

J. Leib,

Washing Machine,

Nº 85,315,

Patented Dec. 29, 1868.

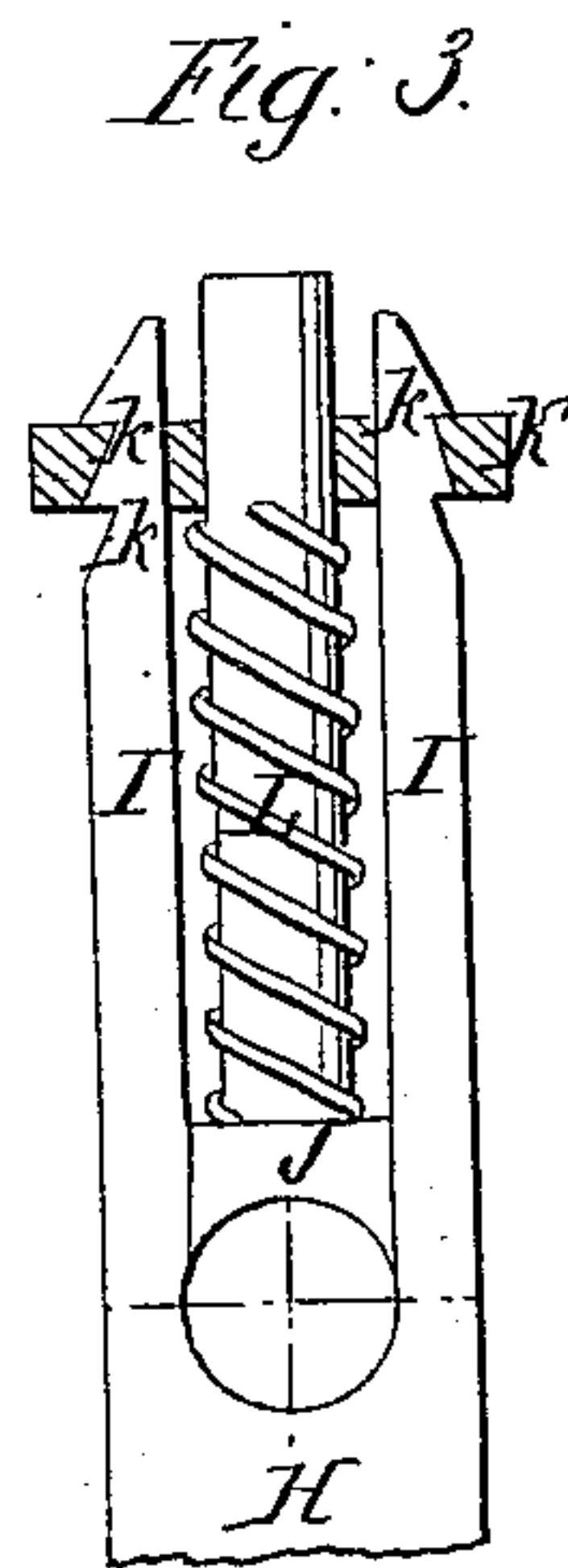
