(No Model.)

H. B. BAKER.

WASHING MACHINE.

No. 457,979. Patented Aug. 18, 1891.

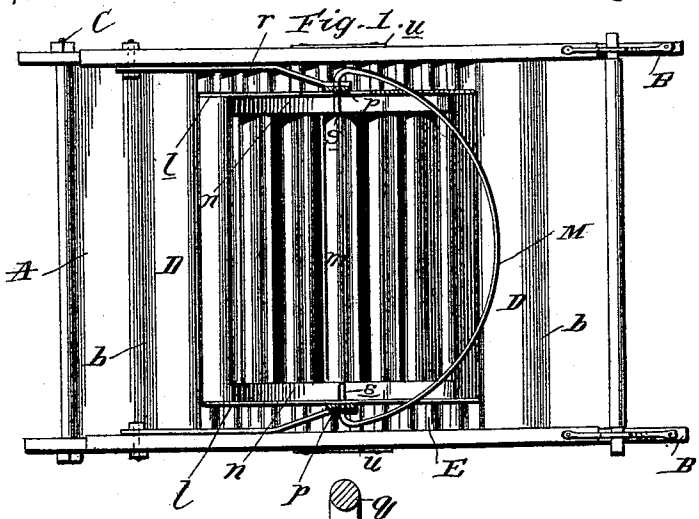
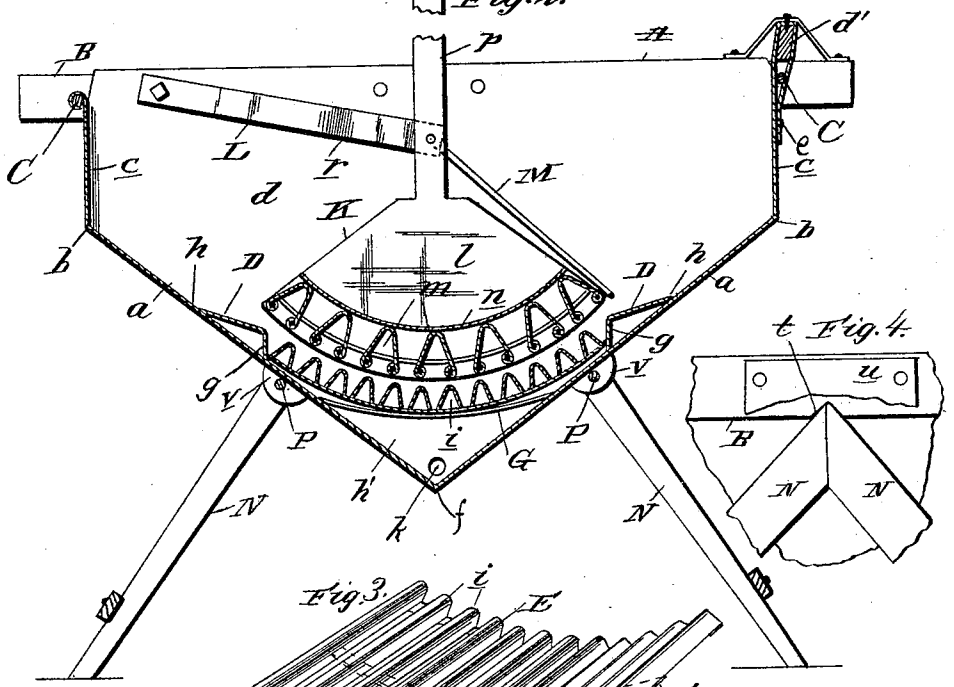
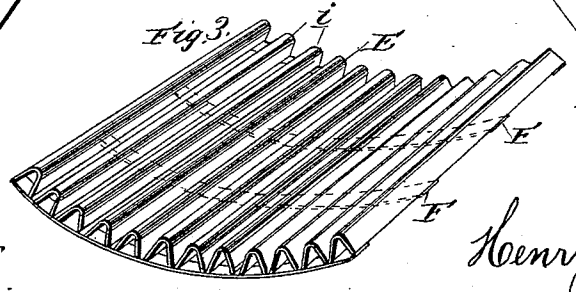


Fig. 2.





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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY B. BAKER, OF NELSONVILLE, OHIO, ASSIGNOR OF ONE-HALF TO I. P. PRIMROSE AND HIRAM E. HOWE, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 457,979, dated August 18, 1891.

Application filed November 29, 1890. Serial No. 373,022. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. BAKER, a citizen of the United States, residing at Nelsonville, in the county of Athens and State of Ohio, have invented certain new and useful Improvements in Washing-Machines; and I do 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 appertains to make and use the same.

This invention has relation to an improvement in washing-machines, and the novelty will be fully understood from the following description and claim, when taken in connection with the accompanying drawings, in which—

Figure 1 is a plan view of my improved washing-machine. Fig. 2 is a vertical longitudinal sectional view of the machine with the reciprocating rubber in position. Fig. 3 is a perspective view of the removable bottom or base rubber, and Fig. 4 is a sectional detail view.

