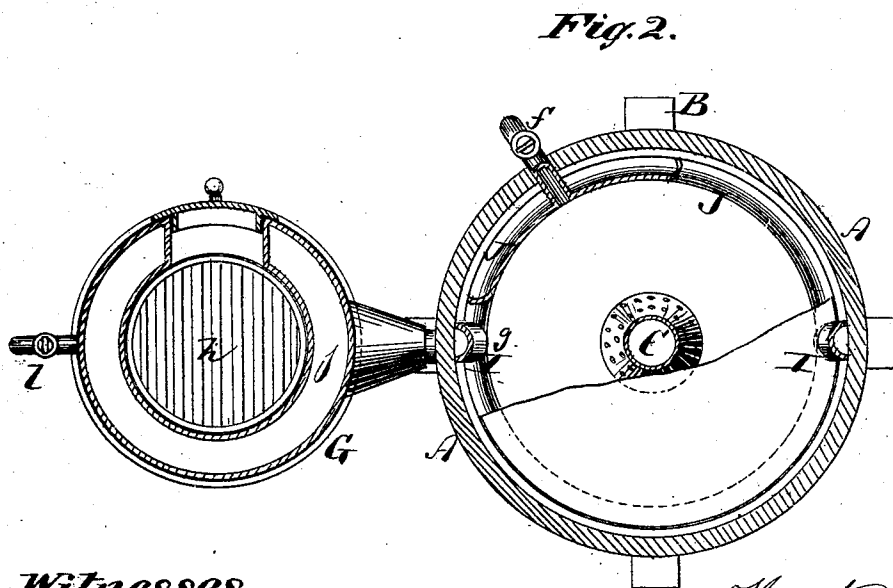
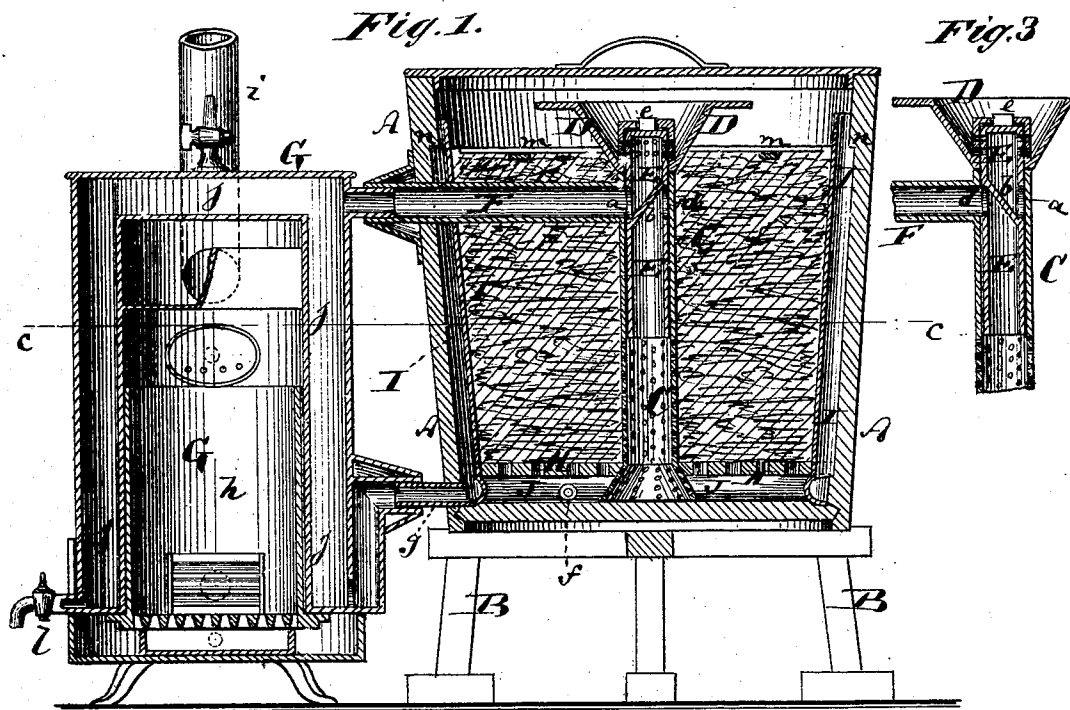


W. REINEMER.
Wash-Boilers.

No. 144,795.

Patented Nov. 18, 1873.



Witnesses.

John Becker.
Fred Haynes

Wm Reinemer
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

WILLIAM REINEMER, OF HOMBURG, PRUSSIA.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. **144,795**, dated November 18, 1873; application filed August 13, 1873.

To all whom it may concern:

Be it known that I, WILLIAM REINEMER, of Homburg, Prussia, have invented an Improved Machine for Washing Clothes, &c., of which the following is a specification:

Figure 1 represents a vertical central section of my improved washing-machine; Fig. 2, a horizontal section thereof on the line *c c*, Fig. 1. Fig. 3 is a detail vertical section through the plug and pipe by which the flow of the liquid is regulated.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new machine for bucking or scalding clothes, and consists, first, in a novel construction of the pipe and regulating-plug for directing the water used for bucking and scalding upward or downward, as may be required; also, in the combination therewith of certain overflow-pipes and of a false bottom for detaining the dirt beneath the garment to be cleaned.

