

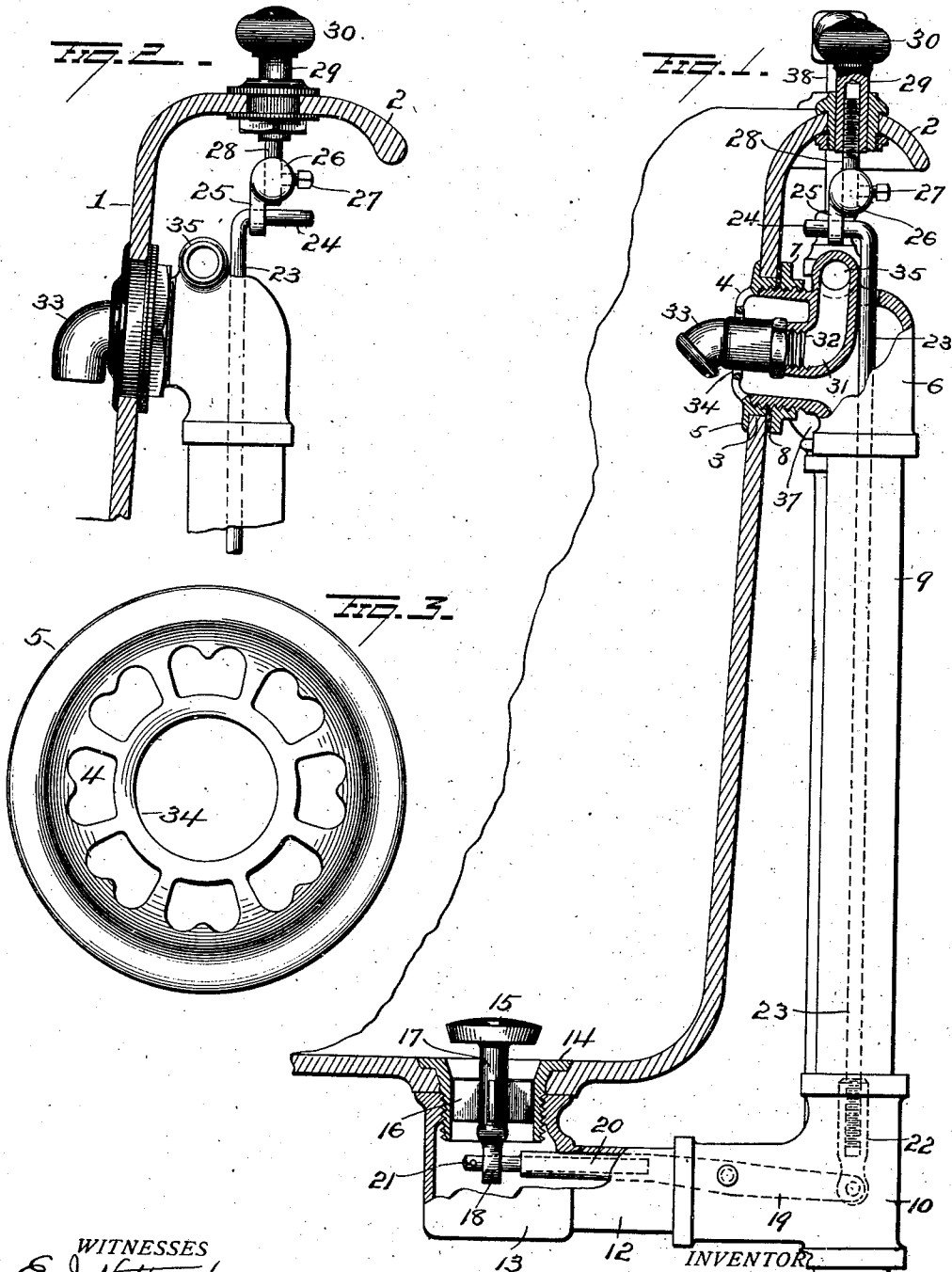
H. M. WEAVER.
BATH TUB FITTING.

