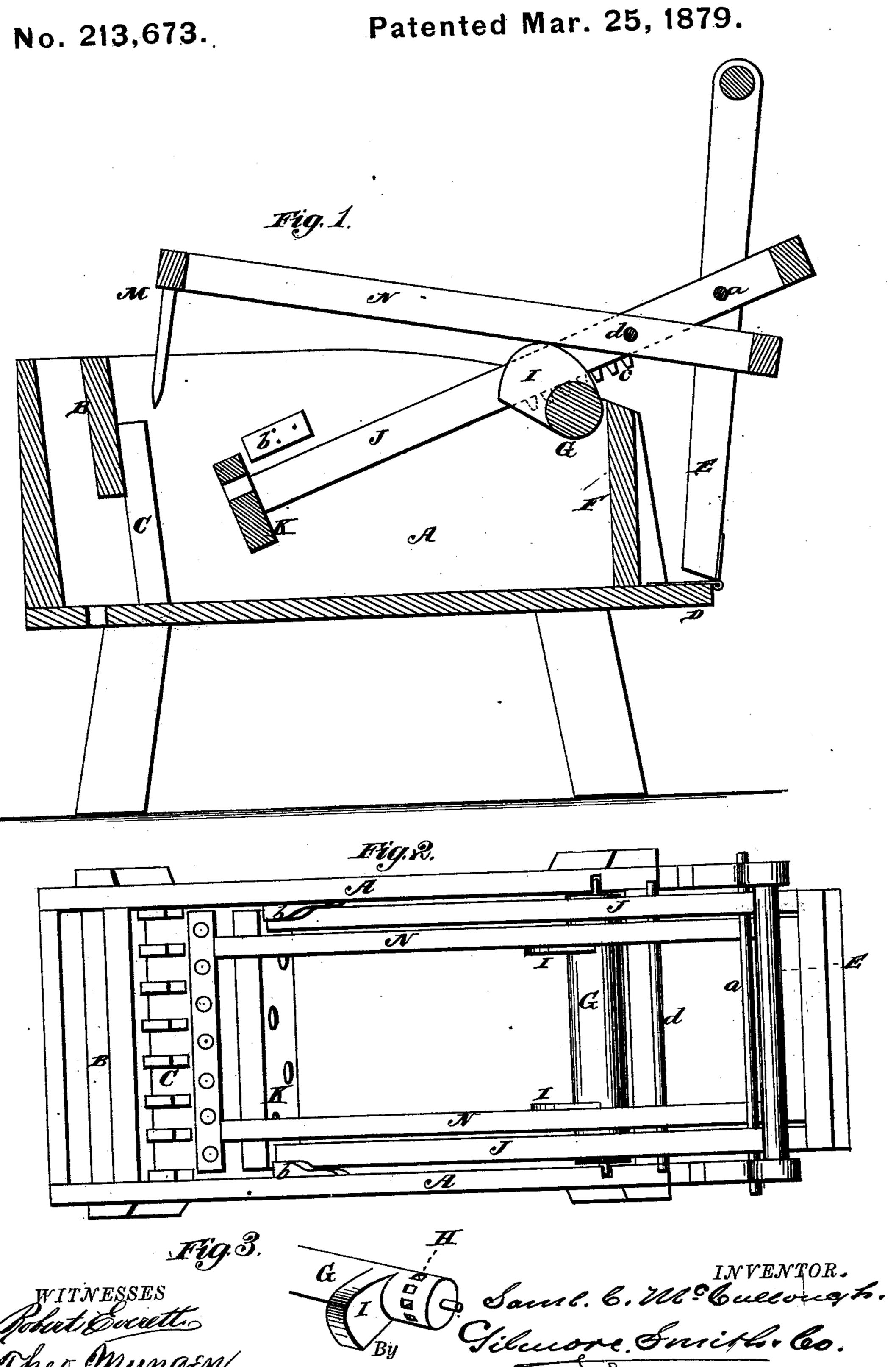
## S. C. McCULLOUGH. Washing-Machine.



Gelecore Griffe Co. ATTORNEYS.

## UNITED STATES PATENT OFFICE.

SAMUEL C. MCCULLOUGH, OF OTTUMWA, IOWA.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 213,673, dated March 25, 1879; application filed January 18, 1879.

To all whom it may concern:

Beitknown that I, Samuel C. McCullough, of Ottumwa, in the county of Wapello and State of Iowa, have invented a new and valuable Improvement in Washing - Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal central section of my washing-machine, and Fig. 2 is a top-plan view of the same. Fig. 3 is a perspective detail view.

This invention has relation to washing-machines; and it consists in the improvements in the construction of the same, hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings similar letters of reference indicate corresponding parts in the governal flowers.

in the several figures.

A represents the suds-box; B, a cross-piece near one end thereof, from which strips or cleats C, having intervening spaces, project to the bottom of the box. At one end of the box A a ledge, D, projects, and to this ledge is hinged a frame-lever, E, as shown. Immediately inside of the end board, F, a shaft, G, is journaled in the sides of the box A. This shaft G has mortises H near each end, and quite near to the mortises is provided with cams I. To the hand-lever frame E is pivoted a frame, J, by means of a rod, a, and this frame J has at its lower end a perforated plunger, K. The frame J is prevented from leaving an inclined position by small cleats b, secured to the sides of the box A, as shown. The sides

of the frame J are provided with racks c, the teeth of which mesh with the mortises in the shaft G, and impart motion to said shaft when the hand-lever E is operated to cause a partial rotary motion of the rake M at the lower end of a frame, N, pivoted to the arms of the frame J by a rod, d. The teeth e of the rake M, when the machine is operated, enter the spaces between the strips C, and, when the fabric is in place in the box, squeeze it between the strips C, thereby expelling the cleansing liquid from the fabric. The rake M also, by reason of its partially-rotating motion, turns the fabric in its backward movement.

The perforated plunger K at the lower end of the frame J is operated at the same time as the frame N and rake M, and presses the clothes against the strips C, the combined action of the rake M and perforated plunger K pressing the clothes against the strips C, and turning them to present the different portions of the clothes causes the clothes to be thoroughly cleansed.

What I claim as new, and desire to secure

by Letters Patent, is—

In a washing-machine, the combination of the box A, provided with the cross-piece B and strips C, with the lever E hinged thereto, the frame J, having racks c and perforated plunger K, the frame N, having rake M, and the shaft G, having cams I and mortises H, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

SAMUEL CLINTON McCULLOUGH.

Witnesses:

WILLIAM J. ANSON, JNO. W. MILLER.