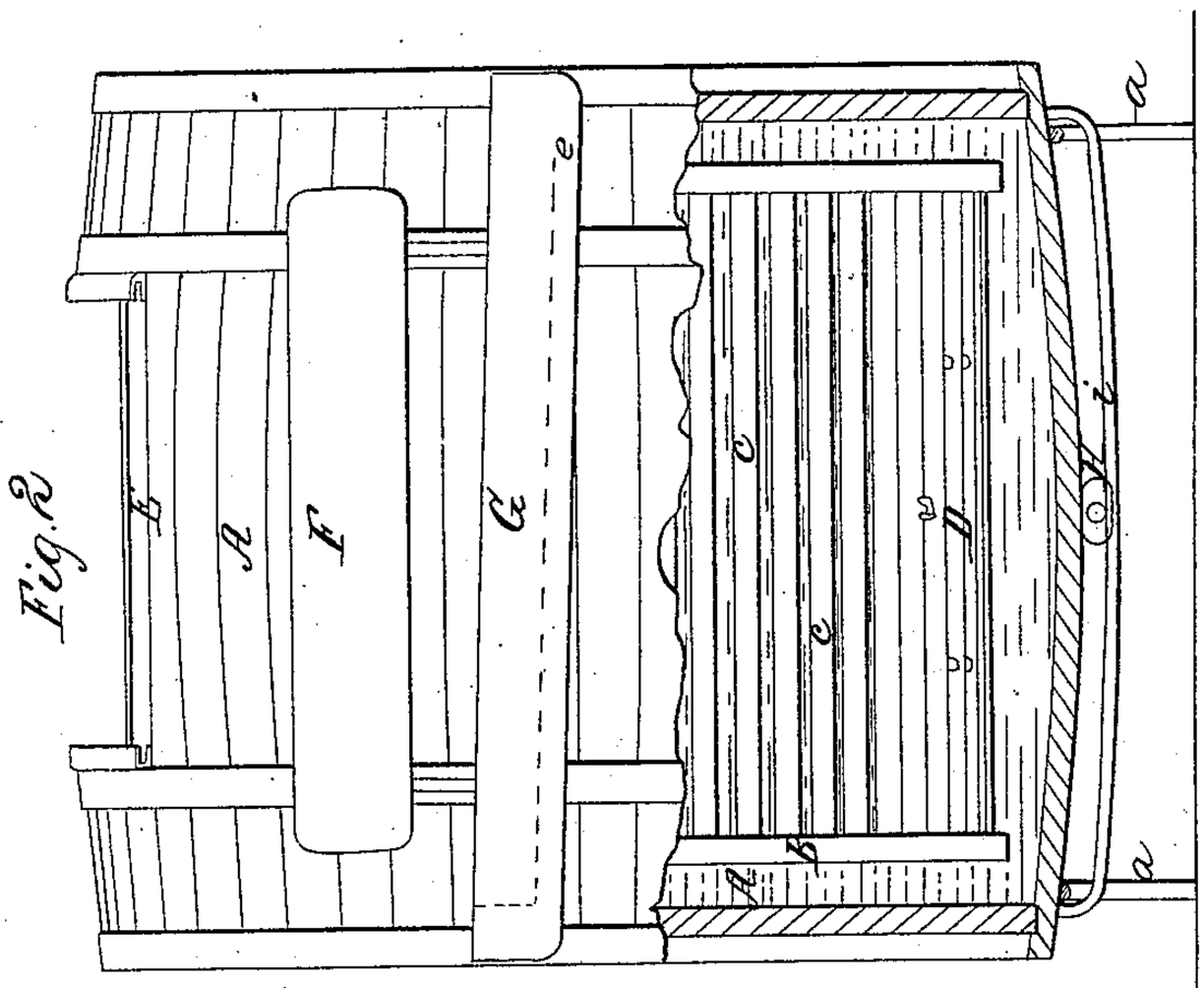
