

(No Model.)

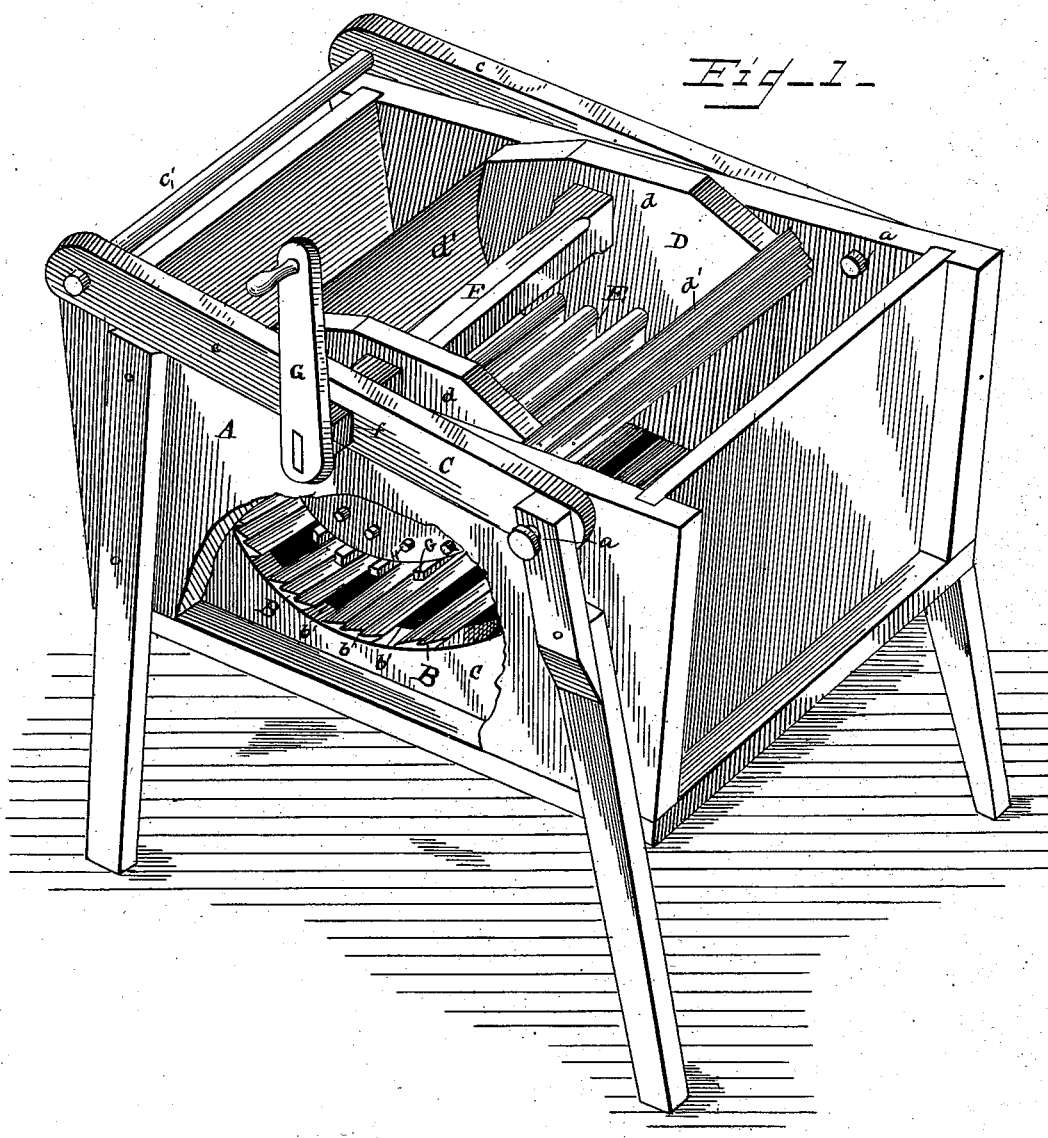
2 Sheets—Sheet 1.

