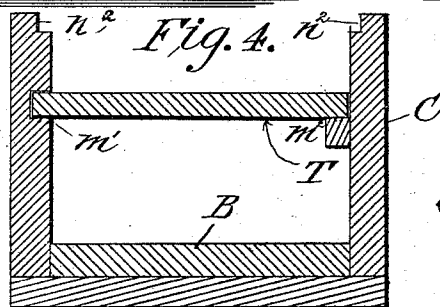
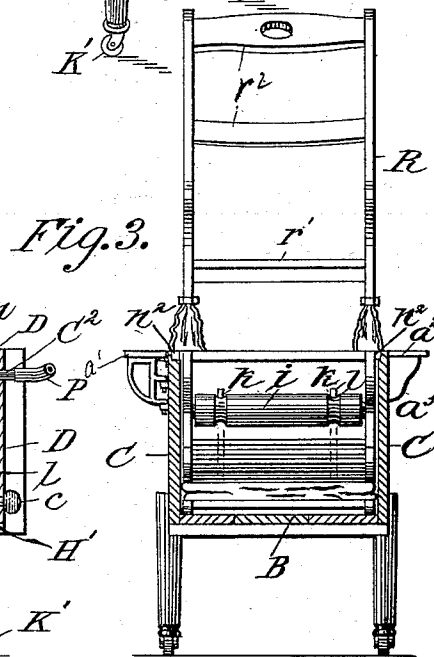
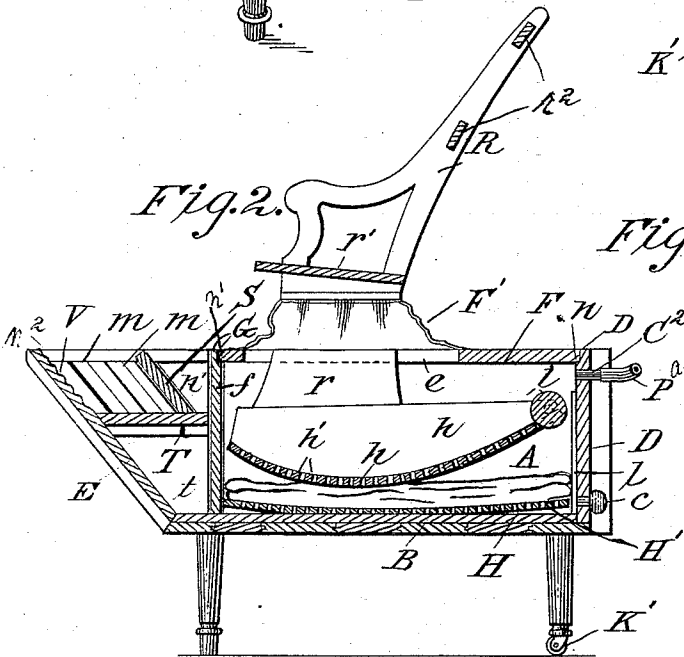
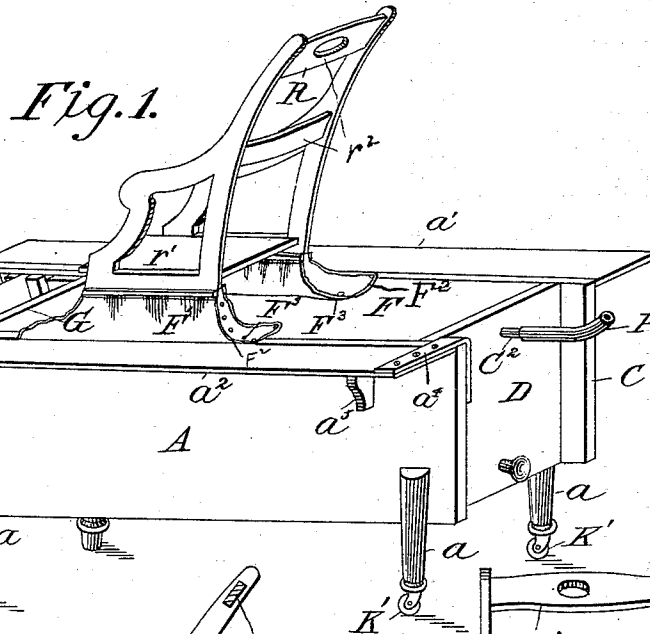


(No Model.)

S. ARCUS.
WASHING MACHINE.

No. 439,852.

Patented Nov. 4, 1890.



Witnesses: C
Theo. Proulx
Mathilda Proulx

Inventor:
Sinclair Arcus
per
H. Harrison
attorney

UNITED STATES PATENT OFFICE.

