2 Sheets--Sheet 1.

D. M. HOLMES.

Improvement in Washing-Machines.

No. 131,059. Patented Sep. 3, 1872.

Fig. 1

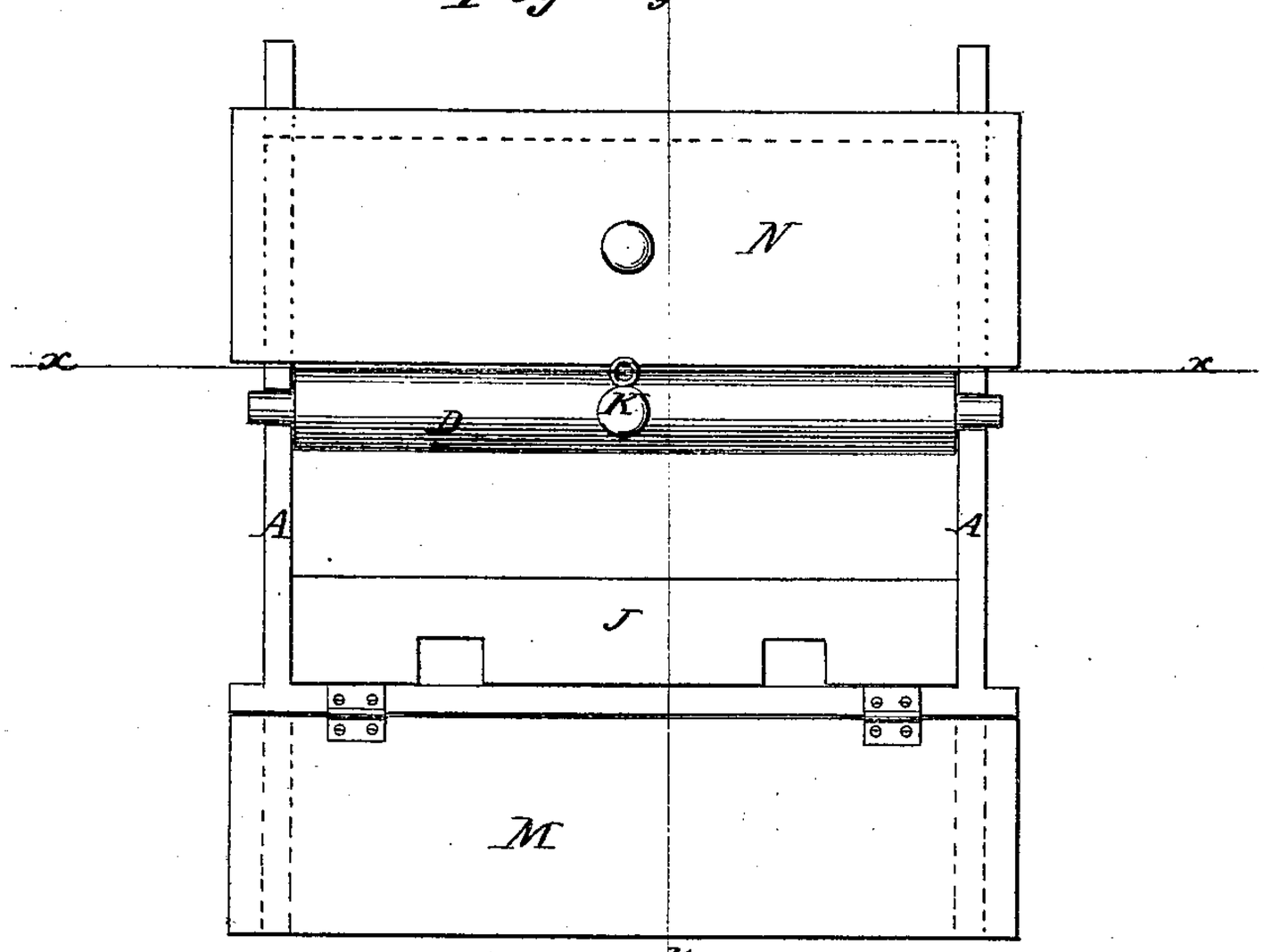
