C. J. LINDERHOLM.

WASHBOILER.

APPLICATION FILED JUNE 11, 1909.

968,778.

Patented Aug. 30, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

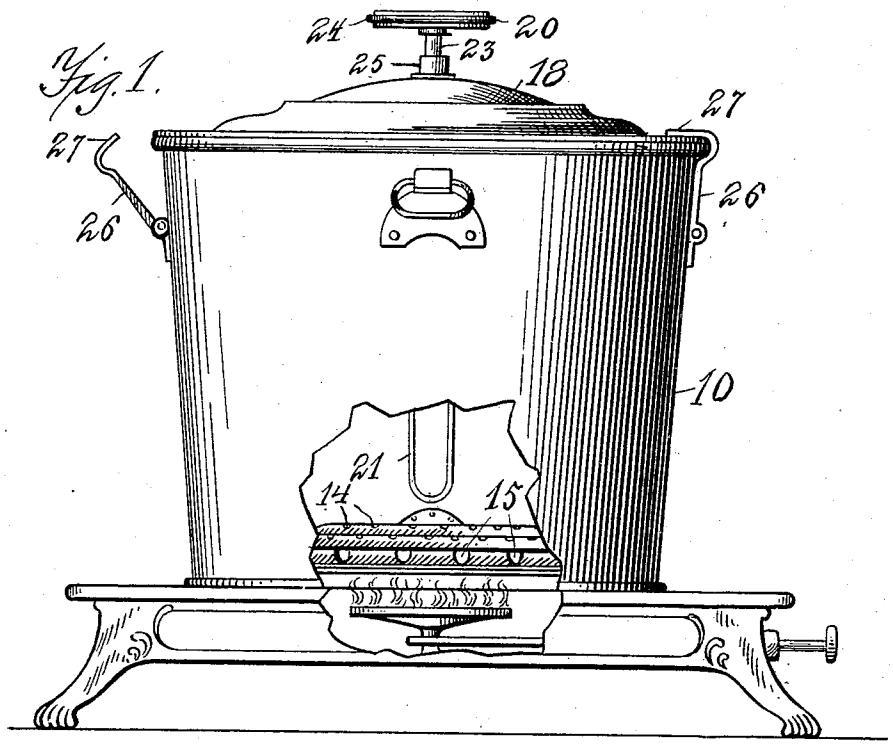
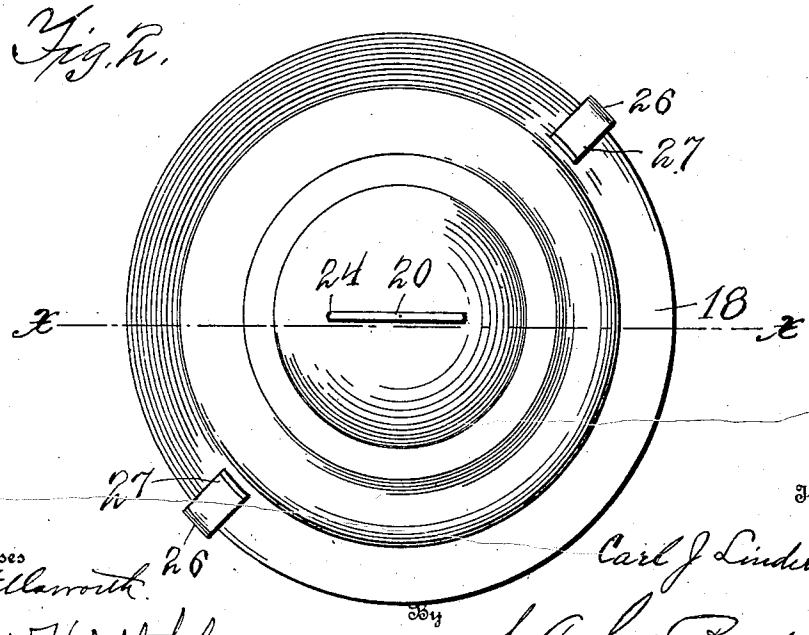


