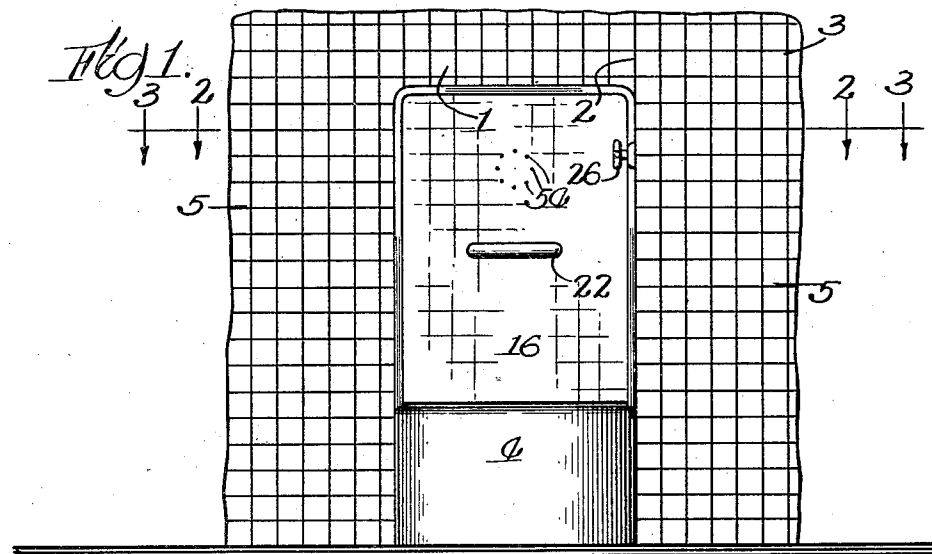
Dec. 8, 1931. L. C. SCHAUB 1,835,813

BATH FIXTURE

Filed Nov. 15, 1929 3 Sheets-Sheet 1

Fig. 1.



