Nov. 5, 1957 L. J. VALENTINE 2,811,983

HOT WATER AND SUDS SAVER

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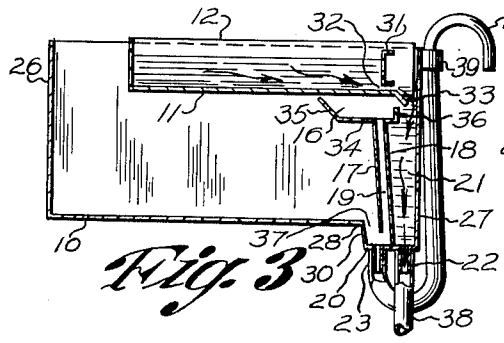


Fig. 3

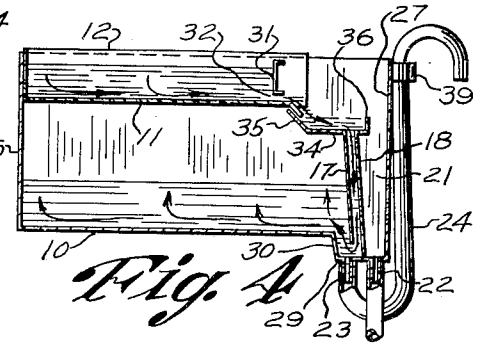


Fig. 4

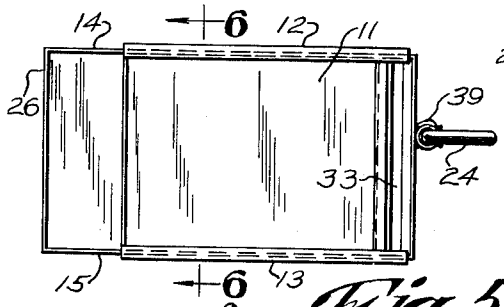


Fig. 5

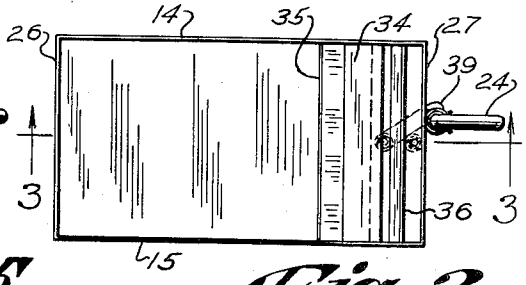


Fig. 2

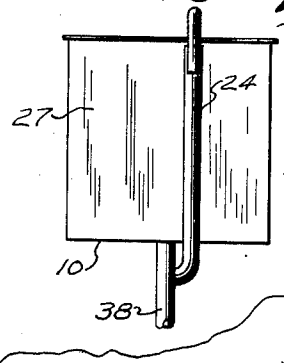


Fig. 7

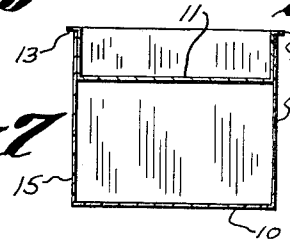


Fig. 6

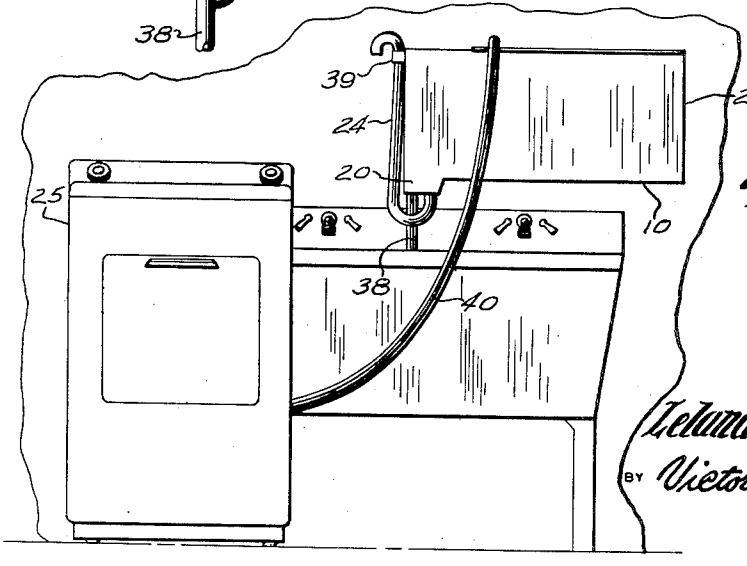


Fig. 1

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HOT WATER AND SUDS SAVER

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2 Claims. (Cl. 137—571)

