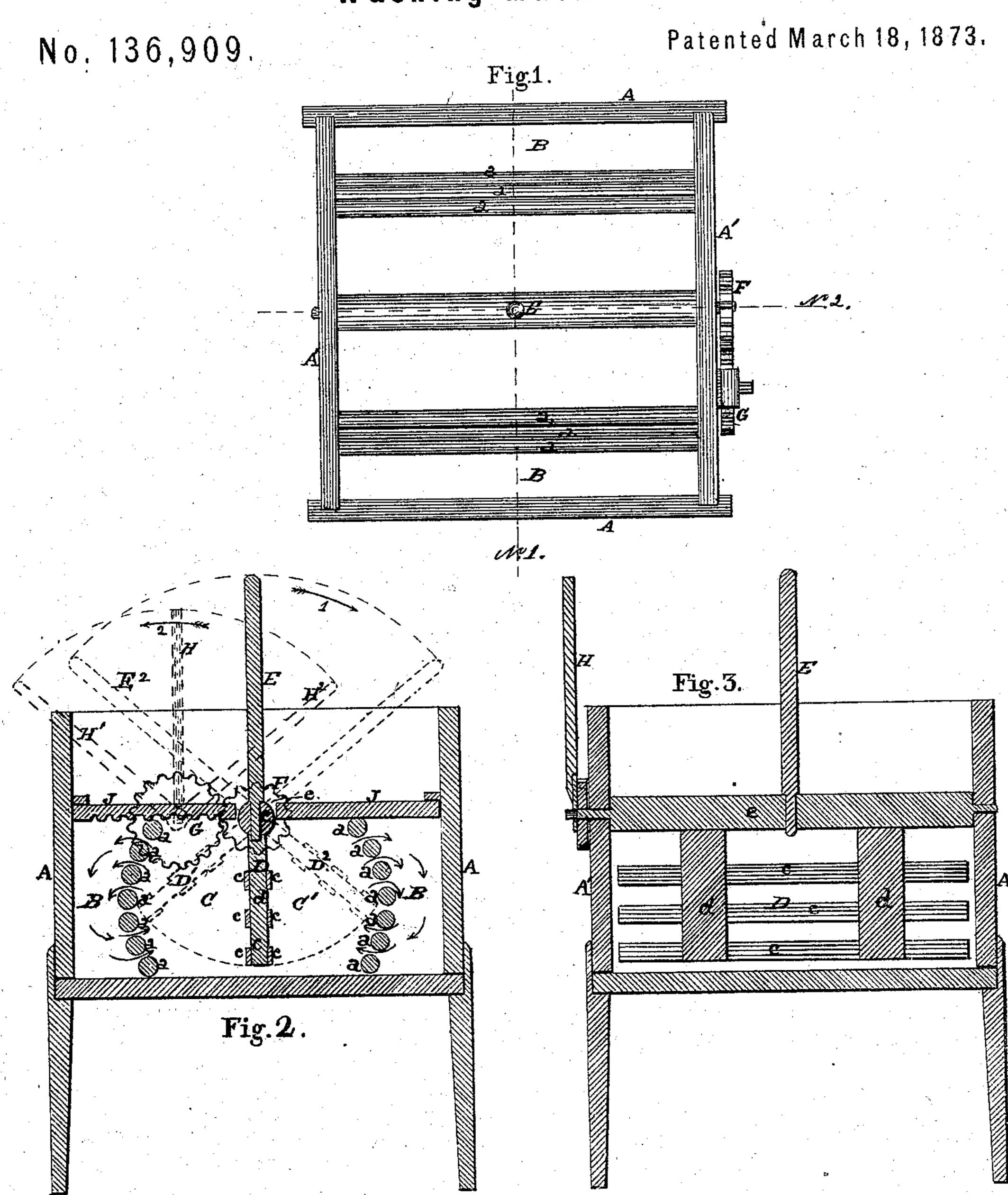
J. B. FISHER.
Washing-Machines.



VITNESSES.

John D.

INVENT

## United States Patent Office.

JOHN B. FISHER, OF AMSTERDAM, NEW YORK.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 136,909, dated March 18, 1873.

To all whom it may concern:

Be it known that I, John B. Fisher, of Amsterdam, in the county of Montgomery, State of New York, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a description thereof, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 represents a vertical view of the machine embodying the invention from above, with the covers removed. Fig. 2 is a cross-section taken at line No. 1 in Fig. 1, illustrating the same. Fig. 3 is a transverse sectional

view taken at line No. 2 in Fig. 1.

