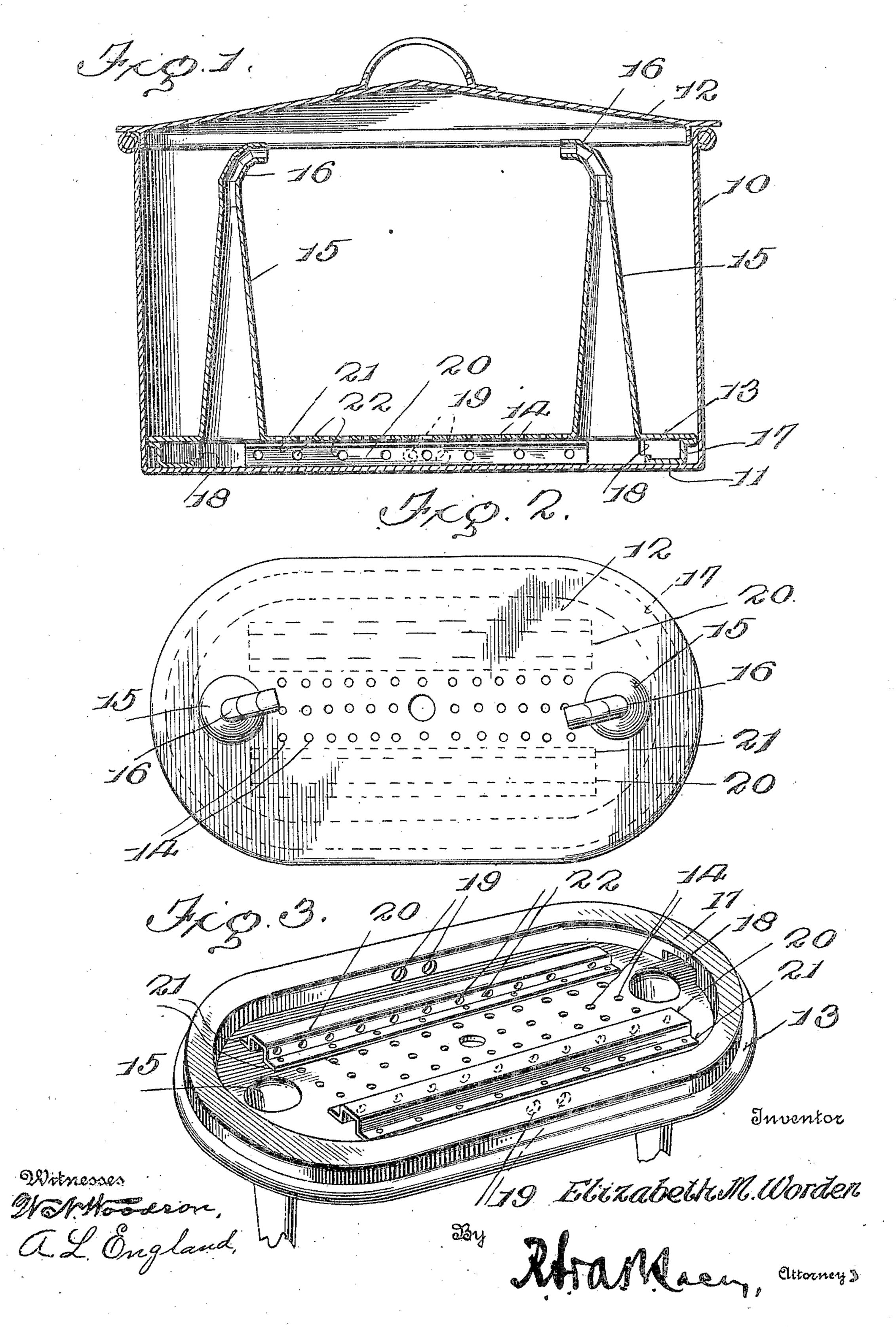
## E. M. WORDEN. ATTACHMENT FOR WASHBOILERS. APPLICATION FILED OCT. 26, 1909.

950,711.

Patented Mar. 1, 1910.



## UNITED STATES PATENT OFFICE.

ELIZABETH M. WORDEN, OF SIBLEY, IOWA.