N. B. CLABAUGH.

WASHING MACHINE.

No. 382,755.

Patented May 15, 1888.



WITNESSES:

Edwin T. Jewell.

R. Kennedy.

INVENTOR.

N. B. Clabaugh.

By R. M. Clabaugh.  
Attorney.

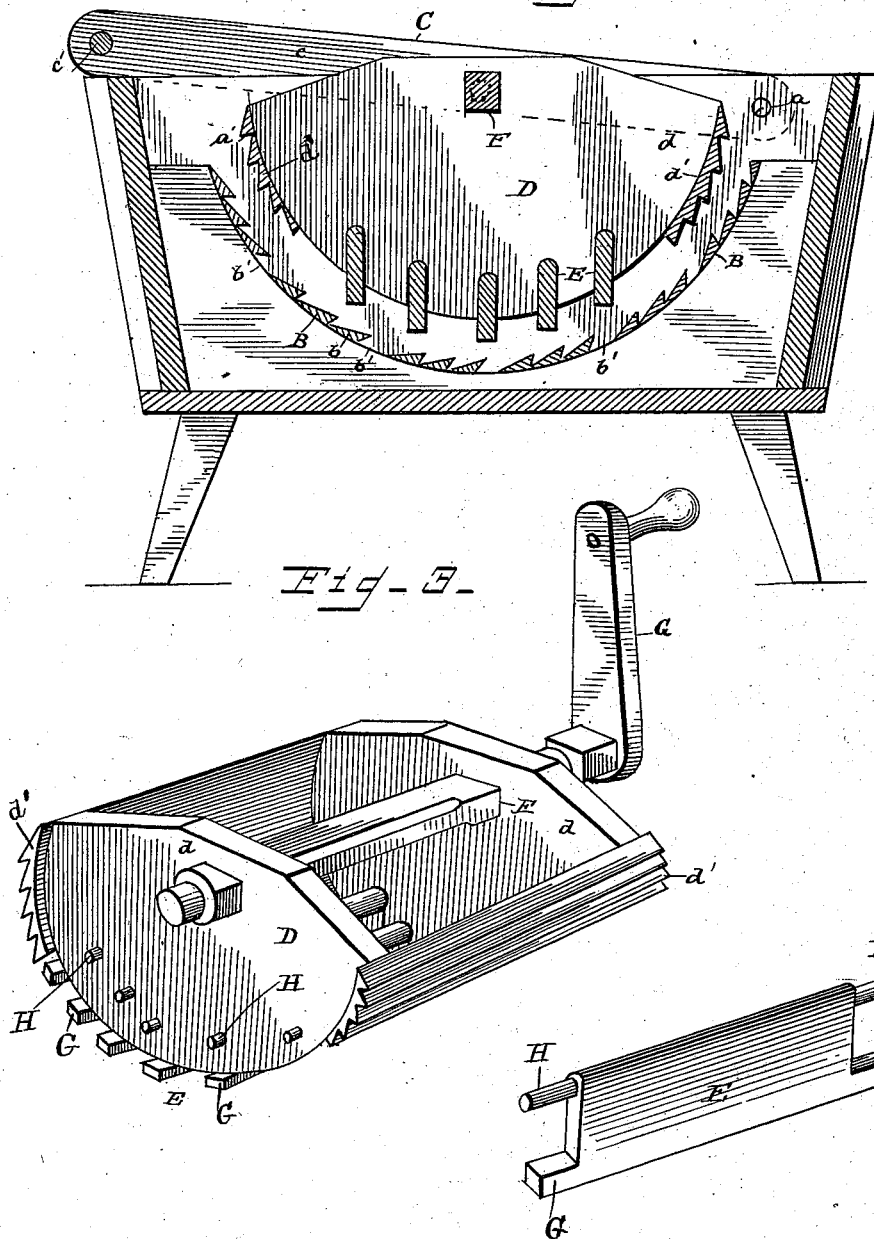
(No Model.)

