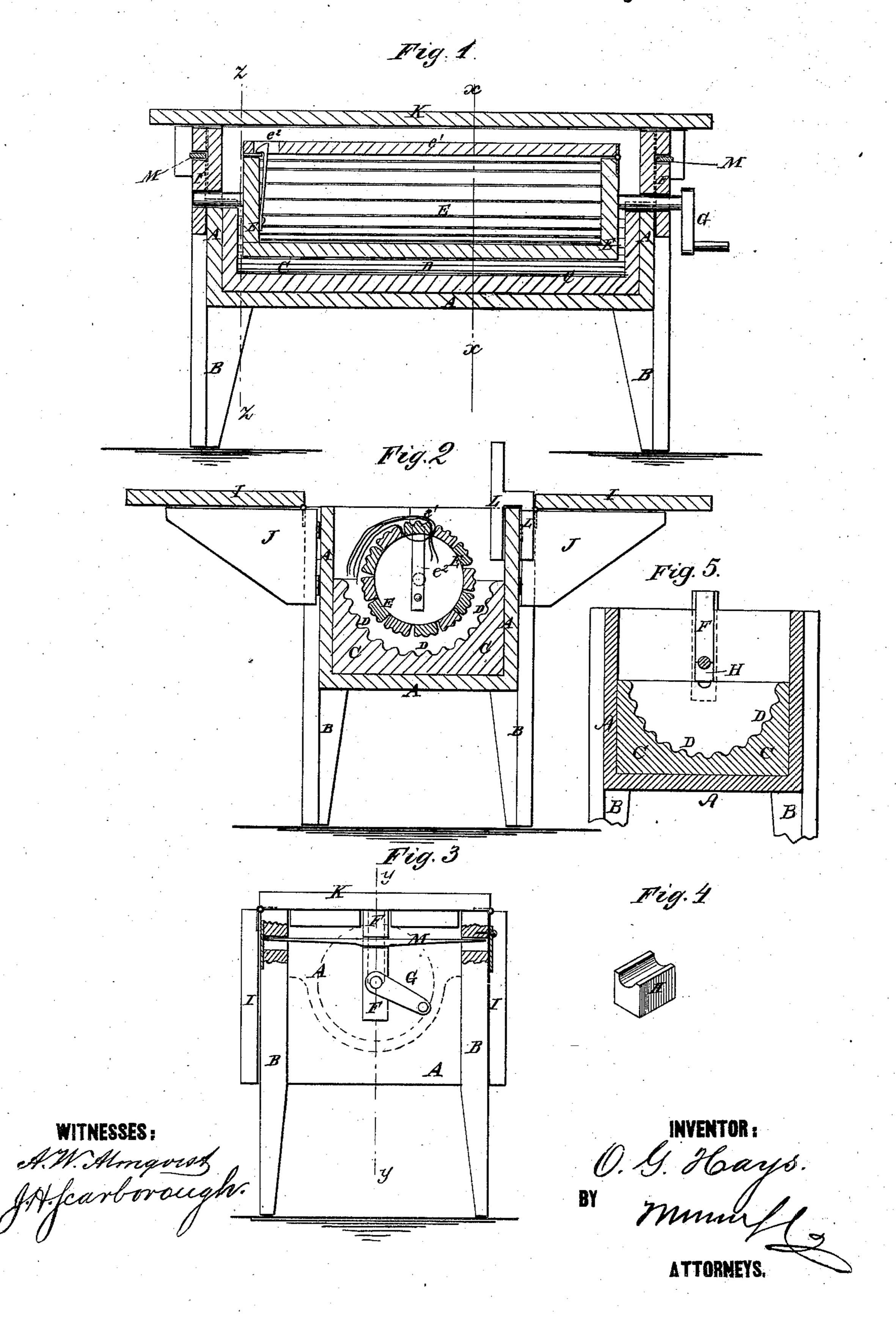
O. G. HAYS. WASHING-MACHINES.

No. 194,431.

Patented Aug. 21, 1877.



## UNITED STATES PATENT OFFICE.

ORIEN G. HAYS, OF NILWOOD, ILLINOIS.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 194,431, dated August 21, 1877; application filed March 3, 1877.

To all whom it may concern:

Be it known that I, ORIEN G. HAYS, of Nilwood, in the county of Macoupin and State of Illinois, have invented a new and useful Improvement in Washing-Machines, of which

the following is a specification:

Figure 1 is a vertical longitudinal section of my improved machine through the line y y of Fig. 3. Fig. 2 is a vertical cross-section of the same taken through the line x x, Fig. 1. Fig. 3 is an end view of the same, parts being broken away to show the construction. Fig. 4 is a detail perspective view of one of the bearing-blocks for raising the washingcylinder when desired. Fig. 5 is a vertical cross-section through the line z z of Fig. 1, with the bearing-block H added and the cover removed.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved washing-machine, which shall be simple in construction and convenient in use; and the invention consists in the general construction and arrangement of parts, as hereinafter fully described.

A is the suds-box, which is made rectangular in form and of any desired size, and is attached to legs B to raise it to a convenient

height.

In the bottom of the box A is placed a frame or block, C, the upper side of which is concaved, and has slats D attached to or corrugations formed in it, as shown in Fig. 2. The ends of the box A are slotted vertically to receive the journals of the cylinder E, which journals pass through holes in blocks F, which are so formed as to fit into the slots and overlap the end boards at the sides of the said slots to prevent the water from spattering out when the machine is being used.

One of the journals of the cylinder E projects, and has a crank, G, attached to it, by means of which the machine is operated. The cylinder E is formed by grooved slats attached to the edges of circular disks, said slats being placed at such a distance | apart that the water may flow between them freely.

One, e1, of the slats of the cylinder Eishinged at one end and provided with a spring-catch,  $e^2$ , at the other end, to hold it in place when closed down.

The cylinder E is held down upon the clothes by the wooden springs M, which are inserted in notches in the bearing-blocks F, and the ends of which enter holes in the legs B, or in blocks attached to said legs.

The clothes to be washed are placed between the concave C D and the cylinder E, and are washed by turning the cylinder E back and forth through a part of a revolution, and when washed are brought up by turning the cylinder in the same direction.

When some parts of the clothes are dirtier than the others, the slat e1 is raised, and the clothes are placed within the cylinder with the dirtier part projecting, where they are secured by again closing down the said slat, and they are then rubbed, as before described.

When many clothes are to be washed at the same time, the cylinder E may be raised, and the bearing-blocks H inserted in the slots of the box A beneath the journals of the cylinder E, as clearly shown in Fig. 5.

To the upper edges of the sides of the box A are hinged leaves I, which, when raised into a horizontal position, are supported by

brackets J.

K is the table-top, which, when the leaves I are raised, fits into the space between the inner edges of said leaves, and thus forms the table.

L is a forked board, which is made of such a size that its fork may fit over the sideboard of the box A, as shown in Fig. 2, so that a wringer may be attached to its upper end.

The wringer may be used with the leaves I raised or lowered, as may be desired.

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

1. The slatted rubbing-cylinder E, consist-

ing of the grooved slats, circular disks, and the grooved slat  $e^1$ , hinged to one of said disks and provided with a spring-catch,  $e^2$ , for securing it to the other disk, as herein shown and described.

2. The combination of the vertically slotted box A, notched adjustable bearing-blocks F, removable blocks H, springs M, and slat-

ted grooved cylinder E, the several parts constructed and relatively arranged to operate in the manner herein shown and described.

ORIEN G. HAYS.

Witnesses:

J. E. DRURY, CHARLES E. ENYART.