April 25, 1950 E. L. BREBIS 2,505,091

DUAL FLUSH VALVE

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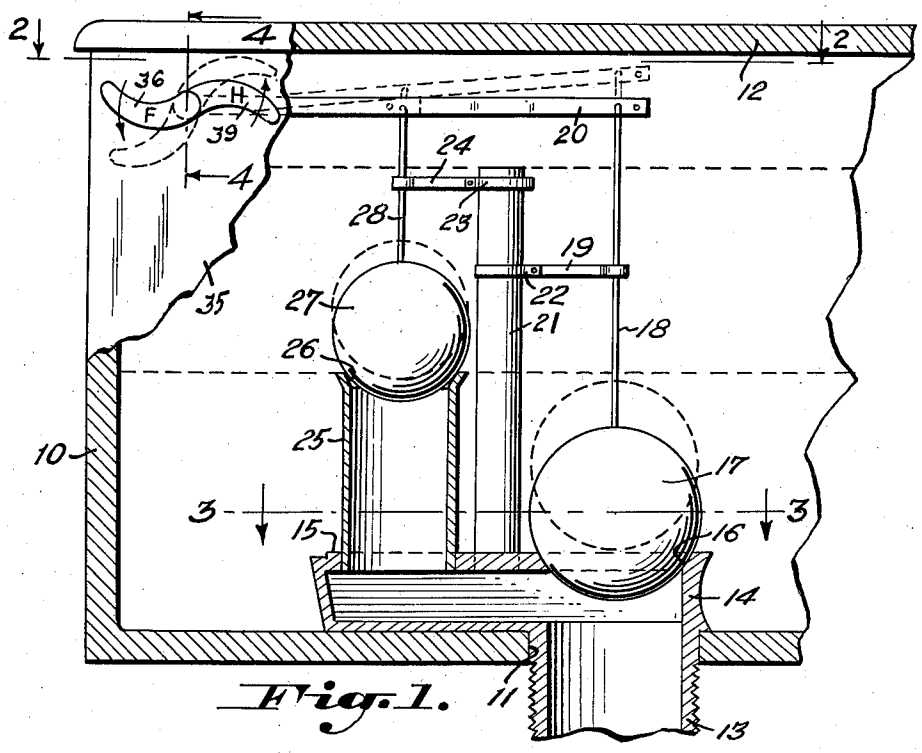


Fig. 1.

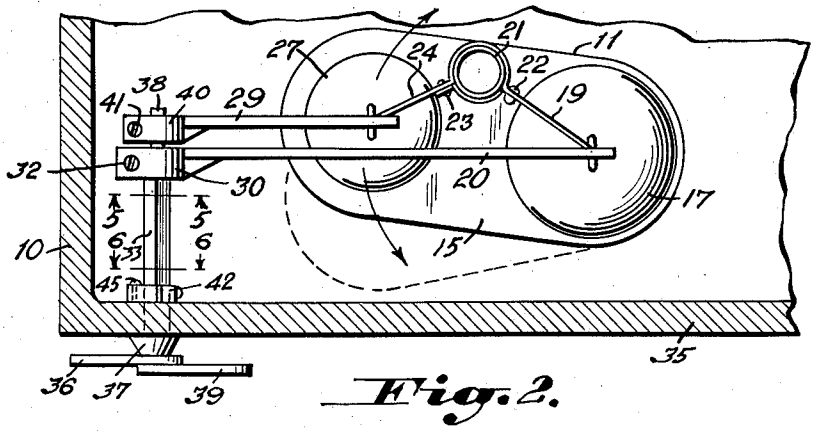


Fig. 2.

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Fig. 3.

