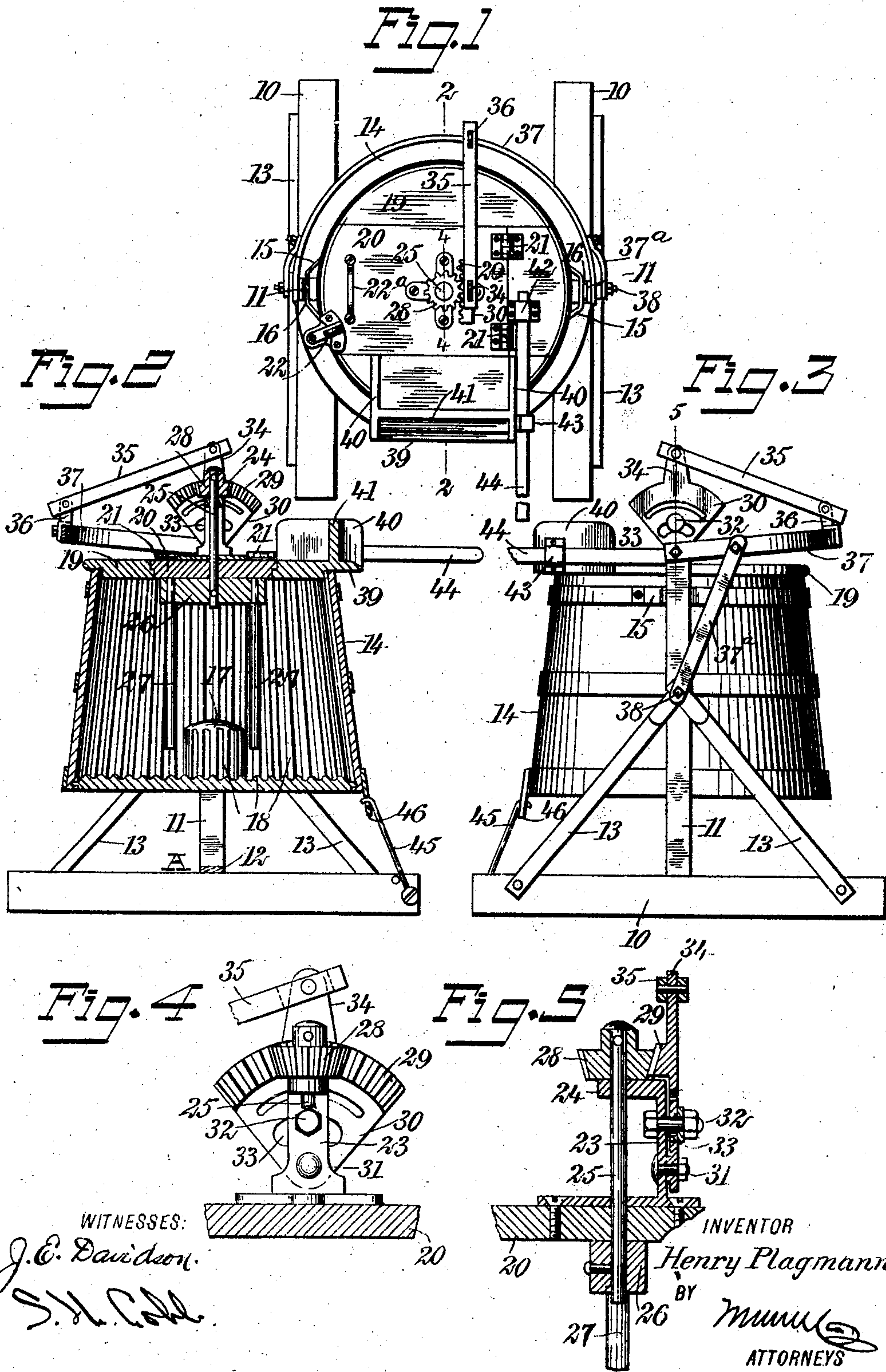


No. 806,492.

PATENTED DEC. 5, 1905.

H. FLAGMANN.  
WASHING MACHINE.  
APPLICATION FILED MAY 6, 1905.





# UNITED STATES PATENT OFFICE.

HENRY PLAGMANN, OF DAVENPORT, IOWA.

## WASHING-MACHINE.

No. 806,492.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed May 6, 1905. Serial No. 259,112.

*To all whom it may concern:*

Be it known that I, HENRY PLAGMANN, a citizen of the United States, and a resident of Davenport, in the county of Scott and State of Iowa, have invented a new and Improved Washing-Machine, of which the following is a full, clear, and exact description.

My invention relates to washing-machines, and has for its principal object the provision of a simple and effective apparatus of this character.

It consists in the various features and combinations hereinafter described and more particularly claimed.

Reference is to be had to the accompanying drawings, which form a part of this specification, in which like reference characters indicate like parts in the several views.

