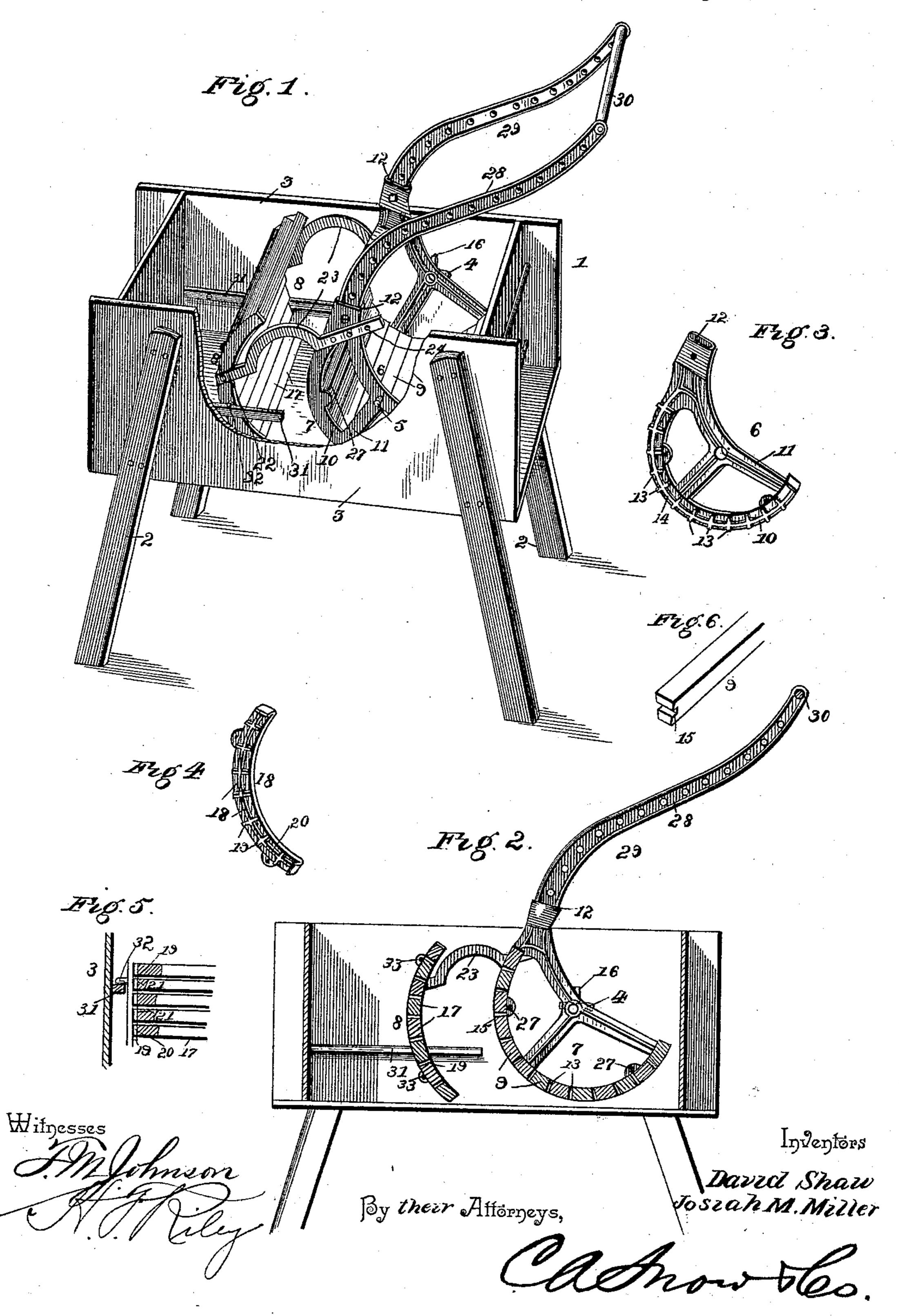
(No Model.)

## D. SHAW & J. M. MILLER. WASHING MACHINE.

No. 496,910.

Patented May 9, 1893.



## United States Patent Office.

DAVID SHAW AND JOSIAH M. MILLER, OF UNION, OHIO.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 496,910, dated May 9, 1893.

Application filed April 26, 1892. Serial No. 430,710. (No model.)

To all whom it may concern:

Be it known that we, DAVID SHAW and Jo-SIAH M. MILLER, citizens of the United States, residing at Union, in the county of Montgomery and State of Ohio, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to improvements in

washing machines.