In the accompanying drawing, the letter A represents a tub of suitable size and shape, made of wood or other material, and supported on a suitable stand, B. Within this tub is erected centrally a vertical pipe, C, which has a funnel, D, placed upon its upper end, said funnel being supported upon a tubular plug, E, that is inserted within the upper part of the pipe C. The plug E is open at its lower end. Its upper end has, by preference, a series of apertures, which communicate with apertures formed in the embracing central part of the funnel D, as shown in Figs. 1 and 3. The lower end of the pipe C, which extends down to the bottom of the tub A, is also perforated, as shown. Into the upper part of the pipe C enters a water-supply pipe, F, which extends to C from a heating apparatus, G, through the side of the tub A. The tubular plug E has an aperture, *a*, at one side, in line with the pipe F, and an inner oblique partition, *b*, behind *a*, and behind such partition another aperture, *d*. When the plug E is so turned that the aperture *a* communicates with the supply-pipe F, as in Fig. 1, the water supplied through F will be caused to enter the upper part of the tubular plug, and thence to the funnel D, and thence overflow into the tub A; but when the plug E is turned so as to bring its aperture *d*

into communication with F, as in Fig. 3, the water supplied through F will be forced downward into the lower part of the plug E, and thence into the perforated lower portion of the pipe C. In order to facilitate the turning of the plug into the two positions shown, I prefer to provide its upper end with a projecting prismatic tenon, *e*, which enters a corresponding aperture in the embracing central part of the funnel D, as shown, so that by taking hold of the funnel and turning it the plug E will be turned in corresponding manner. H is a perforated false bottom placed in the tub A, and separating the lowermost part thereof from the upper main chamber. The space beneath this false bottom can be emptied of its liquid or semi-liquid contents through a cock, *f*. On the inner sides of the tub A are arranged two, more or less, upright pipes, I I, which extend almost to the top of the tub A, and are open at their upper ends, while their lower ends communicate with an annular pipe, J, that is placed in the lowermost part of the tub A, beneath the false bottom H. The annular pipe J communicates by a branch, *g*, with the lower part of the heater G. The heater G has a suitable fire-place, *h*, communicating in suitable manner with a smoke-pipe, *i*, and surrounded by a water-space, *j*, with which the pipes F and *g*, respectively, communicate. A draw-off cock, *l*, is applied to this water-chamber *j*, for the purpose of emptying it when desired. The articles to be washed are placed within the tub A, upon the false bottom H thereof, and are then held down by a suitable spider or metal frame, *m*, that is held down by shoulders *n* formed on the inner side of the tub. The plug E is then turned into the position shown in Fig. 1, so that the water supplied by the heater G will work its way up into the funnel, there more or less dissolve the chemicals supplied for facilitating the cleansing process, and thence to flow over and upon the garments. The water or suds will then percolate through the articles and find its way into the lowermost chamber, which is beneath the false bottom, where the dirt contained in or absorbed by the water will be deposited. The dirty water may at any time be drawn off by the cock *f*. If the supply of water from the heater G should be too rapid, the water

will overflow in the tub A into the pipes I I, and will thence find its way into the lower annular pipe J, and back into the heater. It will be observed that the water supplied to the vessel A from the heater G is in a boiling condition, and will consequently buck or scald the clothes continuously until the same are clean. After the process has been completed, the goods may be removed from the tub, rinsed, and wrung out, and may again be replaced within the tub after the dirty water has been removed, and the boiling process repeated until perfect cleansing will be insured. For bleaching the clothes more or less, I turn the plug E into the position shown in Fig. 3, so as to let the water find its way down and reach the clothes through the perforations in the lower part of the pipe C. When this is done, but moderate heat is applied, and water allowed to pass for a considerable length of time through the apertures, until the clothes will be found to be perfectly or properly bleached.

It will be noticed that by using this improved apparatus the clothes are allowed to lie quiet, and are not injured by rocking or rubbing motion. The cleaning takes place from above. Dirt is not reintroduced, but deposited beneath the false bottom, and as the water is not boiled in the same tub in which the clothes are contained, it does not boil over the clothes. Labor, soap, and fuel are thus economized, and the clothes are preserved for

a longer period than by other washing processes, and a larger quantity of clothes in a shorter time can be cleansed than by hand labor.

The lower end of the central pipe C need not be carried beneath the false bottom H, as shown, but may be brought in line with such false bottom.

I claim as my invention and desire to secure by Letters Patent—

1. The combination, within a washing-tub, A, of the perforated pipe C, plug E, and funnel D, when the plug E is provided with the perforations *a* and *d*, and with the inner partition *b*, substantially as described.

2. The combination of the supply-pipe F, central pipe C, adjustable metal plug E, and funnel D with the overflow-pipes I and outlet-pipe J, substantially as shown and described.

3. The combination of the supply-pipe F, central pipe C, and adjustable plug E with the overflow-pipes I, perforated false bottom H, and outlet-pipe J, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of May, 1873.

WIL. REINEMER.

Witnesses:

FRANZ WIRTH,
GUSTAV STEMLER.