Referring by letter to the said drawings, A indicates the tub. This tub, which is preferably made of sheet metal, although it may be made of other suitable material, has sloping walls *a* arranged at a suitable angle downwardly from the points *b*, from whence they are directed vertically in parallel planes, as shown at *c*. These sloping walls are connected by heads or end walls *d*, along the edges of which are fixed beams B. These beams B are connected near opposite ends by means of bolts or rods C, which also pass through the turned or lapped edges of the walls *c*. One of these transverse vertical walls *c* is of greater height than the opposite one, as better shown in Fig. 2 of the drawings, and this extended wall is looped vertically, so as to receive within it a transverse beam *d'*, which rests at opposite ends upon the side beams B. The end of the wall *c* which depends from said transverse beam is riveted to the wall *c* by rivets *e* or other suitable securing devices.

On the inner sides of the inclined or tapering walls *a*, and at equal distances from the lower angle *f* thereof, I provide transverse strips D. These strips are preferably formed of sheet metal, and their vertically-disposed walls *g* may be left free, so as to allow a slight yielding action and permit the insertion of a removable bottom or base E, as will be presently explained, the strips being secured at their edges *h* to the tub-body. The removable base or bottom E is of a concavo-convex form and composed of ribs *i*, looped vertically, so as to present their smooth convex edges to the clothes. These ribs, which are also formed of sheet metal or other suitable material, are arranged so as to form a space between them, and are secured in such position upon curved metallic strips F, arranged relatively at right angles thereto. This removable bottom or base E is supported upon strips G, which are secured to the side walls *d* of the tub and adjacent to the angle of its bottom, allowing a space *h'* for the reception of sediment, dirt, and other impurities from the clothes, which may be drawn out through a hole *k*, normally closed by a plug or the like. This bottom E is of a width equal to the space between the cross-strips D, and by having the forward wall of said strips arranged so as to slightly yield, said bottom may be sprung into position and firmly retained therein during operation of the machine, and the angle of the strips D may also serve as one of the ribs in connection with the removable bottom or base. I attach importance to this peculiar construction and arrangement of parts, and to the fact that the bottom or bed-piece E may be readily removed and replaced by another should it become impaired or injured in any manner.

K indicates the reciprocating rubber. This rubber is composed of two heads *l* and a series of ribs *m*, which are formed from sheet metal fixed at suitable intervals, so as to allow a space between them. These ribs *m*, which, as combined, are arranged in a curvilinear manner, are of an inverted-V form in cross-section, and their edges, which are separated, are coiled or turned inwardly, so that while the hollows of the ribs are presented to the clothes their edges as thus constructed will not tear or injure the clothes. These ribs of the reciprocating rubber may be braced at intermediate points by means of a rod, wire,

or the like passing through them, and a flange *n* on the inner sides of the heads *l* is also provided as an additional means for fixing the ribs *m* in position This reciprocating rubber is provided with fixed arms *p*, connected by a cross bar or round *q*, which serves as a handle.

L indicates arms, which are designed for the attachment of the rubber to the tub. These arms are secured at their outer ends in a pivoted manner to the side walls of the tub, as shown, and their opposite ends, which are curved inwardly at *r*, are pivotally connected with the arms *p* of the rubber. These arms L afford the reciprocating rubber a swinging movement and allow said rubber to be withdrawn from the tub; but as it is sometimes desirable to detach the rubber from the tub entirely I provide a quick and ready means to accomplish the same. This means of attaching and detaching the reciprocating rubber from the pivoted arms comprises a spring-wire loop M, which has its opposite ends directed inwardly in opposite directions, as shown at *s*, and passed through holes in the inner ends of the arms L and corresponding holes at a suitable point in the arms *p*. By this means it will be seen that it is simply necessary to take hold of the wire loop M and press its opposite ends outwardly, in order to remove or detach the reciprocating rubber from the tub. The legs N, which support the tub at a suitable altitude, are arranged obliquely, and their upper ends are cut at a miter and enter a recess *t* in the side rails B of the tub, a plate *u* being employed to cover said recess in the rails B and serve as an additional means of keeping the upper ends of the legs seated therein. Rods P are employed for bracing and connecting the legs beneath the tub-body. These rods, which pass through the legs and are secured in position by nuts, also pass through holes formed in plates *v*, secured to the body of the tub.

From the foregoing description, taken in connection with the drawings, the operation and advantages of my invention will be obvious, and it will be seen, among other features of advantage, I have provided a cheap, strong, and durable means for the attachment of a wringer.

Having described my invention, what I claim is—

The tub-body having the tapering or inclined walls, the strips G, secured to the side walls slightly above the angle of the tapering walls, the transverse strips D, secured to the inner sides of the inclined walls above the strips G, and the removable ribbed bottom or base curved, as shown, and adapted to be confined upon the strips G and between the strips D within the tub, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY B. BAKER.

Witnesses:
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