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B. E. MUSTEE

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WASTE AND STORAGE WATER CONTROL SYSTEM FOR LAUNDRY TUBS

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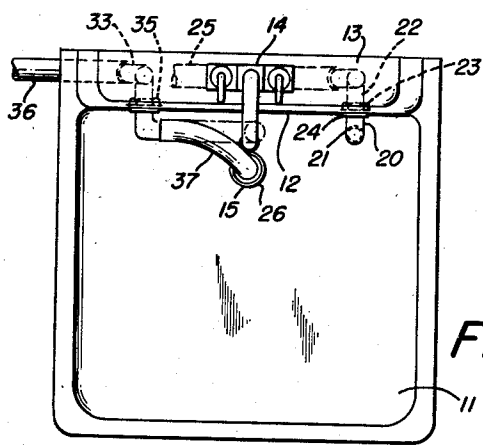


Fig. 1

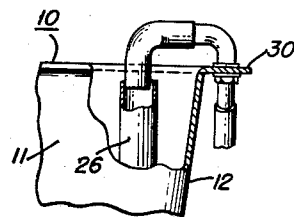


Fig. 4

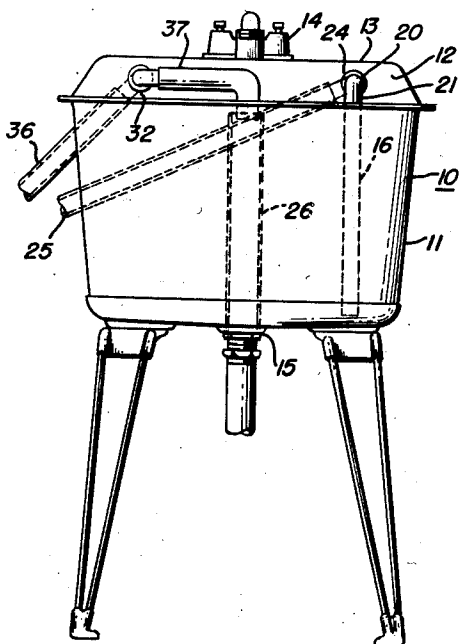


Fig. 2

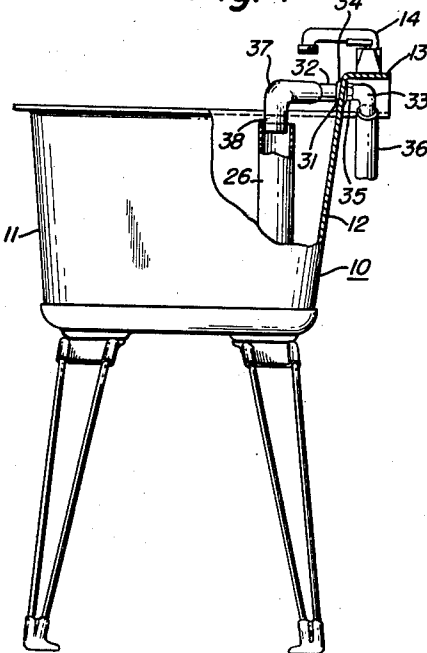


Fig. 3

INVENTOR.
Bernard E. Mustee
BY Ray S. Pyle
att'y

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WASTE AND STORAGE WATER CONTROL SYSTEM FOR LAUNDRY TUBS

Bernard E. Mustee, Cleveland, Ohio, assignor to E. L. Mustee and Sons, Inc., a corporation of Ohio

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5 Claims. (Cl. 137—590)

This invention relates to laundry devices in general, and relates more specifically to an improved laundry tub device for association with a washing machine, and means with the tub for storage and disposal of water from the washing machine.

The common laundry tub has been a double cast cement structure of large size and unattractive lines for many years. More recently there has been a tendency to improve the usefulness of such laundry appliances, as well as their appearance. One such improvement has been the provision of a single tub unit with a tubular drain control pipe used as a combined stopper and overflow for water depth control.

Used with a modern automatic washing machine of the type having a water-saving feature, one hose from the washer is extended into the tub proper and the other hose is placed into the top of the tube. The first hot, soapy water is thus saved for reuse and all rinse water is disposed of directly into the drain.

By extending the water hoses from the washer to the tub, the provision of a separate drain, or special lines from the washer, is avoided. If the suds-saver feature is of interest, the tub must be placed near the washer and a drain must be provided for the tub. Since one hose is extended to the tub for suds-saving, a separate drain system is avoided by using the system provided for the tub. However, hoses draped over the edge of a laundry tub are neither attractive nor handy.

Therefore, an object of this invention is to provide a laundry tub device having a single water storage unit adapted to receive both waste water and water to be saved, and to direct the waste water to the waste outlet of the tub device.

Another object of this invention is to provide an improved water inlet system and water directing system in a laundry tub device to replace the use of hoses draped over and into an open top tub.

