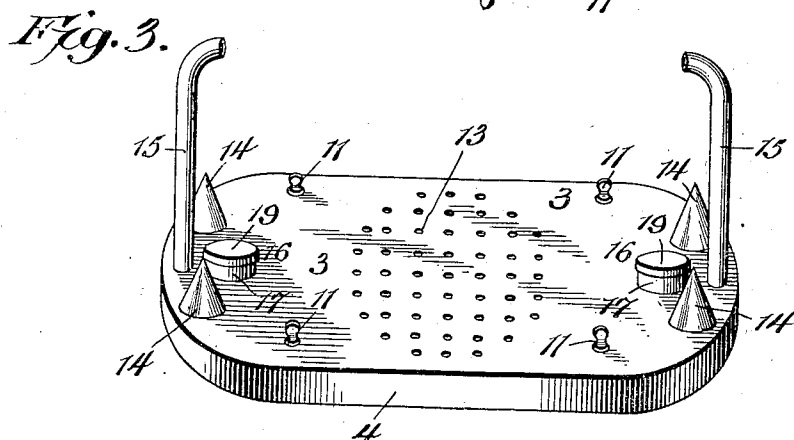
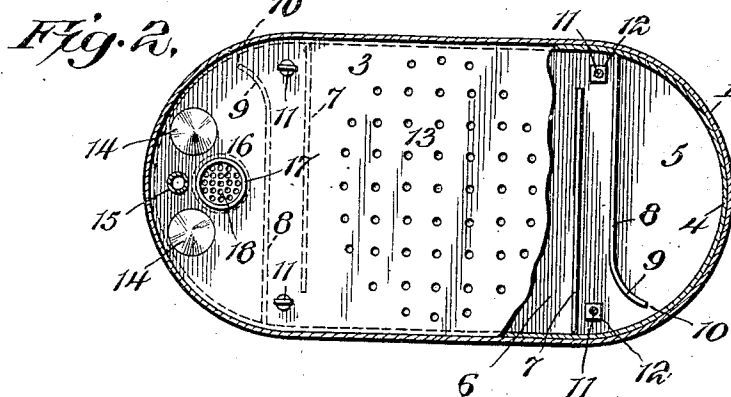
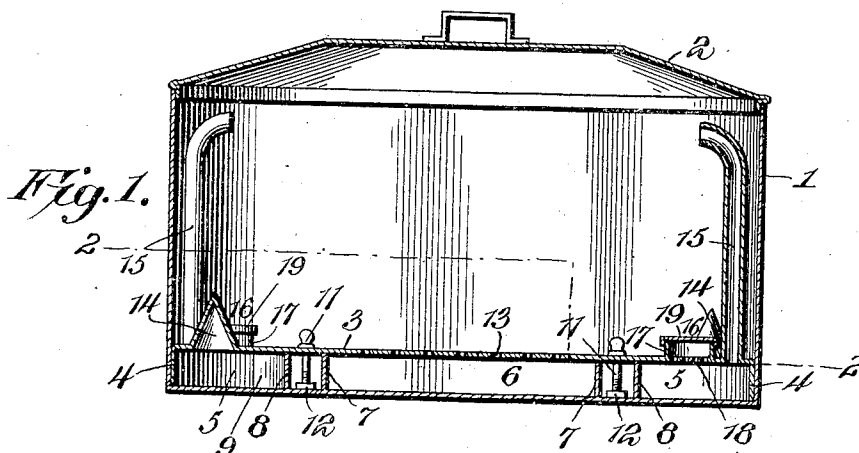


No. 835,644.

PATENTED NOV. 13, 1906.

R. C. SMITH.
WASHING MACHINE.
APPLICATION FILED OCT. 11, 1904.



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WASHING-MACHINE.

No. 835,644.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed October 11, 1904. Serial No. 228,050.

To all whom it may concern:

Be it known that I, ROBERT C. SMITH, a subject of the King of Great Britain, residing at Innisfail, in the district of Alberta, in the North-West Territories and Dominion of Canada, 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 improve the construction of washing-machines and to provide a simple, inexpensive, and efficient one capable of thoroughly cleaning clothes without rubbing or otherwise wearing, tearing, or injuring the same.

A further object of the invention is to provide a washing-machine adapted to subject the clothes and other fabric to the action of currents of hot water, suds, and steam and to afford convenient access to all portions of the washing-machine for enabling the same to be thoroughly cleaned after the operation of washing has been completed.

With these and other objects in view 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 claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a vertical sectional view of a washing-machine constructed in accordance with this invention. Fig. 2 is a horizontal sectional view of the same on the line 2 2 of Fig. 1, the horizontal partition being broken away at one end to illustrate the arrangement of the vertical partitions. Fig. 3 is a perspective view of the removable horizontal partition, illustrating the arrangement of the marginal flange and the steam generating and discharging means.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a receptacle, preferably consisting of an ordinary washboiler and provided with a removable cover 2 and adapted