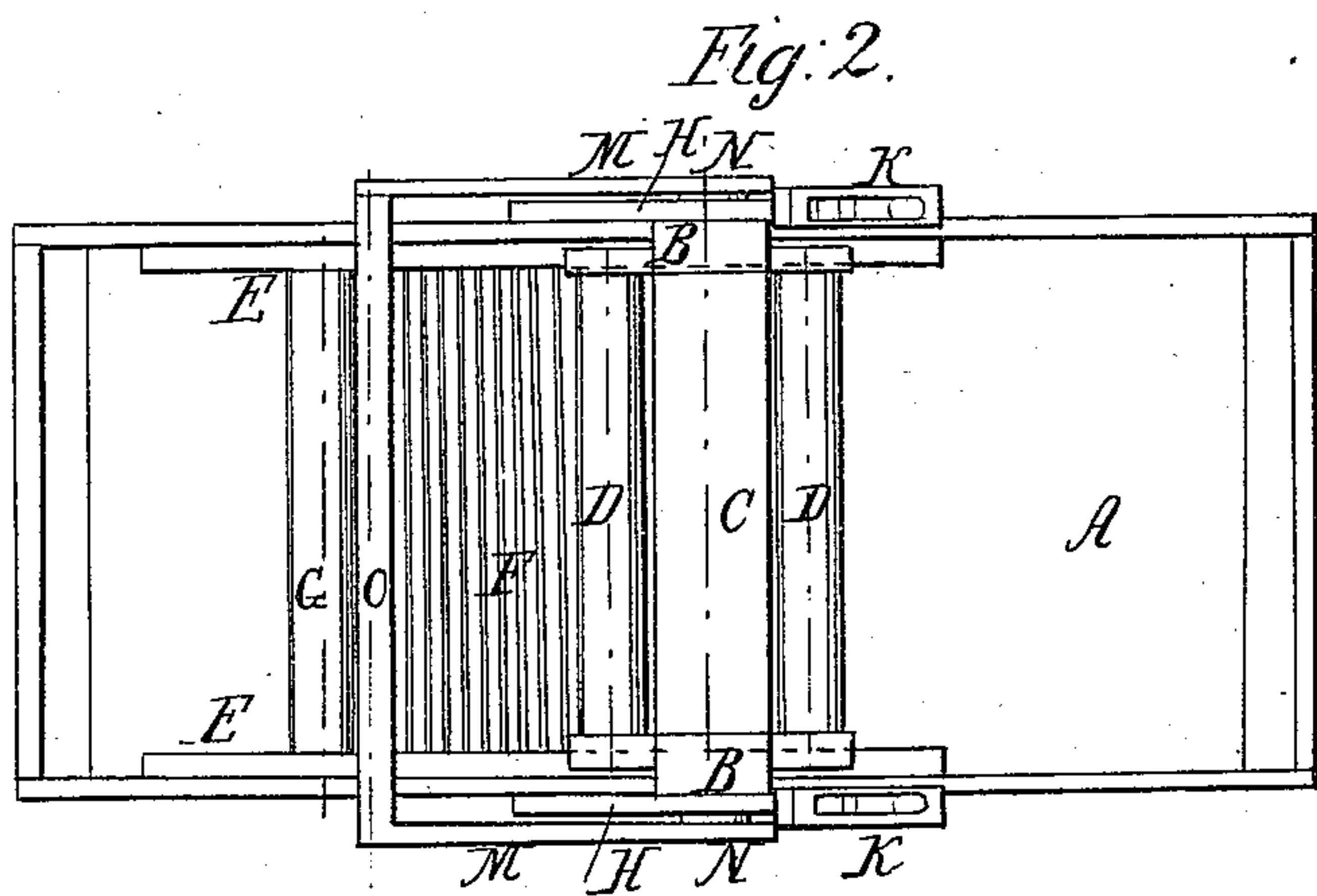
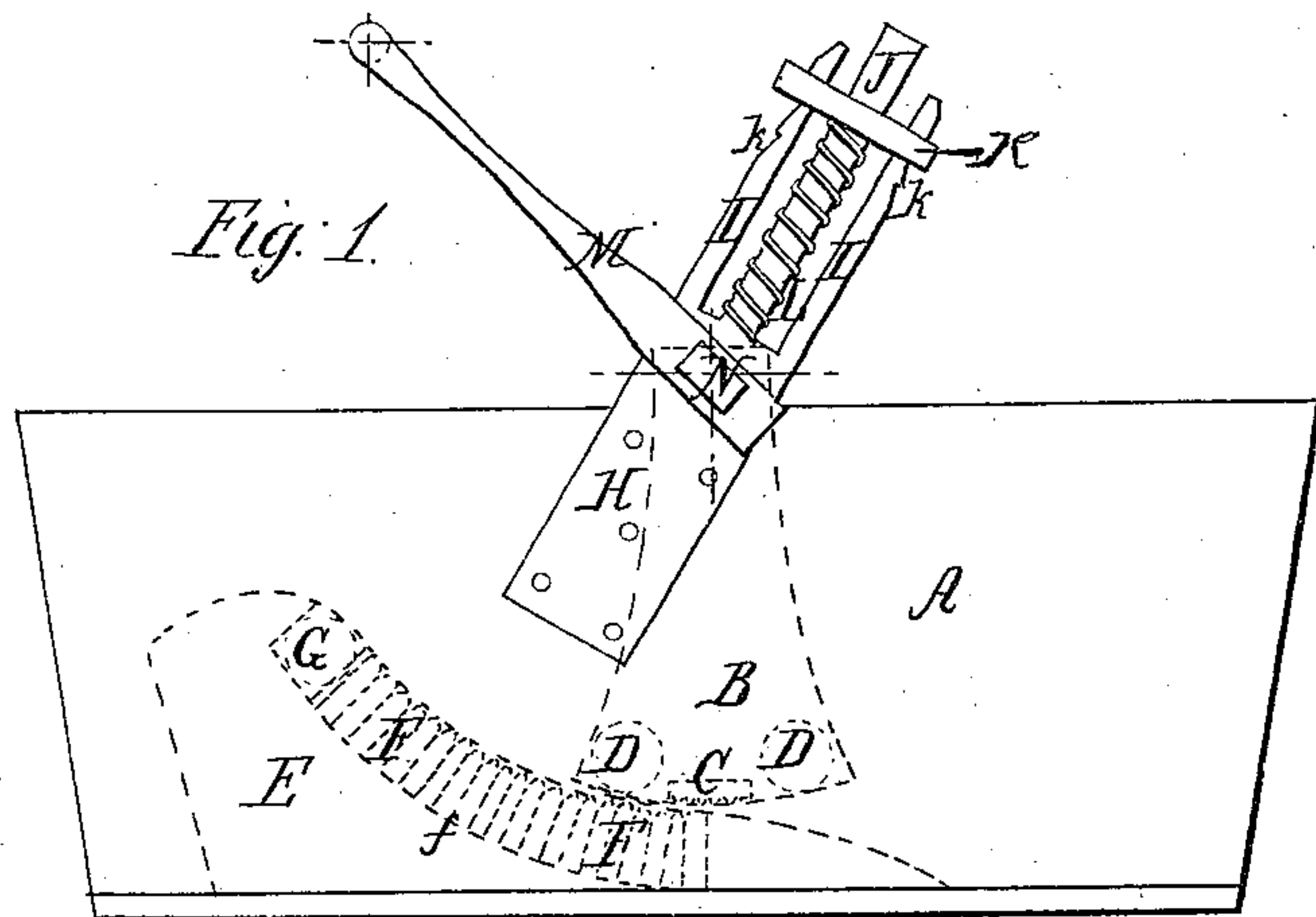