APPLICATION FILED AUG. 10, 1909.

1,010,469.

Patented Dec. 5, 1911.

2 SHEETS-SHEET 1.



WITNESSES
E. J. Nottingham
S. G. Nottingham

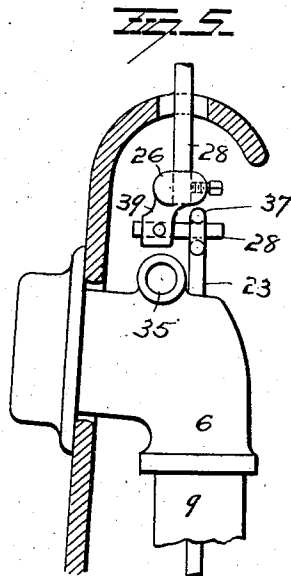
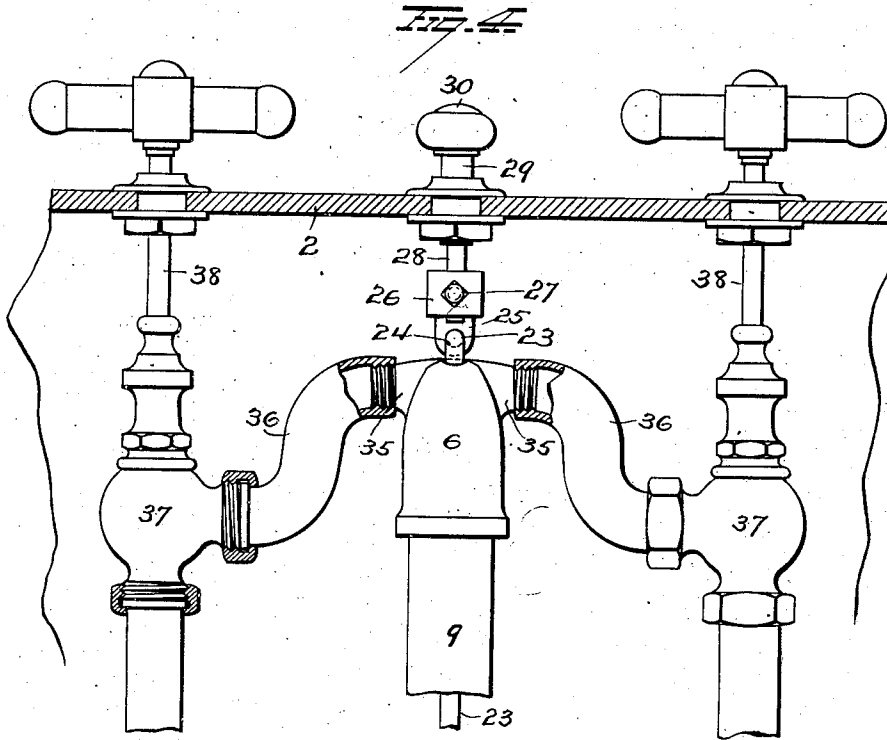
INVENTOR
Henry M. Weaver
By H. A. Seymour
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WITNESSES
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UNITED STATES PATENT OFFICE.

HENRY M. WEAVER, OF MANSFIELD, OHIO.

BATH-TUB FITTING.

1,010,469.

Specification of Letters Patent.

Patented Dec. 5, 1911.

Application filed August 10, 1909. Serial No. 512,221.

To all whom it may concern:

Be it known that I, HENRY M. WEAVER, of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Bath-Tub Fittings; 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.

This invention relates to improvements in bath tub fittings,—one object of the invention being to provide simple and efficient means whereby parts of the fitting which are intended to pass through openings in the flange of the tub, can be readily adjusted so as to properly aline with the openings in tub flanges of different sizes or widths.

A further object is to provide simple and efficient means whereby a single opening in the wall of the tub can be utilized for the overflow and also for the passage of the water inlet nozzle.