My invention relates to certain improvements in washing-machines; and consists in the combination of a gear, or a section of the same, and lever with a gear, lever, shaft, and oscillating beater, in such a manner that the said beater will be capable of being oscillated in both directions by the alternate operations of the levers; the object of this part of my invention being to effect a reciprocating oscillation of the beater in the water-chamber by the simultaneous movements in opposite directions of the levers, which will enable the operator to use both hands in such a manner that one hand will act against the other in the alternate pushing and pulling of both hands, which is required.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the drawing and the letters of reference marked thereon, the same

letters indicating like parts.

In the drawing, A A A' A' represent the wash-tub, which may be square or oblong. Within the said tub, and running from side to side, I place two series of slats, a a a, Figs. 1 and 2. The said slats are placed at a short distance from the sides A A so as to form the outer chamber B B, and are held in position by having their ends let into the sides A' A' of the tub. I also arrange the said slats a a in such a manner as to present a concave form to each of the series toward the central chamber C C', as shown. The said slats a a may be round or other form, or perforated concave pieces may be used as equivalents, though preference is given to the slats a a. By this arrangement of said two series of slats in a concave form

the clothes in each of the sections C C' of the central chamber is made to fall over or change their position after they have been carried up and squeezed against the upper and projecting slats of the said series. By arranging the chambers BB outside the said concave series of slats the water squeezed out of the clothes can return into the central chamber C C' in the direction indicated by arrow in Fig. 2. D is the beater, which consists of the several slats c c secured to the bars d d, which bars are connected in a firm and substantial manner to the rock bar or shaft e, as shown in Figs. 2 and 3. The said beater is suspended centrally within the chamber C C', and in such a manner as to be capable of being oscillated in both directions alternate to and from both concave series of slats a a, as shown by dotted lines in Fig. 2. The beater D being thus arranged, the central chamber is divided into the wash-chamber C and C', and two parcels of clothes—one in each of the said chambers can be operated upon simultaneously, thereby enabling the operator to perform twice the labor in the same time. E is a lever or operating-handle, inserted into or otherwise attached to the rock-shaft e, as shown. On one end of the rock-shaft e I secure the gear F, or section of the same. To one side of the said gear F I place a second gear, G, or a section of the same, which gear is attached to the gear g, supported by any suitable bearings and working in the gear F. On the outer end of the shaft I secure the auxiliary lever or operatinghandle H, Figs. 2 and 3, which auxiliary handle is intended to operate the said gear G, and through the gear F operate the beater D.

By this arrangement of the said gears and the auxiliary lever with the beater and its lever it is intended that the operator will be capable of operating the machine with both hands by pushing alternately, first with one hand, then with the other, on the respective levers E and H. The employment of the auxiliary lever with the usual lever gives a great advantage to the operator, who can use both hands, and by pushing, which is the most convenient and easiest mode of operating effectually, operate the machine without great labor.

The manner in which the several improvements in this invention operate is as follows: The clothes being operated upon are divided

in two parcels and are put into the sections C and C'. The water is then put into the tub to a sufficient depth, when the covers J J are placed in position shown in Fig. 2. The operator then grasps the levers E and H, and pushes preferably the lever E with one hand in the direction indicated by arrow 1, which will cause the beater to take the position of D<sup>1</sup>, when the lever H will, by the operation of the gears F and G, be moved in the direction indicated by arrow 2 until it will have assumed the position of  $H^1$ . The operator will then push the said lever in a direction opposite to that indicated by arrow 2 to cause the said arrow to take the position of dotted lines H2, when the operation of the gears will cause the beater to assume the position of D<sup>2</sup> and the lever E to assume the position of  $E^2$ , when the said lever will be pushed forward a second time, producing results the same as the first movement. The operation being continued by pushing alternately with each hand, as described,

the operator can in a short time, and with great ease, wash double the quantity of clothes that can be washed with a washing-machine with one clothes-receptacle and with a single operating-handle.

One of the covers J I corrugate, so that it can be used as a wash-board when turned up.

This machine is simple and not liable to get out of order, and can be operated with great ease in a very efficient manner.

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

In combination with the oscillating beater D, lever E, and shaft e, the gears G and F, or sections of the same, and lever H, when constructed and arranged to operate substantially as and for the purpose set forth.

JOHN B. FISHER.

Witnesses:

HENRY L. WEST, CHARLES H. WEST.