D. E. Rohr,

Washing Machine,

No. 20,244. Patented May 11, 1858.

Fig. 3.

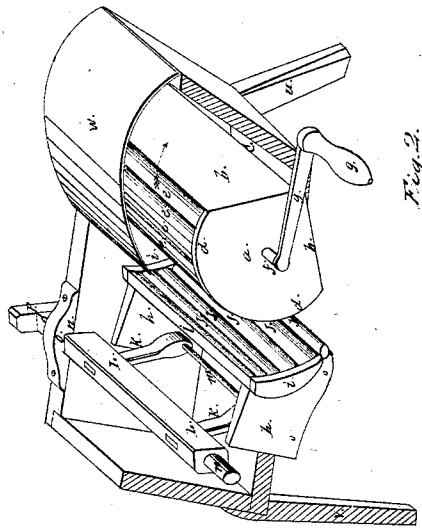


Fig. 2.

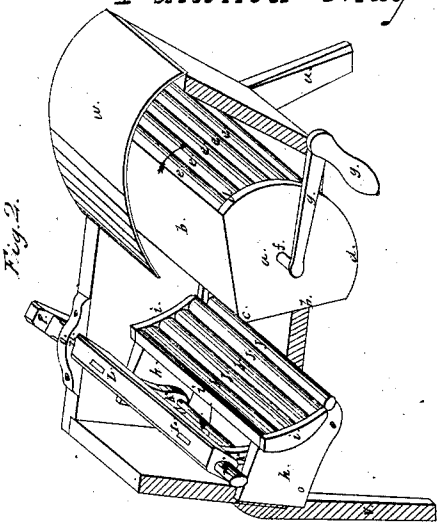
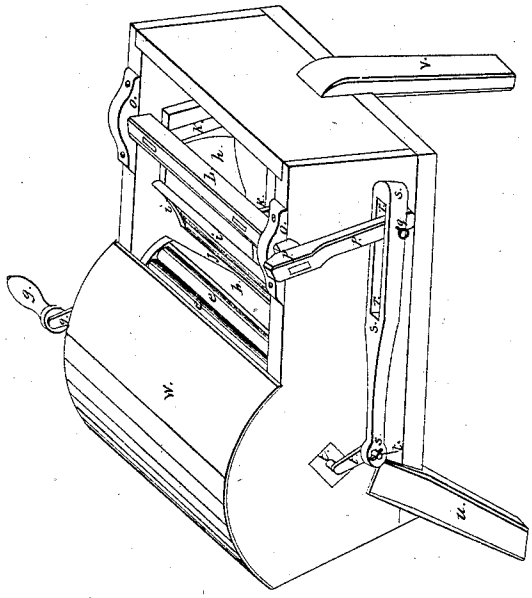


Fig. 1.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

D. E. ROHR, OF CHARLESTOWN, VIRGINIA, ASSIGNOR TO HIMSELF AND THOS. W. DAVIS, OF SAME PLACE.

WASHING-MACHINE.

Specification of Letters Patent No. 20,244, dated May 11, 1858.

To all whom it may concern:

Be it known that I, DAVID E. ROHR, of Charlestown, in the county of Jefferson and State of Virginia, have invented, made, and used certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, Figure 1 being a perspective view of the machine complete. Fig. 2 is a longitudinal sectional view of the casing or box part of the machine, exposing the internal devices and their position before the clothes are rubbed. Fig. 3 is also a longitudinal sectional view of the machine, showing the position of the devices in the act of bringing them in contact with the clothes.

The nature of my invention consists of constructing a washing machine having rubbing devices of a peculiar shape, which I describe as follows: In Figs. 2, and 3, *a*, *a* is a device constructed of a solid piece of timber, of suitable length and diameter; one half of the circumference throughout the given length thereof being shaped into two smooth surfaces, the faces or planes *b*, *b* of which must be at right angles to each other. The corner produced by the rectangular planes, is then dressed off, forming another smaller, or narrow face or plane as at *c*, from three to four inches wide. The other half of the surface of the solid, is formed in a semicircle as at *d*, *d*. Thus one half of the circumference will be circular or convex, while the other portion presents two equal planes, and a smaller plane.

