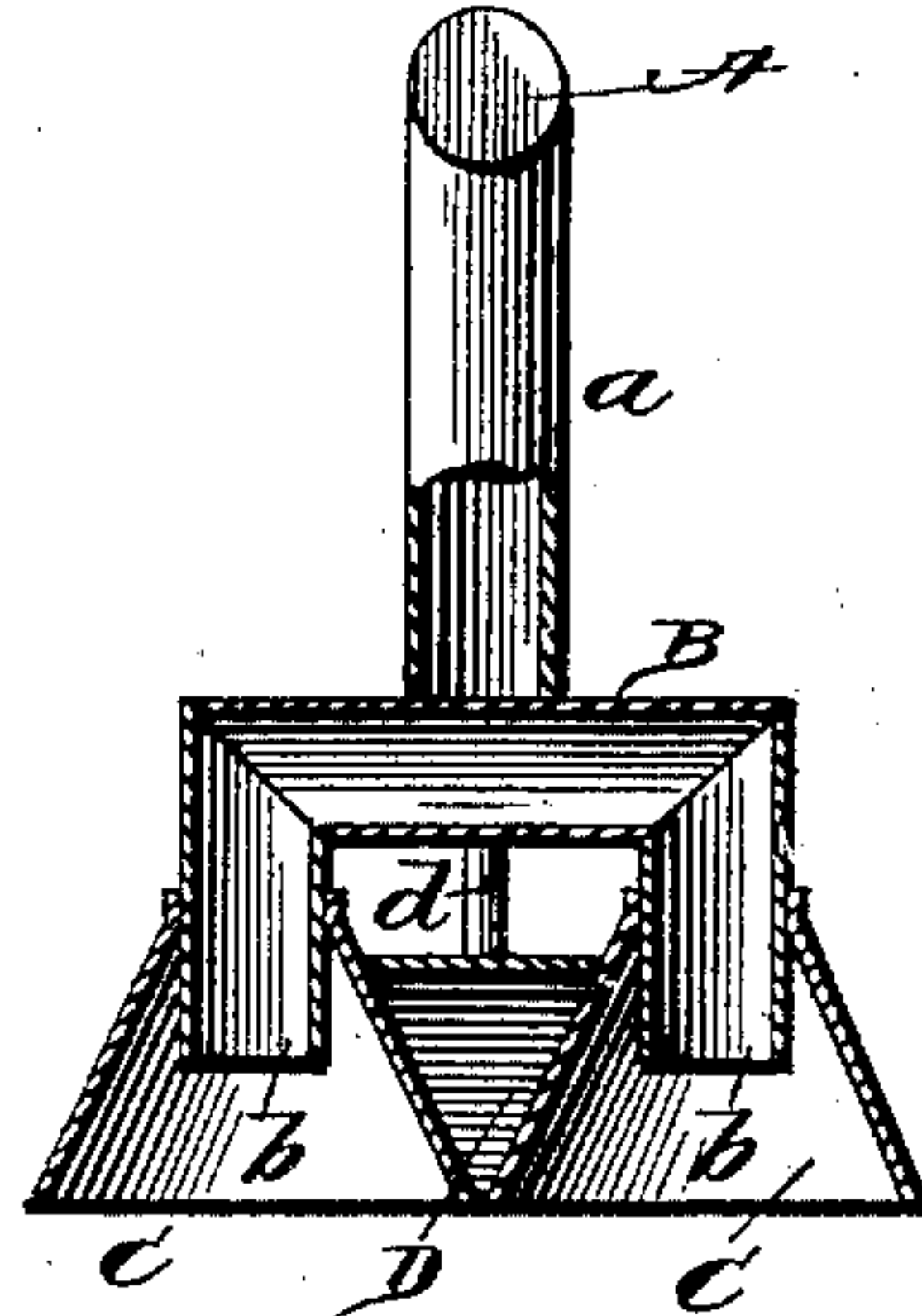


Fig. 3.