SINCLAIR ARCUS, OF CHICAGO, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 439,852, dated November 4, 1890.

Application filed November 14, 1888. Serial No. 290,860. (No model.)

To all whom it may concern:

Be it known that I, SINCLAIR ARCUS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Combined Washing-Machine and Bath-Tub, of which the following is a specification.

My invention relates to improvements in a combined washing-machine, table, &c.; and it consists in the particular construction, arrangement, and operation of the same, as will be hereinafter fully described, and pointed out in the claims.

To enable others skilled in the art to which my invention relates to make and use the same, I will now proceed to describe the same, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of my device. Fig. 2 is a longitudinal section. Fig. 3 is a cross-section. Fig. 4 is a detailed sectional view showing platform T and connection with the sides C C.

Similar letters refer to like parts throughout the several views.

A is the wash-tub, made of wood or any other suitable material, so as to be water-tight, and is preferably mounted upon the legs *a a*, which legs may be provided with rollers *K'*. I prefer the legs, as the tub being higher enables the water or suds to be readily withdrawn through the exit-pipe *c*, and enables the device with attachable leaves to be used as a table.

The tub A consists of the bottom B, the sides C C, the vertical end board D, and the inclined end board E, the parts united making a bath or wash tub, preferably of the form as shown in Figs. 1 and 2 of the drawings; but the same may be made in any other suitable shape that may be desired. The several parts are so secured together as to be water-tight to hold water for the purpose of washing or bathing. The object of making the end piece E inclined is to make the bath-tub of proper shape and to form a foot-rest for tall persons who could not from their height use the inner foot-rest S. This rest S slides in grooves *m m* in the sides C C, as shown in Fig. 2 of the drawings.

Near the inclined end of the tub I provide

a removable partition G, which fits in the slots *ff* on the inside of the sides C C, this partition forming one end of the suds-box, the end D forming the other. On the bottom of said suds-box I place a rack H, slightly curved, so that it can be given a rocking motion. This rack consists, preferably, of square or sufficiently beveled slats *H'* to suit the curve of the rack, and have top and bottom smooth surfaces with suitable spaces between the slats to allow the suds or water to pass through. The motion of the rack shakes the clothes loose in the suds and allows the water to pass between the slats.

R is a rocking-chair of any suitable form, but preferably of the two sides *rr*, seat *r'*, back *r''*, and rockers *h h* on its lower ends. The rocker *h* is provided with the slats *h'*, placed preferably a short distance apart, forming a rack, and the roller *i*. The slats *h'* run from one side *h* to the other at the bottom, and are secured to the same by nails or screws or in any other appropriate manner. The roller *i* is journaled in the back end of rockers *h h* and projects slightly out past the end of the rockers, and is provided or formed with grooves *k k*, preferably two or more. These grooves contact and work with strips *ll* on the inside of vertical end board D, and are for the purpose of keeping the rocker with its rack in the center of the tub and prevent the friction which would otherwise be on the sides C C and end D, the roller *i* being journaled so as to revolve freely. The inside of the vertical end piece D is formed with a small groove *D'*, which receives the tongue on the end of the cover F. The said cover F is provided with slots *ee*, through which pass the chair-sides *rr*. The slots are of suitable length and width to allow free play of the side pieces *rr* in rocking. The inside edges of the sides C C are rabbeted, forming rabbets or rests *nn*, and also a similar rabbet or rest *n'* on the inside at top of partition G, upon which rabbets rest the cover F. I provide a cover *F'*, preferably of rubber cloth, for the slots *ee*. This cover is provided at its top and bottom edges with elastic straps *F''*, which serve to hold the covers close around the chair-sides *rr* and over the slots *ee*, the cloth having holes which button onto buttons *F'''* on the sides C and cover F, and the cloth

may be provided with any other suitable buttons and eyes or fastenings to secure a suitable protection from the water and steam. This cover F' prevents the steam from the suds to escape or rise up and annoy or injure the person operating the machine.

C^2 is a tube at or near the top of the end D, to which may be attached a few feet of hose P, which when the washing is going on can be passed out of the window, allowing the steam to pass out through the hose into the open air or to any place desired. This hose can be used to fill the tub by connecting it to a hydrant for cold water, or to a boiler for hot water, for washing or bathing.

c is an exit at the lower end of D at or near its junction with the bottom B. In the drawings the exit is shown as a hole and plug. The water or suds run off through this exit, and by attaching the hose P to said exit the suds or water may be carried off to any suitable point desired.