Longitudinally across the face of the semicircular face, are attached parallel ridges, flutes, beads or grooves *e*, *e*, *e*, *e*, *e*, *e*, and this compound device as will be seen is arranged upon an axle or shaft, *f*, having a crank handle *g*, *g*, and is inserted within the casing toward the back part of the casing as in the Figs. 2, and 3. The other peculiar device I term a sliding reciprocating scoop *h*, *h*, having attached to its front concave, fluted, (grooved, or ridged) squeezer or washboard *i*, *i*, *i*—J, J, J, J, J. This second compound device is attached and hung to a suspension-yoke device K, K—L, L—*m*. The rod part *m*, being the pivot joint entering the sides of the sliding scoop. The L part is the yoke beam, formed with journal ends *n n n* working in boxes or suitable bearings formed in or attached to the upper edges of the casing in any suitable manner as at *o*, *o*, *o*, *o*. To one end of the yoke-beam is mortised or attached an elbow P, P, the lower end working on a pivot pin *q*, within a slot or longitudinal mortise *r*, *r*, formed in a reciprocating connection rod *s*, *s*, *s* one end of which works on a joint crank arm *t*, *t*, *t*, formed on the end of the axle or shaft *f*, passing through the device A. This rod can be adjusted to give a longer or shorter movement to the scoop *h*, *h*.

The casing of the machine is mounted on two back legs or supports *u*, *u*, and one front leg *v*. This front leg is about two or three inches longer than the back legs, and is so intended in order to raise the front end of the machine, and to incline or slope the bottom backwardly. If desired a hinged, or fixed cap or covering *w*, *w*, *w* may be attached to the upper or top part of the casing over the device *a*. A spigot or stop cock is to be inserted in the back end so as to admit of the discharge or drawing off of the unclean water when desired.

The operation of my machine is as follows: The casing or body part of the machine, is supplied with the required quantity of water (hot or cold) according to requirements of the clothes to be washed, and a supply of soap is thrown into the water to produce suds. The articles to be washed are then deposited in the machine upon the face of the squeezer or washboard *i*, J, J, when the crank is turned, and the rotating rubbing, device *a*, being revolved, from left to right, the flutes or beads *e*, *e*, *e*, *e*, come in contact with the clothes as the squeezer or washboard J, J, J, J, advances toward the beads, and while the device *a*, is rotating around in the direction of the arrow, over and under. The device, or sliding scoop *h*, *h*, moves to and fro, or reciprocates, back and forth, and thus while the device *a*, has a continuous, motion, around, the sliding scoop device *h h*, has an alternating motion.

It will be observed that by my peculiarly constructed and combined mechanism, the clothes do not pass off the squeezer or washboard, and move under or around the device *a*, but instead by the peculiar action of the devices, the clothes are alternately rubbed

by the grooves or beads *e*, *e*, *e*, *e*, *e*, and squeezed or pressed by the grooves or beads *i i i* and, as the surfaces or planes *b*, *b*, *c*, present themselves, the clothes are no longer held or squeezed, but are permitted to fall, down into the suds, or water, while the narrow face *c*, lifts the clothes, and changes or turns them in their position. Thus is the rubbing, squeezing, lifting and dipping of the clothes brought about in an automatical manner, producing the result of hand washing, and so simple is the construction and operation of my washing machine that a child of ten years of age can do the washing, almost as readily as a grown person and bringing about a great economy of time and labor.

Having described fully the nature and construction of my improvements,

What I claim as of my own invention and desire to have secured by Letters Patent of the United States, is—

Construction of the fluted rotating device *a*, *b*, *c*, *d*, the sliding, reciprocating scoop *h h* with fluted or grooved squeezer, or washingboard *i*, J, J, with yoke beam and pendant devices K K, L L, *m*, arranged, combined, and operated substantially as in the manner hereinbefore fully described.

DAVID E. ROHR. [L. S.]

Witnesses:
JOHN D. LINE,
WM. M. LOCK.