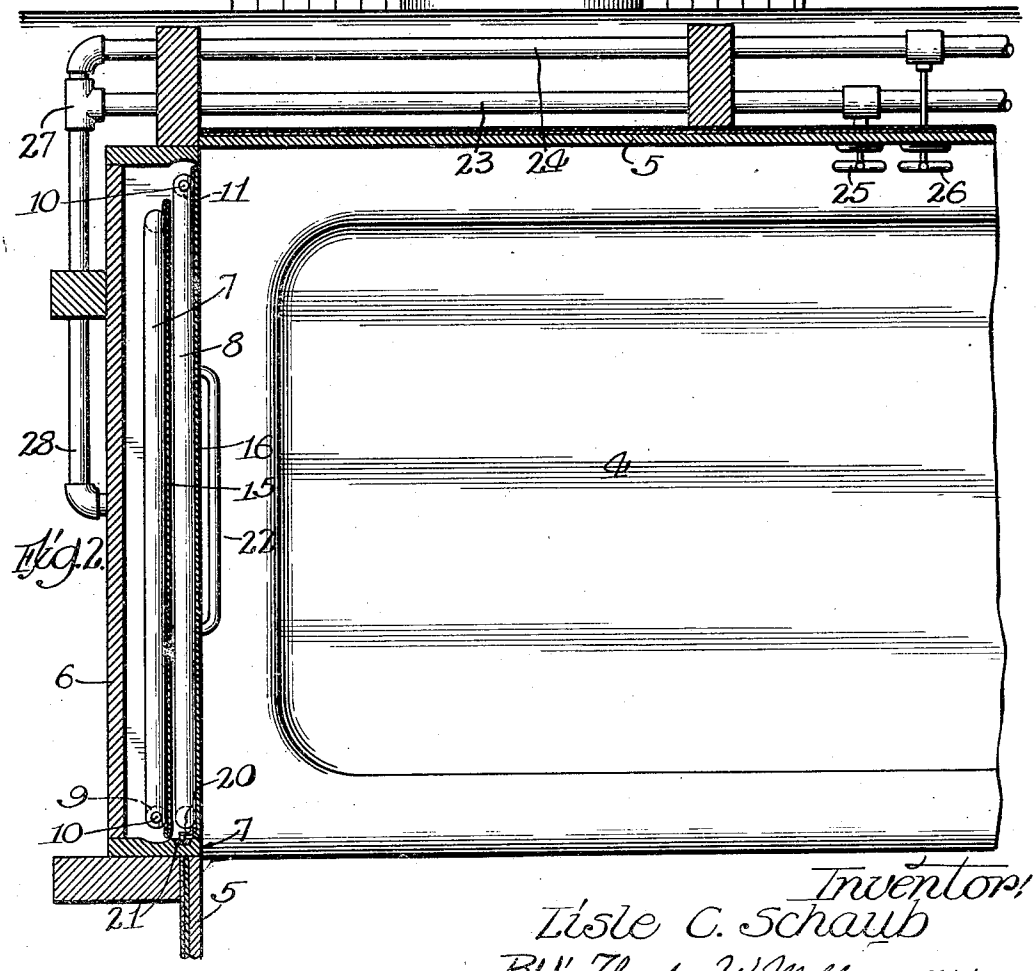


Fig. 2.

Inventor:
Lisle C. Schaub
By: Theodore W. Miller Atty.

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Fig. 3.

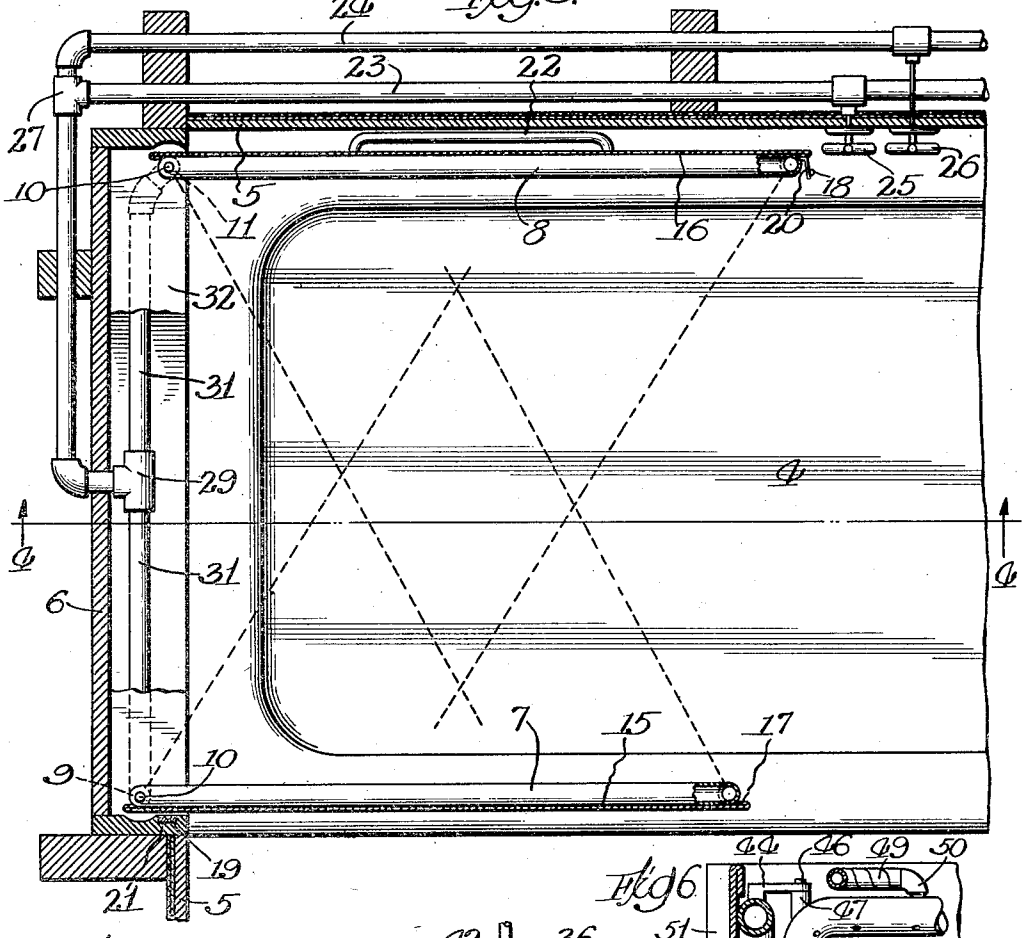
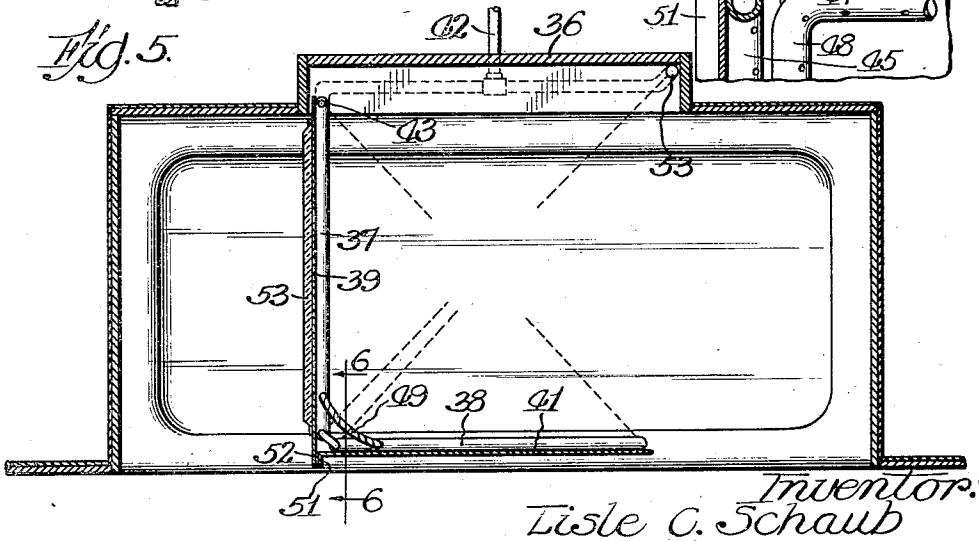