This invention relates to washing machines of the automatic type and particularly as used in the home, and in particular this invention includes an auxiliary tank with a tray removably mounted in the upper end positioned above the upper surface of an automatic washing machine and the discharge of the washing machine is deposited into the receiver or tray from which it passes through a restricter chamber into the tank and wherein, in the next operation of the machine the hot soapy water is drained back into the machine by gravity.

The purpose of this invention is to provided an auxiliary tank adapted to be used in combination with automatic washing machines whereby hot water and suds of one wash are temporarily retained during the rinsing and drying operations and wherein the hot water and suds are adapted to be drained back into the washer for another cycle of operation without requiring an additional pump or other power means.

Various types of soap, suds, and water saving devices have been used in combination with automatic washing machines, some being built into the machines and others used in combination therewith, however, it is difficult to provide a water and suds saving device that is adapted to be used in combination with an automatic washing machine without changing parts of the machine and without using motive power for returning the water and suds to the machine. With this thought in mind this invention contemplates an auxiliary tank adapted to be positioned above an automatic washing machine in which the outlet connection of the washing machine is adapted to discharge into the tank when it is desired to retain the hot water and suds, or into a drain passage when it is not desired to retain the hot water and suds and wherein the hot water and suds are adapted to drain back into the washing machine by gravity.

The object of this invention is, therefore, to provide an auxiliary device adapted to be used in combination with automatic washing machines of different types in which the tank is provided with a receiving tray, and in which the hot water and suds are adapted to be directed into the body of the tank or into a drain, as may be desired.

Another object of the invention is to provide an auxiliary tank for retaining hot water and suds of an automatic washing machine between operations of the machine in which the device is provided with a restricting chamber to control the flow of the hot water and suds into the tank.

A further object of the invention is to provide an auxiliary tank for retaining hot water and suds discharged from an automatic washing machine in which the tank is of a simple and economical construction.

With these and other objects and advantages in view, the invention embodies a substantially rectangularly shaped tank having a catch basin extended across one end with a drain connection extended from the catch basin and also with a connection for a hose to carry water from the tank back to the automatic washing machine also extended from said catch basin, spaced transversely disposed

partitions with a restricting chamber at the upper end extended from the lower end of the catch basin providing a passage to the interior of the tank and also to the drain connection extended from the catch basin, and a tray slidably mounted on the upper end of the tank and adapted to carry hot water and suds from the washer, selectively, to the interior of the tank, or to the drain.

Other features and advantages of the invention will appear from the following description, taken in connection with the drawing, wherein:

Figure 1 is a front elevational view showing an automatic washing machine in combination with wash tubs and showing the auxiliary hot water and suds receiving tank of this invention positioned above the wash tubs.

Figure 2 is a plan view of the tank.

Figure 3 is a longitudinal section through the tank taken on line 3—3 of Figure 2 showing the device with the tray in the position of discharging the hot water and suds directly into a drain.

Figure 4 is a longitudinal section also taken on line 3—3 of Figure 2 showing the receiving tray in the position of directing the discharge of the washing machine into the interior of the tank.

Figure 5 is a plan view of the tank with the tray in a position as illustrated in Figure 3.

Figure 6 is a cross section through the tank taken on line 6—6 of Figure 5.

Figure 7 is an end elevational view of the tank showing the end on which a tube for carrying the hot water and suds back to the washing machine is positioned.