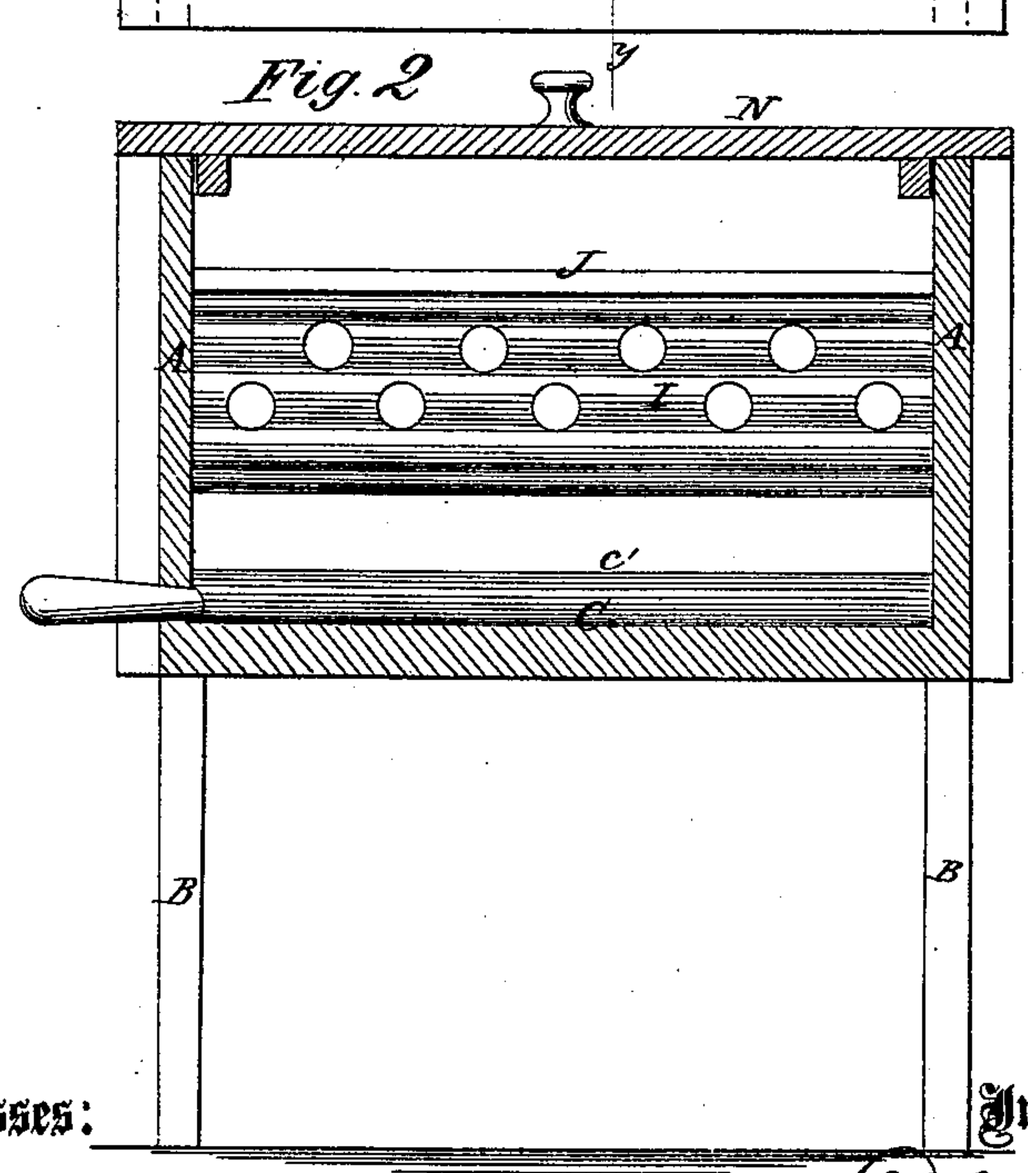


Fig. 2



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2 Sheets--Sheet 2.