Fig. 6

Fig. 5.



Inventor:
Lisle C. Schaub
By Theodore W. Miller Atty.

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BATH FIXTURE

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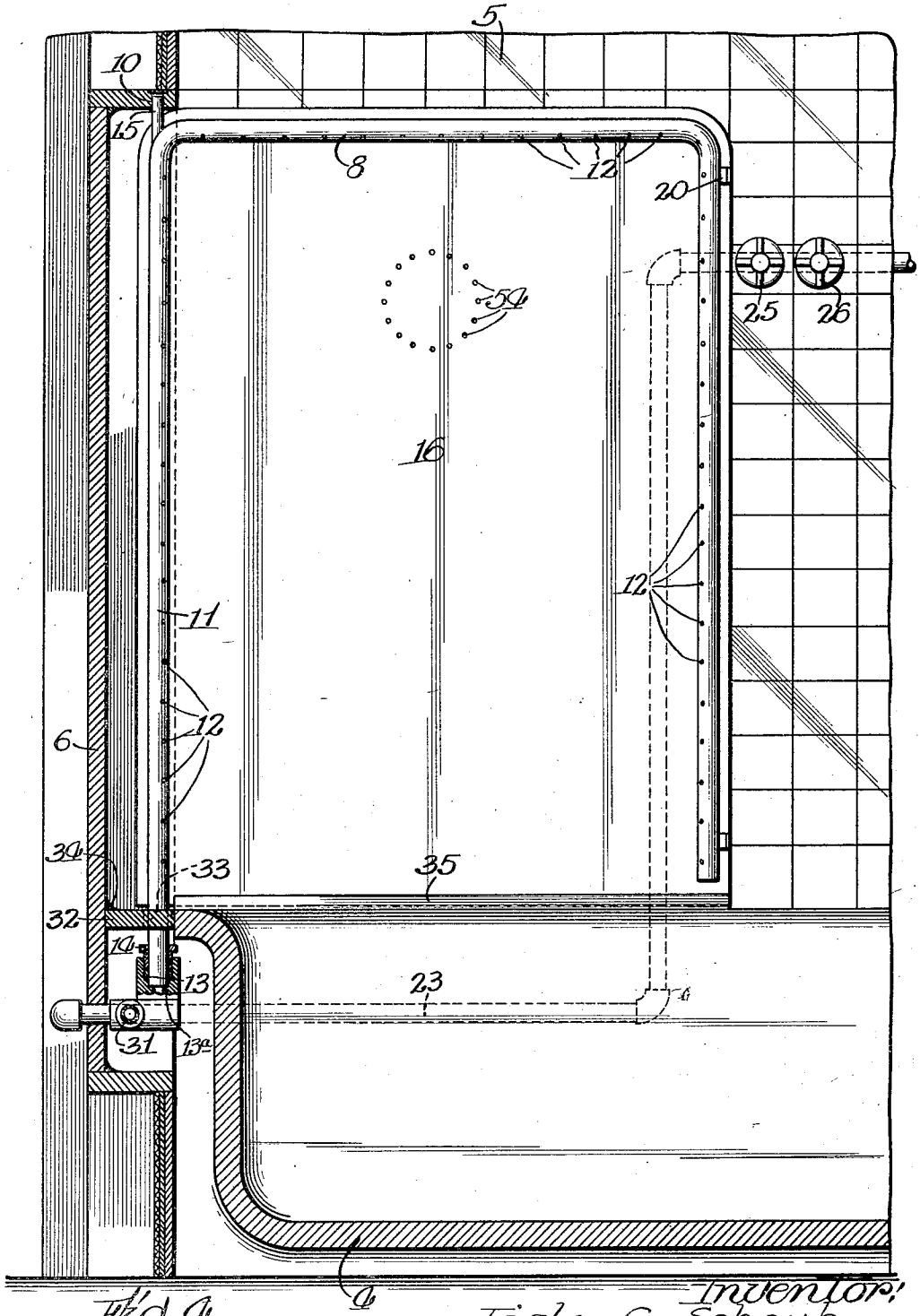

