

Aug. 27, 1935.

J. P. STALEY

2,012,643

WASHING MACHINE

Filed April 25, 1935

2 Sheets-Sheet 1

Fig. 1.

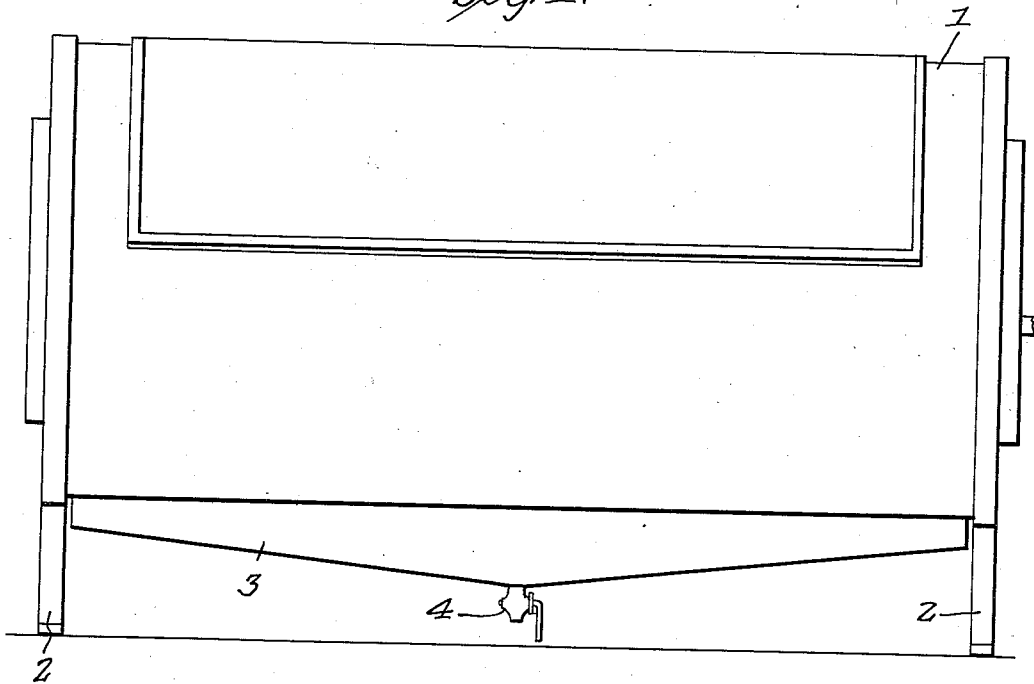


Fig. 3.

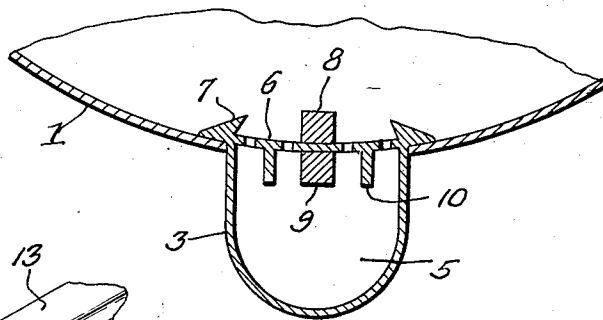
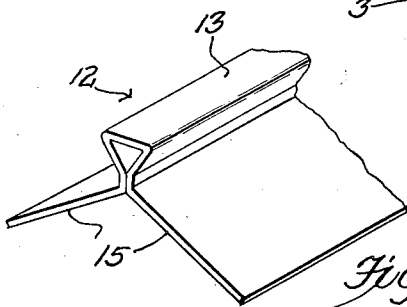


Fig. 6.

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Fig. 4.