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

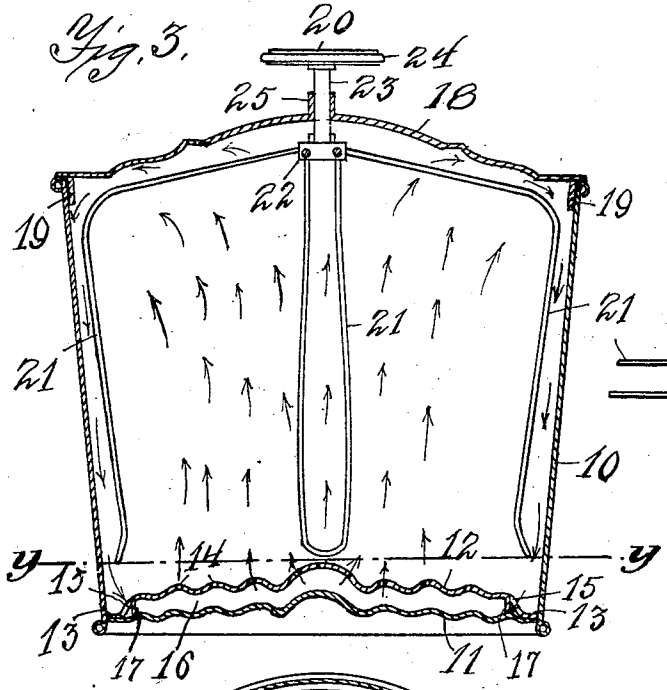


Fig. 5.

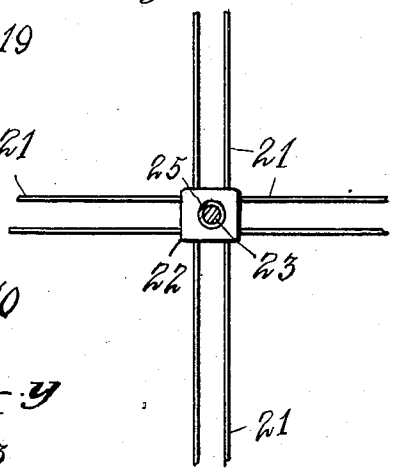


Fig. 4.

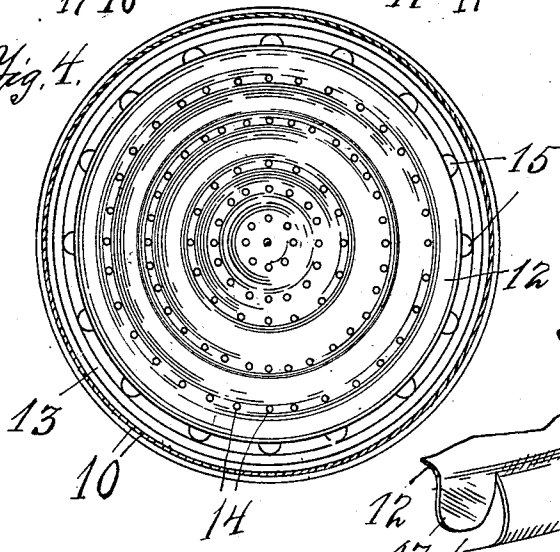


Fig. 6.

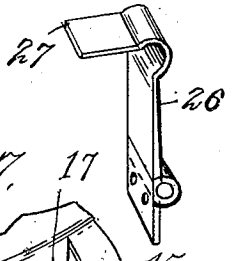
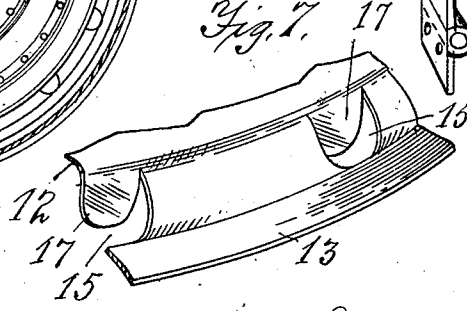


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

CARL J. LINDERHOLM, OF JAMESTOWN, NEW YORK.

WASHBOILER.

968,778. Specification of Letters Patent. Patented Aug. 30, 1910.

Application filed June 11, 1909. Serial No. 501,470.

To all whom it may concern:

Be it known that I, CARL J. LINDERHOLM, a subject of the King of Sweden, and resident of Jamestown, county of Chautauqua, and State of New York, have invented new and useful Improvements in Washboilers, of which the following, taken in connection with the accompanying drawing, is a full, clear, and exact description.

The invention relates to machines for washing clothes wherein the use of steam is employed to cleanse the garments; and the object of my improvement is to provide a simple and durable construction which provides a heating chamber to quickly heat the water, allowing the steam to pass up through the clothes and provides means for separating the clothes from the sides of the receptacle, so that the water may pass down and through large inlet holes into the heating chamber; and the invention consists in the construction and arrangement of the parts, as shown in this specification and drawings, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of the washing machine on a hot plate, a portion of the side being broken away to show the action of the heat. Fig. 2 is a top plan view of the washing machine. Fig. 3 is a sectional view of the washing machine at line X X in Fig. 2 showing the bottom and correspondingly corrugated false bottom and the means for separating the clothes from the sides of the receptacle, holding them in the center and in the path of the steam. Fig. 4 is a sectional view at line Y Y in Fig. 3, showing a plan view of the corrugated false bottom. Fig. 5 is a plan view showing a detail of the connecting block for the wire loops which separate the clothes from the side of the receptacle to allow the water to pass down. Fig. 6 is a perspective view of one of the clasps for holding the cover in place on the receptacle. Fig. 7 is a perspective view of the construction of one of the large inlet holes near the outer edge of the false bottom.

