

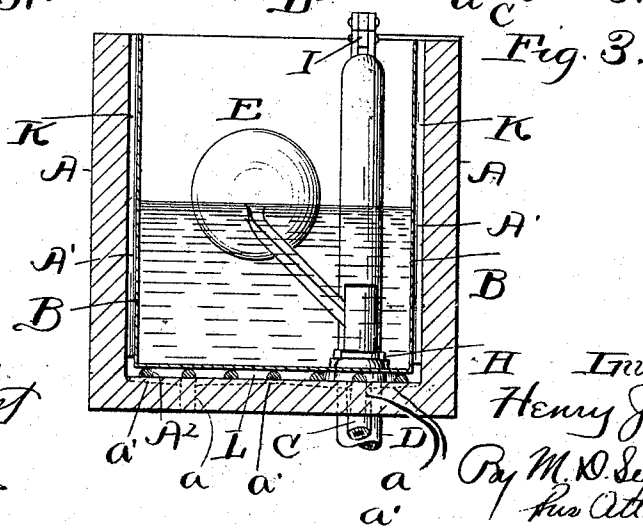
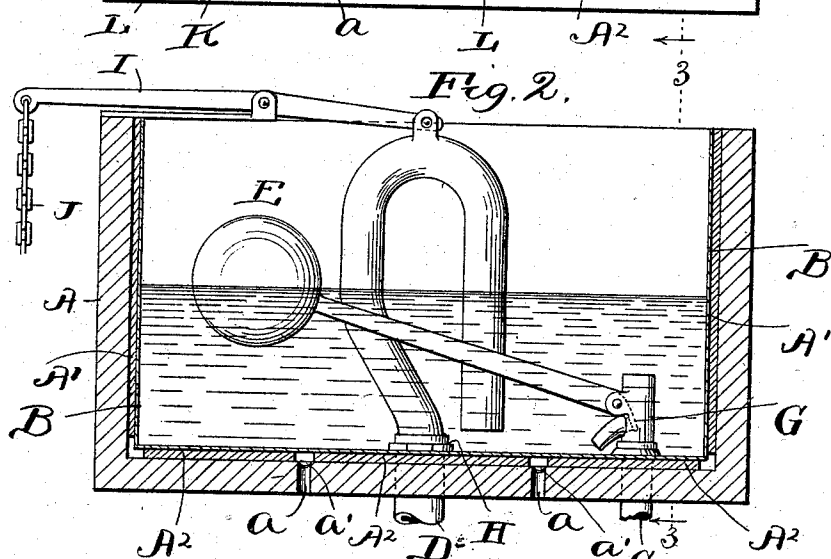
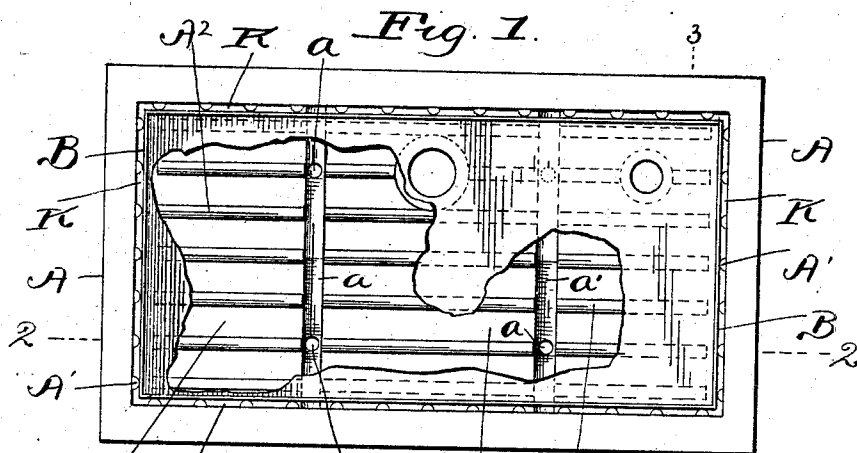
(No Model.)

H. J. LUFF.

FLUSHING TANK OR RESERVOIR FOR WATER CLOSETS.

No. 542,061.

Patented July 2, 1895.



Witnesses.
E. B. Gilchrist
[Signature]

Inventor.
Henry J. Luff.
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His Attorneys.

UNITED-STATES PATENT OFFICE.

HENRY J. LUFF, OF CLEVELAND, OHIO.

FLUSHING TANK OR RESERVOIR FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 542,061, dated July 2, 1895.

