

(No Model.)

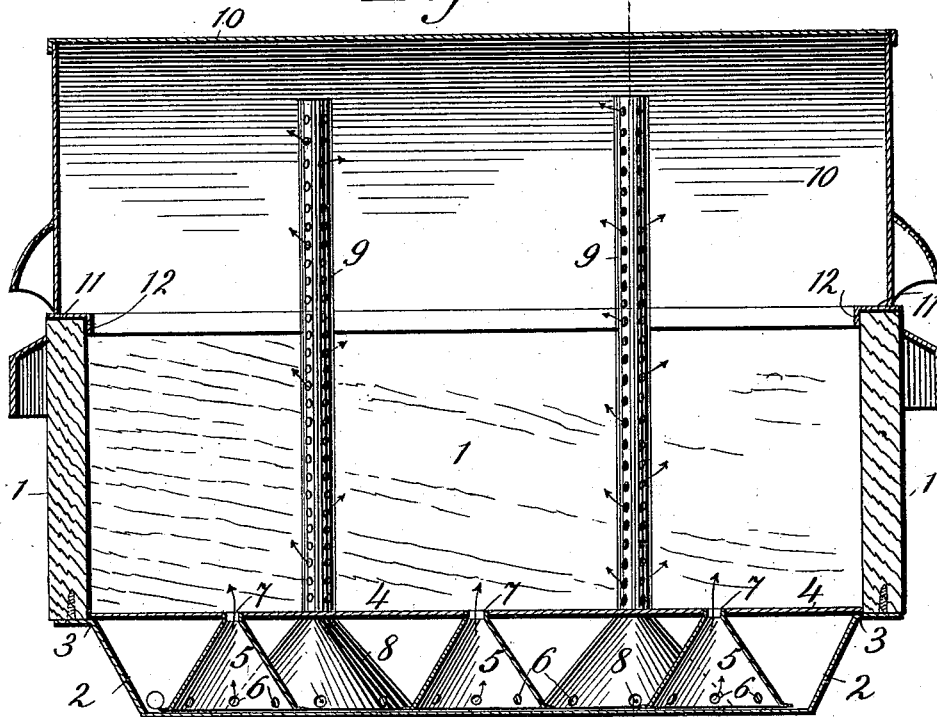
2 Sheets—Sheet 1.

J. A. MEDLEY.  
WASH BOILER.

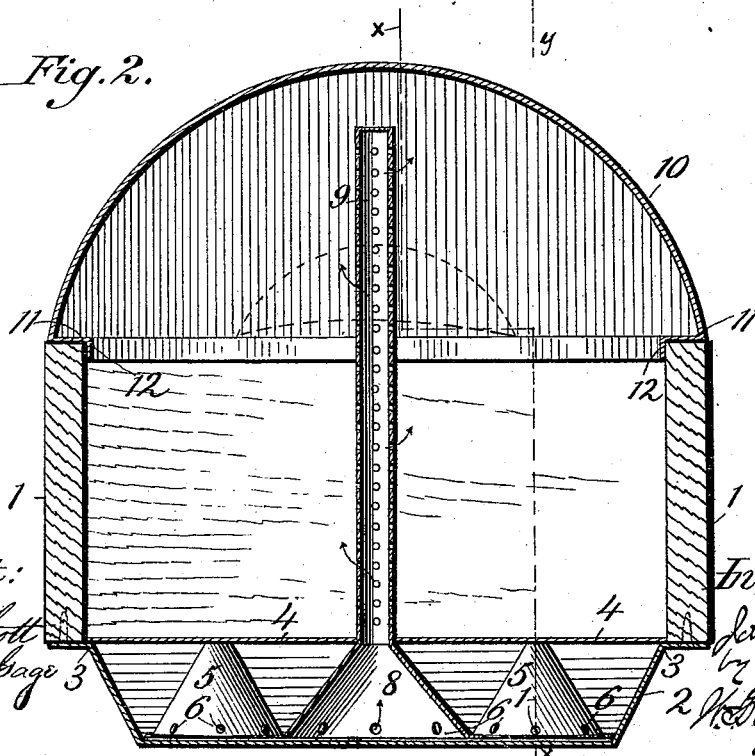
No. 490,575.

Patented Jan. 24, 1893.