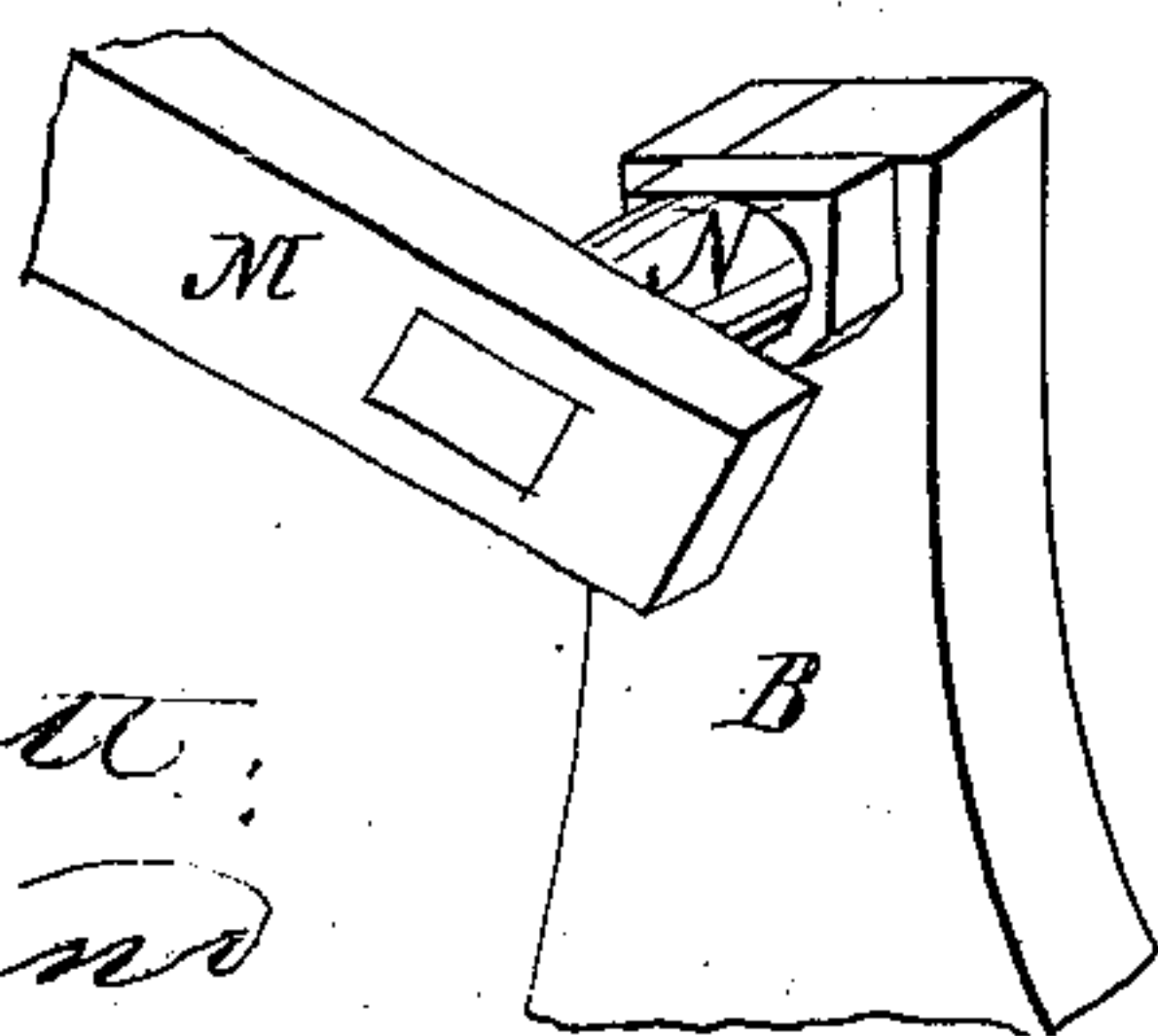