2 Sheets—Sheet 2.

N. B. CLABAUGH.  
WASHING MACHINE.

No. 382,755.

Patented May 15, 1888.  
Fig. 2



WITNESSES.

Edwin I. Jewell,  
H. C. Kennedy.

INVENTOR.

N. B. Clabaugh.  
By J. M. Clabaugh,  
Attorney.

# UNITED STATES PATENT OFFICE.

NORMAN B. CLABAUGH, OF FREDERICK, MARYLAND.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 382,755, dated May 15, 1888.

Application filed April 20, 1887. Renewed March 24, 1888. Serial No. 268,323. (No model.)

*To all whom it may concern:*

Be it known that I, NORMAN B. CLABAUGH, of Frederick city, in the county of Frederick and State of Maryland, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to washing-machines, and more particularly to that class of washing-machines in which reciprocating rubbers are used in connection with stationary or fixed rubbers.

The invention consists in the details of construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a vertical sectional view of the same; and Fig. 3 is a detail view of the reciprocating frame and pivoted rubbers.

A represents a tub provided internally near its bottom and ends with stationary rubbers B. The said rubbers are made in separate sections *b*, with spaces *b'* between them. By this arrangement a space is left between the rubbers and the bottom and ends of the tub.

C is a supporting-frame composed of two side pieces, *c c*, and cross-bar *c'*. The bar *c'* serves as a handle. The lower ends of the pieces *c c* are supported in bearings *a* near one end of the tub.

In Fig. 3 I have shown the reciprocating frame and rubbers, which I will now describe. The reciprocating frame D consists of the side pieces *d d*, made preferably in the form of a semicircle and connected together by stationary end rubbers, *d' d'*. The said end rubbers are made narrow, so that a large space is left between them. The rubbers E are loosely pivoted in the side pieces *d d*, and have a swinging movement independently of the reciprocating frame.

In the employment of a swinging rubber in connection with a reciprocating frame it has been customary to construct the swinging rubber with two pivots near its upper end and make the length of the body of the rubber the distance between the side pieces of the reciprocating frame. Great inconvenience and loss of power are caused thereby, for the reason that

when the frame is inclined the rubbers will be pressed up between the side pieces and will offer no resistance to the articles to be washed. To obviate this difficulty I have constructed a swinging rubber with pivots H H and lugs G G, formed on the lower ends of said rubber. When the frame D is reciprocated, the rubbers E cannot be pressed up between the sides *d d* on account of the lugs G G striking the lower edges of said sides.

A shaft, F, is passed through the side pieces *d d*, near their upper edges, and its projecting ends are supported in bearings *f*, formed in the side pieces *c c* of the frame C. To one end of the shaft F a crank, G, is secured, by means of which the reciprocating frame is operated. It will be seen that by raising or lowering the handle *c'* of the frame C the distance between the stationary and reciprocating rubbers may be regulated accordingly.

The operation of my invention is as follows: The frame C is raised so as to bring the frame D out of the tub. After the cleansing materials and articles to be cleaned have been placed upon the stationary rubbers the frame D is then replaced. The operator then holds the handle *c'* in one hand and operates the crank with the other, regulating the distance between the rubbers with the handle *c'*. Whichever way the frame D moves, the pivoted rubbers will all incline in that direction, and as the direction of the frame D is constantly being changed so the pivoted rubbers will shift at every change of motion, and it will be seen that the articles to be cleaned will be separated and thoroughly rubbed at every such change.

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

In a washing-machine, the combination, with a tub and stationary rubbers, of a reciprocating frame carrying swinging rubbers, said swinging rubbers consisting of a body-portion having pivots H H and lugs G G, substantially as described.

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

NORMAN B. CLABAUGH.

Witnesses:

Z. JAMES GITTINGER,  
P. R. MCCHERY.