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Fig. 3

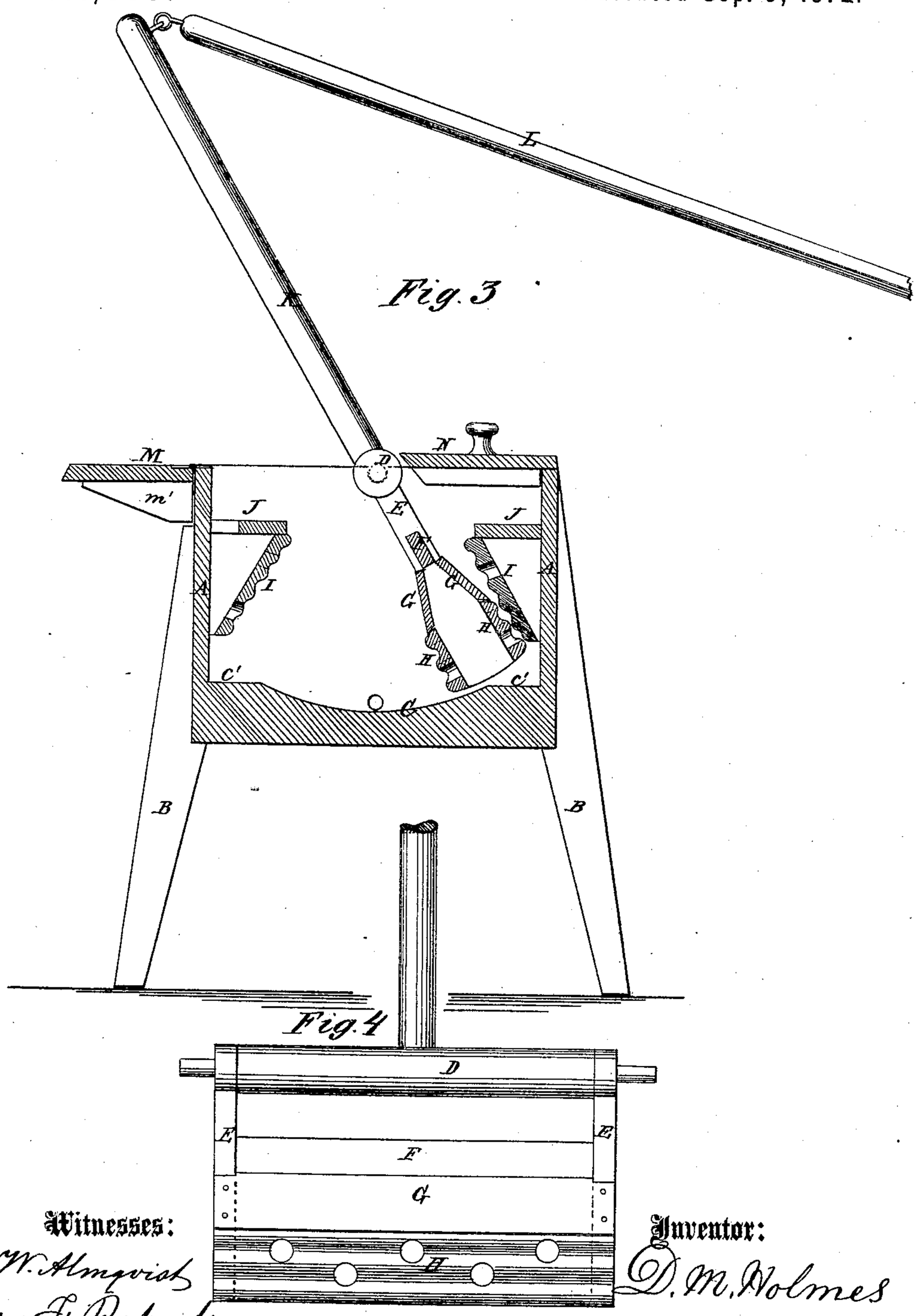

Fig. 4

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UNITED STATES PATENT OFFICE.