## ATTACHMENT FOR WASHBOILERS.

950,711.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed October 26, 1909. Serial No. 524,620.

To all whom it may concern:

Be it known that I, ELIZABETH M. Worden, a citizen of the United States, residing at Sibley, in the county of Osceola and State of Iowa, have invented certain new and useful Improvements in Attachments for Washboilers, of which the following is a specification.

This invention relates to laundry appliances and refers particularly to an attach-

ment for a wash boiler.

An object of this invention is to provide a device which is adapted for insertion within a wash boiler in order to produce a circulation of the water therein while being heated and to provide means whereby the steam which is generated by the boiling of the water is concentrated in the central portion of the boiler where it is directed upon the articles placed within the boiler.

The invention further aims at the provision of means whereby the water is heated in separate columns and is caused to circulate through several different passages or ways which are provided by the attachment

for the same.

For a full understanding of the invention reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a longitudinal section through a wash boiler having the improved attachment applied thereto, the attachment also being disclosed in section. Fig. 2 is a top plan view of the attachment removed from the boiler, and Fig. 3 is a perspective view of the attachment in an inverted position.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawing by the same reference characters.

Referring to the drawings the numeral 10 designates a wash boiler of common formation having a horizontal section substantially of the form of an ellipse and which is provided with an integral or permanent bottom 11 and a suitable cover 12. Arranged within the boiler 10 and spaced upwardly from the bottom 11 is a base-plate 13 having a plurality of perforations 14 which are preferably arranged in longitudinal alinement and are confined to the central portion of the plate 13. Upwardly extended from points adjacent the opposite ends of the base-plate 13 are conical flues 15, the apexes of which terminate in suitable nozzles 16 which

are curved inwardly and are offset laterally and oppositely at slight angles from one another. The bases of the flues 15 are terminated in the base-plate 13 and the openings 60 formed through the flues 15 are continued through the base plate 13 thereby. Disposed at the perimeter of the base plate 13, the same conforming to the shape of the bottom 11, and disposed against the under side of 65 the same is a channel member 17 of substantially rectangular cross-sections and which is provided with openings 18 arranged adjacent to the opposite ends of the channel members 13. This location of the openings 70 18 disposes the same near the bases of the flues 15 for a purpose hereinafter set forth. The channel members 17 are further provided with openings 19 formed through the inner walls of the same adjacent the sides of 75 the base plate 11. Arranged longitudinally against the under side of the base plate 13 is a pair of channel bars 20 which are provided with flanges 21 through which rivets are engaged for supporting the bars 20 80 against the under side of the base plate 13. The channel bars 20 are terminated inwardly of the bases of the flues 15 and are provided with pluralities of openings 22 through their inner walls.

The operation of the attachment is as follows:—The base plate 13 is positioned within the boiler 10 and is spaced upwardly from the bottom 11 through the medium of the channel member 17. As the water within 90 the boiler 10 is heated and steam is generated the water enters the perforations 14 and is carried up the flues or pipes 15 by the pressure of the steam. This circulation is constant during the application of heat to 95 the boiler 10. The nozzles are off-set, as is disclosed in Fig. 2, for the purpose of directing the steam throughout the central portion of the boiler 10 and to provide means whereby the steam from the nozzles will not 100 be deflected by the opposite blowing of the same against one another.

Having thus described the invention, what is claimed as new is:—

In combination with a wash boiler of a 105 base plate disposed therein and having a plurality of apertures formed through the central portion thereof, a channel member positioned against the periphery of the under face of said base plate, said channel 110 member having openings formed through the inner wall of the same at the ends and

•

- -

.

at the sides of said base plate, flues extended upwardly from the ends of said base plate within the said channel member and adjacent the said openings in the said channel 5 member at the ends of the said base plate, channel bars disposed against the under face of said base plate upon the opposite sides of the perforated portion, and terminating adjacent the bottoms of said flues, said channel bars having openings formed in the inner

walls thereof and nozzles formed at the apexes of said flues and turned inwardly therefrom, said nozzles being arranged in opposite relation to one another.

In testimony whereof I affix my signature 15 in presence of two witnesses.

ELIZABETH M. WORDEN. [J., s.]

Witnesses:

J. F. GLOVER, GEO. H. CAJACOB.