No. 746,390. PATENTED DEC. 8, 1903.

I. W. SCHMIDT.

BATH TUB.

APPLICATION FILED MAR. 19, 1903.

NO MODEL.

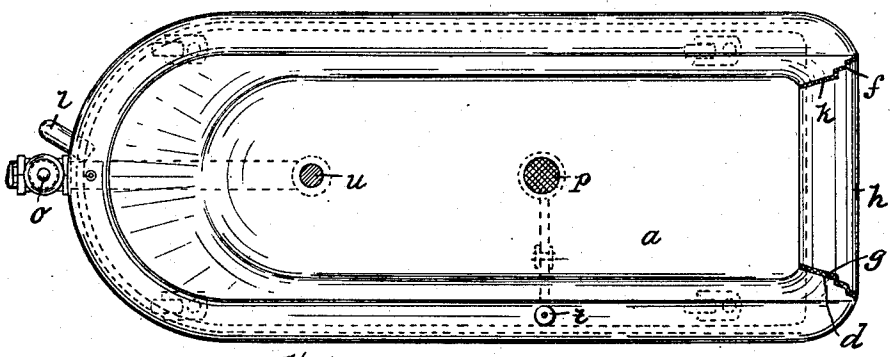


Fig. 1.

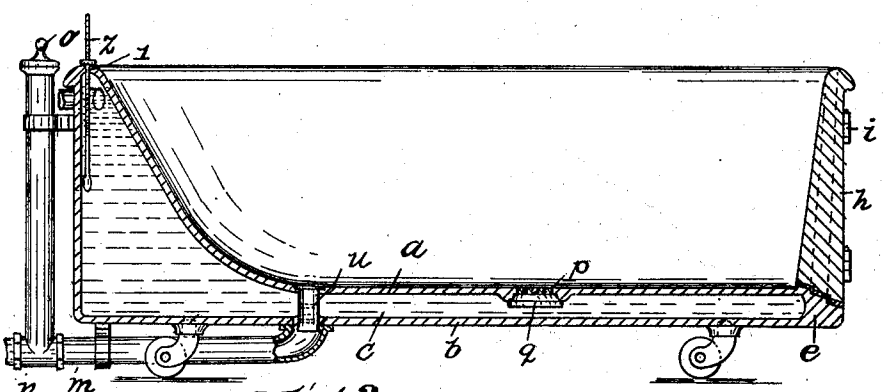


Fig. 2.

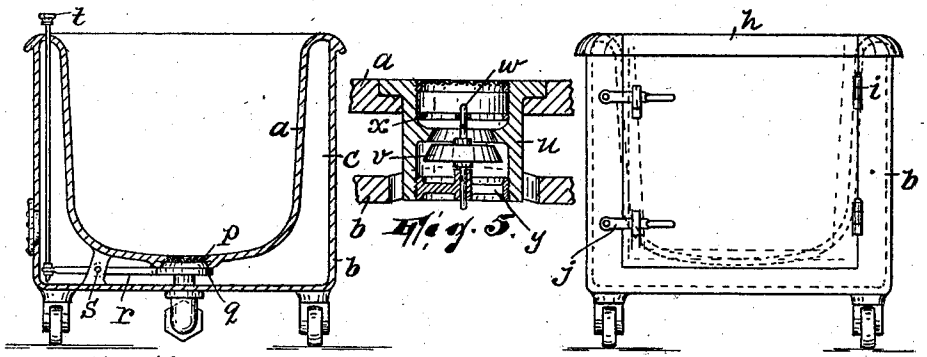


Fig. 3. Fig. 5. Fig. 4.

WITNESSES:

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No. 746,390. Patented December 8, 1903.

UNITED STATES PATENT OFFICE.

IDA W. SCHMIDT, OF NEW YORK, N. Y.

BATH-TUB.

SPECIFICATION forming part of Letters Patent No. 746,390, dated December 8, 1903.

Application filed March 19, 1903. Serial No. 148,493. (No model.)