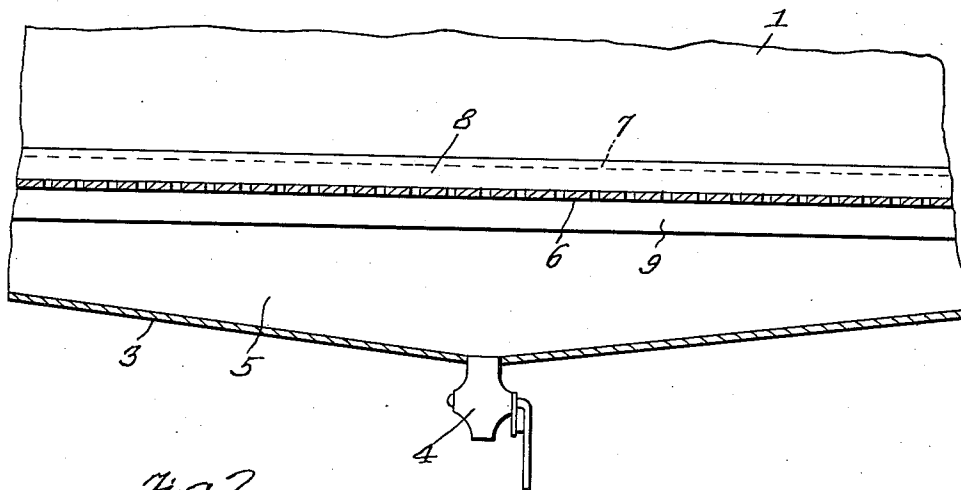


Fig. 2.

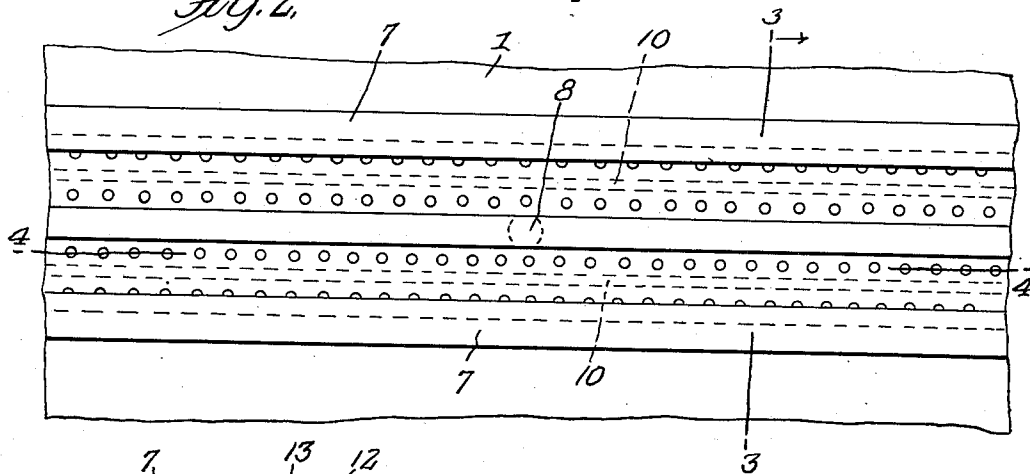
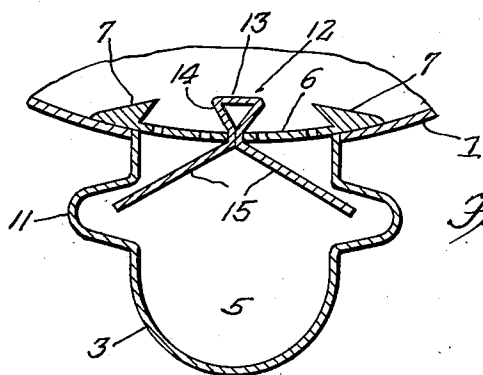


Fig. 5.

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UNITED STATES PATENT OFFICE

2,012,643

WASHING MACHINE

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Application April 25, 1935, Serial No. 18,223

5 Claims. (Cl. 68—18)

The present invention relates to new and useful improvements in washing machines and has for its primary object to provide, in a manner as hereinafter set forth, novel means through the medium of which clothes may be thoroughly washed and rinsed by a continuous process.

Other objects of the invention are to provide a washing machine of the aforementioned character which will be comparatively simple in construction, strong, durable, highly efficient and reliable in operation, compact and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:—

Figure 1 is a view in side elevation of a washing machine embodying the present invention.

Figure 2 is a view in top plan of an intermediate portion of the invention.

Figure 3 is a vertical sectional view, taken substantially on the line 3—3 of Figure 2.

Figure 4 is a vertical longitudinal sectional view, taken substantially on the line 4—4 of Figure 2.

Figure 5 is a view in vertical transverse section through a modified form of the invention.

Figure 6 is a perspective view of one end portion of the baffle member shown in Figure 5.

Referring now to the drawings in detail, it will be seen that the reference numeral 1 designates a horizontally mounted, substantially cylindrical casing or container which, as usual, is mounted on suitable supports 2. Depending from the bottom of the casing 1 and communicating with said casing for receiving water, dirt, etc., therefrom is a trough 3 the bottom of which inclines toward a drain cock 4, said trough providing a settling chamber 5.