The object of the present invention is to provide a simple and inexpensive washing machine adapted to be operated with the expenditure of but little force and capable of thoroughly cleansing clothes and removing dirt and stains.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed

20 out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a washing machine embodying the invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a detail perspective view of one of the castings of the pivoted presser and rubber. Fig. 4 is a similar view of one of the curved end bars of the sliding presser. Fig. 5 is a detail sectional view. Fig. 6 is a detail perspective view of one of the slats.

Referring to the accompanying drawings, 1 designates a washing machine body supported by legs 2, and having secured to the inner faces of opposite sides 3, near one end of the 35 body, bearings 4 which are open and receive journals 5 of end castings 6, of a pivoted presserand rubber 7. The pivoted presser and rubber 7 co-operates with a sliding presser 8, and these parts squeeze clothes between them 40 press out the water, suds and dirt and thoroughly clean the clothes. The pivoted rubber and presser is approximately semi-cylindrical and presents its convex surface to the clothes and exerts a rubbing action on them 45 before clamping them and pressing them between it and the sliding presser 8, and it is composed of a series of slats 9, which are secured to the castings 6. The casting 6 consists of a curved bar 10 and a spider 11 formed 50 integral with the curved bar and bracing the same, and the casting 6 is provided at one end

with a socket 12. The curved bars are pro-

vided with a series of transverse flanges 13 between which the slats are secured, and they are provided with a series of longitudinally 55 disposed tenons 14 which engage slots or mortises 15 of the slats 9. The slats 9 are arranged at intervals and have sufficient space between them to permit the passage of water, suds and dirt forced out of the clothes. The 50 journals 5 of the castings are arranged in the bearings 4 and are secured therein by blocks 16 arranged on the inner faces of the sides of the washing machine body opposite the openings or mouths of the bearings.

The sliding presser 8 is constructed similarly to the pivoted presser and rubber, and consists of a series of slats 17 arranged at intervals and having their ends secured to curved end bars 18, which are connected by 70 rods 33 and which are provided with flanges 19 and tenons 20 to engage mortises 21 of the slats 17. The end bars are provided in their outer faces with recesses 22, which receive connecting bars 23. One end of each 75 bar 23 is pivoted to a casting of the presser and rubber 7, and is provided with a series of adjusting perforations 24 and the other end is pivoted to the end bars 18 at the recesses 22. The connecting bars are arched at 80 the middle to prevent clothes being caught in them and being torn. The presser 8 slides upon track-bars 31 and the end bars 18 are provided with lugs 32, which rest upon the track bars. The castings 6 of the rubber and presser 85 7 are connected by rods 27 which prevent the castings becoming separated from the slats. The sockets 12 receive the inner ends of side bars 28 of a handle 29 which is formed by the side bars and a cross-bar 30. The side bars 90 28 are sigmoidal and they form continuations of the curves of the castings 6, and their inner ends are secured in the sockets by bolts.

It will be seen that the washing machine, is simple and inexpensive in construction, 95 strong and durable and capable of thoroughly cleansing clothes without injuring the fabrics.

The ends of the connecting bars 23 having perforations are pivoted to the castings above the pivotal point of the latter, whereby when 100 the handle is oscillated, the presser and rubber 7 and the presser 8 will be brought together and separated to clamp and release clothes. The adjusting perforations enable

the pressure on the clothes to be regulated as they enable the presser and rubber 7, and the presser 8 to be brought closer together or moved farther apart at the end of a stroke when the clamping or squeezing is done.

What we claim is—

The combination of the body provided at opposite sides with horizontal track bars, the combined presser and rubber 7 comprising to the segmental castings provided at their upper ends with sockets and the slats having their ends secured to the bars and presenting a convex outer face, the presser 8 mounted on the track bars and composed of curved end bars and slats secured to the end bars, the transverse rods 27 connecting the castings of the combined rubber and presser 7, and the transverse rods 33 connecting the curved

end bars of the presser 8 and causing the said parts to clamp their respective slats, the han-20 dle having curved side bars secured in said sockets, and the connecting bars 23 having their ends pivoted to the combined rubber and presser 7 and to the presser 8, and being arched intermediate of their ends and each 25 provided at one end with adjusting perforations, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures

in the presence of two witnesses.

DAVID SHAW.
JOSIAH M. MILLER.

Witnesses:
G. A. SLONAKER,
WM. A. WEST.