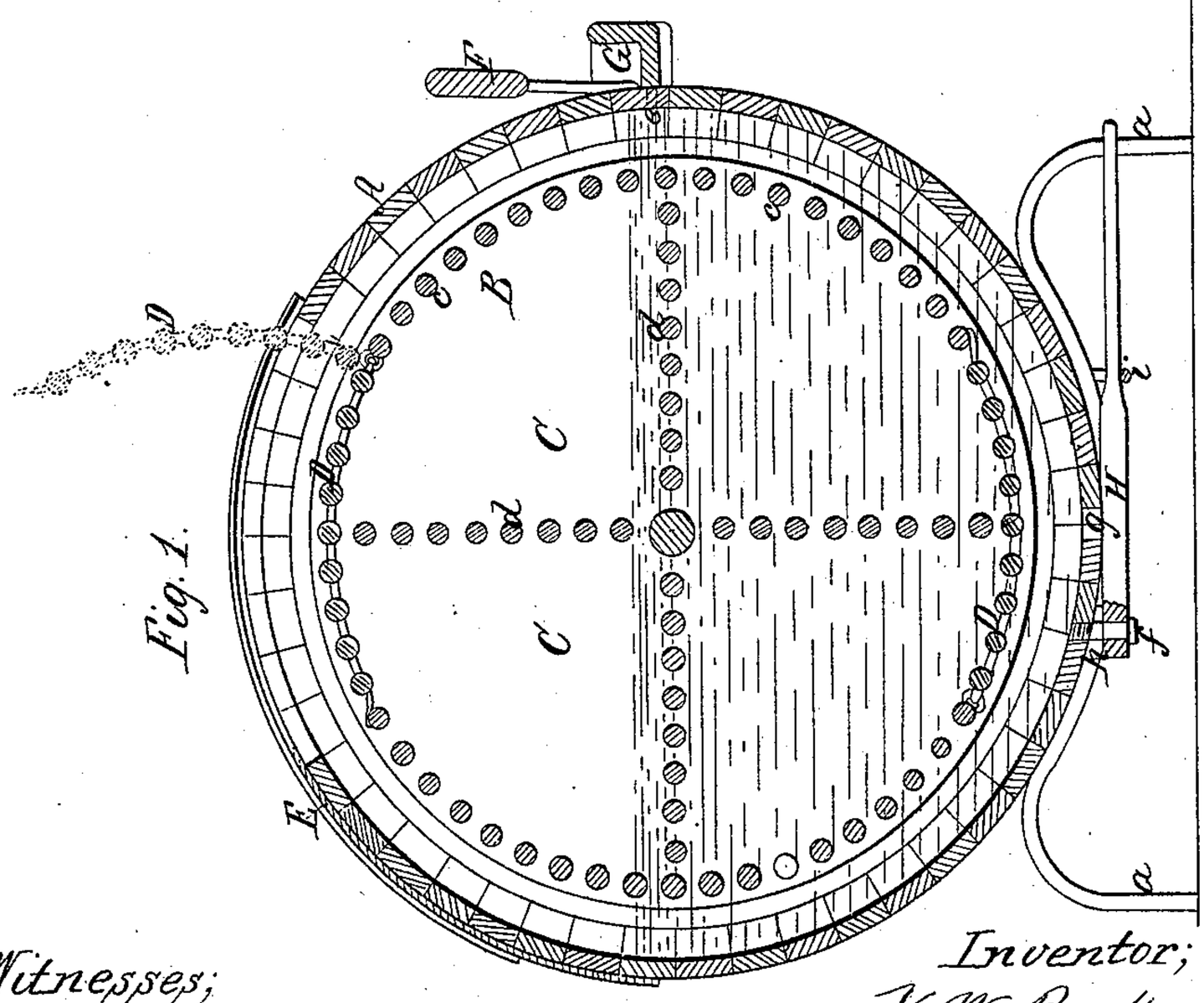
N. W. Beckwith,