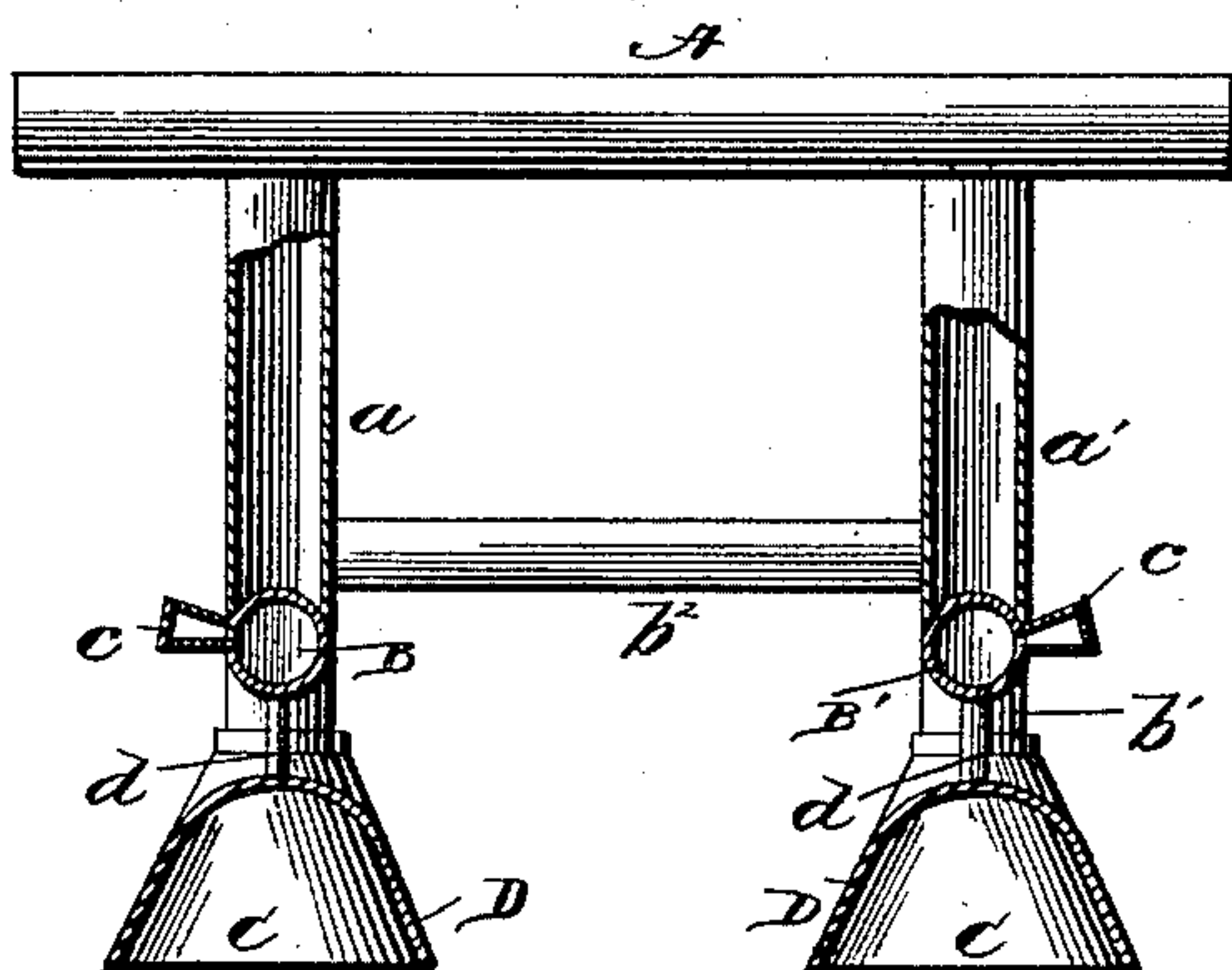
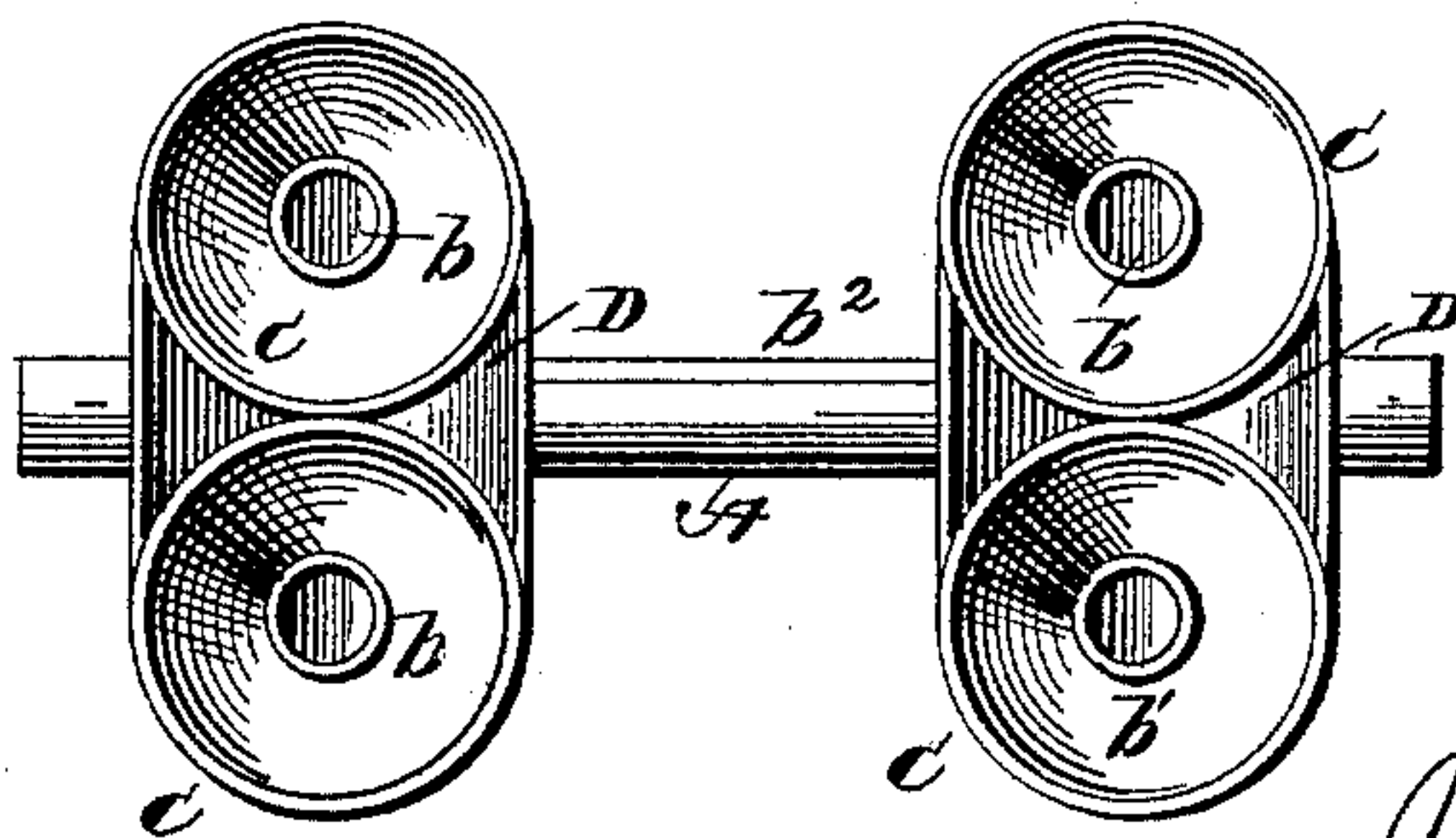