to be placed on a stove or other heating device for heating water contained therein to produce currents of hot water, suds, and steam for removing the dirt and stains from clothes and other fabrics, whereby the same are washed without rubbing or pounding them. Within the receptacle is arranged a horizontal partition 3, conforming to the configuration of the walls of the receptacle and being substantially of the same area as the interior of the receptacle in order to fit snugly therein. The receptacle is preferably provided with rounded ends, as clearly shown in Fig. 2 of the drawings, and the horizontal partition is also rounded at the ends. The horizontal partition is provided with a depending vertical marginal flange 4, which fits snugly against the walls of the receptacle and which is supported upon the bottom of the same, as clearly indicated in Fig. 1 of the drawings. The space between the horizontal partition or false bottom and the bottom of the receptacle is divided into end and intermediate compartments 5 and 6 by means of vertically-arranged transversely-disposed partitions 7 and 8, each extending from one side of the marginal flange 4 and terminating short of the opposite side to provide a circuitous passage to prevent water from passing directly from the intermediate compartment into the end compartments or chambers. The vertical partitions 7 and 8, which are arranged in pairs, are rigidly secured to the upper face of the bottom of the receptacle, and the partition 8 has its end portion curved and terminating adjacent to the marginal flange to provide a narrow entrance to the end chamber or compartment 5. The transverse partitions 7 and 8 form narrow transverse passages which extend across the receptacle, and the inlet and outlet openings, formed by terminating the opposite ends of the members of each pair of transverse partitions short of the marginal flanges at opposite sides of the receptacle, communicate, respectively, with the intermediate and end compartments. The vertical flanges 4 support the horizontal partition or false bottom, which is firmly clamped on them by means of screws 11, having heads at their upper ends, and engaging nuts 12, soldered or otherwise secured to the upper face of the bottom of the receptacle 1 at the space between

the transverse partitions and form threaded sockets. The screws, which are disposed in pairs, are arranged between the planes of the vertical partitions, as clearly shown in 5 Figs. 1 and 2 of the drawings, and they are capable of firmly holding the horizontal partition or false bottom in place. They also enable the horizontal partition or false bottom to be readily removed to afford access to all 10 portions of the receptacle for cleaning the same after the operation of washing has been completed.

The horizontal partition or false bottom is provided at its central portion with perforations 13, located above the intermediate compartment 6, and the perforations or apertures of the intermediate section or portion of the horizontal partition permit water to pass from the upper portion of the receptacle into 20 the space beneath the horizontal partition or false bottom. The horizontal partition is provided at its ends with upwardly-extending steam-confining casings 14, consisting of imperforate conical casings mounted upon the horizontal partitions over openings therein and communicating with the end chambers or compartments 5. The air is confined in the steam-confining casings 14 and prevents water from entering the same, and as soon as 30 the water is heated to a boiling-point steam collects within the generators 14 and produces a pressure and assists in forcing hot water, suds, and steam upward through a pair of discharge-tubes 15, mounted on the end portions of the horizontal partition or false bottom extending upward from the same and provided with curved upper terminating portions arranged to discharge the hot water, suds, and steam upon the clothes and 40 other fabrics being washed. The marginal flange and the vertical partitions prevent the steam from escaping through the perforated intermediate portion, and the hot water and suds are thereby discharged through the tubes 15. This also produces a circulation, the water being drawn downward through the apertures or perforations of the section or portion 13 and passing through the passages formed by the vertical partitions into the end chamber or compartments. The horizontal partition or false bottom also supports a pair of soap-holders 16, consisting of imperforate cylindrical bodies or casings 17, mounted over perforated portions 18 of the partition 55 3 and provided with removable imperforate caps or closures 19, which may be positively secured to the body portions of the casings 17 in any suitable manner, if desired, to prevent the pressure from forcing the caps off the casings. The soap is subjected to the action of

the hot water and suds are thereby formed, and it will be apparent that the clothes and other fabrics subjected to the action of the hot water, suds, and steam will be thoroughly cleaned without wearing, tearing, or otherwise 65 injuring them.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a washboiler, of 70 a washing device embodying a horizontal partition or false bottom spaced from the bottom of the boiler and provided with perforations communicating with the space between the bottom of the boiler and the horizontal partition or false bottom, and a soap-receptacle consisting of an imperforate body mounted on the false bottom or partition and covering the said perforations and provided with an imperforate closure for affording access to the interior of the said receptacle. 80

2. A washing-machine comprising a receptacle provided at the upper face of its bottom with threaded sockets, a horizontal partition having a depending marginal flange and 85 spaced from the bottom of the receptacle, said partition being provided between its ends with an intermediate perforated portion, the perforations of which form entrances to the space below the partition, transversely-disposed partitions rigidly secured to the upper 90 face of the bottom of the receptacle and arranged in pairs at the ends of the intermediate perforated portion, the inner member of each pair having one end fitted against the marginal flange at one side of the receptacle and terminating short of the said flange at the opposite side of the receptacle to form an entrance, and the other member of each pair extending from the flange adjacent to the entrance-opening and terminating short of the 100 other side to provide an outlet, said transverse partitions dividing the space below the horizontal partition of the intermediate and end compartments and forming narrow transverse passages, which extend across the receptacle, and the inlet and outlet openings of which communicate with the said intermediate and end compartments, and adjustable fastening devices engaging the threaded 105 sockets of the receptacle and rigidly clamping the horizontal partition on the transverse partitions.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 115 the presence of two witnesses.

ROBERT C. SMITH.

Witnesses:

W. R. WILSON,
A. FAHUM.