Nov. 11, 1941. F. C. KUHNLE 2,262,290

PLUMBING FIXTURE

Filed Feb. 2, 1940 2 Sheets-Sheet 1

Fig. 1.

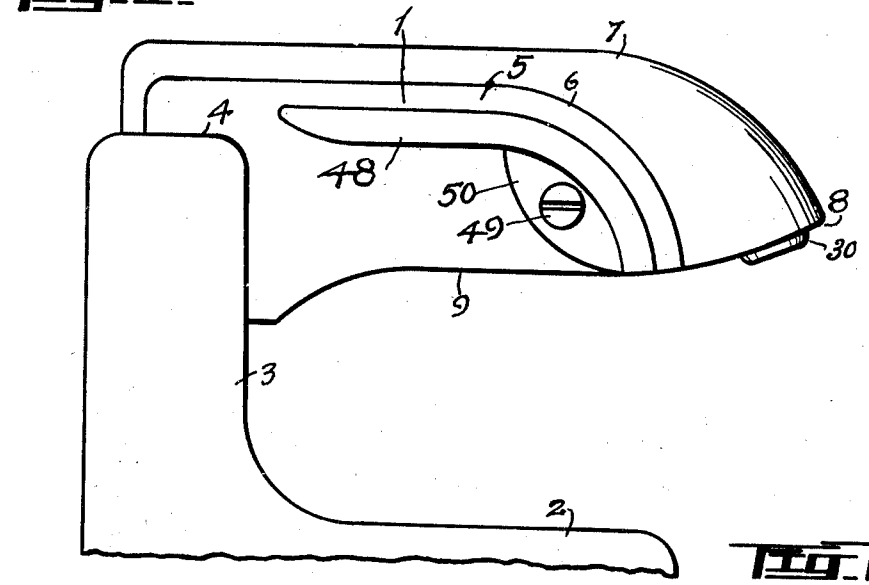
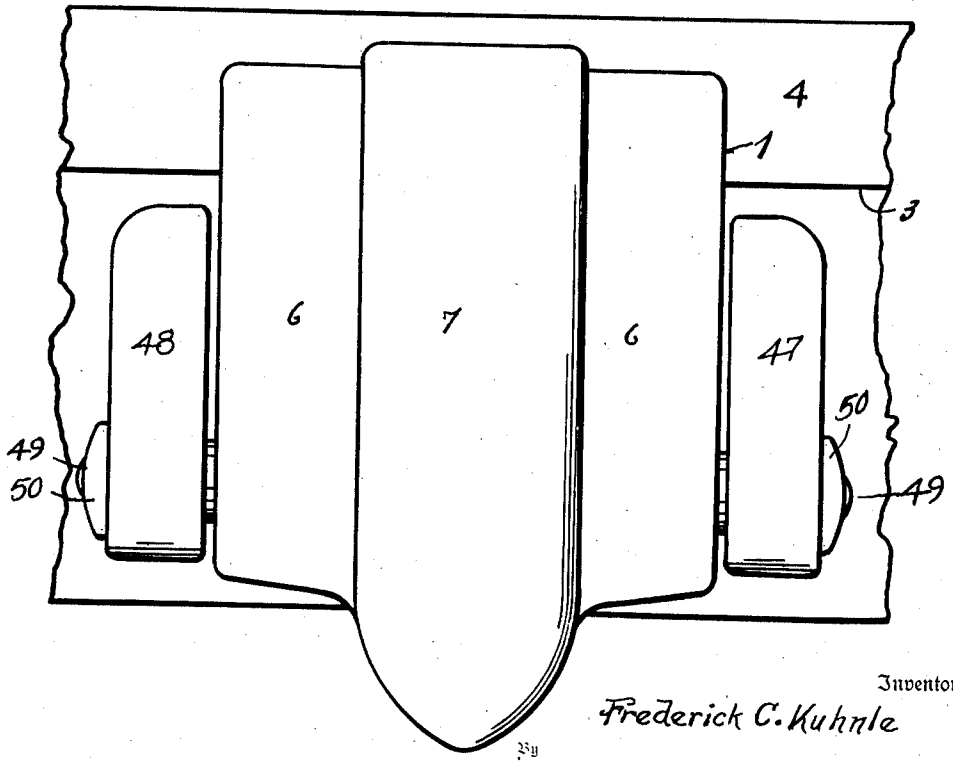


Fig. 2.