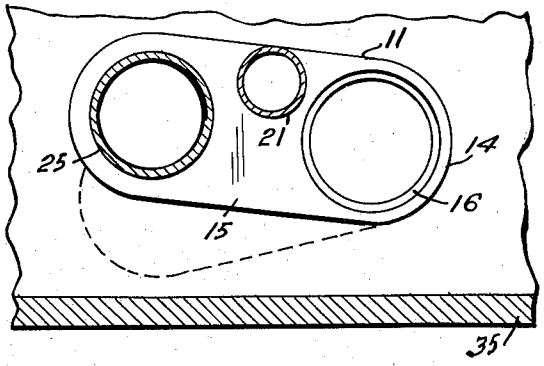


Fig. 4

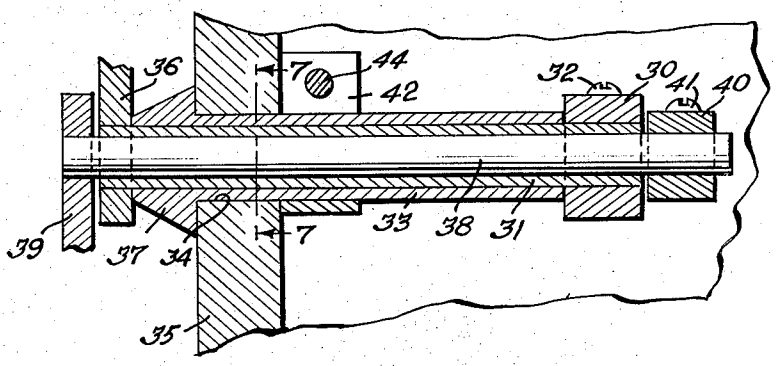


Fig. 6.

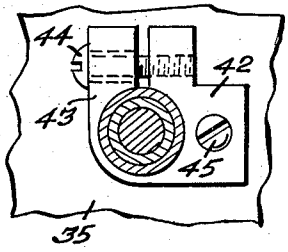


Fig. 5.

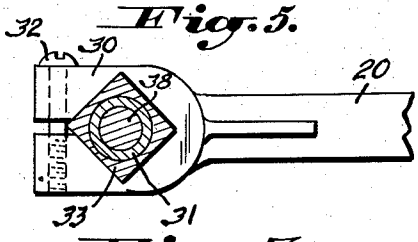
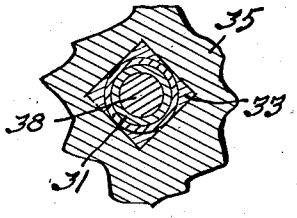


Fig. 7.



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Patented Apr. 25, 1950

2,505,091

UNITED STATES PATENT OFFICE

2,505,091

DUAL FLUSH VALVE

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Application August 6, 1948, Serial No. 42,857

1 Claim. (Cl. 4—37)

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The present invention relates to dual flush valve and it consists in the combinations, constructions and arrangements of parts herein described and claimed.

It is an object of the present invention to provide an attachment for the conventional flush tank having means whereby a portion or substantially all of the water therein may selectively be dispensed therefrom.

Another object of the invention is the provision of a novel arrangement of selectively operable valves in a flush tank.

A further object of the invention is the provision of a novel arrangement of levers for operating a plurality of valves in a flush tank.

Another object of the invention is the provision of a device of the character set forth wherein all of the component parts are of standard or conventional character.

A still further object of the invention is the provision of novel means and mechanism for latching in position a bearing sleeve forming a part of the invention.

Another object of the invention is the provision of an apparatus of the character set forth which is simple in its construction and operation and efficient and effective in use.

Another object of the invention is the provision of an apparatus of the character set forth in which the parts thereof may be easily repaired and replaced.

Other and further objects of the invention will become apparent from a reading of the following specification taken in conjunction with the drawings, in which:

Figure 1 is a fragmentary elevational view, partly in section, of an embodiment of the invention,

Figure 2 is a fragmentary sectional view taken along line 2—2 of Figure 1,

Figure 3 is a fragmentary sectional view taken along line 3—3 of Figure 1,

Figure 4 is an enlarged fragmentary sectional view taken along line 4—4 of Figure 1,

Figure 5 is an enlarged sectional view taken along line 5—5 of Figure 2,

Figure 6 is an enlarged fragmentary sectional view taken along line 6—6 of Figure 2, and

Figure 7 is a fragmentary sectional view taken along line 7—7 of Figure 4.

Generally, there is provided an attachment for a flush tank which may readily be inserted therein and which consists of a drain pipe connection formed integrally with a hollow base having a valve seat therein and an upwardly extending

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tubular connection having a valve seat in the upper end thereof. A drain pipe also extends upwardly from the hollow base. Hollow rubber ball valves are seated in each of the aforementioned valve seats and are each provided with an upwardly extending wire connection which interconnects with a lever. Through the front face of the tank extends a bearing sleeve in which are revolubly mounted a pair of nested shafts each provided with an operating handle without the tank and each connected with one of the levers within the tank whereby operation of one of the handles will cause the dispensing of approximately half of the water in the tank through the drain pipe and whereby operation of the other handle will cause the draining of substantially all of the water through the aforesaid drain pipe.

