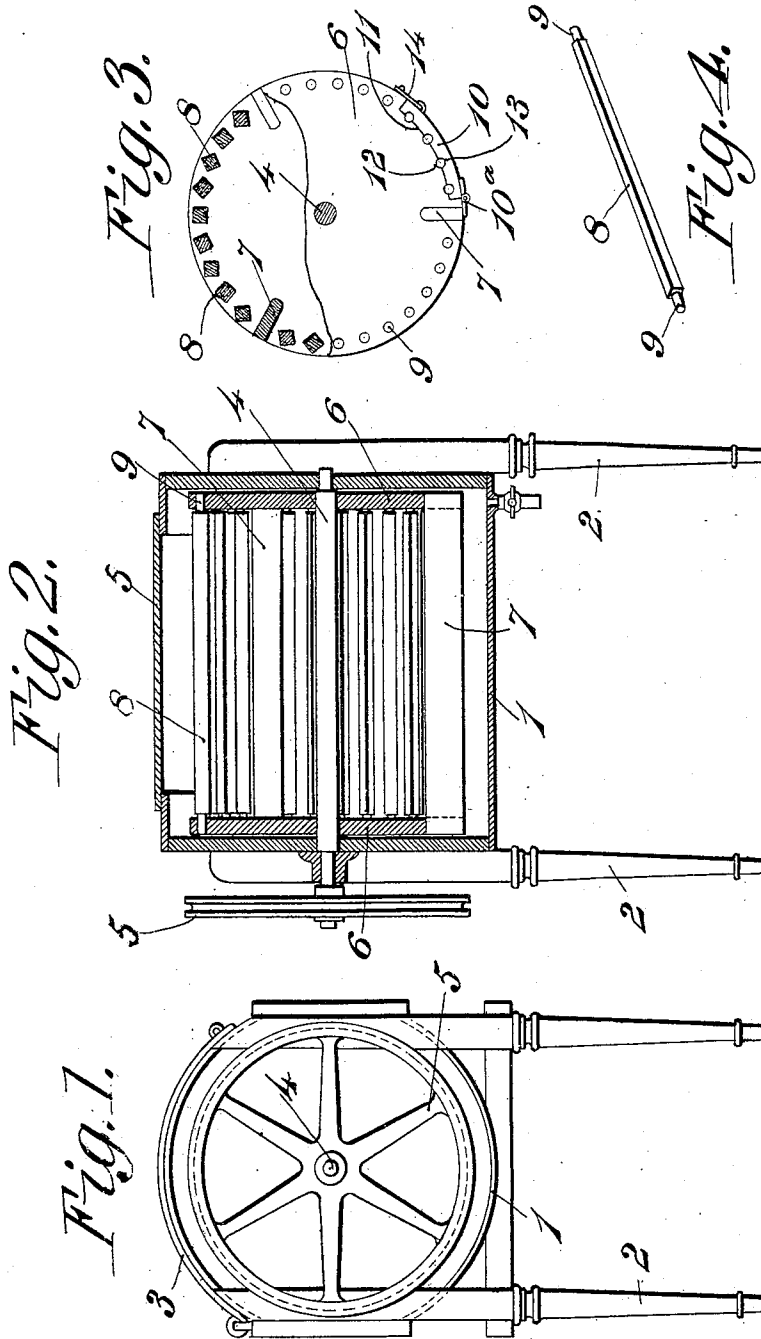


No. 860,857.

PATENTED JULY 23, 1907.

F. A. DINSMORE.  
WASHING MACHINE.  
APPLICATION FILED MAR. 9, 1906.



WITNESSES:

*E. H. Lawson*  
*Hubert D. Lawson*

*Frank A. Dinsmore*, INVENTOR

By *C. A. Snow & Co.*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

FRANK A. DINSMORE, OF FREDONIA, NEW YORK.

## WASHING-MACHINE.

No. 860,857.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed March 9, 1906. Serial No. 305,109.

*To all whom it may concern:*

Be it known that I, FRANK A. DINSMORE, a citizen of the United States, residing at Fredonia, in the county of Chautauqua and State of New York, have  
5 invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to washing machines and its object is to provide a machine of this character which is so constructed as to thoroughly clean clothes therein  
10 by rotating the clothes receptacle.

Another object is to provide a washing machine which is very simple, durable and inexpensive and easy to operate.

With the above and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

20 In said drawings: Figure 1 is an end elevation of the machine; Fig. 2 is a longitudinal section thereof; Fig. 3 is an end elevation of the clothes receptacle a portion thereof being shown in section; and Fig. 4 is a detail view of one of the rollers.

25 Referring to the figures by characters of reference, 1 is a casing supported upon legs 2 and having a movable cover 3 whereby access may be readily had to the interior of the casing. A shaft 4 is rotatably mounted within the ends of the casing and has a drive wheel 5  
30 at one end thereof while secured to the shaft within and adjacent the ends of the casing are cylinder heads 6 in the form of disks. These heads are rigidly connected at intervals by blades 7 which are arranged radially upon the heads and extend inwardly from their  
35 peripheries. Interposed between every two blades is a series of rollers 8 each of which is rectangular in cross section and has trunnions 9 which are rotatably mounted within the heads. A frame 10 is connected by hinges 10<sup>a</sup> with the peripheries of the two heads 6  
40 and this frame is adapted to be seated within recesses 11 formed in the peripheries of the heads. The inner walls of these recesses 11 have depressions 12 adapted

to receive the trunnions 9 of one set of rollers 8, and similar depressions 13 are formed within the inner faces of the ends of frame 10 to receive the trunnions  
45 9. The recesses 12 and 13 are of course adapted to register and when the frame 10 is secured in the recesses 11 as by means of fasteners 14 it becomes impossible for the rollers 8 carried by the frame to become detached. However, by swinging the frame open these trunnions  
50 can be easily removed. The blades 7 extend into the cylinder beyond the inner faces of the rollers.

It will be understood that the cylinder may be rotated in any desired manner and when it is desired to wash clothes the same are placed within the cylinder,  
55 after which soap and water may be placed within the casing 1. The cylinder is adapted to be partly rotated in opposite directions intermittently and during this operation the clothes will be carried upward by the blades 7 for a portion of the rotation of the cylinder and  
60 will then be dropped downward on the angular rollers. The clothes in sliding over these rollers will be rubbed to a certain extent and a thorough cleansing of the fabrics will therefore result.

What is claimed is:

65 In a washing machine the combination with a casing and a shaft revolubly mounted therein; of cylinder heads secured to and revoluble with the shaft, each of said heads having a peripheral recess, a frame hingedly connected to the heads and normally seated within the recesses, the ad-  
70 joining faces of the frame and heads having registering notches, means for securing the frame within the recesses, radially disposed blades interposed between and fixedly connected to the heads adjacent the peripheries thereof, and a plurality of angular rollers interposed between  
75 every two blades, certain of said rollers being journaled within the heads and the remaining rollers being journaled within the registering notches in the heads and frame, the radial blades extending inwardly beyond the rollers and constituting lifting devices, the inner edges of  
80 said blades being rounded.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRANK A. DINSMORE.

Witnesses:

J. M. PETTIT,  
BESSIE WHITNEY.