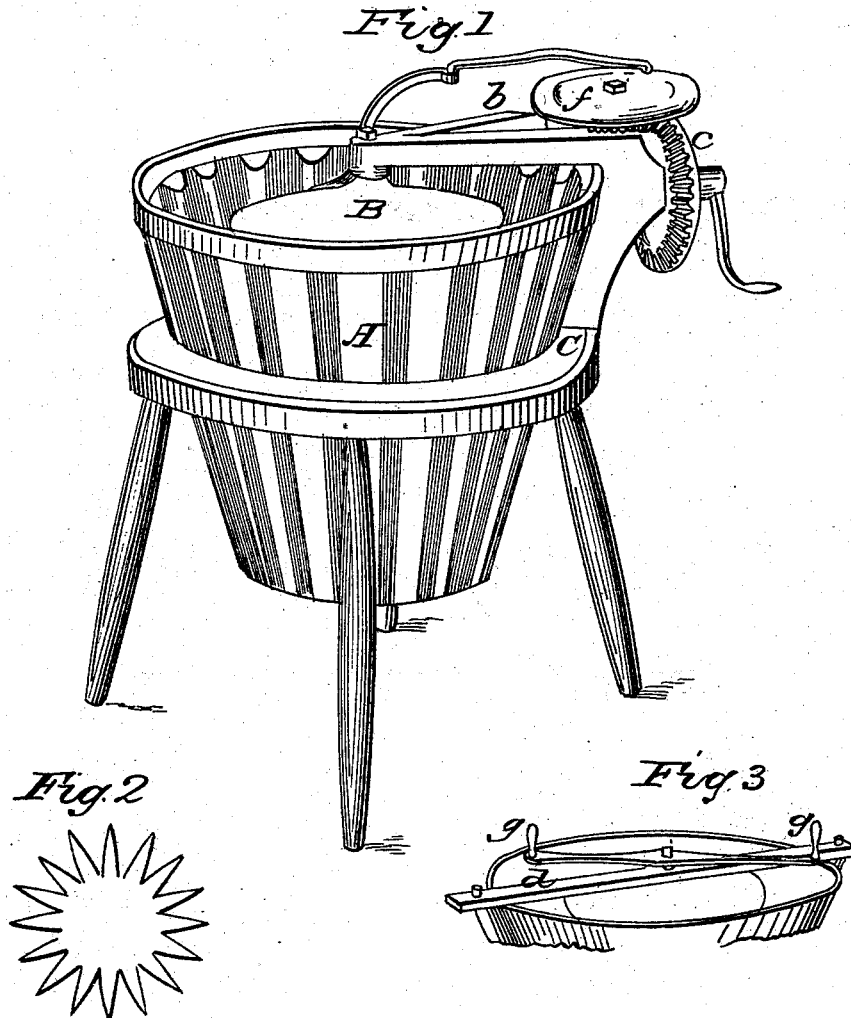


F. A. GLEASON.  
Washing Machine.

No. 54,892.

Patented May 22, 1866.



Witnesses  
Chas. L. Loomis  
Alfred Green

Inventor  
Franklin A. Gleason

# UNITED STATES PATENT OFFICE.

FRANKLIN A. GLEASON, OF BROOKLYN, NEW YORK.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 54,892, dated May 22, 1866.

*To all whom it may concern:*

Be it known that I, FRANKLIN A. GLEASON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in the Construction of Washing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view; Fig. 2, a detached sectional view; Fig. 3, a detached view of machines as previously constructed.

My improvement, as herein represented, is applied to the machine commonly known as "French's conical washing-machine," but may be applied to others of similar construction.

The nature or character of the improvement consists in constructing the tub and cone of corrugated sheet metal, which combines lightness and durability with facility of manufacture; in making the ribs of much greater depth than heretofore, which, combined with a rapidity of motion obtained by gear, produces greater agitation of the water, consequently washing quicker and better, and in employing a balance-wheel to equalize the motion or counter-act the concussive effect incident to rapid reciprocating motion.

To enable others skilled in mechanics to make and use my invention, I will proceed to describe its construction and operation.

I construct the tub A, Fig. 1, in the usual form; but instead of wood I use sheet metal, corrugating the sides to form the ribs *a a a*. The cone or center piece B, I also construct in a similar manner; but this being the part to which motion is given, and by which virtually the washing is done, I make the ribs of considerable depth—say about one-fourth of the diameter of the cone, Fig. 2. This form, combined with the rapid motion hereinafter described, pro-

duces violent agitation of the water, consequently washing more rapidly and thoroughly.

The top of the cone has been heretofore supported by a bar, *d*, Fig. 3, extending quite across the top of the tub, much to the inconvenience of the operator. Instead of this I construct two arms, *b b*, Fig. 1, secured to the frame C, formed with an elbow at the top of the tub, extending to and uniting at the center, thus leaving nearly the whole circumference of the tub approachable. In one of these elbows I fix a horizontal axis, upon which runs a bevel-gear wheel, *e*, operated by a crank. This drives a pinion and balance-wheel combined, *f*, which runs upon a perpendicular axis above the wheel. From the periphery of the balance-wheel a connection reaches to an arm rising from the top of the cone.

By means of the multiplying-gear any rapidity of motion that is desirable may be given.

The balance-wheel is made sufficiently heavy to counteract the concussive or shaking effect incident to rapid reciprocal or vibratory motion.

As previously constructed the cone was operated by the handles *g g*, Fig. 3, moving them to and fro alternately; but the motion proved to be too slow and also more laborious than crank motion.

Disclaiming the conical form of the tub and center or cone, they being the subject of a previous patent,

What I claim as my invention, and for which I desire Letters Patent, is—

Constructing the tub and cone of corrugated sheet metal, in combination with the balance-wheel, gear-wheel, and pinion, substantially as herein described, and for the purposes specified.

Witnesses:

CHAS. E. LOEW,  
ALONZO GREEN.

FRANKLIN A. GLEASON.