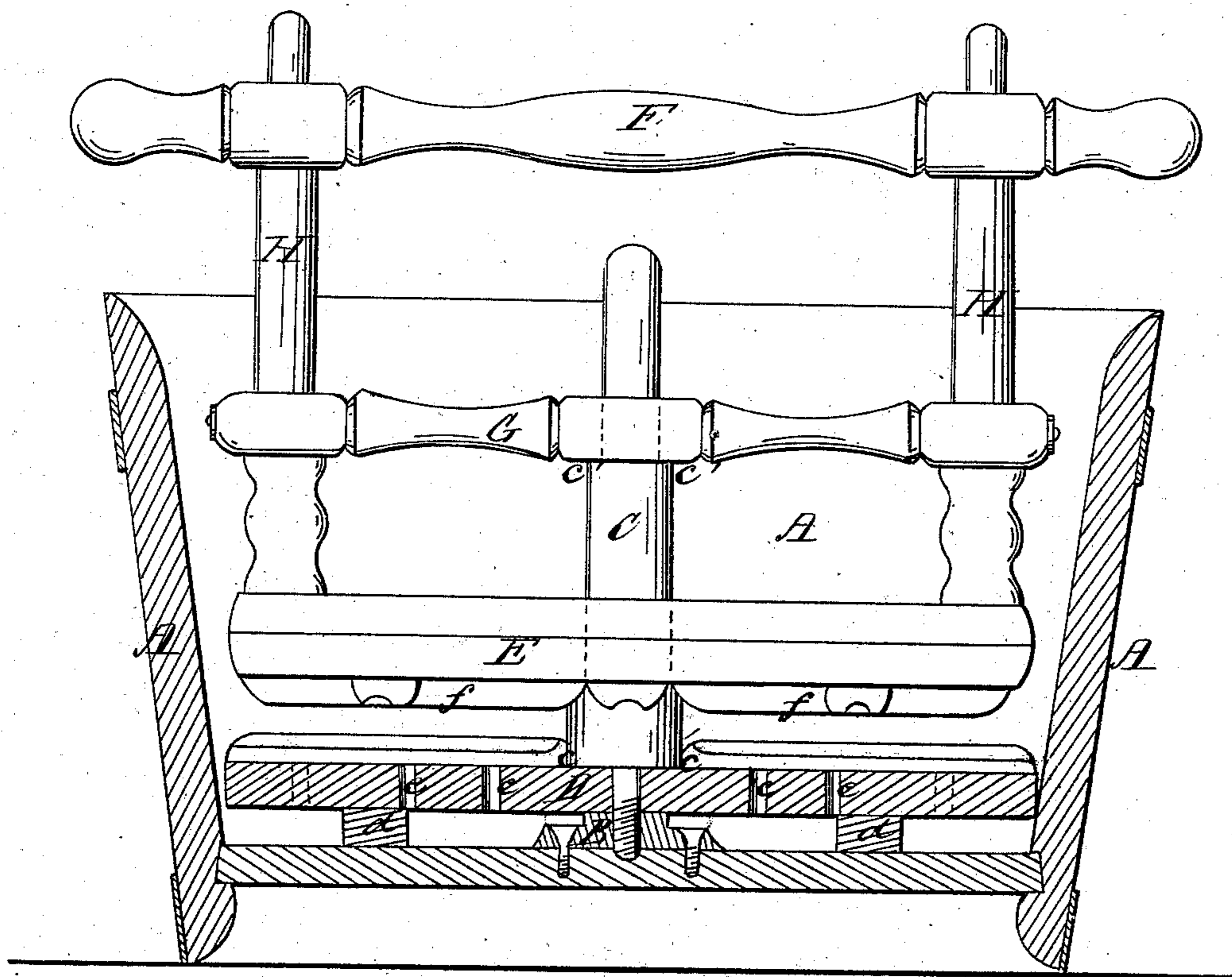


W. R. Hill,

Washing Machine,

N^o 48,402,

Patented June 27, 1865.



Inventor

W. R. Hill

Witnesses.

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UNITED STATES PATENT OFFICE.

W. R. HILL, OF DETROIT, MICHIGAN.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 48,402, dated June 27, 1865.

To all whom it may concern:

Be it known that I, W. R. HILL, of Detroit, in the county of Wayne and State of Michigan, have made new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawing, making part of this specification, in which my improvement is represented by a vertical central sectional view of the tub and lower disk, the rubber being in elevation.

My improvement consists in a washing-machine which is adapted to be set in a tub of any size, therein to perform its work.

To enable one skilled in the branch of industry to which my invention appertains to construct and use the same, I will proceed to describe it.

A is a tub. B is a step screwed to the upper side of the tub bottom. In this step or stud is screwed a center post, C, its shoulder *c* holding down the lower disk, D, whose cleats *d* prevent its contact with the bottom of the tub. Holes *e* allow of the circulation of the water through the disk, and the latter has on its upper surface ribs which constitute a rubbing-surface for the clothes. Upon the central post is slipped a rubber, which consists of a disk, E, with cleats *f*, and having an operative-bar, F, and a yoke, G, which is supported on the shoulder *c'* of the center post, and is connected at its ends to the pillars H H.

The operation is as follows: The stud having been previously attached to the bottom, where it may remain without interference with any use for which the tub is designed, the central post is erected thereon and the different portions caused to assume the position shown in the drawing. The clothes are introduced between the disks, with the requisite water and soap, and are rubbed by the reciprocating ro-

tary movement of the upper disk, which is operated by the medium of the handle F. The central post secures the lower disk or wash-board in position and forms the axis of rotation of the upper disk, and by the motion of the latter the water is caused to circulate and to be expressed through the clothes, while dirt or gritty matter, which settles, of course, as it has opportunity, collects below the false bottom, where it is not again disturbed until the operation is completed and the machine is about to be cleaned.

No hole is required to be made through the bottom of the tub for the proper attachment of the washing apparatus, which is readily removable as required.

The yoke G, supported on the shoulder *c'* of the center post, sustains the rubber, so that the post itself does not project upward as far as the cross-bar F. When the rubber is elevated so as to free the yoke from the post the disk can be lifted so as to slip past the wringer, which may be attached to the side of the tub. I am not aware that any other tub-machine possesses this characteristic.

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

1. The lower disk, fastened and constructed as described, and acting as a wash-board and a filter.

2. The combination of the center post, stepped into the stud, as described, and having the two shoulders, which act respectively upon the wash-board disk and the rubber disk to maintain them in their relative positions.

W. R. HILL.

Witnesses:

HENRY STARKEY,
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