To all whom it may concern:

Be it known that I, IDA W. SCHMIDT, a citizen of the United States, residing in New York city, in the county and State of New York, have invented certain new and useful Improvements in Bath-Tubs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to bath-tubs; and it has reference particularly to bath-tubs to be used by invalids and weak and decrepit persons, its principal object being to so construct the tub that the person using it may enter and leave the same with the minimum exertion.

My invention will be found fully illustrated in the accompanying drawings, wherein—

Figure 1 is a top plan view of my improved bath-tub. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a view of one end of the tub, and Fig. 5 illustrates a detail.

In order to carry out the object in view, the tub is provided with a water-tight door adapted to close an opening formed in one of the walls of the tub affording entrance to and exit from the tub. The water is admitted to the tub after the person has entered the same and properly closed the door, and in order to avoid the necessity of waiting for the water to acquire the desired level, which would be unduly protracted were it necessary to depend upon the usual pipes and other water connections, a temporary reservoir for holding the water, and between which and the tub there is a sufficiently capacious and valved communicating means, is provided.

The general construction above outlined I find is perhaps preferably reduced to practice in that particular adaptation of my invention shown in the accompanying drawings.

In said drawings, *a* is an inner shell forming the tub proper, and *b* an outer shell. These shells are preferably made integral and form between them a space *c*, which constitutes the reservoir aforesaid, in which the water to be used is temporarily stored.

Entrance to the tub is afforded by an opening *d*, at which point the space between the shells *a* and *b* is of course closed, as at *e*, the material being, as shown, preferably shaped as a stepped jamb *f*, against which the correspondingly stepped faces *g* of the door *h* seat, the door being supported by hinges *i* and having suitable latches *j* for securing it closed. Between the door and its jamb may be placed a seal *k* to make the connection water-tight.

l designates the fittings which are adapted to be connected to the supply, and *m* the fittings adapted to be connected to the waste *n*, controlled by a valve *o*.

In the bottom of the shell *a* is formed a relatively large opening *p*, affording communication with space *c* and provided with a valve *q*, carried by a lever *r*, fulcrumed at *s* and having an operating device *t*.

u is a discharge-pipe affording direct communication between the interior of shell *a* and fitting *m*, into which latter it projects. In order to prevent the water in space *c* from flowing in by way of this pipe, a buoyant check-valve *v*, only opening outwardly, is provided, said valve being carried by a valve-stem *w*, guided in spiders *x y* in the pipe.

In using the tub, the valves *o* and *q* being closed, water is first admitted to the reservoir *c* and its temperature taken by means of a thermometer *z*, which may be projected down through an opening 1 in the top of shell *a* into the water. The person then enters the tub and closes and secures the door, whereupon the valve *q* is opened by means of its operating device *t*. This permits the water from the reservoir *c* to flow into the tub proper until a common level in both the tub and the reservoir is reached, whereupon the valve *q* may be again closed. Before leaving the tub the valve *o* is opened, permitting the water in the tub to leave the same by way of pipe *u*, while the water left in the reservoir may flow out by way of the fitting *m* direct. When the tub proper is free of water, the door may be opened, so that the person may leave the tub.

It will be understood that the door *h* may be placed in any of the side walls of the tub.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a bath-tub having a closured entrance opening therein, a reservoir, a valved communicating means between

the reservoir and the tub, and a valved discharge for the tub, substantially as described.

2. In a bath-tub, the combination of a shell forming the tub proper and having an opening in one of its side walls, a closure for said opening, another shell in which said first-named shell is disposed, said shells forming between them a reservoir, and the first-named shell having an opening affording communication between its interior and the reservoir, a valve controlling said opening, and a valved discharge for said first-named shell, substantially as described.

3. A bath-tub having one of its side walls provided with an entrance-opening extending substantially to the bottom of said wall from the top thereof, and a door for said opening, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of January, 1903.

IDA W. SCHMIDT.

Witnesses:
JOHN W. STEWARD,
JOSEPH B. FLYNN.