Referring more particularly to the drawings, there is shown therein a flush tank 10 having the conventional opening 11 in the bottom thereof and provided with a conventional cover 12. Through the opening 11 extends a drain pipe connection 13 which is integrally formed with and dependant from a hollow base member 14 whose upper face 15 is provided with a valve seat 16 in which is seated a rubber ball valve 17 provided with an upwardly extending stem 18 which extends through a guide member 19 and which is pivotally connected at its upper end to a lever 20.

A conventional overflow pipe 21 extends upwardly from the base 14 and has clamped thereto, as indicated at 22, the guide member 19 and has also clamped thereto, as indicated at 23, a guide member 24.

The base 14 has upwardly extending therefrom a hollow cylindrical member 25 having a valve seat 26 in the upper end thereof in which is seated a rubber ball valve 27 having an upwardly extending stem 28 extending through the guide member 24 and pivotally connected at its upper end to a lever 29.

The lever 20 is provided with a yoke 30 at its inner end which yoke surrounds a hollow shaft 31 and is clamped thereto by means of a screw 32. The shaft 31 extends through a bearing sleeve 33 which is square in its outer cross sectional periphery and which extends through a square opening 34 in the front wall 35 of the tank 10. The outer end of the shaft 31 is provided with an operating handle 36 and the outer end of the sleeve 33 is provided with a collar 37 formed integrally therewith and adapted to limit inward movement of the sleeve into the front wall 35.

Revolubly mounted within the shaft 31 is a

shaft 38 whose outer end is provided with an operating handle 39 and whose inner end extends through a yoke 40 formed integrally with the lever 29 and which yoke is clamped to the shaft 38 by means of a screw 41.

A stabilizing clamp member 42 is provided with a yoke 43 which is clamped upon the sleeve 33 by means of a screw 44 and which is provided with a stabilizing screw 45 which extends therethrough and which bears against the inner side of the wall 35.

In operation, it will be apparent that when a minimum of water is needed for flushing purposes from the tank 10, it is only necessary to lift the handle 39 which will cause the shaft 38 to revolve and lift the lever 29 thereby lifting the stem 28 and, consequently, the ball valve 27. This action will allow water to flow through the cylindrical member 25 to the interior of the base 14 and thence through the drain pipe 13. By virtue of the height of the member 25 only approximately one-half of the water in the tank 10 will be dispensed therefrom. However, if it is desired to substantially completely empty the tank 10 it is only necessary to depress the handle 36 which will cause the shaft 31 to revolve thereby lifting the lever 20 and hence the stem 18 to unseat the valve 17 from its seat 16 thereby allowing practically all of the water in the tank 10 to be dispensed through the drain pipe 13.

While but one form of the invention has been shown and described herein, it will be readily apparent to those skilled in the art that many minor modifications may be made without departing from the spirit of the invention or the scope of the appended claim.

What is claimed is:

An apparatus of the character described comprising, in combination, a flush tank, a hollow base member, a drain pipe dependent from the base member and adapted to extend through the bottom of the tank, a valve seated in the top of the base member, a pipe connected with the top of the base member and extending upwardly approximately half of the depth of the tank, a valve seated in the top of the upwardly extending pipe, vertical stems affixed to each of the valves, a lever connected to the upper end of each of the stems, a bearing sleeve non-revolubly mounted in the front wall of the tank, a hollow shaft revolubly mounted in the sleeve and affixed to one of the levers, a solid shaft revolubly mounted in the hollow shaft and affixed to the other lever, an operating handle affixed to the outer end of each of the shafts and means for rigidly maintaining the bearing sleeve in position, said means comprising a yoke clamped about the sleeve adjacent the inner face of the front wall of the tank, a collar for the sleeve upon the outer side of the wall and a screw threaded in the yoke and bearing against the inner face of said wall.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,960,864	Brown	May 29, 1934
1,963,211	Patterson	June 19, 1934
2,237,294	Easley	Apr. 8, 1941