

M. A. CALDWELL.  
 WASHING-MACHINE.

No. 181,556.

Patented Aug. 29. 1876.

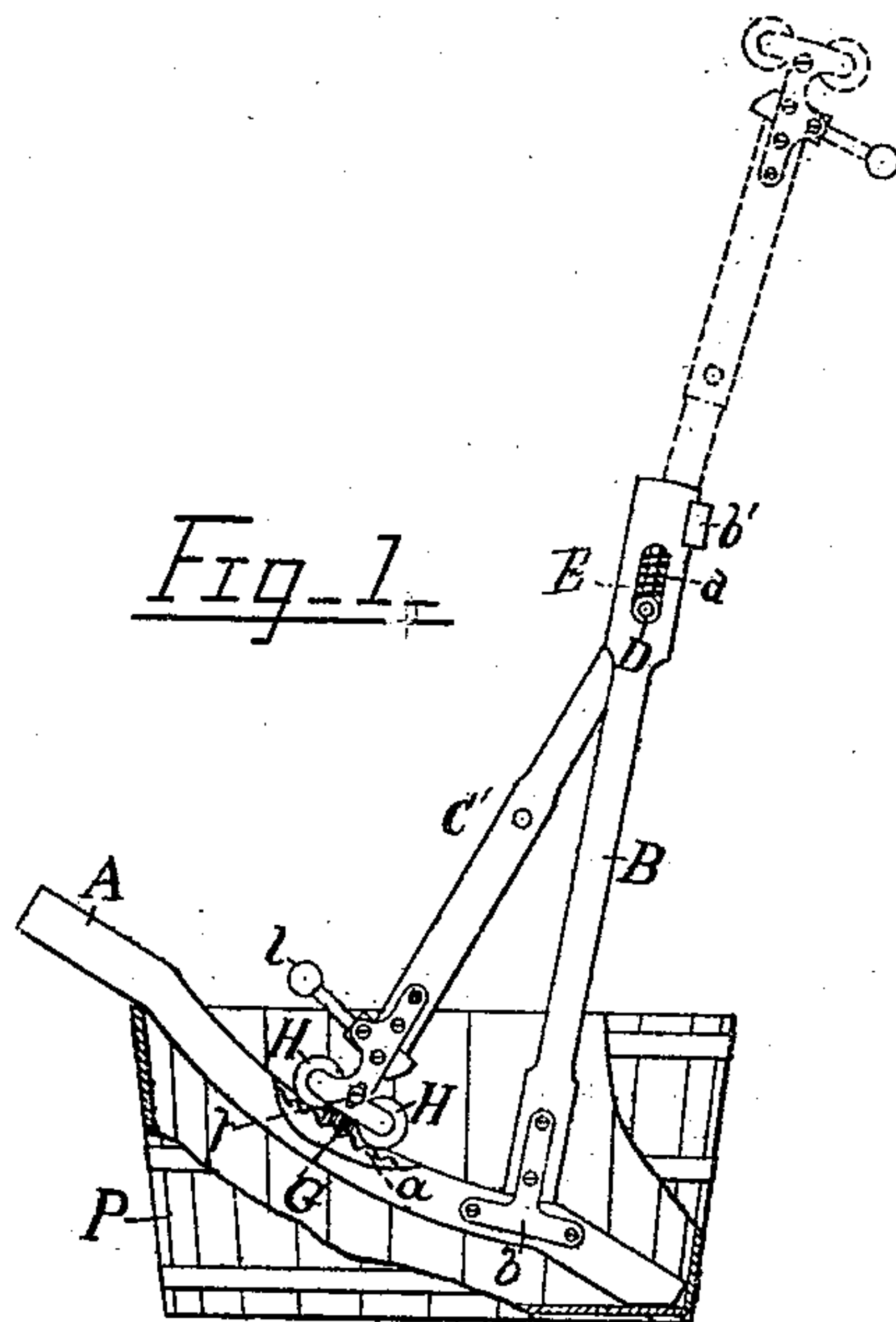


Fig-2-

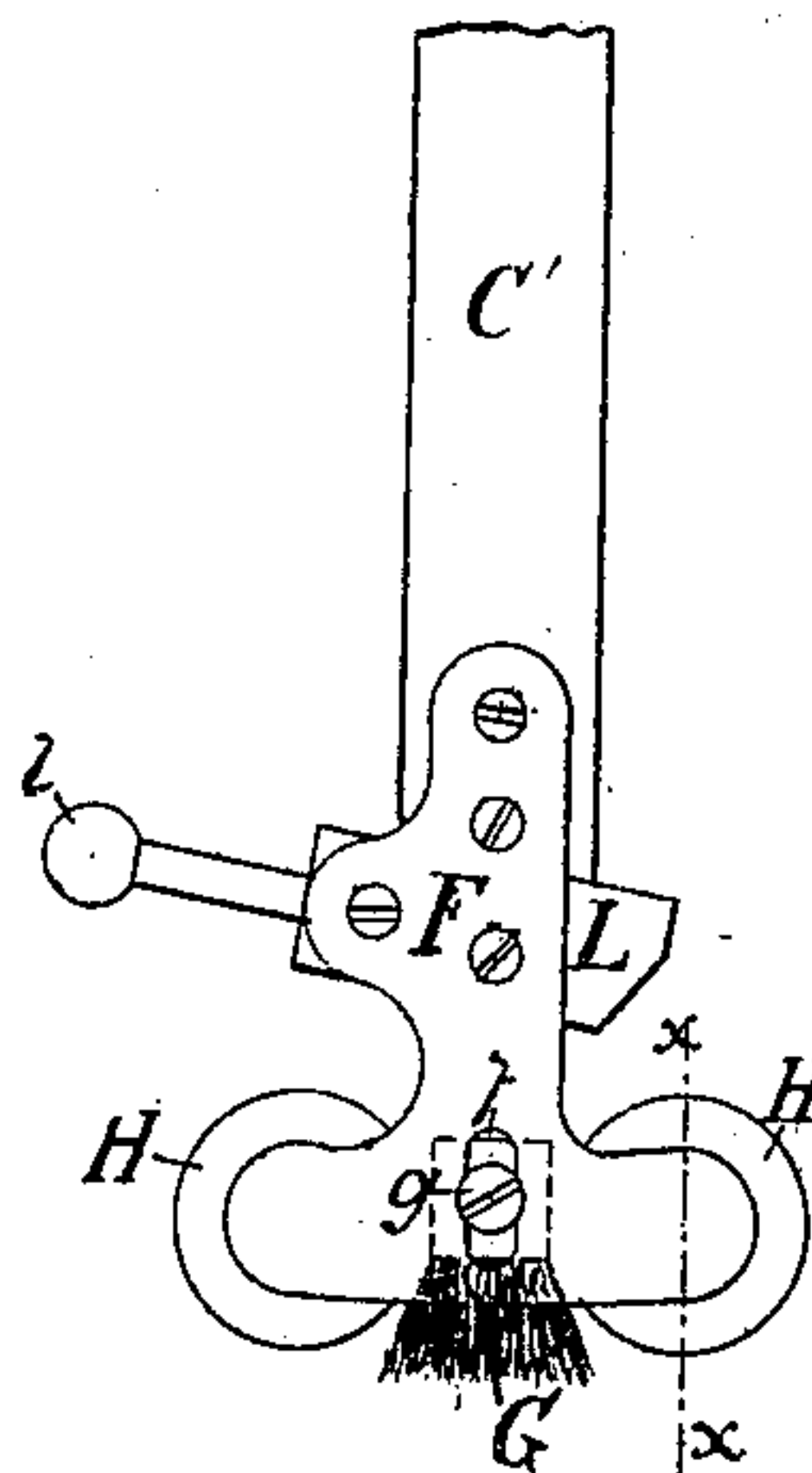