Other objects and a fuller understanding of the invention may be had by referring to the following description and claims, taken in conjunction with the accompanying drawing, in which:

Figure 1 is a top view of a laundry tub device incorporating the principles of the invention;

Figure 2 is a front view of a laundry tub device incorporating the principles of the invention;

Figure 3 is a side view, partially in section to eliminate the fixture illustrated at the right in Figure 2, of the tub device with the preferred type of fixture of this invention; and

Figure 4 is a fragmentary view of an alternate fixture mounting.

The drawing illustrates a modern type laundry tub device 10 which may be made of sheet metal or reinforced plastic. The device 10 has a water container portion 11 defined by walls including a back wall 12. A ledge 13 in Figure 1 extends rearwardly from the back wall 12. A ledge 30 of modified design is illustrated in Figure 4. A faucet 14 of conventional design is

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employed to admit fresh hot and cold water either singularly or mixed. An outlet 15 at the bottom of the water container 11 allows water to escape to a suitable drain.

Modern washing machine devices are provided with pumps to remove the water from the machine. Usually the machines are provided with flexible hoses to extend to a drain. Quite often the drain is a distance from the washing machine or is a closed type of drain connected to the laundry tub. Thus, separate drain facilities are required for the washing machine or, as is more usually done, the hose is provided with a hooked end to hang over the side of the laundry tub. The waste water then runs into the water container 11 and out through the outlet 15 through the drain facilities provided for the laundry tub. Placing the hose on the floor to run to a drain produces an undesirable dampness condition, and hanging of the hose over the side of the laundry tub is quite often a nuisance or, at least, is quite unsightly.

As illustrated in Figures 1 and 2, a fixture 20 having a spout portion 21 and a hose attachment member 22 defines a water passageway through a wall of the water container 11. Preferably, the opening through the wall is high in order that water will not run back into the fixture 20 in normal use of the tub. The particular illustrated fixture 20 is held engaged through the opening in the tub by means of a flange 24 on the spout 21 and a nut 23 threadably engaged to the spout 21 and mechanically connected to the hose attachment member 22.

By the use of the fixture 20, the hose attachment member 22 may be positioned in a convenient out-of-the-way position, preferably behind the back wall 12 and under the ledge 13 and, therefore, is completely hidden from sight thereby contributing to the neat appearance of the modern laundry room. A hose 25 such as would be provided to extend from the outlet of a modern automatic washer is shown mechanically engaged to the hose attachment member 22 by simple friction attachment. The hoses from such washers are generally of a high quality resilient rubber and held by their own elastic characteristics.

A second fixture 31, substantially identical to fixture 20, is provided on the opposite side of the tub device 10 as shown best in Figure 2 of the drawing. Fixture 31 has a spout 32 and a hose attachment member 33 with a flange 34 and nut 35 to hold the fixture 31 engaged with the back wall 12 of the tub device 10 and extended through a suitable opening therein. A hose 36 is extended from an automatic washing machine to the hose attachment member 33 in the same manner as described with respect to fixture 20. However, the spout portion 32 is provided with a positionable extension in the form of hose 37 which has a downwardly turned end 38. Although other forms of positionable spout extensions may well be provided as desired, a high quality resilient tubular member as shown is believed to be preferable. The hose 37 is formed to extend from the spout 32 and lie in a natural position adjacent the back wall 12. In such position, any water directed through the hose 37 from the hose 36 will run down into the water container 11.

The tub device 10 is provided with a tubular overflow and stopper member 26 in order to prevent water from passing through the outlet 15, and to define a maximum water depth within the water container 11 and yet provide access to the outlet 15 through the interior of the tubular member 26. By positioning the spout extension hose 37 to register with the tube 26, any water directed through the hose 37 will pass through the drain outlet of the tub device without regard to any body of water which may be trapped in the water container 11.

By the arrangement thus shown and described, either one of the two fixtures 20 and 31 may be used singularly to deliver water from an automatic washer into the water

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container 11, or both may be used in conjunction. Some automatic washing machines are provided with a fixture which permits the machine to pump the first hot, sudsy water to a storage container and to then pump the water back from the storage container at the beginning of a new washing cycle. Thus, water which has been used for relatively clean clothing and has not become sufficiently soiled to be discarded, can be saved and reused to reduce the expense of lost hot water and soap. With such machines there are provided two outlet hoses and, accordingly, the illustrated embodiment of this invention has been shown as being employed by such a machine and the hoses 25 and 36 represent the two hoses from such a machine.

When used with a machine having the two hose outlets as described, the water to be saved enters the water container 11 through the hose 25 and the fixture 20 and an extension hose or tube 16 extends from the spout 21 to the bottom area of the water container 11. Thus, the water to be saved may be withdrawn through the extension 16 by the pumping action of the associated washing machine.

With the two hose system extending from the described automatic washing machine, the hose extension 37 may be allowed to lie against the back wall 12 between washing periods and be in an out of the way position, or in the event that the original wash water is not to be saved and the tube 26 is not employed in the tub device 10, the hose 37 rests against the back wall 12 and the waste and rinse water passing therethrough through hose 36 from the automatic washing machine runs into the container 11 and out through the outlet 15. The original water coming through the hose 25 also runs out the outlet 15 in such event. Whenever the original water is to be saved, the tube 26 is put in place and the extension hose 37 is positioned from its normal place against back wall 12 to the entrance at the top of the tube 26. Under such conditions, the original water coming through hose 25 will be trapped and saved in the water container 11 and all subsequent rinse waters coming through the hose 36 will pass through tube 26 to the waste drain.