A further object is to provide improved means for operating the waste-plug and to so construct the same as to permit vertical movement of the plug and prevent loss of any of the parts when the plug is removed.

A further object is to provide means for adjusting the valves which control the flow of hot and cold water, relatively to the central nozzle through which the water is discharged into the tub.

With these objects in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view partly in elevation and partly in section showing the application of my improvements to a tub. Fig. 2 is a view showing the application of the plug operating devices when used with a tub having a wide flange. Fig. 3 is a face view of the screen or grating over the overflow outlet. Fig. 4 is a detail view showing the connection between one of the valves and the central nozzle, and Fig. 5 is a view of a slight modification.

1 represents a bath tub having a flange 2 at its upper edge and provided below said flange with an opening 3 which occupies the position of the overflow outlet of bath tubs as commonly constructed. A screen or grating 4 is placed over this opening and provided with an annular flange 5 which fits

within said opening and said flange is internally threaded for the reception of the threaded portion of a hollow casting 6. A washer 7 also screws on the threaded portions of the casting 6 and between this washer and the inner edge of the flange 5 and the inner face of the tub, a packing 8 is disposed. By means of the washer 7, the screen or grating 4 and the casting 6 are secured in position on the tub. The casting 6 is made in the form of an elbow and with its downwardly projecting member, the upper end of a pipe 9 communicates and the lower end of this pipe is connected with a coupling 10. A waste pipe 11 is connected with the lower end of the coupling 10 and a short pipe section 12 connects the horizontal arm of this coupling with a collar casting 13. The casting 13 is located below the waste outlet in the bottom of the tub and said waste outlet contains a bushing 14 which communicates with the chamber in the casting 13. The bushing 14 forms a seat for the waste plug 15 and the depending shank of the latter is provided with wings 16 which constitute strainers within the bushing 14.

The stem of the plug 15 comprises two members 17 (which carries the wing 16) and 18 which is provided with an opening for the reception of one member of an operating lever, to which said member 18 may be loosely connected. The operating lever above referred to comprises two members 19 and 20. The member 19 of the lever is pivotally supported between its ends in the coupling 10 and the forward portion of said member 19 is made tubular for the reception of the member 20 of said lever. The member 20 thus has telescopic relation to the member 19 and has the member 18 of the plug stem connected with it,—if desired a stop 21 may be secured to the longitudinally movable member 20 to prevent displacement of the stem member 18 from said member 20 of the lever.

A socketed arm 22 is pivotally attached to the outer end of the lever 19 within the coupling 10 and this socketed arm receives the lower threaded end of a rod 23 which extends upwardly through the pipe 9 and through the elbow or casting 6. The rod 23 extends above the casting 6 and at its upper end is provided with a laterally projecting arm 24 which passes freely through a hole in an arm 25 depending from a head 26. The head 26 is adjustably secured by means

of a set screw 27 to the lower end of a rod or stem 28. This rod or stem passes upwardly through an opening in the flange 2 of the tub and receives the shank 29 of a knob 30,—said shank also passing through the hole in the flange 2 and adapted to have free movement therein. It is apparent that by means of the knob 30 and its connection with the rod 23, the latter can be moved longitudinally for the purpose of rocking the lever 19 and thus opening or closing the plugged waste-outlet of the tub.

By means of the construction above described, the connection between the knob stem 28 and the rod 23 can be readily adjusted so as to position these parts properly to permit the knob stem to pass through the opening in the flange 2 of the tub whether this opening be made in a narrow or wide flange.

In Fig. 1 of the drawing my improvements are shown applied to a tub having a narrow flange 2. Should it be desired to connect the devices with a tub having a wide flange, such as shown in Fig. 2 of the drawing, the rod 23 may be turned so that the arm 24 will project outwardly and in any case the connection of the knob stem with the rod 23 will be so that said rod stem will pass properly through the opening which is centrally located in the tub flange, and can be readily adjusted by turning the rod 23 until the head 26 (the arm 25 of which is freely movable on the arm 24 of the rod) becomes disposed immediately in line with the stem 28 passing through the opening in the flange 2 of the tub.