Fig. 4.

Inventor:
Lisle C. Schaub
By: Theodore W. Miller Atty.

Patented Dec. 8, 1931 1,835,813

UNITED STATES PATENT OFFICE

LISLE C. SCHAUB, OF CHICAGO, ILLINOIS

BATH FIXTURE

Application filed November 15, 1929. Serial No. 407,316.

This invention relates to bath fixtures in general, and more particularly to an apparatus adapted, when in operative position, to convert an ordinary bath tub into a shower bath and when in inoperative position to be concealed from view.

Where space economy is not an important factor, bathrooms containing the usual bathroom fixtures, including a bath tub, are frequently provided with an adjoining compartment fitted out as a shower bath. Where space economy is an important factor and a shower bath is desired in addition to the bath tub, the latter is frequently equipped with the usual spray, together with a waterproof curtain or other means for preventing splashing outside of the tub when the spray is in use. This latter form of providing shower bathing facilities in addition to the tub bathing facilities is not as desirable as the former employing the separate compartment because of the objection to the permanent spray device above the tub and the presence of the means for preventing splashing, which usually must be removed when the tub is used in its ordinary capacity for bathing. Furthermore, the ordinary means for preventing splashing when a shower bath is used in conjunction with a bath tub is more or less inefficient because it usually consists of a curtain which is bound to permit a certain amount of water to splash upon the bathroom floor.

It is, therefore, highly desirable to provide a construction which has all of the advantages of the separate compartment for a shower bath and which at the same time has the same advantage as to space economy, which is obtained where the bath tub is fitted with a shower bath spray and means for preventing splashing outside of the tub when the spray is used and the primary object of my invention is, accordingly, to provide a construction having these advantages.

Another object of my invention is to provide a shower bath apparatus adapted to be used in conjunction with a bath tub or other means for carrying off water, which apparatus when not in use may be concealed in the wall of the bathroom, and which may be readily withdrawn therefrom to operative position to spray a person standing in the tub and to prevent splashing of the water thereoutof on the bathroom floor.

Other and further objects of this invention will be apparent as the same becomes better understood from an examination of the specification and claims in conjunction with the accompanying drawings, wherein:

Fig. 1 is a fragmentary elevation of a section of a bathroom embodying this invention;

Fig. 2 is an enlarged fragmentary section taken at the line 2—2 of Fig. 1;

Fig. 3 is a fragmentary sectional view taken at the line 3—3 of Fig. 1;

Fig. 4 is a fragmentary sectional view taken at the line 4—4 of Fig. 3;

Fig. 5 is a horizontal section taken similarly to Fig. 3 but showing a modified form of the apparatus; and

Fig. 6 is an enlarged fragmentary section taken at the line 6—6 of Fig. 5.

Referring to the drawings more particularly, reference character 1 designates one wall of a bathroom provided with a wall section 2 at right angles to wall 1 and a third wall section 3 parallel to the wall 1 and adjoining the section 2. The wall section 2 is approximately the length of a bath tub 4 installed longitudinally along the base thereof. The wall 1 and sections 2 and 3 are preferably provided with tile 5.