DANIEL M. HOLMES, OF WESTCHESTER VILLAGE, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **131,059**, dated September 3, 1872.

Specification describing a new and useful Improvement in Washing-Machine, invented by DANIEL M. HOLMES, of Westchester Village, in the county of Westchester and State of New York.

In the accompanying drawing, Figure 1, Sheet 1, is a top view of my improved machine, the hinged part of the cover being turned back. Fig. 2, Sheet 1, is a detail vertical section of the same taken through the line *x x*, Fig. 1. Fig. 3, Sheet 2, is a detail vertical section of the same taken through the line *y y*, Fig. 1. Fig. 4, Sheet 2, is a detail side view of the beater.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved washing-machine, simple in construction, convenient in use, easily operated, and effective in operation, washing the clothes quickly and thoroughly, and without wearing them or injuring even the most delicate fabrics; and it consists in the construction and combination of various parts of the machine, as hereinafter more fully described.

A is the suds-box which is made rectangular in form and is supported upon legs B of such a length as to raise the machine to a convenient height. C is the bottom of the box A, which is concaved longitudinally, about upon the arc of a circle, having its center above the axis of the beater. The concavity of the bottom C does not extend quite to the sides of the tub A, a shoulder, *c'*, being left along each side, as shown in Fig. 3. D is a shaft, the journals of which work in slots or notches in the centers of the upper edges of the ends of the box A. To the shaft D, near its ends, are attached the upper ends of the two bars, E, which extend down to or nearly to the bottom C of the box A. The bars E are connected a little above their centers by a cross-bar, F. From the cross-bar F the bars E gradually increase in width for about half the distance to their lower ends, and remain the same width for the rest of the distance to said lower ends. To the inclined edges of the bars E are attached boards G, and to their straight edges are attached boards H. The boards H are corrugated longitudinally, and have numerous holes formed in them, as shown in Fig. 4, to allow the water to pass through freely. The interior of the beater thus forms a space or chamber, into which the water may flow when squeezed out of the clothes, so that it may be impossible to fill the box so full of clothes as to prevent the free circulation of the water, and thus impede the cleansing of the clothes. I are boards attached to the sides of the box A, and which are so placed as to be nearly upon radial lines from the axis of the shaft D, so that the clothes may be pressed squarely between them and the sides of the beater. The boards I are corrugated longitudinally, and have numerous holes formed through them to allow the water to pass through freely when squeezed out of the clothes. The upper edges of the boards I are supported, and the spaces between said boards and the sides of the box A are covered, by boards J, as shown in Fig. 3. To the center of the shaft D is attached the lower end of an upwardly-projecting arm or lever, K, to the upper end of which is pivoted the upper end of a bar, L, which extends down into such a position that it may be conveniently grasped by the operator. This arrangement enables the machine to be operated by operators of different heights with equal facility, and also gives a great advantage of leverage. One part, M, of the cover is hinged to the edge of the box A, and is provided with brackets or braces *m'*, so as when the said cover is turned back, to support the said cover in a horizontal position, to adapt it to serve as a table. The other part, N, is detachable, so that it may be removed to allow a wringer to be attached.

In using the machine part of the clothes are placed upon each side of the beater, and as the said beater is swung upon its pivots, the clothes are compressed between the said beater and the inclined side boards I. As the beater is swung back, the clothes drop down upon the shoulder *c'*, which checks them and causes them to turn over in the water, so that they will be compressed each time in a new place, and thus insuring their being thoroughly washed.

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

1. The beater D E F G H, constructed substantially as herein shown and described, in combination with the boards I and box A, as and for the purposes set forth.

2. The shoulders *c'*, formed upon the sides of the concaved bottom C of the box A, in combination with the boards I and beater D E F G H, substantially as herein shown and described, and for the purpose set forth.

DANIEL M. HOLMES.

Witnesses:

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T. B. MOSHER.