Figure 1 is a top plan view of one embodiment of my invention. Fig. 2 is a vertical section on the line 2 2 of Fig. 1. Fig. 3 is a side elevation looking from the right in Fig. 1, and Figs. 4 and 5 are enlarged sectional details on the lines 4 4 and 5 5 of Figs. 1 and 3, respectively.

A designates a frame comprising separated base-bars 10 10, from which rise opposite standards 11 11, between which is shown extending a connecting portion 12, which may serve to tie the base-bars together. Oppositely-inclined members 13 13 connect each standard with its base-bar and act as braces for the former. Upon the standards is mounted a tub or receptacle 14, at opposite sides of which near its upper portion are fixed brackets 15, having projecting from them into recesses in the standards trunnions 16, this support permitting the oscillation of the tub. From the bottom of the tub at its center rises a projection 17, furnishing a surface against which the articles under treatment may be rubbed, and about this projection and the cylindrical wall of the tub are vertical corrugations 18, which also extend across the bottom. The top of the tub is provided with a cover 19, in which is an opening which may be closed by a section 20, hinged at one side at 21. At the opposite side is a securing-button 22, pivoted upon the fixed portion of the cover and extending over the movable section, and adjacent to it is shown a handle 22<sup>a</sup> for convenience in raising the cover.

Fixed upon the outer side of the section 20 near its center is a bracket 23, having an overhanging end portion 24, in which and in the rounded opening in the cover is journaled a

shaft 25, extending into the interior of the tub. Here the shaft has fixed to it a head 26, from which agitating pins or members 27 depend, they being here shown as two in number and lying upon opposite sides of the projection 17. Fast upon the upper extremity of the shaft is a bevel-pinion 28, meshing with a segmental bevel-gear 29, formed upon a sector 30, pivoted at 31 upon the bracket 23. This sector may oscillate about its pivot and is guided and limited in its movement by a bolt 32, carried by the bracket and extending through a curved slot 33 in the sector. From the upper side of the sector rises a projection 34, and this is pivotally connected by a link 35 with an arm 36, extending from a bail-shaped member 37, connecting the upper ends of the standards and being articulated thereto. This member 37 is shown as connected with the frame at each side by a link 37<sup>a</sup>, which may be conveniently joined to the frame by a bolt 38, which also serves to connect the braces 13 with the standard.

The cover is shown as overhanging the tub at 39, and at opposite sides of this extended portion are walls 40, connected by a wall 41, this serving as a retaining-table at one side of the cover-opening. Fixed upon the cover between the hinges 21 is a socket 42, and adjacent to the edge of the cover is another socket 43, the same being secured to one of the side walls 40. These sockets serve to separably receive a handle 44, by which the tub may be rocked upon its trunnions.

In using the apparatus the tub is first preferably fixed against movement by a hook or locking member 45, pivoted upon one of the base-bars and engaging an eye 46, depending from the tub. The cover-section may now be raised, its button having been swung to one side and one of the pivot-pins of the link 35 removed and water, with which is mixed a suitable detergent, and the articles to be operated upon introduced. Then the cover-section is closed and the link connected, the lock thrown off the tub, and it is oscillated upon its trunnions by moving the lever, which has been inserted in its sockets. As the sector carrying the gear-teeth is attached to a relatively fixed point through the link system, the pinion upon the shaft 25 is caused to travel past said gear and by its engagement therewith to rotate the shaft. This results in the revolution of the attaching-pins, which moves the contents about the tub, rubbing the articles against the projection 17 and the



tub-walls. At the same time an effective circulation of the cleansing liquid is produced by the swaying motion of the tub. This operation continues for a suitable time, after which the articles are rinsed in the usual manner and removed, the tub being locked and the cover-section raised, as has been previously described. When not in use, the handle may be withdrawn from its sockets, so that the apparatus takes up less room. If desired, the tub may be withdrawn from the frame by springing the standards apart slightly to release the trunnions from their sockets.

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

1. In a washing-machine, the combination with a frame comprising opposite standards, of a tub mounted to rock upon the standards, a cover for the tub, a shaft journaled upon the cover and having agitators extending into the tub, a pinion fixed to the shaft, a segmental gear mounted to oscillate upon the cover and meshing with the pinion, a bail-shaped

member extending between the standards and pivoted thereto, links connecting said member with the frame at opposite sides, and a link joining the member and gear.

2. In a washing-machine, the combination with a frame, of a tub mounted to rock thereon, a cover for the tub, a bracket rising from the tub, a shaft journaled in the bracket and cover and having agitators extending into the tub, a pinion fixed to the shaft, a segmental gear having a slot being mounted to oscillate upon the bracket, a projection extending from said bracket into the slot, a bail-shaped member pivoted to the standards, and means connecting said member with the frame and the segmental gear.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY FLAGMANN.

Witnesses:

P. MEYER,  
E. A. GOETTIG.