Fig-4-

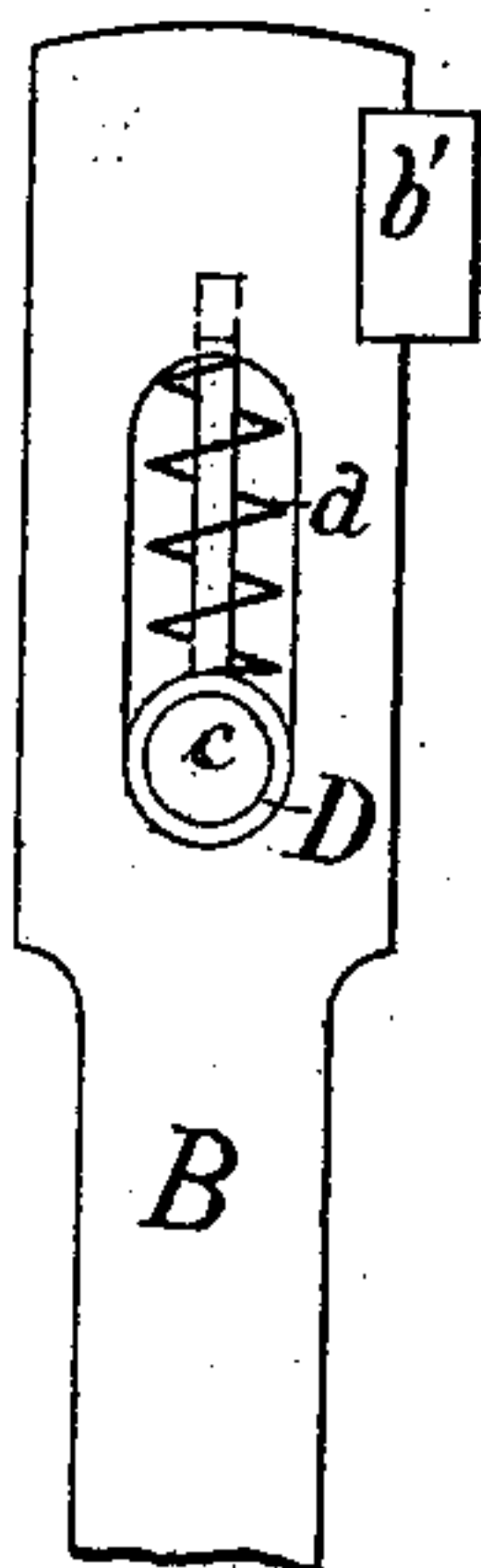


Fig-3-