The wall 1 at the head of the tub 4 is provided with a vertical narrow boxlike housing 6, which is set in the wall with its outer edges 7 flush with the surface of the tile 5. This housing 6 contains a shower bath spraying apparatus which may be folded out of the housing and the wall 1 in which said housing is located, to operative position wherein it may be used to efficiently spray a person standing in the tub 4. This apparatus when in operative position also acts to prevent the splashing of the water used beyond the confines of the tub 4 and in every way is as efficient as a separate shower bath would be. This apparatus may be substantially all assembled in the housing 6 before installation to reduce the cost thereof.

The apparatus within the housing 6 includes a pair of inverted U-shaped pipes 7 and 8, each pivoted on one leg, the pipe 7 on the leg 9 and the pipe 8 on the leg 11. Each of these U-shaped members 7 and 8 is adapted to receive water the same as an ordinary spray device and is provided with a plurality of apertures or jets 12 so bored as to spray in the directions indicated in dotted lines in Fig. 3 to thoroughly bathe the body of a person standing in the tub on all sides. The jets 12 are of slightly increasing size from the inlet ends of the members 7 and 8 to compensate for any drop in pressure.

The legs 9 and 11 on which the members 7 and 8 are pivoted are the legs through which these respective members are supplied with water, the inlet or lower end of the leg being connected through the intermediary of a suitable fixture 13 employing a stuffing box and gland 14, which prevents leakage and at the same time permits relative rotational movement of the leg in alignment with fixture 13. The upper end of the inlet leg of each U-shaped member is provide with an integral cylindrical boss 15 welded in alignment with the leg and fitted in a bearing 16 formed by an aperture in the top of the housing 6. These bosses 15 and bearings 16, therefore, together with the movable connections provided by the fixtures 13 and stuffing box glands 14, form the hinge supports for the respective U-shaped members 7 and 8. A circular shoulder 13^a formed integrally within the fixture 13 engages the end of the leg of the corresponding U-shaped member and takes up the thrust due to the weight of this member and the door attached thereto.

Each of the members 7 and 8 has welded thereto a sheet metal door 15 and 16, respectively, the outer edges of the doors being crimped over as at 17 and extending just beyond the periphery of the respective members. The member 7 and door 15 are adapted to be folded into the housing 6 close to the rear side thereof, and the member 8 and its door 16 are adapted to be folded into the housing 6 at the front thereof and consequently the member 7 and its door 15 are of less width than the member 8 and its door 16. The door 16 is adapted to close the housing 6 when the apparatus is not in use and the spray devices 7 and 8 are folded in said housing. The door 16 is provided with a spring catch 20 having a small ball 18 spring projected outwardly, which yieldably engages in a socket 19 formed in a keeper 21, which is secured in the side of the housing 6. The door 16 is also provided with a handle 22 preferably in the form of a towel rack and its outer face is preferably enameled to simulate the tile 5 so that when the apparatus is not in use its presence will not be noticed. A series of apertures 54 are formed in the door 16 to permit the circulation of air in the housing 6 and promote evaporation of moisture therein.

The usual hot and cold water pipes 23 and 24 respectively having regulating valves and handles therefor 25 and 26, accessible from the tub 4, are connected together as by a T 27 to merge in a single pipe 28, which is connected through suitable connections, including a T 29 inside of the housing 6. The T 29 is in turn connected to oppositely extending pipes 31 to the ends of which are connected the respective fixtures 13 leading to the legs 9 and 11, respectively, of the bath spray devices.

In order that any water that might be splashed into the housing 6 when the apparatus is in use may be returned to the tub 4, said housing is provided with a false bottom 32 above the fixtures 13 and apertured to receive the legs 9 and 11. Suitable bushings 33 are provided in the apertures for the legs 9 and 11, which prevent leakage of water beneath the bottom 32. The interior of the housing 6 is provided with a suitable waterproof coating 34. The edge of the bottom 32 is flush with the top of the tub 4.

The lower edge of each door 15 and 16 is provided with a strip 35 of rubber on its inner side which engages with the corresponding edge of the tub 4 when the apparatus is in operative position with these doors open so that no water can splash out between the lower edges of the doors and the edge of the tub.

In Figs. 5 and 6 there is shown a modified form of the apparatus wherein there is provided a housing 36 which is set into the bathroom wall the same as the housing 6, but in this case the housing is situated in the wall at the side of the tub intermediate the ends thereof instead of in the wall at the head of the tub, as in the previous embodiment.