At the top edge of the side pieces C C from the removable partition G to the inclined end E and in the top edge of said end E, I form a rabbet n^2 , which serves as a rest in which to place the platform T and foot-rest S, to form part of the top of the table, as will be hereinafter more fully set forth and described. On one of the sides C on the inside is a groove m' , running from the partition G to the end E, the said groove m' being twice the depth of the rabbet n^2 , and on the other side C on the inside, directly opposite to the groove m' , I provide a cleat m^2 , the said groove and cleat being for the reception and support of the board T when used as a platform or rest in the operation of washing, as shown in Fig. 2. The close-fitting connection of the platform T with the sides, the partition, and end piece will prevent the steam arising from the suds which may have passed into chamber t from reaching the feet of the operator, the said platform forming a check or protection therefrom.

b is a step, preferably placed on one of the legs a or on the main frame, for the purpose of enabling the operator to easily mount the machine.

The manner of operation as a washing-machine is as follows: The removable partition G and platform T having been placed in their respective positions, and the rest S having been placed in the proper groove most suitable to the size of the operator, I then place the rack H on the bottom of the tub. The clothes O to be washed are then folded and laid on the top of rack H. The suds or water are then fed into the tub by means of the hose P or otherwise. The rocking-chair, with its rockers and slats, is then placed in the tub, the rockers with its slats resting upon the clothes. The cover F is then placed in position and its slots covered by the rubber covers F' , which is buttoned on, as before described and shown. If desired, the hose P is passed out of the window to carry off the

steam. The operator then mounts the machine by assistance of step b and sits down in the chair and commences rocking in the usual manner, which rocking will thoroughly wash the clothes O without injuring the same, as the rocking motion does not produce a rubbing but a compressing effect, the clothes being squeezed or compressed between the rack H and slats h' . The curve of said rack and the spaces between the slats allow the water to be forced through and thoroughly cleanse the clothes, the washing taking ordinarily from ten to twenty minutes, according to the condition of the clothes to be washed. After the clothes have been washed, they are removed by taking off the covers and lifting out the rocking-chair; or, if desired, a wringer may be secured to partition G, the clothes passing through the wringer onto platform T, from whence they can be removed to any receptacle desired. It is evident that the rocking-chair can easily be removed without lifting by swinging it back over end D until it rests on the floor. After the washing has been completed, the used suds can be readily removed or run off through exit c , its cork being out, and the same can be run to any point by means of the hose P, as desired. I have found by experience in the use of the machine that clothes or cloth of any description, from the finest fabric to the heavy Brussels carpet, can be thoroughly washed with comparative ease and without injury to the material being washed. The length from the seat to the bottom of the rockers is so long that the operation is made easy and more readily worked than in the case of a rocking-chair on the floor, and it is evident that a person while sitting in the chair and rocking and washing can be reading, sewing, nursing the children, or performing any other suitable duty. When the washing is completed and the chair removed, the cover F is placed in position, and the platform T and foot-rest S are placed in the rabbets n^2 on sides C C and end E, which will on the top of the machine form a smooth surface to be used as a kitchen-dresser. My device is particularly adapted to families of ordinary circumstances, who usually live in small flats or tenement-houses, having but little or limited storage room. For this purpose I have attached two extensions or leaves. One leaf a' is hinged to one side of the tub and is supported horizontally by a hinged bracket, and the other leaf a^2 is removably attached to the other side of the tub, the leaf a^2 being provided with metal flanges a^4 , which fit over the ends of the sides C, and are held in position by means of bracket a^5 , so as to be firm and yet removable. When the machine is used as a washing-machine or bath-tub, the leaves a' and a^2 are folded down out of the way, ready to be raised when desired to use the device as a dining-table. When the device is desired to be used as a bath-tub, the rocking-chair, racks, partitions, and re-

movable parts are taken out, which will leave a tub suitable for bathing, the water being fed into the tub through the hose P or in any other suitable manner. In case the machine
5 is desired to be removed from one point or room to another it can be readily done.

What I claim as new, and desire to secure by Letters Patent, is—

10 1. In a combined washing-machine and bath-tub, the combination of a rocking-chair having a rack on its rockers provided with a grooved roller, with a tub having projections on its vertical ends, a removable rack on its
15 bottom, and a removable slotted top, substantially as shown and described, and for the purpose set forth.

2. The combination of the tub A, the sides of which near one end are provided with the horizontal groove m' , the horizontal cleat m^2 , and the inclined grooves m , with the platform
20 T, which rests in said horizontal groove and on said cleat, and with the foot-rest S, which fits in said inclined grooves and rests on the platform T, all substantially as shown and
described.

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

SINCLAIR ARCUS.

Witnesses:

CHAS. C. TILLMAN,
H. HARRISON.