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Filed Feb. 2, 1940 2 Sheets-Sheet 2

Fig. 3.

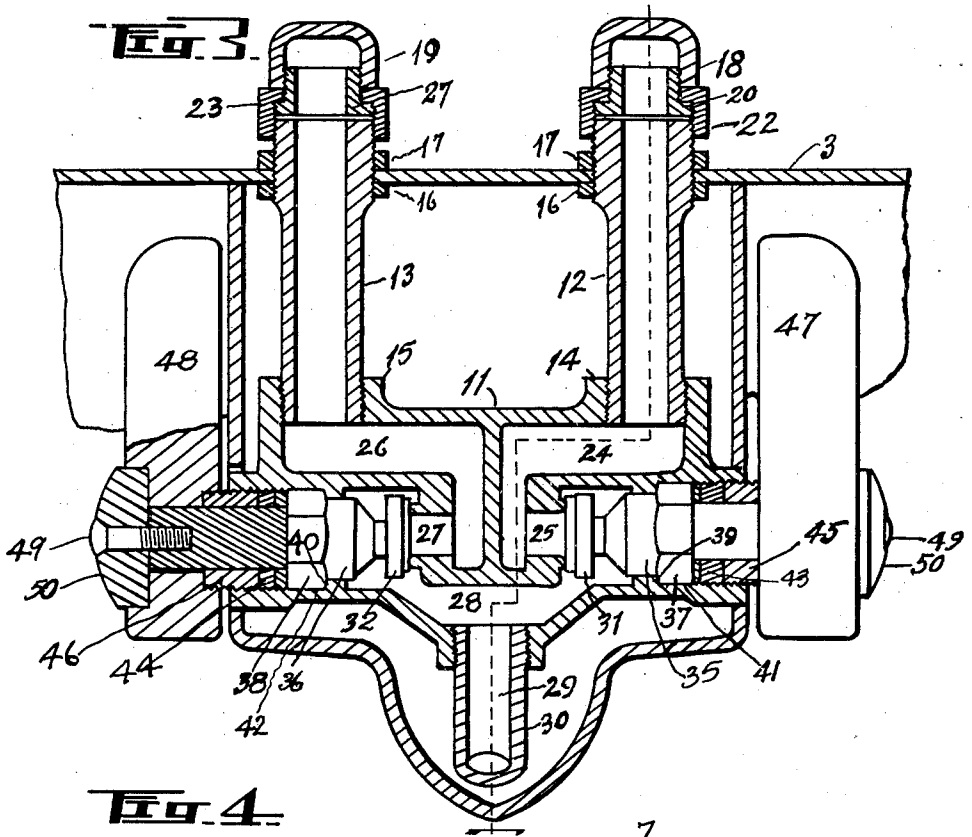


Fig. 4.