*Fig. 1.*



*Fig. 2.*



Attest:

*J. H. Schott*  
*Alfred T. Sage*

Inventor:

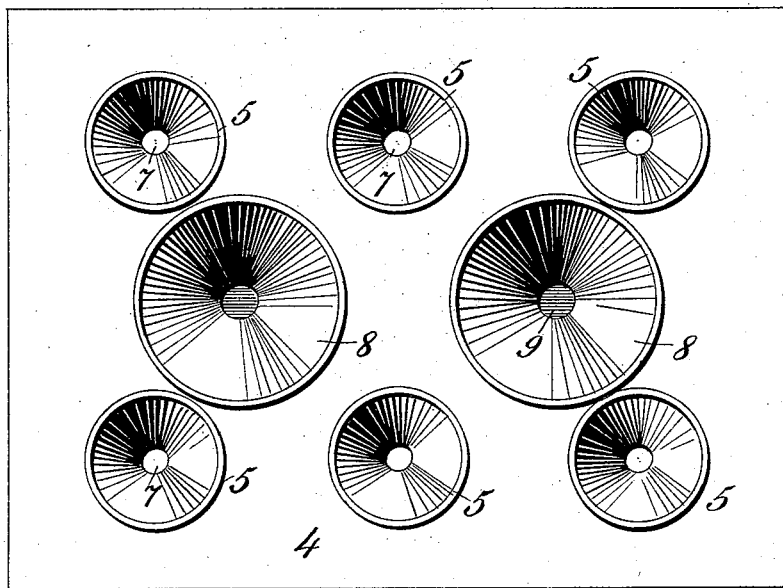
*John A. Medley*  
*W. H. Henderson*  
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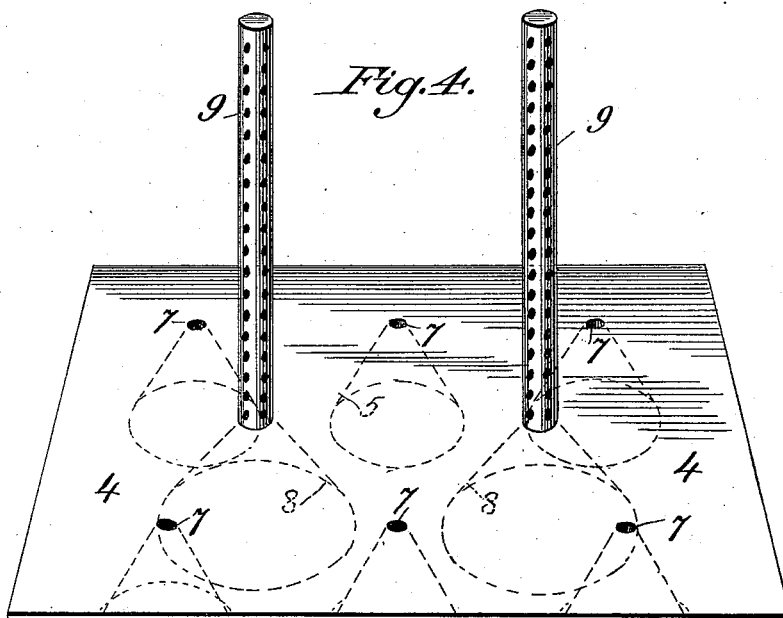
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*Fig. 3.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

JOHN ALFERD MEDLEY, OF COMANCHE, TEXAS, ASSIGNOR OF ONE-HALF TO  
ROBERT H. C. HENDERSON, OF SAME PLACE.

## WASH-BOILER.

SPECIFICATION forming part of Letters Patent No. 490,575, dated January 24, 1893.

Application filed October 11, 1892. Serial No. 448,601. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN ALFERD MEDLEY, a citizen of the United States, residing at Comanche, in the county of Comanche and State of Texas, 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to washing machines, particularly to that kind known as boiler washing machines, and it has for its object to improve the construction so as to generate steam in conical chambers located beneath a false bottom and having communication through said bottom with the lower portion of the chamber above the bottom and beneath the clothes in the boiler so that the steam generated in said conical chambers will be injected with force against the clothes above the false bottom and thus lift and agitate the same in order that steam generated in other conical chambers beneath the false bottom and rising therefrom through vertical tubes extending through and above the clothes in the boiler and passing out through perforations in said tubes may be diffused laterally from said tubes and through the body of the clothes in the boiler as the clothes are lifted by the pressure of the steam injected from the conical chambers opening beneath the clothes, whereby steam is not only generated in less time and raised to a higher pressure but is also caused to agitate the clothes and to be diffused throughout the body of the same, thus resulting in a thorough cleansing of the clothes.

