A. W. GIBBS. WASHING MACHINE.

Patented Dec. 1, 1891. No. 464,017. FI G_I_ તર FIG_3_ 25 24 Artemus W. Grabs

United States Patent Office.

ARTEMUS W. GIBBS, OF BLUE MOUND, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 464,017, dated December 1, 1891.

Application filed January 21, 1891. Serial No. 378,586. (No model.)

To all whom it may concern:

Be it known that I, ARTEMUS W. GIBBS, a citizen of the United States, residing at Blue Mound, in the county of Linn and State of Kansas, have invented a new and useful Washing-Machine, of which the following is a specification.

The invention relates to improvements in

washing-machines.

The object of the present invention is to simplify and improve the construction of washing-machines and enable the parts to readily yield to the varying thicknesses of clothes and prevent the fabric being injured.

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

In the drawings, Figure 1 is a perspective view of a washing-machine constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a detail

sectional view on line x x of Fig. 2.

Referring to the accompanying drawings, 1 designates an approximately semi-cylindrical washing-body, composed of a sheet-metal bottom 2 and wooden sides 3, and journaled in suitable bearings of the sides is a shaft 4, 30 upon which is mounted a cylindrical rotary rubbing-cylinder 5. The rubbing-cylinder 5 is composed of disks 6 and longitudinal bars 7, secured to the peripheries of the disks and having beveled sides, and operating in con-35 junction with the cylindrical rubber 5 is a stationary rubber 8, which is flexible and yielding and adapted to conform to the varying thicknesses of clothes being washed and prevent injury to the fabric, and is composed 40 of a series of transverse slats 9, having beveled sides similar to those of the cylindrical rubber 5, and arranged at intervals on wires 10 and adapted to permit sediment and dirt to pass readily between them and settle at 45 the bottom of the body or tub 1. The stationary flexible concave rubber 8 is composed of the transverse slats and end bars 11, and the wires 10 pass through the slats and the end bars 11 and have their ends lapped 50 and secured in the perforations of the end l

bars. The end bars are provided with eyes 12, to which are secured the lower ends of springs 13, which have their upper ends secured to staples 14, arranged on end pieces 15 of the body or tub 1, and the staples 14 are 55 arranged in vertical series to enable the adjustment of the stationary flexible rubber 8, and as the latter is arranged a considerable distance from the bottom of the body sufficient space is left to enable it to readily ad- 60 just itself to the clothes being washed. The end bars of the concave flexible rubber are provided at their ends with rollers 16, arranged to engage vertical cleats 17, secured to the end pieces of the body 1, and the said 65 rollers permit a ready adjustment of the flexible rubber 8 and prevent the same binding

against the body.

Mounted upon one end of the shaft 4 is a pinion 18, which meshes with a cog-wheel 19, 70 and the latter is provided with an operatinghandle 20 and is mounted on a stud-shaft 21, which projects outward from a bearing-plate in which the shaft 4 is journaled, and the said stub-shaft is braced by a plate 23, which 75 has its end secured to the outer face of legs 24 at one side of the body. The body 1 is provided at one end with a transverse vertically-arranged wringer-board 25, to which a wringer may be attached, and the top of the 80 body is closed by a cover 26, composed of sections hinged together, and one of the sections is provided with a knob 27. The legs 24 are arranged at an angle and have their upper ends secured to the side of the body, and are 85 connected below the latter by horizontal bars 28, upon which is supported a frame 29. Clothes are passed between the rubbing-cylinder and flexible rubber 8, and the ends of the latter are forcd backward against the 90 body of the machine, and during the operation of the machine the rotary cylinder causes a slight reciprocation of the flexible rubber 8 and causes the latter to rub the clothes, and were it not for the rollers and the cleats this 95 motion and rubbing would be defeated.

What I claim is—

In a washing-machine, the combination of the body provided with vertical cleats 17, arranged at the ends of the machine and adja- 100 cent to the sides, the cylindrical rubber 5, the concave flexible rubber 8, the springs connecting the concave rubber with the body and suspending the former in the latter, and the 5 rollers arranged at the ends of the concave rubber and adapted to engage the vertical cleats, substantially as described.

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

ARTEMUS W. GIBBS.

Witnesses: ALBERT CHARLES,

B. F. GIBBS.