Referring now to the drawing, wherein like reference characters denote corresponding parts, the improved hot water and suds saving device of this invention includes a tank **10**, a tray **11** having flanges **12** and **13** on the upper edges by which the tray is slidably mounted on side walls **14** and **15** of the tank **10**, a restricting chamber **16** positioned to receive water from the tray **11** with the tray in the position shown in Figure 4, vertically disposed partitions **17** and **18** providing a passage **19** from the chamber **16** to a catch basin **20** and a drain passage **21** extended from the upper end of the tank to the catch basin, a drain connection **22** extended from the catch basin and an outlet connection **23** from which a hose **24** extends, the hose **24** providing means for carrying the hot water and suds back to the washing machine, such as the machine **25**, shown in Figure 1, by gravity.

The tank **10** is provided with an end wall **26** connecting the side walls **14** and **15** and also an end wall **27** connecting the opposite ends of the side walls and extending into the catch basin **20** forming an end wall thereof.

The bottom end of the tank terminates at the point **28** and the bottom is connected to the lower end **29** of the catch basin with a wall **30**.

The tray **11** is provided with a cross channel **31**, the lower edge of which is spaced above the bottom of the tray providing a restrictive passage **32** through which water flows directly into the drain passage **21** with the tray in the position shown in Figure 3, or into the restrictive area **16** with the tray in the position shown in Figure 4. The open end of the tray is provided with a lip **33** that provides a guide for directing the water into the passage **21** or into the restrictive area **16**.

The chamber **16** is formed with a bottom plate **34** and a flange wall **35** at one side and a flange **36** at the opposite side and, as shown in Figure 3, the water may be carried over the flange **36** when it is not desired to save the hot water and suds or the water may flow directly into the restricted chamber **16** and through the passage **19** into the catch basin **20** from which the water flows through a passage **37** into the body of the tank **10**.

The nipple **22** extended from the lower end of the catch basin **20** is provided with a tube **38** that is adapted to

extend to a suitable drain and the tube or hose **24**, which is positioned on the nipple **23** also at the lower end of the catch basin is adapted to extend to the upper end of a washing machine whereby the hot water and suds may flow by gravity to the washing machine. The tube or hose **24** is retained between spring clips **39** when the tube is retained in an upwardly disposed position to hold the water in the tank.

With the parts assembled as illustrated and described water discharged from the washing machine **25** passes upwardly through the outlet hose **40** to the tray **11** and from the tray **11** the water flows through the restrictive opening **32** into the restricting chamber **16** from which the water passes downwardly through the cavity **19** between the partitions **17** and **18**, passing from the lower end of the cavity or passage through the opening **37** and into the tank **10**. When it is not desired to use the water and suds the tray is moved to the position shown in Figure 3 whereby the hot water and suds pass directly downwardly to the passage **21** and tube **38** into a drain.

By this means hot soapy water from the washing machine may be temporarily retained in the tank **10** during the rinsing and drying operations of the machine and upon completing the cycle the tube or hose **24** is removed from the clip **39** and placed in the upper end of the washing machine whereby, with another batch of clothes positioned therein the hot soapy water may flow back to the washing machine and be reused.

The device provides an automatic washing machine accessory whereby hot water and suds of the washing machine may be reused.

It will be understood that other modifications, within the scope of the appended claims, may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

1. In a washing machine accessory, the combination which comprises an auxiliary tank having a catch basin in the bottom and positioned at one end thereof, a drain connection extended from the catch basin, an outlet connection having a tube extended therefrom for draining fluids in the tank to a washing machine, a partition positioned between the drain and outlet connection of the catch basin, and a tray having a restricted outlet passage slidably mounted on the tank for receiving water from a washing machine, said tray being adapted to be actuated to permit water discharged therein to pass directly out of the restricted outlet passage to the drain connection of the catch basin or to the outlet from which the tube extends for carrying the water back to the washing machine.

2. In an automatic washing machine accessory, the combination which comprises an auxiliary tank having a catch basin at one end and in the lower part thereof, spaced vertically disposed partitions extending upwardly from the catch basin providing a drain passage in one side of the catch basin and extended across the tank, a restricted chamber positioned at the upper ends of the partitions and having an outlet passage opening into the area between the partitions, and a receiving tray having a restricted outlet passage slidably mounted on upper edges of walls of the tank and adapted to be positioned to flow water discharged therein, selectively, into the restricted chamber at the upper ends of the partitions or into the drain passage at the end of the tank.

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