Fig. 4.



Witnesses;
Rush R. Abbott,
A. W. Heldenbrand

Inventor;
John Leib,
By John Abbott

United States Patent Office.

JOHN LEIB, OF AKRON, OHIO.

Letters Patent No. 85,315, dated December 29, 1868.

IMPROVED WASHING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN LEIB, of Akron, in the county of Summit, and State of Ohio, have invented new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of my invention, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon, of which drawings—

Figure 1 is an elevation of my improved washing-machine.

Figure 2 is a plan of the same.

Figure 3 is a detail elevation of the mechanism for securing and pressing down the rubber.

Figure 4 is a perspective view, showing manner of combining rubber-frame, axle, and handles.

The nature of my invention consists in the novel mode of constructing the frame for the axle of the rubber, whereby I am able to vary the amount of pressure on the rubber in a very cheap and effectual manner, at the same time having the several parts so arranged as to render it very easy to remove the rubber from the box whenever found desirable.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The box A is made of wood or other suitable material, of the general form shown, and may be set on the ground, as shown in drawing, or legs may be secured to it in an ordinary manner.

The wash-board frame E E is secured in the inside of the box A by nails or screws, which are driven through said frame-pieces into the sides of the box.

At the upper ends of the frame E E is pivoted the roller G, by means of pins at its ends which run in holes in said frame-pieces, said holes being so arranged as to bring the surface of the roller G a little above the plane of the wash-boards F F.

The frame-pieces E E have a deep notch, *f*, cut in them, in which set the pieces F F, which form the wash-board. These pieces F are rounded off on their upper edges, and form, when setting beside each other, a corrugated wash-board, with a surface similar to that of an ordinary wash-board.

The rubber consists of the two rollers D D, which are pivoted between the rubber frame-pieces B B by pins driven into their ends, and running into holes in the pieces B B, and the corrugated rubber-board C, which is secured between the pieces B B and between the rollers D D.

In the upper ends of these pieces B B are mortised the axle-pieces N N, which are of the form shown in fig. 4, the ends of which are mortised into the handle-pieces M M, which are united at their other ends by the handle O, as seen in fig. 2. The handle-pieces M M and frame-pieces B B are placed at an oblique angle with each other, as seen in figs. 1 and 4, for greater convenience in operating the rubber by the handle O.

The pieces H H are secured by nails or screws to the box A, and their upper and central portions are cut out, leaving the arms I I and a rounded bottom portion, on which rests the round portion of the axle-pieces N N, when there are no clothes between the wash-board F F and rubber D C D.

These arms I I are of such size and material as to possess a small degree of elasticity, and in their outer edges are cut the notches *k k*.

The pressers J are of the form shown in fig. 3, and are arranged between the arms I I, their ends being cut in a concave form, and resting on the round part of the axle-pieces N N.

A spiral spring, L, sets around the round portion of the pressers J, its lower end resting on the square lower part of said pressers, while its upper end bears against the collar K, which is of the form shown, and is provided with bevelled faces on the inside ends, as seen in fig. 3, which bevelled faces fit into the notches *k k* in the arms I I, and thus secure the collars K K in any desired position.

The general construction of my machine having been thus fully described, its operation is readily seen. The clothes to be washed are put into the box A, at the lower side of the wash-board F F, and a sufficient amount of washing-water is introduced to fill the box A up to about one-third of the height of the wash-board. The handle O is then brought down into the box A, which carries the rubber D C D back from the wash-board F F, when a portion of the clothes are drawn up on said wash-board. Then, by raising and operating the handle O, the rubber D C D is caused to rub that portion of the clothes on the board F F, the rollers D D serving to keep the clothes pressed down, so as not to be torn by the rubber-board C, and the springs L L serving to keep the rubber D C D pressed down on the clothes, and also to allow of a rising of said rubber, to conform to any irregularities in the thickness of the clothes.

When that portion of the clothes on the board F F has been sufficiently washed, the handle O is raised to such a height as to bring the rubber C over and beyond the roller G. The portion of clothes on the board F F having been brought up so as to come on the roller G, the passing of the rubber C over said roller will draw up the clothes over the board F F a distance equal to the width of the rubber C. The clothes thus drawn over the roller G being grasped by the operator, to prevent their being drawn back, the rubber D C D is brought back over the board F F, and the washing or rubbing of the clothes performed, as before shown.

It is readily seen that, by springing together the arms I I, the collars K K may be slipped up or down one or more notches *k k*, thus decreasing or increasing the tension on the springs L L, as desired; or, said collars K K may be taken off of the arms I I, the pressers J J removed from between said arms and off of the arms N N, and the whole rubber and frame D C

D, B B, N N, M M, O, taken from the box A, which can then be used for rinsing the clothes if desired.

It is also readily seen that rubber springs might be used in the place of the spiral springs L L, if found desirable.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The peculiar arrangement and combination of the frame-piece H with the elastic arms I I, having notches *k k* cut therein, the collar K, with bevelled inner-end

faces, the spring L, presser J, and axle-arm N of the rubber-frame, the several parts being arranged and combined substantially as and for the purpose herein specified.

As evidence that I claim the foregoing, I have hereunto set my hand in the presence of two witnesses, this 17th day of October, A. D. 1868.

JOHN LEIB.

Witnesses:

JOHN CRAMER,
J. A. SUMNER.