

No. 835,975.

PATENTED NOV. 13, 1906.

J. F. NELSON.
WASHING MACHINE.
APPLICATION FILED APR. 26, 1906.

Fig. 1.

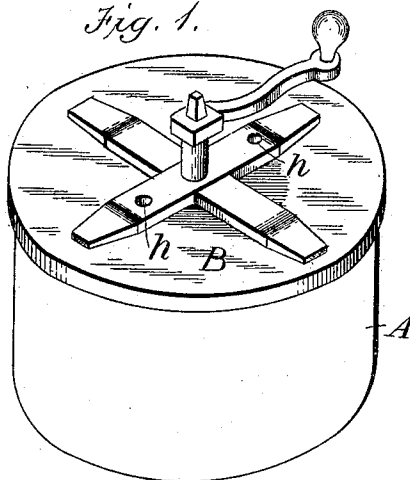


Fig. 2.

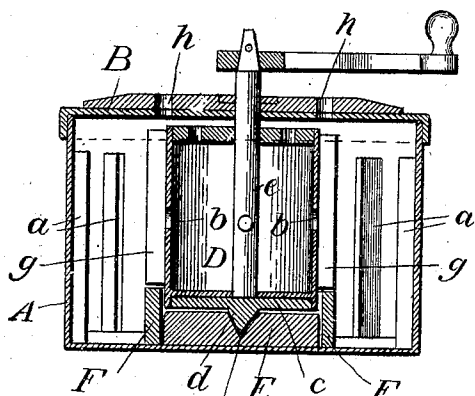


Fig. 3.

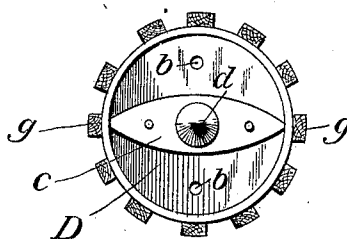


Fig. 4

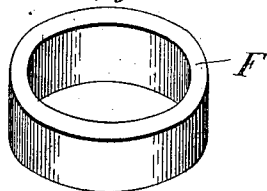
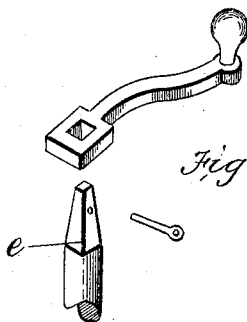


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN F. NELSON, OF JUNIATA, PENNSYLVANIA.

WASHING-MACHINE.

NO. 835,975.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed April 26, 1905. Serial No. 257,463.

To all whom it may concern:

Be it known that I, JOHN F. NELSON, a citizen of the United States, residing at Juniata, in the county of Blair and State of Pennsylvania, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

It is the purpose of this invention to provide a circular washboiler of corrugated sheet metal substantially throughout its inner sides for reasons and as will appear more fully hereinafter.

The object of the improvements is to enhance the efficiency of the machine and increase the ease and readiness with which it may be operated.

The drawings hereto annexed, with the letters and marks of reference marked thereon, form a part of this specification and are to be referred to as such, of which drawings—

Figure 1 is a perspective view of the machine complete. Fig. 2 is a central sectional view of the same. Fig. 3 is a bottom view of what I term the "receptacle for water." Fig. 4 is a perspective view of the rim surrounding the lower part of the water-receptacle in the operation of the machine. Fig. 5 is a detail view showing the manner of attaching the crank.

The same letters of reference designate the same parts or features, as the case may be.

It is proposed to use corrugated sheet metal, as far as the same may be practicable, in the construction of the machine. Therefore it may be supposed that material of this character is the material represented, whether the same is so clearly indicated and described or not.

In the drawings, A designates the body of the washing-machine, which may be of sheet metal or any other suitable material and of such size as is desired. The inner surface of the body is provided with ribs *a*, which extend on the bottom from the rim F radially to the sides and up the sides to as near the top as may be practicable. The ribs *a* may be square or rounded on the edges as practice may suggest as best or may be thought best. The ribs may be made of wood, and other strengthening-strips or necessary filling of wood may be added to the washer as may be found necessary or desirable.

B is a lid to the washer, provided on its top with cross-slats, as shown in Fig. 1, through which the central vertical crank-shaft extends, and which is connected to the water-

receptacle and operates the entire operative parts of the machine.

D designates a water-receptacle, which is composed of sheet-steel or other metal and is hollow with four holes *b* in the sides and bottom for the circulation of steam and the water therethrough. The number of the holes *b* may be increased or diminished, as circumstances may suggest. The water-receptacle D is kept free from everything beside water, and this is kept in a state of ebullition during the active washing of the clothes. The water-receptacle is connected with the crank-shaft and is rotated thereby, E designating a disk attached to the bottom of the washer, on which the water-receptacle is adapted to be rotated. There is an oval-shaped strip *c*, secured on the bottom of the water-receptacle, extending across the same, in the center of which there is a pointed projection, which projection is stepped in a depression *f* of the disk E to center the rotation of the water-receptacle. The disk E provides for raising the water-receptacle D to substantially the center of the washer proper, so that by agitating the water at the center of the latter the rinsing process is facilitated.

F designates a rim of suitable material surrounding the disk E and extending above the top of the same and around the base of the water-receptacle to prevent the clothes from getting under the said water-receptacle and between it and the disk E and step *d*.

The exterior sides of the water-receptacle are provided with vertical ribs *g*, which may be formed from galvanized sheet-iron or other suitable metal, and be set vertically on the sides of the water-receptacle from one to two inches apart.

It is to be understood that the invention comprises, in effect, a steam-washer—that is, steam is the principal agent through which clothes placed in the water in the tub around the water-receptacle are washed.

In operation the machine, properly equipped, is set upon the stove, and the water in the water-receptacle becoming heated forms into live steam, which issues through the holes in the sides and bottom of the water-receptacle, forcing its way through the clothes and back again into the water-receptacle in the form of hot water or steam and out again through the clothes in the form of water and steam, keeping up this ebullition and circulating action until the material in the tub is thoroughly cleansed. By rotating

the water-receptacle the action of the machine is perfected and the washing of the clothes greatly accelerated. Holes *h*, formed through the lid B and cross-slats thereon, are
5 provided for the escape of steam from the tub where the steam becomes of too high pressure above the high-water line. After the clothes have been washed they may be rinsed
10 in the same manner as they were washed by the use of a copious amount of clear water and without boiling.

I claim—

A washing-machine, combining in its construction a metallic lid having cross-slats secured to its upper surface, a metallic circular
15 body, and bottom, having vertically and radially arranged ribs secured to its interior surface which the lid covers, a metallic rotary water-receptacle secured centrally in the
20 washer and having a limited number of holes

in its sides, top and bottom for the circulation through the machine of steam and hot water from the water-receptacle, provided with vertical ribs on its outside, a circular disk arranged centrally below the water-receptacle to raise the latter, a centrally-
25 arranged operating-shaft, attached at its bottom to the water-receptacle, and a crank for rotating the said shaft, the interior of the water-receptacle being free from all mechanism
30 excepting the vertical shaft, the said water-receptacle being completely closed excepting as to the holes hereinbefore mentioned.

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

JOHN F. NELSON.

Witnesses:

EDWIN G. GEESEY,
AMANDA CRIST.