In this modified form U-shaped members 37 and 38 are provided and these members have welded thereto doors 39 and 41, as in the previous embodiment. A water supply 42 is connected to one leg 43 of the member 37, as before, but the door 41 instead of being pivoted in the casing 36 opposite to the leg 43 is pivoted to the free side of the door 39 through the intermediary of lugs 44 at the top and bottom of its legs 45 and pivot screws 46 for said lugs secured in bosses 47 formed at the top and bottom of leg 48 on the member 37. Water is conveyed from the member 37 to the member 38 through the intermediary of a flexible cable 49 attached as at 50 to the respective members 37 and 38. The door 41 and member 38 may thus be folded against the inner side of the door 39 and member 37 and the door and members swung into the housing 36, the door 39 acting to close the same when the apparatus is in inoperative position.

When the apparatus is in operative position, the door 41 being assisted by a marginal flange 51 formed thereon and a rubber strip 52 on the face of said flange and being also assisted by a rubber strip (not shown) on its lower edge similar to the strip 35, acts to prevent splashing of water outside of the tub.

A stationary vertical perforated pipe 53 is mounted in the side of the housing 36 opposite to the leg 43 and connected to the water supply so that it cooperates with the legs of the members 37 and 38 to spray water on all sides simultaneously of a person standing in the tub.

The outer face of the door 39 is preferably provided with a mirror 53.

The advantages of the aforedescribed constructions will be apparent without further description.

I am aware that many changes may be made without departing from the principles of this invention and I do not, therefore, wish to be limited to the details shown or described.

What I claim is:

1. In an apparatus of the character described, the combination with a member and a bath tub, of a bath spraying device adapted to be concealed in said member and withdrawn therefrom to spray a person in the tub, said device having means associated therewith adapted when the device is in operative position to engage the inner edge of the tub to prevent splashing beyond the edge of the tub.

2. In an apparatus of the character described, the combination with a member and a bath tub, of a bath spraying device in said member adapted to be withdrawn therefrom to spray a person in the tub, and a door adapted to conceal the device when the same is in inoperative position and adapted when it is in operative position to engage the inner edge of the tub.

3. In an apparatus of the character described, the combination with a member provided with an opening, of a pair of bath spraying devices adapted to be contained in said opening, and a pair of doors adapted to be swung across said opening, one door being adapted to close the same and each door provided with one of said devices.

4. In an apparatus of the character described, the combination of a door and a U-shaped spraying member attached thereto adapted to spray from the edges of the door.

5. In an apparatus of the character described, the combination with a member having an opening therein and a bath tub, of a pair of doors adapted to be swung across said opening, a bath spraying device on each door, one door when closed adapted to close said opening with said devices concealed therein, said doors when in open position coming to opposite edges of said tub with said devices in operative position to spray a person standing in the tub.

6. In an apparatus of the character described, the combination of a bath spraying device and a closure rigidly attached thereto, said device being adapted to be used when the closure is open and concealed by the closure when the same is closed.

7. In an apparatus of the character described, the combination with a member and a bath tub, of a bath spraying device in said member adapted to be withdrawn therefrom to spray a person in the tub, and a closure adapted to conceal the device when the same is in inoperative position and adapted when it is in operative position to engage the inner edge of the tub to prevent splashing beyond the edge of the tub.

8. In an apparatus of the character described, the combination of a bath spraying device and water supply pipe therefor, and a closure adapted to conceal said device pivoted on said pipe.

9. In an apparatus of the character described, the combination with a member provided with a compartment, of a bath spraying device provided with means for laterally projecting vertically arranged jets in said compartment adapted to be folded out of the same to operative position.

10. In an apparatus of the character described, the combination with a member provided with a compartment, of a bath spraying device provided with means for laterally projecting vertically arranged jets adapted to be concealed in said compartment when not in use and to be withdrawn therefrom to operative position.

11. In an apparatus of the character described, the combination with a member provided with a compartment, of a bath spraying device adapted to be concealed in the compartment and withdrawn therefrom, said device including a plurality of lateral sprays spaced horizontally to spray the body of a person from different sides simultaneously.

In witness whereof, I hereunto subscribe my name this 12th day of November, A. D. 1929.

LISLE C. SCHAUB.