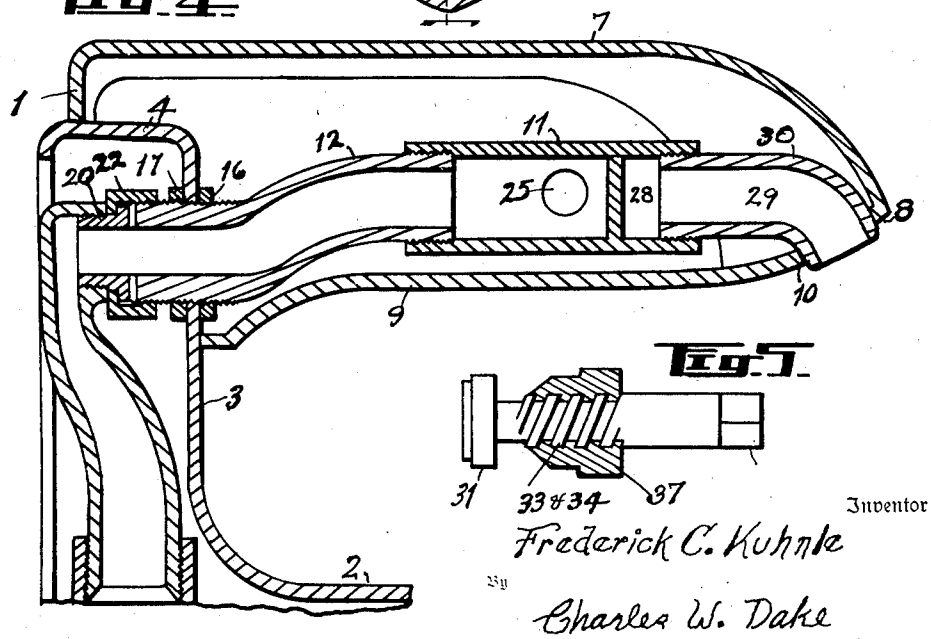


Fig. 5.

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UNITED STATES PATENT OFFICE

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PLUMBING FIXTURE

Frederick C. Kuhnle, Grand Haven, Mich.

Application February 2, 1940, Serial No. 316,949

4 Claims. (Cl. 4—192)

My present invention relates to improvements in plumbing fixtures in which a plurality of water control valves operate in conjunction with a faucet to control the flow of water to a receptacle such as a bath tub, lavatory, kitchen sink or the like; and the objects of improvement are, first, to provide a plumbing fixture whereby either cold or hot water may be drawn, either selectively or intermixed of a tempered temperature from a single faucet; second, to provide a plumbing fixture that will be simple in construction; third, to provide a plumbing fixture that will be rugged and not liable to disorder; fourth, to provide a plumbing fixture, which, while being rugged, will be cheap to manufacture; fifth, to provide a plumbing fixture whereby the temperature of the water being drawn can be regulated; sixth, to provide a plumbing fixture that will readily be accessible; and seventh, to provide a plumbing fixture that is enclosed within an ornamental or other housing.

These named objects and other objects that appear from a perusal of the following description are attained by the structure disclosed in the accompanying drawings, in which:

Figure 1 is a side elevation view of the ornamental housing in which is enclosed and supported the greater portion of the operative elements of my improved plumbing fixture and also includes portions of the bath tub or lavatory to which my plumbing fixture is applied.

Figure 2 is a front elevation view of the ornamental housing in which is enclosed and supported the greater portion of the operative elements of my plumbing fixture including a portion of a sink or lavatory to which the plumbing fixture is applied.

Figure 3 is a horizontal sectional view of my improved plumbing fixture taken on a horizontal plane on line I—I of Fig. 1, the view showing the operative parts in their respective places within the canopy-forming housing.

Figure 4 is a vertical sectional view of my improved plumbing fixture taken on a plane through the fixture on line II—II of Figures 2 and 3, in which is shown the operative parts in their respective operative places within the canopy-forming housing.

Throughout the drawings, similar numerals refer to similar parts, and referring thereto:

Numeral 1 designates the canopy-forming housing enclosing the operative parts of the plumbing fixture; 2 a broken-away portion of the shelf of a wash stand back of the wash bowl; 3 a broken-out portion of the panel extending upwardly from the shelf 2 back of the wash bowl; 4 the top of the panel 3 to which the canopy-forming housing is secured. 5 designates the downwardly curved roof of the housing 1, which extends back over the top 4 of the panel 3, and consists of two portions 6 separated by raised panel 7, the roof portions 6 terminating in the downwardly curved apex 8, from which extends back to the panel 3, bottom wall 9 having hole 10 at the apex 8. Within the canopy-forming housing 1 is located valve housing 11 secured to the panel 3 by water supply extension tubes 12 and 13 screw-threaded into bosses 14 and 15 of the valve housing, extending back therefrom through the panel 3 to which the tubes are secured by nuts 16 and 17 screw-threaded on the extension tubes having connection with hollow upwardly extending water supply members 18 and 19, by flanged nipples 20 and 21 screw-threaded into the said water supply members, and gland nuts 22 and 23 engaging the flange of the nipples 20 and 21 and screw-threaded onto the end of the water supply extension tubes 12 and 13.