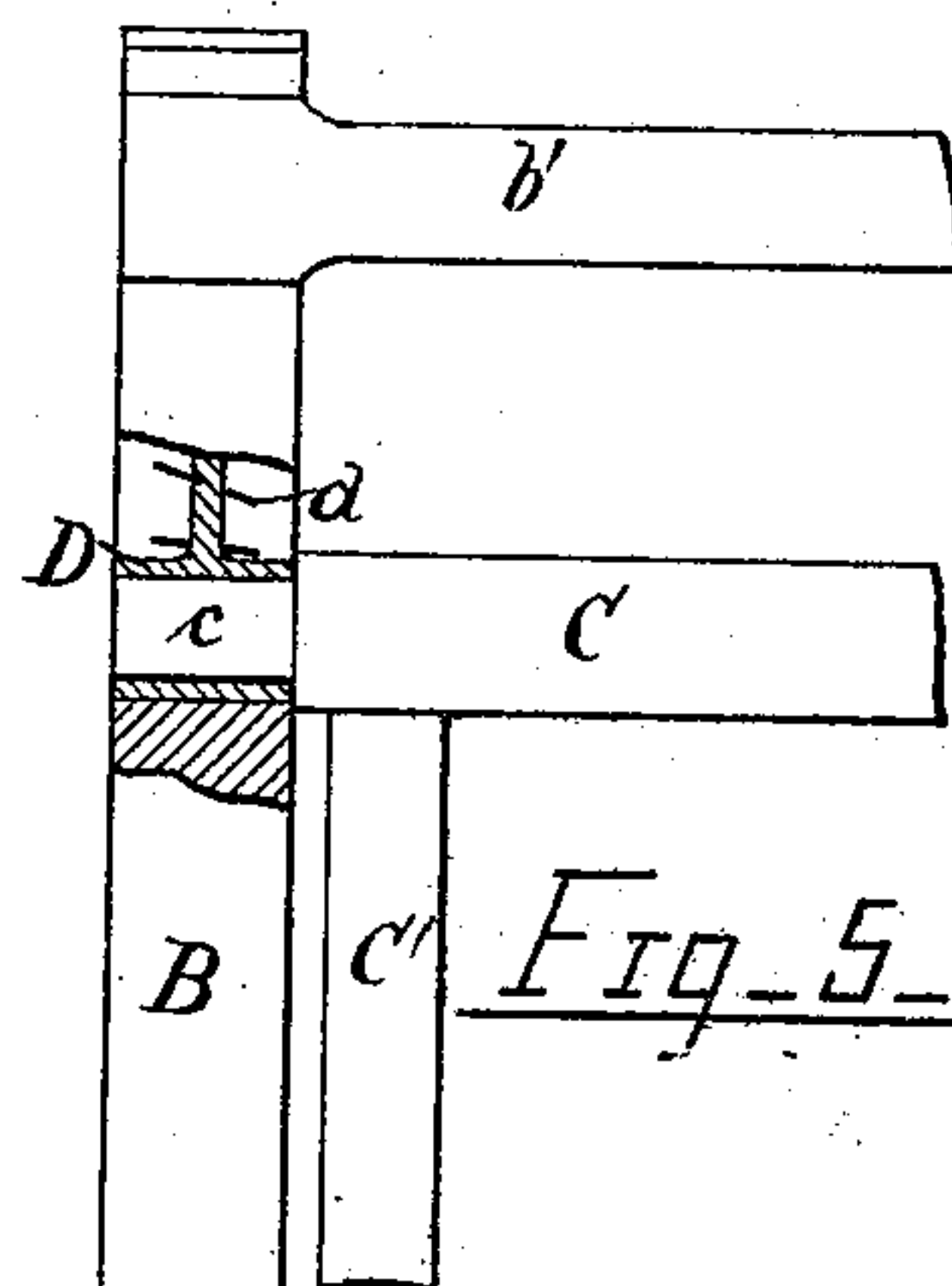
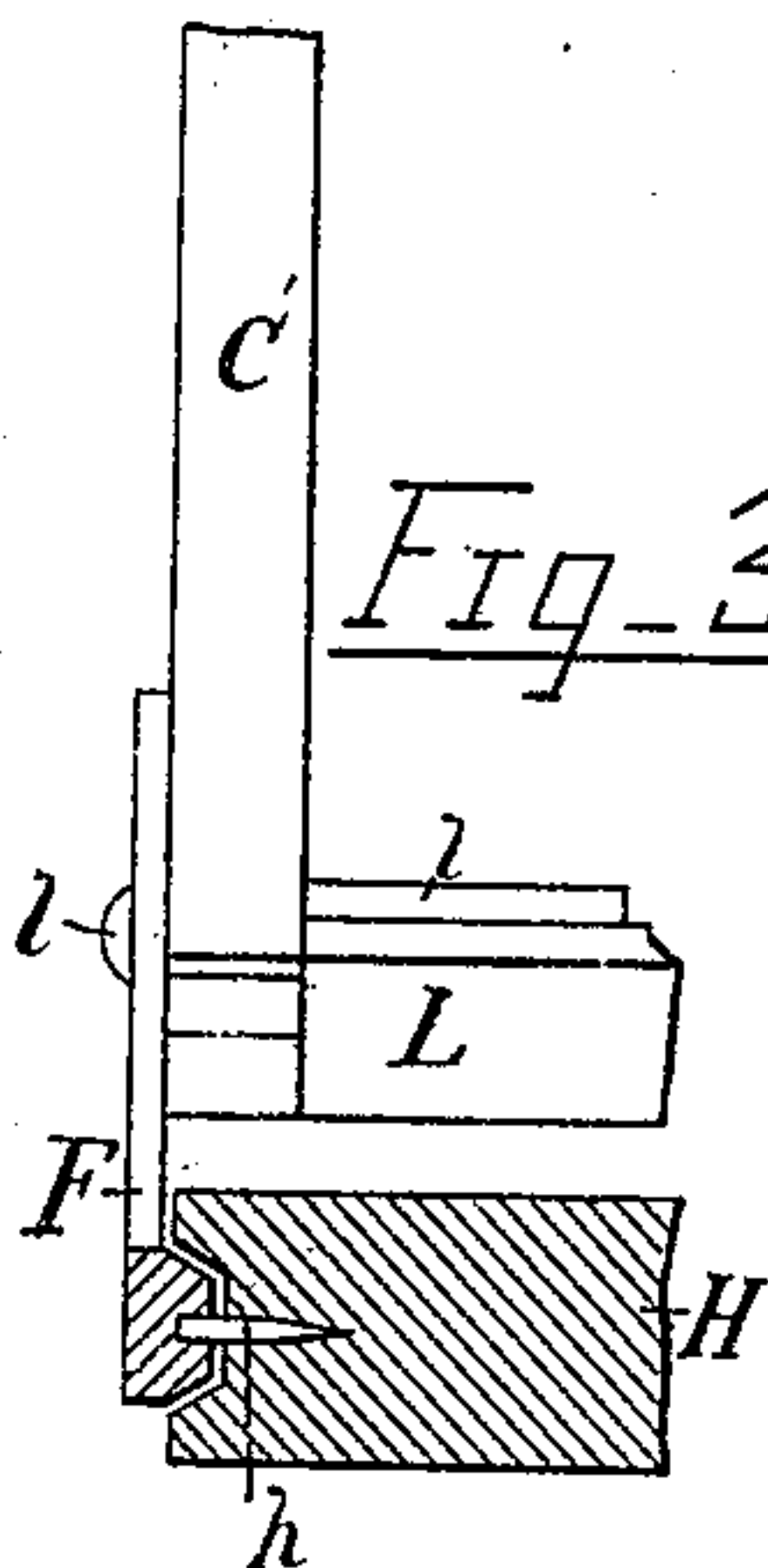