Across the top of the trough 3 extends a foraminous plate 6 the longitudinal marginal portions of which project beyond said trough 3 in a manner to rest on the bottom of the casing 1 (see Figure 3), said marginal portions being formed to provide oppositely inclined, undercut baffles 7. Also rising from the plate 6 is a central baffle 8. A central baffle 9 and side baffles 10 depend from the plate 6 into the trough 3.

In operation, as the water is agitated in the cylindrical container 1 in the usual manner, said water passes over the oppositely inclined outer baffles 7, the dirt therein settling in the chamber

5 provided by the trough 3, this operation being facilitated by the upstanding central baffle 8 and the under cut inner walls of said baffles 7. The depending baffles 9 and 10 prevent or materially reduce agitation of the water, dirt, etc. in the chamber 5. It will thus be seen that the valve 4 may be adjusted as desired to continuously drain the dirt and dirty water from the trough 3 or, if desired, said valve may be normally closed and periodically opened. Of course, soap and water, or water alone when rinsing is being done, may be continuously fed to the casing 1 by any suitable means to compensate for the water which is drained therefrom. It will thus be seen that a construction and arrangement has been provided whereby the clothes may be thoroughly washed and rinsed by a continuous process.

Referring now to Figures 5 and 6 of the drawings, it will be seen that the trough 3 is provided with opposed channels 11 in its side walls. The reference numeral 12 designates generally a centrally located baffle which is mounted in the foraminous plate 6 and which is formed from a single piece of suitable metal.

The baffle 12 includes a hollow, upstanding portion 13 of substantially triangular cross section having inwardly inclined side walls 14 for directing the water through the plate 6. The baffle 12 further includes anticlinal plates 15 which project into the channels 11, as illustrated to advantage in Figure 5 of the drawings. If desired, the plates 15 may be secured, at spaced points, in any suitable manner to the trough 3.

In the operation of the modified form of the invention, the water in the container 1 rises over the outer baffles 7, the dirt therein passing through the plate 6 into the trough 3. As will be apparent, this separation of the dirt from the water is facilitated by the centrally located baffle 12. As the dirt passes through the foraminous plate 6 it is directed outwardly by the plates 15 and passes through the channels 11 into the lower portion of the trough 3. The plates 15 effectively prevent agitation of the water and dirt in the trough 3 and prevent return of said dirt to the container 1.

It is believed that the many advantages of a washing machine embodying the present invention will be readily understood, and although preferred embodiments of the invention are as illustrated and described, it is to be understood that further modifications and changes in the details of construction may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:—

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1. A washing machine of the class described comprising a container for the reception of water, a trough depending from said container and communicating therewith, a foraminous plate
5 extending over the trough, and spaced baffles rising from said plate, said trough providing a settling chamber for receiving dirt from the water in the container.

2. A washing machine comprising a container
10 for the reception of water, a trough depending from said container and communicating therewith, a foraminous plate extending across the trough, a central baffle rising from the plate, and side baffles on the longitudinal marginal portions
15 of the plate, said side baffles being oppositely inclined and including undercut inner faces.

3. A washing machine comprising a container for the reception of water, a trough depending from said container and communicating there-
20 with, a foraminous plate extending across the trough, a central baffle rising from the plate, and side baffles on the longitudinal marginal portions of the plate, said side baffles being oppositely inclined and including undercut inner faces, the
25 first-named baffle being formed from a single piece of metal and including inwardly inclined

sides and further including anticlinal plates beneath the first-named plate and in the trough.

4. A washing machine comprising a container for the reception of water, a trough depending from said container and communicating there-
5 with, a foraminous plate extending across the top of said trough and fixed thereto, the longitudinal marginal portions of the plate extending beyond the sides of the trough and engaged with the bottom of the container, a plurality of spaced
10 baffles rising from the plate, and a plurality of spaced baffles depending from said plate into the trough, said trough providing a settling chamber for the container.

5. A washing machine comprising a container
15 for the reception of water, a trough depending from said container and communicating therewith, said trough including opposed channels in its side walls, a foraminous plate extending
20 across the top of the trough, side baffles on the longitudinal marginal portions of the plate, and a centrally located baffle mounted on the plate, the latter including anticlinal plates extending
25 into the channels.

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