It has also for its object to so construct the machine that a support will be afforded at the lower part of the boiler for the false bottom carrying the conical steam chambers and upright perforated tubes; and further, to provide an arched cover for the boiler whereby the steam rising above the clothes will be caused to gather or huddle at the middle portion of the cover around the upper ends of the perforated tubes so that there will be a greater pressure of the steam at that point than at

other points thereby establishing steam eddies at that point and causing a reverse or downward pressure of the steam at that point, resulting in creating a greater agitation than otherwise would be the case.

It has also for its object to provide a seat for the cover at the upper end of the boiler and means for preventing the cover from being forced sidewise out of place.

To the accomplishment of the foregoing objects, the invention consists in the construction and combination of parts hereinafter particularly described and then sought to be specifically defined by the claim, reference being had to the accompanying drawings forming a part hereof, and in which

Figure 1 is a vertical longitudinal section on the line  $x-x$  of Fig. 2; Fig. 2 is a vertical cross section on the line  $y-y$  of Fig. 1; Fig. 3 is a bottom plan view of the false bottom showing the conical steam chambers affixed thereto; and, Fig. 4 is a perspective of the false bottom with the conical steam chambers and perforated tubes secured thereto.

In the drawings the numeral 1 designates body of the boiler which preferably is made of some suitable wood from the lower edge of which depends the pan 2 having inwardly and downwardly tapering sides and formed with shoulders 3 lying inside of the inner wall of the body 1 so as to constitute a support for the false bottom 4 which normally rests on said shoulder. This false bottom has on its lower side a series of conical chambers 5 which are formed with perforations 6 near the lower edge of the chamber, said chambers communicating at their upper ends through openings 7 with the space above the false bottom. The purpose of these chambers is to receive a portion of the water which lies in the pan 2 and to separate it from the main body of water in the pan so that it may be readily converted into steam, the converging walls of the chambers hugging or gathering the steam toward the upper parts of the chambers so as to cause it to be injected with force through the openings in the false bottom directly beneath the clothes in the body 1 thereby forcing or lifting the clothes upwardly and keeping them in a state of agitation. The false bottom is further provided with conical chambers 8

from the upper ends of which extend the vertical tubes 9, the same being perforated and rising to a point above the top of the body 1 as illustrated clearly in Figs. 1 and 2 of the drawings. These conical chambers 8 are made larger in diameter than the chambers 6 so that a greater volume of steam may be generated therein for the purpose of supplying the extended perforated pipes 9. By so constructing the false bottom with the two sets of conical chambers of different diameters, and with the extended perforated pipes rising above the top of the wall 1, the steam generated in the conical chambers not only lifts the clothes and keeps them in a state of constant agitation but is also diffused through the body of the clothes thus opened up, thereby resulting in the most thorough cleansing of the clothes in the minimum of time at the minimum expenditure of fuel and heat. If the conical chambers 6 were not employed, steam generated in the pan 2 would merely pass through the perforations in the pan into the space above, but would not be injected with force sufficient to lift and open up the clothes for action thereon of the steam injected laterally from the upright perforated tubes; and if the perforated tubes were employed without the conical chamber 6 the steam would not be injected laterally to the extent and with the same result as when the clothes are opened up by the steam injected by the conical chambers 6; but by the employment of the two together, each is made to contribute to the result of the other and the best results obtained.

I provide an arched cover 10 for the body 1, the lower portion of the cover being turned inwardly to form a flange 11 to rest on top of the wall 1 and is then turned downwardly to form a lip 12 which will lie inside of the body

1 and bear against its inner face so as to prevent the cover from being moved laterally and accidentally displaced. This cover is made arched so that the steam which rises above the clothes in the body 1 will gather or huddle at the middle portion of the cover around the upper ends of the perforated tubes 9 and at that point be deflected downwardly so that coming in contact with the steam issuing from the perforations in the upper end of the tubes 9 which extend into the cover, there will be created eddies of steam which are deflected downward and thereby cause a greater agitation of the clothes within the body 1.

Under the construction described a steam boiler of the character specified will be formed in which the steam will be quickly generated with the employment of a small quantity of fuel, and in which the clothes will be thoroughly cleansed in a short time. The construction is simple and inexpensive, durable and efficient.

Having described my invention and set forth its merits, what I claim is:

The combination with the body 1, of the false bottom 4 formed with openings 7 and having on its under face conical chambers 5 communicating with said openings and provided with conical chambers 8 and perforated tubes 9 extending upwardly from and communicating with said chambers, substantially as and for the purposes described.

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

JOHN ALFERD MEDLEY.

Witnesses:

A. J. CAFFEY,  
FRED. GRIMM.