Application filed September 7, 1894. Serial No. 522,311. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. LUFF, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Flushing Tanks or Reservoirs for Water-Closets; 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 pertains to make and use the same.

My invention relates to an improvement in flushing tanks or reservoirs for water-closets, the object being to so place or support the metallic tank within the inclosing wooden case that, should said tank become leaky, the water from within the tank, instead of saturating and thereby injuring the inclosing case, is received within spaces provided between the sides and bottom of the metallic tank and the inclosing case, and is permitted to escape through one or more discharge-holes provided in the bottom of the inclosing case, thereby at once indicating that the tank needs repair.

With this object in view my invention consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a top plan of a flushing tank or reservoir embodying my invention, the discharge-valve, float, and weighted valve-actuating lever being removed and a portion of the copper or metallic tank being broken away to more clearly show the construction. Fig. 2 is a side elevation, mostly in vertical section, on line 2 2, Fig. 1. Fig. 3 is a vertical section on line 3 3, Fig. 1.

Referring to the drawings, A designates the inclosing wooden case of the tank, and B represents the copper or metallic flushing tank or reservoir suitably supported within case A and designed to receive the water employed for flushing the water-closet. Tank B is provided, in the usual manner, (see Fig. 2,) with a supply-pipe C, a discharge-pipe D, a float E, supported in any approved manner and operatively connected with the supply-valve G. A discharge-valve H and a weighted lever I is operatively connected with the discharge-valve and provided with a chain J for actuating the same in the direction to elevate

the discharge-valve from its seat against the action of the weight connected with the lever.

Heretofore the copper or metallic tank within the inclosing wooden case was fitted snugly within said case, and the result, in case of leakage of said tank, was that the water in the tank would escape into the wood surrounding it and soon saturate the wooden case and render the same not only leaky at different points but greatly injure said case. Furthermore, the leakage of the metallic tank was not detected until said tank was badly worn or mutilated, if not rendered unfit for further use.

The primary object of my invention is to provide a construction whereby a leak in the metallic tank is at once detected before the tank and the inclosing wooden case are seriously injured.

By my invention the tank is supported within the inclosing wooden case in such a manner that narrow spaces K are formed between the external sides of the tank and the inner sides of the inclosing case, and so that narrow space or spaces L are also formed between the bottom of the tank and the bottom of the inclosing case, all of said spaces being in open relation with each other and with one or more discharge-holes *a* in the bottom of the inclosing case, by which construction, if a leak occurs in the tank, the water escaping from the tank at the point of leakage will readily find its way, unobstructed, to the discharge-openings *a* in the bottom of case A, and thereby indicate that the tank requires immediate attention and repairs before greater damage is done.

Spaces K and L are preferably formed as follows: The internal sides of the inclosing case are provided, at suitable intervals, with ribs A', arranged up and down the case, said ribs extending preferably from the upper edge of the case downwardly to within a suitable distance of the bottom of the case, and the bottom is provided at suitable intervals with ribs A², arranged lengthwise of said bottom, but the ribs upon the bottom do not quite extend to the ends of the bottom, and the metallic tank is placed upon ribs A².

By the construction shown, wherein the ribs A do not quite extend to the bottom of

case A and ribs A² do not quite extend to the ends of said bottom, (see Fig. 2,) it follows that all of spaces K are in open relation with space or spaces L. The bottom of case A is
5 shown provided with one or more grooves or channels a', arranged transversely of the bottom, and discharge-holes a lead from said grooves or channels to the external atmosphere. Hence if a leak occurs in tank B the
10 water within said tank will pass or escape to the spaces had between the sides and bottom of the tank and inclosing case and thence to discharge-openings a via grooves or channels a'.

15 What I claim is—

A reservoir of the character indicated, comprising an outer case A provided, upon its inner sides and bottom, with ribs so arranged

that the spaces between the ribs on the bottom shall be in open relation with the spaces 20 between ribs on the sides, a metallic inner case B seated upon the ribs formed upon the bottom of the outer case, and the bottom of the outer case being provided with channels a arranged transversely of the ribs upon said 25 bottom, and said bottom being provided, also, with discharge-openings a' leading from said channels, all operating substantially as shown, for the purpose specified.

In testimony whereof I sign this specification, in the presence of two witnesses, this 2d day of August, 1894. 30

HENRY J. LUFF.

Witnesses:

C. H. DORER,

L. WARD HOOVER.