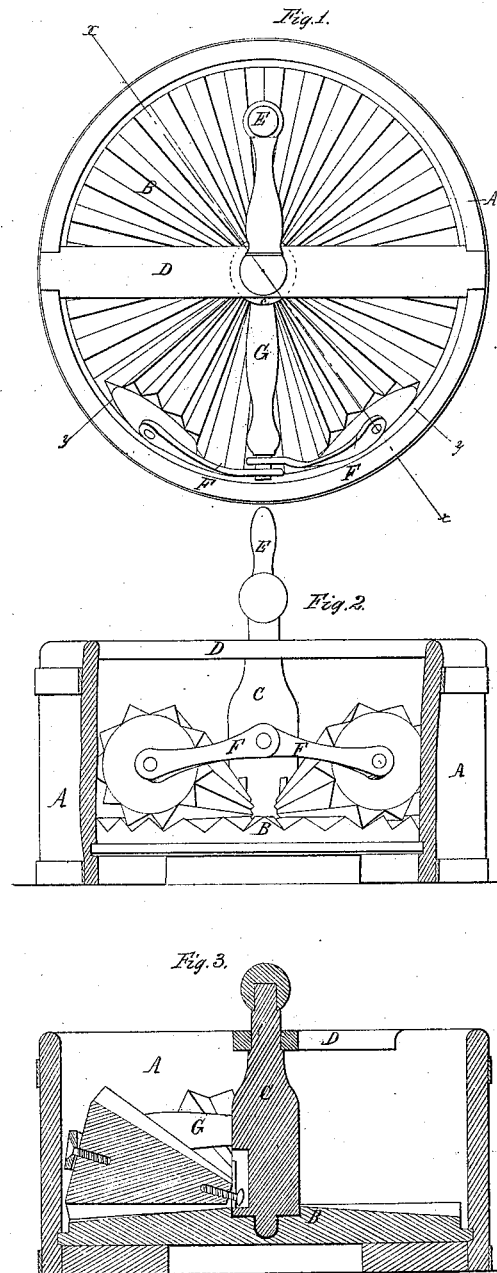


T. D. Gail,

Washing Machine

N^o 52,408.

Patented Feb 6, 1866.



Witnesses.

C. P. Smith
Wm. Rushin

Inventor.

T. D. Gail
by *Wm. Rushin*
att'y

UNITED STATES PATENT OFFICE.

TITUS D. GAIL, OF NEWPORT, ILLINOIS.

WASHING-MACHINE.

Specification forming part of Letters Patent No. 52,408, dated February 6, 1866.

To all whom it may concern:

Be it known that I, **TITUS D. GAIL**, of Newport, in the county of Lake and State of Illinois, have made new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, sufficient to enable one skilled in the art to which it appertains to construct and use the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a plan or top view. Fig. 2 is a vertical section of the tub on the line *yy*, and elevation of the machinery inside. Fig. 3 is a vertical central section on the line *xx*, Fig. 1.

My invention consists of a pair of corrugated cones adjustably attached to a central rotary post and revolving upon a concave corrugated bed within the tub.

In the drawings, **A** is the tub, and **B** the circular disk, which lies upon the bottom of the tub, but may be removed therefrom when the vertical central post, **C**, is lifted. The latter is stepped into a socket in the bottom of the tub, journaled in a cross-piece, **D**, and rotated by means of the handle **E**.

The disk or false bottom **B** may be level, convex, or concave, and its surface is provided with radial corrugations which increase in depth toward the periphery, so as to correspond to those on the rotary cones, which revolve above and in contact with the disk, or rather, when in use, upon the clothes which intervene between the cones and the disk, which, by preference, is attached to the bottom of the tub, but may be made removable. These cones or frusta are journaled in the post at the apices, and at their bases are journaled in links

F, which are pivoted to a radial and horizontal arm, **G**, projecting from the central post, **C**.

The vertical motion of the cones is permitted by the journaling of the shoulder-pin *a* in the dovetailed slot of the post, for, as the enlarged head of the pin occupies the recess behind the plate which forms the face of the slot, it cannot be drawn out from thence except by lifting to such a height as to be above the plate at an enlargement of the slot, which is provided for the entry and withdrawal of the enlarged head of the pin in putting the machine together for work or taking it apart for cleansing.

The outer ends or bases of the cones are journaled in the links **F**, which are loosely pivoted on the central post so as to permit the free play up and down of the cones, according to the thickness of the clothes over which they are passing, the latter being exposed to the action of the corrugated cones upon corrugated concave bed, as the central post is revolved to cause the rotation and revolution of the said cones.

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

The rotating and revolving corrugated cones, journaled at their apices by the headed pins in recessed slots in the post and at their bases in pivoted links, as described, in combination with the corrugated bed, the whole being arranged and operated substantially as described and represented.

TITUS D. GAIL.

Witnesses:

OCTAVIUS KNIGHT,
W. F. HALL.