Similar numerals refer to corresponding parts in the several views.

The numeral 10 indicates the receptacle which is preferably made round for a purpose hereinafter set forth. The receptacle 10 is provided with a bottom 11 which is corrugated in concentric rings to increase the heating surface thereof.

A false bottom 12 is provided which has corrugations corresponding to those on bottom 11 and rests upon the portion 13 around its edge. False bottom 12 is provided with a large number of minute perforations 14 throughout its central portion through which the water and steam passes up through the clothes. The large openings 15 are provided around the outer edge of the false bottom to allow of the downward passage of the water as it returns down the sides of the receptacle. The openings 15 are struck from the sheet metal false bottom by means of suitable dies, the portion 17 of the sheet metal being bent inward and standing vertically as shown in Figs. 3 and 7. The portion 17 rests upon the bottom 11 thereby holding the two bottoms a given distance apart around its outer portion so that the weight of the clothes can not force down the false bottom.

It is apparent that the concentric corrugations of the bottom give added heating surface and aid in holding the heat under the central portion of the bottom so that the water in the thin space 16 between the two bottoms 11 and 12 is quickly heated and passes up through the minute perforations 14, as shown by the arrows in Fig. 3, passing down the outer side of the clothes and through the holes 15 into the space 16.

A cover 18 is provided for the receptacle 10 having a flange 19, which preferably fits within the receptacle. In order to hold cover 18 firmly in place hinged clamps 26 are attached to the outer sides of the receptacle 10 the lip 27 springing over the edge of the cover 18 so as to resiliently hold the cover in place by the spring of said lip 27. The clamps 26 are placed on the opposite sides of the receptacle, as shown in Figs. 1 and 2, so that they firmly hold the cover in place.

The clothes, after becoming damp in the water, would naturally settle down against the sides of the receptacle so that the water cannot pass down against the sides of the receptacle as indicated by the arrows in Fig. 3. In order to keep the clothes in the path of the steam in the central portion and thereby accomplish the cleansing process more quickly and at the same time to open the way for the downward passage of the water, a separator 20 is provided having wire arms 21 made in the form of loops which extend out from the center to the inner sides of the receptacle 10 and down the sides of the same. Loops 21 are attached

to a block 22 by being inserted into the same. A rod or pipe 23 is attached to the upper side of block 22 and has a crosswise handle 24 on its upper end for turning the separator. The rod or pipe 23 is revolubly mounted in a suitable opening 25 in the center of cover 18 so that the separator 20 may be easily turned within the receptacle, thereby causing the wire loops 21 to pass around the inner sides of the receptacle between the clothes and the receptacle, thereby opening a passage for the water so that it may easily pass down the inner sides of the receptacle and into the openings 15.

It is obvious that the separator 20 with its long arms 21 which extend out to the inner sides of the receptacle and down nearly to the false bottom, performs an office quite different from the common clothes stirrer and is indispensable in combination with my form of heating chamber with the large openings 15 around the outer edge for the inflow of the water, as it passes down the inner sides of the receptacle with the four arms 21 arranged as shown. A quarter turn of the separator will open the way for the downward passage of the water around the entire inner side of the receptacle.

In using the washing machine, the cover and separator are removed and a quantity of water is placed within the receptacle, sufficient to thoroughly steam the clothes. The clothes are then placed within the receptacle and the combined cover and separator are replaced, forcing the arms 21 down each side of the clothes. The cover is then clamped to place by means of the spring clamps 26 and the separator 20 is given a quarter turn, thereby opening a passage for the downward flow of the water around the inner side of the receptacle, between the receptacle and the clothes. As soon as the clothes have become sufficiently heated to thoroughly begin to steam, the separator should be given a quarter turn about once in five minutes, thereby opening a passage around the clothes and preventing their tendency to sink against the inner side of the receptacle. The clothes may thus be steamed until thoroughly cleansed.

I claim as new:

1. In a device of the character described, the combination of a receptacle, a perforated false bottom in said receptacle a spaced distance from the bottom of said receptacle, said false bottom having a series of holes around its outer edge, and revoluble means for separating the clothes from the inner side of the receptacle for the passage of the water down to said holes.

2. In a device of the character described, a cylindrical receptacle having a suitable bottom and cover, a false bottom for said receptacle separated a short spaced distance from the bottom of the receptacle said false bottom having a plurality of small holes throughout its central portion and a series of large holes around its outer edge, vertical shields of metal on said false bottom opposite said large holes on their inner side to prevent the free outflow of the water, and a separator revolubly mounted in said cover having arms extending along the vertical wall of the receptacle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL J. LINDERHOLM.

Witnesses:
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I. A. ELLSWORTH.