Fig. 4.



WITNESSES

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WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 327,507, dated September 29, 1885.

Application filed February 11, 1885. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. WOOD, a citizen of the United States, residing at Woodyard, in the county of Athens and State of Ohio, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to 10 which it appertains to make and use the same.

My invention relates to washing-machines; and it has for its object to provide a device of this character which shall be cheap and simple in its construction, effective in its operation, and strong and durable, and one by which the injury to the material being operated upon will be reduced to a minimum.

With these ends in view the invention consists in the combination, with a supporting-frame, of a series of conical shells and steam outlet or escape openings.

The invention further consists in the improved construction and combination of parts, hereinafter fully described, and pointed out 25 in the claims.

In the drawings, Figure 1 is a perspective view of a washing-machine constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 30 is a transverse vertical section. Fig. 4 is a bottom view.

In the accompanying drawings, in which like letters of reference indicate corresponding parts in all the figures, A represents a bar or handle, depending from which, near each end thereof, is a downwardly-extending rod or bar, *a a'*. These rods or bars *a a'* are connected and braced near their lower ends by means of a cross-piece, *b²*, secured thereto 40 in any suitable manner.

At the lower ends of the pipes *a a'* are provided transverse pipes or tubes B B', which are closed at their ends, and extending downwardly from each of the ends of the pipes B 45 B' are pipes or tubes *b b'*.

C represents shells, which are preferably constructed of metal and conical in form. These shells or openings are provided at their upper ends with holes or openings to receive 50 the ends of the pipes *b b'*, which project there-through into said shells C, the lower ends of said shells C being on the same horizontal plane.

The pipes or tubes B B' and *b b'* communicate, and communicating with the pipes or tubes B B', midway between the ends of the same, are short branch pipes *c* for the escape of the steam which necessarily enters said pipes when the machine is operated.

The conical shells C, which serve as pounders, are braced by metal strips D, which are soldered, riveted, or otherwise suitably secured to the said shells. The bracing strips D are secured to the shells upon the outer and inner sides of the same, and extend between them, thus forming a solid side or wall to each pair of shells, and the said bracing-strips are in turn braced by short bars or rods *d*, which are secured thereto at one end and to the pipes or tubes *b b'* at their other 65 ends; and as said bracing-strips are rigidly connected with the conical shells it will be seen that the rods *d* also serve as braces for the same.

The operation is as follows: The clothes to be cleansed are placed in a tub about one-half or two-thirds full of water, and the machine moved to and fro, which movements create alternately in the shells and pipes a suction and an exhaust pressure, the upward movement or raising of the shells on one side, creating a suction, while the downward movement serves to create a pressure and forces the air and steam from the shells through the short or branch pipes *c*. 85

By this construction of machine the most delicate of fabrics may be washed without any injury to the same; and, further, the machine before described is simple in its construction, effective in its operation, and may 90 be manufactured and supplied at a slight cost.

I claim as my invention, and desire to secure by Letters Patent—

A washing-machine, comprising a handle, bars depending from the ends thereof, tubes B B', secured to the lower ends of said bars, pipes depending from the ends of said tubes, conical shells secured to said pipes, bracing-strips connecting the shells and the escape-pipes in the tubes B B', substantially as set 100 forth.

In testimony whereof I affix my signature in presence of two witnesses.

Witnesses: JAMES F. WOOD.

A. H. WOODYARD,
JANE WOODYARD.