July 22, 1924. 1,502,061

M. SAMPSON

AUTOMATIC WATER CONTROLLER SUITABLE FOR BATHTUBS AND SUCH LIKE RESERVOIRS

Filed Jan. 31, 1922

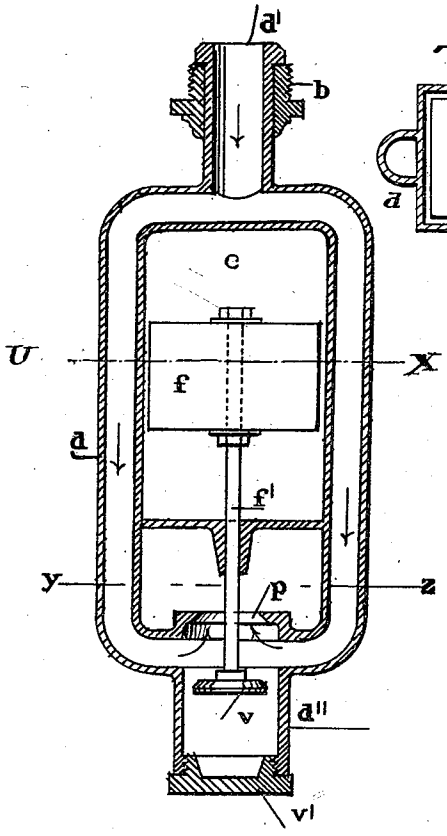
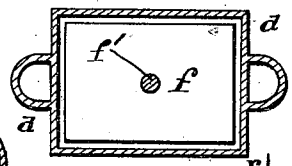


Fig. 1

Fig. 5.



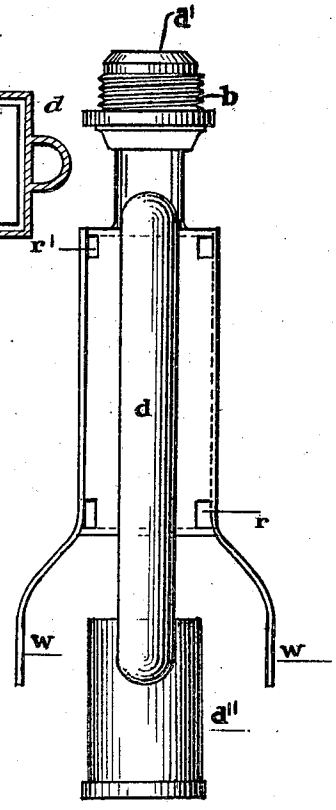


Fig. 2

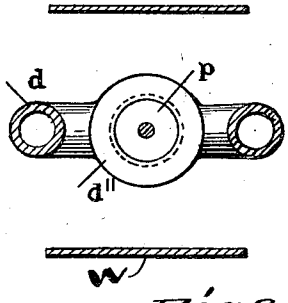


Fig. 3.

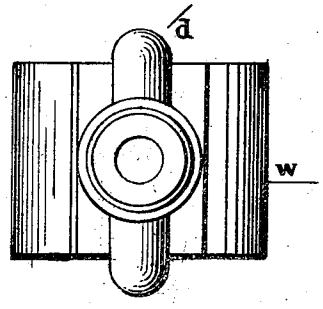


Fig. 4

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By W. P. Barclay Atty.

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UNITED STATES PATENT OFFICE.

MEYER SAMPSON, OF CHICAGO, ILLINOIS.

AUTOMATIC WATER CONTROLLER SUITABLE FOR BATHTUBS AND SUCH LIKE RESERVOIRS.

Application filed January 31, 1922. Serial No. 533,010.

To all whom it may concern:

Be it known that I, MEYER SAMPSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Automatic Water Controllers Suitable for Bathtubs and such like Reservoirs.