Washing-Machine.

No. 102,358. Patented Apr. 26. 1870.





Witnesses;
J. McCoomby
Fred Haynes

Inventor;
N. W. Beckwith
per Brown Coomb & Co
Attys

UNITED STATES PATENT OFFICE.

NELSON W. BECKWITH, OF McDONOUGH, NEW YORK.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. **102,358**, dated April 26, 1870.

To all whom it may concern:

Be it known that I, NELSON W. BECKWITH, of McDonough, in the county of Chenango and State of New York, have invented a new and useful Improvement in Washing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 represents a sectional view, taken transversely through its axis, of a cylinder washing-machine constructed in accordance with my improvement; and Fig. 2, a partly sectional edge view of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to what are known as "cylinder machines;" and it consists in a peculiar construction of a rotating cylinder or clothes-carrier within an outer case, both provided with doors, the inner ones of which control access to compartments made in the inner or working cylinder, that is of slatted construction.

Referring to the accompanying drawings, A represents an outer case, which is of barrel form or construction and arranged to stand on legs *a a*, also having one of its heads removable for the purpose of introducing and removing, when required, the inner or working cylinder, B, that is of slightly less diameter and width than the interior of the outer case, and rotates in bearings in the heads or ends of the latter, being worked by a cranked handle, *b*, on the outside or through suitable gearing, as deemed most desirable. This inner cylinder, B, is made up of heads or ends united at or near the periphery by slats or bars *c c*, arranged at a slight distance apart, and the interior of such cylinder divided by similar slats or bars, *d d*, to form four (more or less) open-work compartments, C C, to which access is had for putting in and taking out the clothes by hinged slatted doors D D, each one of which should be provided with a suitable fastening, and is arranged to open or uncover two of the adjacent compartments C C, which renders unnecessary a separate door to each compartment. The shell or outer case, A, is also provided with a sliding door E through the way covered, by which either door, D, may be opened, and which serves to allow of the filling of the machine. This door E, as also the doors D D, should be kept closed when the machine is running.

From this description it will be seen that provision is made for washing the clothes in separate or detached parcels by their arrangement within the compartments C C, as is often desirable with clothes of varied character or texture, and yet a free circulation for the water between the several compartments and through the periphery of the working-cylinder is established, as the clothes during the rotation of such cylinder are thrown backward and forward in different directions, and more or less rubbed by their contact with the slats *c c* and *d d*, which are preferably of a round form in their cross-section, and may be made either of wood or incorrodible metal, as may, also, most of the other parts of the machine. In this action, however, there will be no violent rubbing or twisting of the clothes, but a gentle yet efficient action, with all necessary agitation of the water, that is free to pass all around as well as through the working-cylinder in various directions, and the clothes are made to constantly change their position, and subjected every revolution to a draining as well as a dipping process.

For washing clothes or articles of more than ordinarily large size, it is desirable to so attach the bars or slats *d d*, which separate either two of the adjacent compartments C C, as that they may be taken out, and thus only two compartments of larger size formed within the working-cylinder.

Below the door E of the outer case, A, is a projection or bracket, F, from the periphery of said case, onto which a wringer may be hung and secured, as required, to wring the clothes as they are taken out of the washing-machine, and immediately below such attachment for the wringer is a cross-trough, G, to catch the water expressed from the clothes in wringing, which water thus caught is prevented from overflowing the trough by being carried through a channel or passage, *e*, from or near the one and lower end of the trough, when set sloping, back into the outer case of the washing-machine.

Connected with the bottom of the outer case A is a lever-valve, H, pivoted, as at *f*,

and arranged to control an outlet, *g*, for drawing off, when required, the water from the machine. This lever-valve may be faced, where it covers the outlet *g*, with either rubber or metal packing, and has a close action secured to it, and is kept from being accidentally shifted, so as to open the outlet *g*, by a rubber spring, *h*, applied to it at the pivot in the rear, and a spring-rod, *i*, over which it slides in front, or spiral springs may be applied to each end of the rod *i*. Said lever-valve is opened, when required, by moving it laterally in either direction. When it and the door E are closed, all passage or leakage of water from the machine is prevented.

What is here claimed, and desired to be secured by Letters Patent, is—

The arrangement of the doors D D to the inner or working cylinder, B, and compartments C C, arranged within the latter so that each inner door controls two compartments, as shown and described.

NELSON W. BECKWITH.

Witnesses:

F. M. DODGE,

GILBERT BECKWITH.