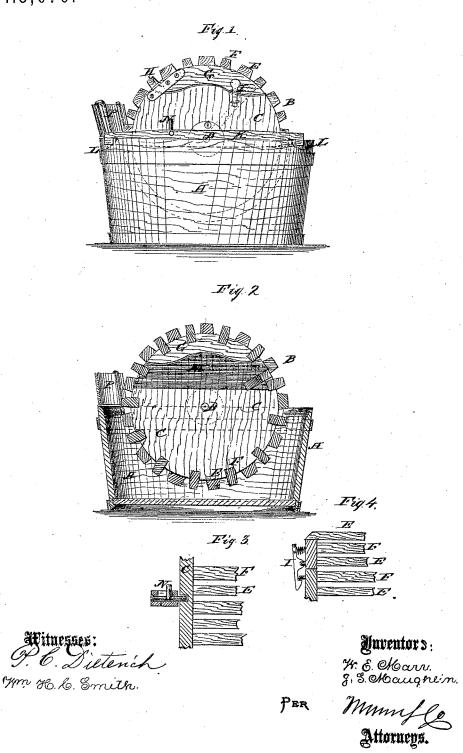
## W. E. MARR & J. S. MAUGHLIN.

Improvement in Washing-Machines.

No. 115,076.

Patented May 23, 1871.



## UNITED STATES PATENT OFFICE.

WILLIAM C. MARR AND JOSEPH S. MAUGHLIN, OF ONAWA CITY, IOWA.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 115,076, dated May 23, 1871.

To all whom it may concern:

Be it known that we, WILLIAM C. MARR and Joseph S. Maughlin, of Onawa City, in the county of Monona and State of Iowa, have invented a new and Improved Washing-Machine; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part

of this specification.

This invention relates to improvements in washing-machines; and it consists in a hollow drum having a rim formed of longitudinal pieces applied with spaces between, and each alternaterib projected inwardly more than the next, the said drum being provided with a crankshaft and a bearing support for one end, all adapted for application to a common wash-tub or wash-boiler on the stove, and to be used by placing the clothes inside and revolving the drum in the water contained in the tub or the boiler, all as hereinafter described.

Figure 1 is a side elevation of our improved washing-machine. Fig. 2 is a sectional elevation of the same. Fig. 3 is a detail section, showing means for locking the drum in the right position for opening it to apply or remove the clothes; and Fig. 4 shows a locking device for holding the door of the drum shut, said door being employed to confine the clothes in

the drum.

Similar letters of reference indicate corre-

sponding parts.

A is a common wash-tub. B is the hollow drum, consisting of two circular disks, C, mounted on a shaft, D, and connected at their peripheries by the cross-bars E and F, which are arranged with spaces between them, and each alternate bar is projected inwardly beyond the other, as shown clearly in Fig. 2. G is a cover for an open space made in the periphery of the drum for admitting the clothes and removing them; said cover is hinged at H, and is held shut by a spring-catch, I, and stud. K is a beam for supporting the end of

the crank-shaft opposite to the crank. Said beam has a notch, L, at each end, for dropping down on the upper edge of the tub, as shown, for supporting it. This beam, being provided with several notches, admits of applying the drum to tubs of different sizes, the other end of the shaft resting in a notch in the upper edge of the tub. The drum containing the clothes being revolved in the water will cause such disturbance as to maintain a continuous flow of water through the clothes, which will cleanse them very effectually without subjecting them to any rubbing, which is objectionable on account of wearing them. We propose, however, to provide a small rubbing-surface, M, on the inside of one of the disks, suitably arranged to be reached for rubbing by hand when the cover G is raised, to admit of rubbing by hand when the cover G is raised by the cover G is raised. bing out particularly foul spots in the clothes. N is a sliding locking-pin arranged on the bar K for engaging with the drum, having a hole properly arranged therefor, to hold the drum in the right position for rubbing by hand. P is a guard for preventing the overflow of the water.

This improved washing-machine is exceedingly simple and cheap, and very efficient in

operation.

Having thus described our invention, we claim as new and desire to secure by Letters Patent-

1. The hollow drum and the supportingbeam, constructed, arranged, and combined with a tub or boiler, substantially as specified.

2. The hollow drum having the hand rubbing board or surface M arranged on the inside of one of the disks in such relation to the opening for introducing the clothes that the clothes may be rubbed thereon by hand when the cover of said opening is raised, all substantially as specified.

> WILLIAM C. MARR. JOSEPH S. MAUGHLIN.

Witnesses:

JAMES ARMSTRONG, C. S. Perkins.