The object of the invention is to automatically shut off the water supply to a bath tub when the water flowing into the bath tub has reached a predetermined height in the bath tub, and eliminate as far as possible the risk of overflow of water from the bath tub by carelessness on the part of the bath tub user.

It is a frequent occurrence in apartment buildings for an overflow of water to occur from the bath tub that causes damage and inconvenience to the occupants of the building by carelessness on the part of an occupant failing to close the water faucets to the bath tub, when temporarily retiring from the bath room, hence considerable loss in water when an overflow from the bath tub occurs.

Referring to the drawings in which similar letters refer to similar parts.

Fig. 1, shows a sectional elevation of the entire apparatus.

Fig. 2, shows a side elevation of the apparatus.

Fig. 3, shows a view taken on line *y*, *z*, of Fig. 1.

Fig. 4, shows a plan view projected from Fig. 2.

Fig. 5, is a sectional view through line *u*, *x*, of Fig. 1.

The water controller is attached to the usual water faucet of a bath tub, by a jam nut *b* screwing into the faucet of the bath tub or by other suitable means.

The water controller consists of a rectangular shaped vessel or chamber *c*, surrounded by a branch pipe *d* of a yoke pattern, the upper end *d'* of the pipe being for connection to the faucet of a bath tub, and the lower branch *d''* forming a valve chest or chamber for the outlet valve *v* that seats in a seat surrounding a discharge opening in the valve chest on its upward movement only, the lower end of the said valve chest being closed by a screwed plug *v'*.

Situated within the rectangular shaped vessel or chamber *c* is a float *f* suspending a rod *f'* provided with a valve *v* that rises and falls with the said float, and automatically shuts off the water flowing into the bath tub on a predetermined depth of water therein. The action of the said controller after being attached to a bath tub faucet and the water is free to flow as follows:

In the drawing the direction of the arrows indicate the direction of the water flow through the apparatus until a predetermined depth of water is attained in the bath tub, the inlet water to the apparatus flowing freely through the valve port *p* into the bath tub, and when a predetermined depth of water is attained in the bath tub the float *f* in the rectangular vessel or chamber *c* is immediately acted upon by the rise of the water within the bath tub, and causes the valve attached to the float *f* by the rod *f'* also to rise up and close the valve port *p* so that the flow of water into the bath tub is automatically shut off and carelessness on the part of an occupant of the building temporarily retiring from the bath room during the time the main water faucet of the bath tub is full open results in no damage.

The wings *w* confine the splash of the water within the bath tub that flows through the valve port *p*. At the lower end of the float receptacle are small apertures *r* to permit water to enter the float receptacle and similar apertures *r'* are also formed at the upper end of the said receptacle for free escape of air during the rise of the water in the float receptacle.

What I claim is:

1. In a water controller for bath tubs, the combination of a float receptacle, a pipe surrounding said receptacle and disposed in a vertical plane, the upper portion of said pipe having an inlet, and the lower portion of said pipe having an outlet port, a valve chamber communicating with the lower portion of said pipe and disposed opposite said outlet port, a float within said float receptacle, a valve rod suspended from the float and passing through said outlet port, a valve mounted on said rod and movable in said chamber, the said valve being upwardly seated to close said outlet port whenever the float ascends to its highest position in the float receptacle, substantially as shown and described.

2. In a water controller for bath tubs, the

combination of a float receptacle or chamber c, a float within said receptacle, a yoke pipe surrounding the said receptacle, a valve rod f' suspended from the said float, a valve v attached to the said valve rod exterior to the chamber, a valve chest d'' joining with the yoke pipe and having a discharge port at its upper end, the said valve seating upwardly within the said valve chest to close the said port, and the inlet to the said yoke at its upper end, whereby as the float rises in the receptacle the valve v will be gradually lifted up into the water current flowing from the said yoke pipe into the valve chest, and the pressure of the water current will act principally on the under side of the valve to close the valve port and hold the valve closed independent of the float in the float receptacle.

MEYER SAMPSON.