Within the valve housing 11, for clearness of description, is cold water supply passage 24 extending from the water supply extension tube 12 to the valve port 25, and in a similar manner as described, is a hot water supply passage 26 extending from the water supply extension tube 13 to the valve port 27. Extending from the valve ports 25 and 27 is passage 28 opening into the passage 29 of the nozzle member 30, bent downwardly at its forward end whereby the water issuing from the nozzle passage will be directed downwardly at an incline to the horizontally disposed top of the wash stand or bath tub. The valve ports 25 and 27 are operated to open and closed condition by valves 31 and 32, by turning the coarsely screw-threaded valve stems 33 and 34 in the nuts 35 and 36, having hexagonal portions 37 and 38 engaging shoulder 39 and 40, in the valve cage bores 41 and 42, and held against said shoulders by packing washers 43 and 44, screw-threaded nipples 45 and 46 engaging the handles 47 and 48, by which the valves 31 and 32 are operated through the threaded stems 33 and 34, which are squared at their outer ends for the reception of the valve operating handles 47 and 48 secured to the valve stems by button head screws 49 and composition washers 50, having their two sides of curved form.

In the operation of my improved plumbing fixture, should it be desired to draw cold water, it is only necessary that the handle 47 be raised from its horizontal closed position in the water

control valve 31, which will allow cold water to flow from the water supply through the extension tube 12 into the passage 24, through the valve port 25 into the passage 28, and from said passage 28 and through the passage 29 of the nozzle 30. The stoppage of the water flow is accomplished in the reverse order, that is, by depressing the handle 47, the valve 31 is moved by the coarse screw threads on the valve stem turning in the nut 35 to closed position of the port 25. But, should it be desired to draw hot water, the handle 48 is raised from its horizontal position, as shown, to a vertical position which, in like manner to the cold water control valve, is withdrawn from its seat. The hot water is then permitted to flow through the hollow extension tube 13 from the water supply member 19 into the passage 26, through the valve port 27, into the passage 28, and from the passage 29 of the nozzle into the wash bowl or bath tub. The arrangement of the cold and hot water is so that the cold water can be drawn from that portion of my fixture at the right and the hot water from the portion at the left, except that both cold and hot water discharge from one and the same nozzle. That feature discloses that both hot and cold water may be drawn from the water supply and in thus doing, water of temperatures ranging from the temperature of the cold water to that of the hot water may be discharged from the nozzle.

Having described my improved plumbing fixture, the rights which I desire to secure are set forth in the claim as follows:

1. In a plumbing fixture, a valve enclosing canopy like housing secured to the back panel of a wash bowl and extending generally horizontal therefrom with two opposed vertically disposed sides and a downwardly curved apex in spaced apart relation to the said back panel and a spout protruding from said apex and a valve operating lever at each of said vertically disposed sides of the housing as described.

2. In a plumbing fixture, a water control valve enclosing canopy like housing having therein a plurality of horizontally disposed water control valves, secured to the back panel of a wash bowl and having a downwardly curved apex in spaced apart relation to the said panel, the housing having two opposite vertically disposed sides each having adjacent thereto a curved lever for operating the said valve by valve stems extending through the said vertically disposed sides of the housing as described.

3. In a plumbing fixture of the class described, a water control valve canopy like housing for attachment to the back panel of a wash bowl and extending generally horizontally from said panel and having a downwardly curved apex in spaced apart relation to the panel with a spout protruding therefrom and two vertically disposed sides in spaced apart relation with and valve operating levers adjacent thereto.

4. In a plumbing fixture of the class described, water control valve canopy like housing extending generally horizontal from the back panel of a wash bowl and having an apex in spaced apart relation to the said panel with a water delivery spout protruding from the lower side of the apex and two opposite vertically disposed sides with valve operating levers adjacent said sides.

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