The present invention relates to a multiple purpose water connector and it particularly relates to a multiple purpose connector which may be associated with washing machines.

It is among the objects of the present invention to provide a multiple purpose connector which may be utilized in connection with various types of washing machines to enable ready control of liquid flow into and from the washer with relatively simple valve constructions without difficulty as far as the housewife or user is concerned.

Another object is to provide a simple, the universal multiple purpose water valving arrangement which will permit introduction of either hot or cold water into the enclosure of a clothes washer, dish washer or other type of domestic factory or industrial washing machine.

Still further objects and advantages will appear in the more detailed description of the construction, forms and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

FIGURE 1 is an exploded or separated sectional view showing the valve arrangement and the interior construction thereof, and associated connections.

FIGURE 2 is a diagrammatic view showing how this valve arrangement may be connected to the hoses of a washing machine, FIGURE 2 being upon a smaller scale than FIG. 1.

FIGS. 3, 4, 5 are transverse sectional views respectively taken upon the lines 3—3, 4—4 and 5—5 of FIG. 1.

In FIGS. 1 and 2, there is shown a washing machine A having an enclosure B and legs C.

The faucet D may have a hot water tap E and a cold water tap F with a common connection G.

The body H of the valve has a main outlet connection J with the lateral transverse connections K connected to the inlet hose L and M connected to the outlet hose N.

Similarly, the valve body H is a spring seated check valve P and a three-way valve Q.

Referring specifically to the valve construction shown in FIG. 1 the mouth member 10 serves as a means for connection to a faucet and it has a flange 11 and an inturned portion 12 which engages the upper end 13 of the body H.

Press fitted into the end of the body 13 or soldered thereinto is the nipple 14 which has a seat 15 for the ball 16 of the ball check P.

The ball check P has a spiral spring 17 which presses the ball check 16 against the seat 15 and retracts upon the ledge 18 at the other side.

The lateral connection K opens at 19 into the interior 20 of the body H and it has an enlarged head portion 21 which may connect with the rotatable member 22 having the inturned lip 23.

The inturned lip 23 engages the outwardly extending flange 24 which is provided with the inwardly extending sleeve portion 25. This sleeve 25 tightly fits onto the rubber hose 26.

The rubber hose 26 serves as an inlet connection to the washing machine A.

At the lower portion of the body H is the cylindrical body portion 27 which receives the rotary three-way valve unit 28 having three passageways at 29, 30 and 31.

This valve body 27 connects at 32 to the chamber 20 and at 33 to the lateral connection 34 having an enlarged mouth portion 34. The enlarged mouth portion 34 is designed to connect to the rotating member 35 having an inturned lip 36 engaging the outturned portion 37 of the sleeve 38.

The sleeve 38 fits into the end 39 of the rubber hose N which acts to drain the washing machine.

The discharge will take place through the nipple 40 from the outlet J of the valve chamber 27.

In operation, by turning the valve Q it is possible for the user to achieve flow of water into the machine, discharge of water, and circulation of water from the drain to the inlet of the machine.

The check valve P will prevent reverse flow to the spigot or faucet indicated at G but will permit flow into the inlet connection K at the inlet hose L to the washer and if necessary will permit direct flow of liquid to the outlet J.

When the valve Q is in its present position the water will run through the drain hose N to the outlet J, and the machine may be thus drained of water.

If the valve is turned 90° in the direction of the arrow 41 there will be flow directly from the faucet to the outlet J without passing into the inlet connection L.

If the valve is turned 180° in the direction 41 the flow will be from the drain connection N and back through the inlet connection L to the washing machine with the check valve P preventing flow out or to the faucet.

In the present position, turning on of the faucet will result in passage of water into the washer through the inlet L and turning at 90° in the direction of the arrow 41 will shut off the water out of the toilet from the washer.

This simple connection device will permit ready control of the flow of liquid into the washer and from the washer and from the faucet with a minimum of parts and by a housewife without requiring special connections and without any complicated fittings requiring the assistance of a plumber. The unit may be sold inexpensively and made of brass or other non-corrosive metal and the various elements thereof may be readily machined, and with hose connections may be connected to the same body unit.

While there has been herein described a preferred form of the invention, it should be understood that the same may be altered in details and in relative arrangement of parts within the scope of the appended claims.

The unit may be made of stainless steel or brass or other suitable materials.

The important feature of the present invention resides
in the use of a three way valve in connection with a check valve.

The valve may be made in different shapes and designs embodying the basic principles.

In the form shown in the faucet or water supply D may be controlled by the valving arrangement 50.

The valving arrangement Q is provided with a handle 51 held in position by the screw 52. The valve is held in position at its other side by means of the nut and screw connection and the coil spring 54.

Having now particularly described and ascertained the nature of the invention, and in what manner the same is to be performed:

What is claimed is:

A domestic washing machine of the type having a vertical tubular flow connection with a single top threaded end inlet connection from a sink faucet and a single bottom outlet to a sink, said washing machine having two parallel superimposed lateral inlet and outlet threaded end conduit connections extending transversely from the side of the flow connection and having upper and lower junctions with the tubular flow connection, the axes of the vertical tubular flow connection and the lateral connections being positioned in the same vertical plane, a spring seated inlet ball check having a vertical coil spring positioned above the top lateral conduit, and above the upper junction and an inwardly directed shelf fin immediately above the upper junction to serve as a retainer for the lower end of the coil spring and a manual three way valve controlling the lower junction, the position of said three way valve permitting draining of the washing machine in one position, inflow to the washing machine in a second position and circulation through the washing machine in a third position, the upper junction being unobstructed.

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