Another method, having some advantage, is to fasten the hose 37 into a side opening of tube 26. The tube 26 may then be inserted into the bottom drain rather than to insert the hose into the tube.

The fixture 31 with its hose extension 37 is not necessarily dependant upon the provision of the fixture 20. By the provision of one fixture only and the positionable extension therefor, water from a single washing machine may be directed first into the water container 11 and after the container 11 has been filled with the first hot soapy water, the hose 37 may be positioned to extend into the tube 26 to direct the remaining water to waste. Thereafter, the hot water may be returned to the washing machine for another washing cycle by means of separately provided pumping system or by dipping.

In Figure 4 there is illustrated the mechanics of altering the fixtures for use with a ledge such as the ledge 30 wherein it is required to pass vertically through an opening rather than horizontally as shown in the Figures 1 through 3.

Although the invention has been described in its preferred form with a certain degree of particularity, it is understood that the present disclosure of the preferred form has been made only by way of example and that numerous changes in the details of construction and the combination and arrangement of parts may be resorted to without departing from the spirit and the scope of the invention as hereinafter claimed.

What is claimed is:

1. A laundry device, comprising, a water holding tub, a bottom wall with water outlet therethrough for gravity flow from said tub, an overflow tube interfittable into said drain outlet to serve as a stopper therefor, a first

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fixture defining a water passageway through a wall of said tub, said fixture having a positionable spout portion, said spout portion having a first position directed into said overflow tube, a second position directed into said tub away from said overflow tube, said first fixture having a hose attachment portion on the exterior of the tub to receive a first discharge hose from a laundry washing machine, water from said discharge hose thereby being directed into said tub or diverted to drain as desired, a second fixture defining a water passageway through a wall of the tub near the top thereof, said second fixture having a spout portion extending substantially to the said bottom wall of the tub and a hose attachment portion on the exterior of the tub to receive a second discharge hose from said laundry washing machine.

2. A laundry device, comprising, a water holding tub, a water outlet for gravity flow from said tub, a tubular member removably seatable in said outlet and serving as a plug for said outlet, said tubular member having open ends and thereby serving as a depth regulator overflow for said tub, a fixture defining a water passageway through a wall of said tub, said fixture having a positionable spout portion, said spout portion having a first position directed into said tubular member, a second position directed into said tub away from said tubular member, said fixture having a hose attachment portion on the exterior of the tub whereby a discharge hose from a washer may be attached to said attachment portion and the water directed into the tub or tubular member as desired.

3. A laundry device, comprising, a water holding tub, a water outlet for gravity flow from said tub, a tubular member removably seatable in said outlet and serving as a plug for said outlet, said tubular member having open ends and thereby serving as a depth regulator overflow for said tub, a fixture defining a water passageway through a wall of said tub, said fixture having a resilient spout portion, said spout portion having a first position directed into said tubular member, a second position directed into said tub away from said tubular member, said spout portion being formed to lie naturally in one of said positions and being flexible against the resistance thereof into the other position, said fixture having a hose attachment portion on the exterior of the tub, whereby a discharge hose from a washer may be attached to said attachment portion and the water directed into the tub or tubular member as desired.

4. In claim 3, said second position being the natural position and in said second position, the spout lies against the side of the tub.

5. A laundry device, comprising, a water holding tub, a bottom water outlet for gravity flow from said tub, a member removably seatable in said outlet and serving as a plug for said outlet, said member including an upstanding conduit portion, said member having open ends and thereby serving as a depth regulator overflow for said tub, a fixture defining a water passageway through a wall of said tub, said fixture having a spout portion within said tub, said fixture having a hose attachment extension on the exterior of the tub, one of said portions being constructed to be swingable from a first position relative to said other portion for directing liquid flow from said spout portion into said conduit portion and to a second position directing fluid from said spout portion into said tub away from said conduit portion, whereby a discharge hose from a washing machine may be attached to said attachment extension and the water directed into the tub or conduit portion as desired.

References Cited in the file of this patent

UNITED STATES PATENTS

1,289,173	Hoffman	Dec. 31, 1918
1,509,753	Woodson	May 30, 1925
1,976,902	Stoddard	Oct. 16, 1934

(Other references on following page)

5

UNITED STATES PATENTS

2,065,347	Schulse	Dec. 22, 1936
2,341,894	Bariffi	Feb. 15, 1944
2,588,774	Smith	Mar. 11, 1952
2,642,085	Geldhoff	June 16, 1953

5

6

FOREIGN PATENTS

153,370	Switzerland	June 1, 1932
195,054	Switzerland	Mar. 16, 1938

OTHER REFERENCES

Catalogue of Sears Roebuck & Co., page 816; Spring, Summer 1954.