Fig-5-

WITNESSES

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# UNITED STATES PATENT OFFICE.

MARVIN A. CALDWELL, OF NORTH EAST, PENNSYLVANIA.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **181,556**, dated August 29, 1876; application filed January 26, 1876.

*To all whom it may concern:*

Be it known that I, MARVIN A. CALDWELL, of North East, in the county of Erie and State of Pennsylvania, 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 thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a machine for washing clothes, which shall be attached to a wash-board, and may be used or not, as the operator may desire; and which, when in use, shall closely resemble in its actions the hand process.

My device is shown in the accompanying drawing as follows:

Figure 1 is a side elevation view of my device, showing the position it occupies in the wash-tub. Fig. 2 is a detached view of the rubbing device. Fig. 3 shows the manner of hanging the rollers in the rubber. Figs. 4 and 5 show the manner of hanging the rubbing device, so as to give it elasticity.

The following description will fully explain my invention.

A is the wash-board, and is the same as any ordinary wash-board, only the corrugated face is curved—that is, it is the arc of a circle. Near the lower ends of the board A is attached a standard, B, by means of the casting b. These standards are bound together at the top by a cross-piece, b'. Near the upper ends of the standards are slots E, in which is hung a rock-shaft, C. The rock-shaft C is properly hung or journaled in the casting D, which

lies in the slot E. It is simply an eye or box, with a stem which acts as a guide, and around which is a coil-spring. Thus the rock-shaft may be raised or lowered—that is, it will move up and down in the slot E according to the amount of clothes passing under the rubber. Attached to the rock-shaft C is a swing, C', at the lower end of which is the rubbing device. This is the essential feature of my invention. It consists of two pressing-rollers, H H, pivoted on the T-iron F, and a brush, G, attached in an adjusting slot, f, by a screw, g, between the two rollers. The rollers are pivoted in the manner shown in Fig. 3. When the brush G becomes worn out, it can be removed, and a new one substituted. The movement of the rubbing device over the clothes on the board is the same as that of the hands when washing by hand; and the action of the pressing-rollers and brush is believed to be more effective. When the rubber is not in use it is thrown up, as seen by dotted lines in Fig. 1.

What I claim is as follows:

A washing-machine consisting of a curved corrugated wash-board, A, standards B B, having slots E E, in which are secured the journal-castings D D, the same being of the form shown, and provided with springs encircling their shanks, rock-shaft C, oscillating frame C', and a rubber device consisting of rollers H H, and brush G, the whole constructed, combined, and arranged to operate substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

MARVIN A. CALDWELL.

Witnesses:

JNO. K. HALLOCK,  
ELMER GREEN.