The hollow casing or elbow 6 is made with an internal angular duct 31, the lower horizontal portion of which terminates centrally within the horizontal portion of the casting or elbow 6 rearwardly of the free end thereof and is threaded internally for the reception of a threaded nipple 32 at the rear end of a nozzle 33. This nozzle passes through a central opening 34 in the screen 4. The nozzle 33 may be secured within the casting 6 as above described before the latter is secured to the tub,—said nozzle being so constructed as to permit the screen 4 to be passed over it and then turned to screw the flange of said screen onto the horizontal portion of the casting 6. The casting 6 is also made with laterally projecting tubular members or pipes 35 which communicate at their inner ends with the duct 31 and the outer ends of these laterally projecting tubular members or pipes 35 are externally threaded for the reception of S-shape pipes 36. The outer ends of the pipes 36 are coupled to the valve casings 37 with which the hot and cold water pipes are respectively connected. The valves within these casings are provided with stems 38 which pass through suitable openings in the flange 2 of the tub. By

connecting the tubular members 35 on the casting 6 with the valve casings by means of S-shape pipes 36, the positions of said valve casings may be adjusted by turning the pipes 36 more or less on their connections with the tubular members 35, so as to cause the valve stems 38 to properly aline with the centrally arranged openings in the flange 2 of the tub.

If desired, the arm 24 at the upper end of the rod 23 may be omitted, and the upper end of said rod provided with an eye 37 for the free passage of a short horizontal rod 38 secured to a depending member 39 on the head 26, as shown in Fig. 5.

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

1. In a bath-tub fixture, the combination with a hollow casting forming an elbow and provided internally with a water duct terminating horizontally in the central portion of the horizontal member of said casting, means for conducting hot and cold water to said duct, a screen to extend over the overflow outlet of the tub and having a threaded flange to screw on the hollow casting, a clamping washer on said hollow casting for securing the same and the screen to the tub, a nozzle passing through the center of the screen and having a nipple connecting said nozzle with the water duct within the hollow casting, and a waste pipe communicating with said hollow casting.

2. The combination with the waste-plug of a bath-tub, and a lever for operating the same, of a rod connected with said lever, a stem adapted to pass through the flange at the upper edge of the tub and means connecting said stem and rod, and for effecting lateral adjustment of one relatively to the other.

3. The combination with the waste-plug of a bath tub and a lever for operating the same, of a rod connected with said lever, a stem adapted to pass through an opening in the flange at the upper edge of the tub, a head adjustably secured to said stem, and means for effecting lateral adjustment of the rod relatively to the head.

4. The combination with a waste-plug of a bath tub, and a lever for operating the same, of an upwardly projecting rod adjustably connected with said lever, a stem adapted to pass through the flange at the upper edge of the tub, and means for connecting said rod and stem, said means affording vertical and lateral adjustment between the rod and stem.

5. The combination with a waste-plug of a bath tub and a lever for operating the same, of a rod adjustably connected at its lower end with said lever and provided at its upper end with a laterally projecting arm, a stem adapted to pass through the

flange at the upper edge of the tub, a head adjustable on said stem, and an arm depending from said head and provided with an opening for the free passage of the arm at the upper end of said rod.

5 6. The combination with the waste plug of a bath tub having a stem comprising two members removably connected together, of a lever comprising two members, one telescoping and movable within the other and engaging the lower member of the plug stem, means for preventing escape of said lower stem member from the movable member of the lever, and means for operating said
15 lever.

7. The combination with the waste plug of a bath tub, means for raising said plug from below, and a pipe communicating with the overflow outlet of the tub, of a rod passing through said pipe, a stem to pass through the flange of the tub, and means for effecting lateral adjustment between said rod and stem. 20

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses. 25

HENRY M. WEAVER.

Witnesses:

JOHN SHIVELY,
N. P. BIGELOW.