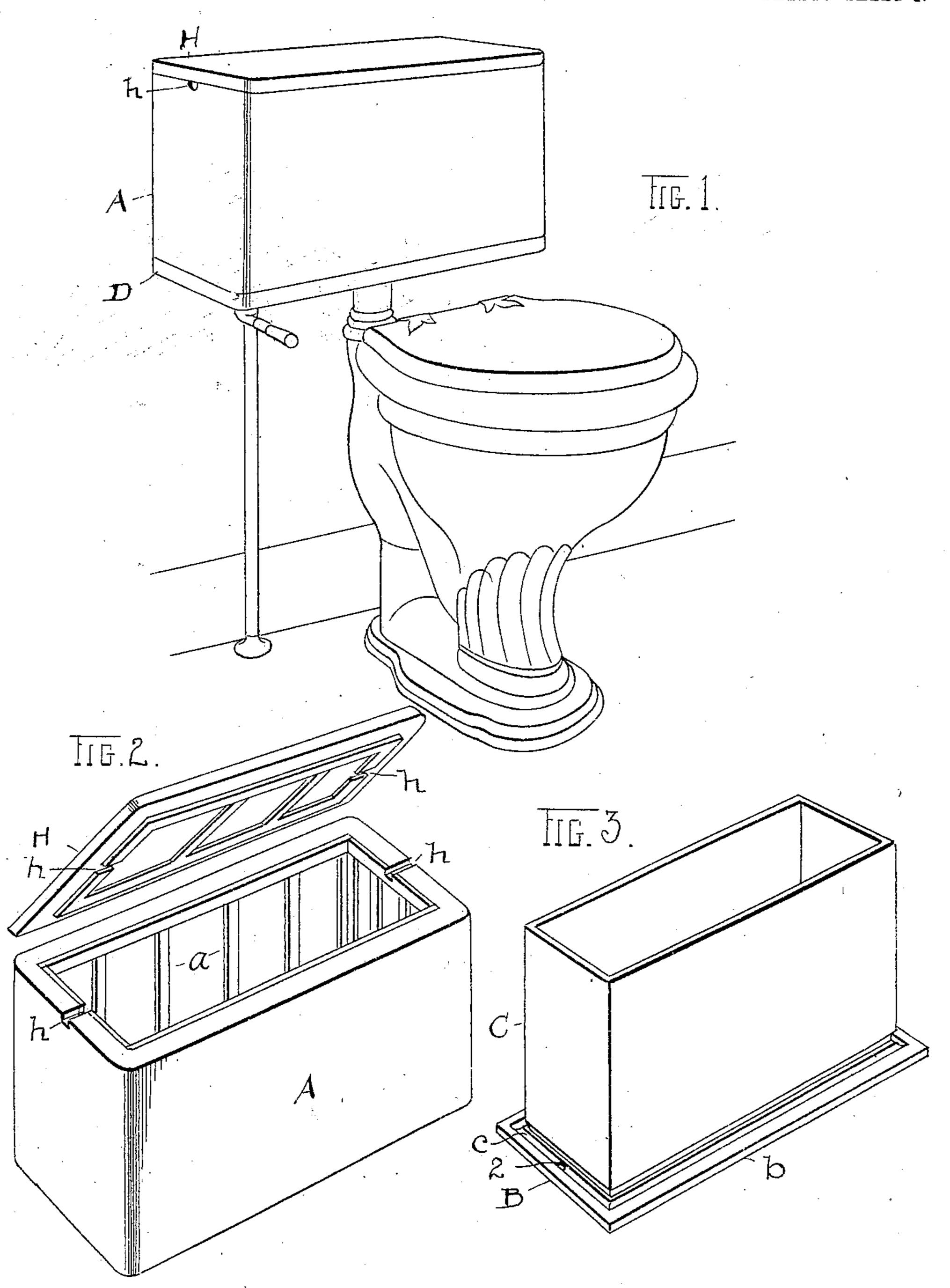
### H. J. LUFF.

### FLUSHING TANK.

APPLICATION FILED FEB. 14, 1903.

NO MODEL.

2 SHEETS-SHEET 1.



ATTEST.
VV. 3.Mener
a. Gbornek

INVENTUR.

By N. T. Frahm ATTY

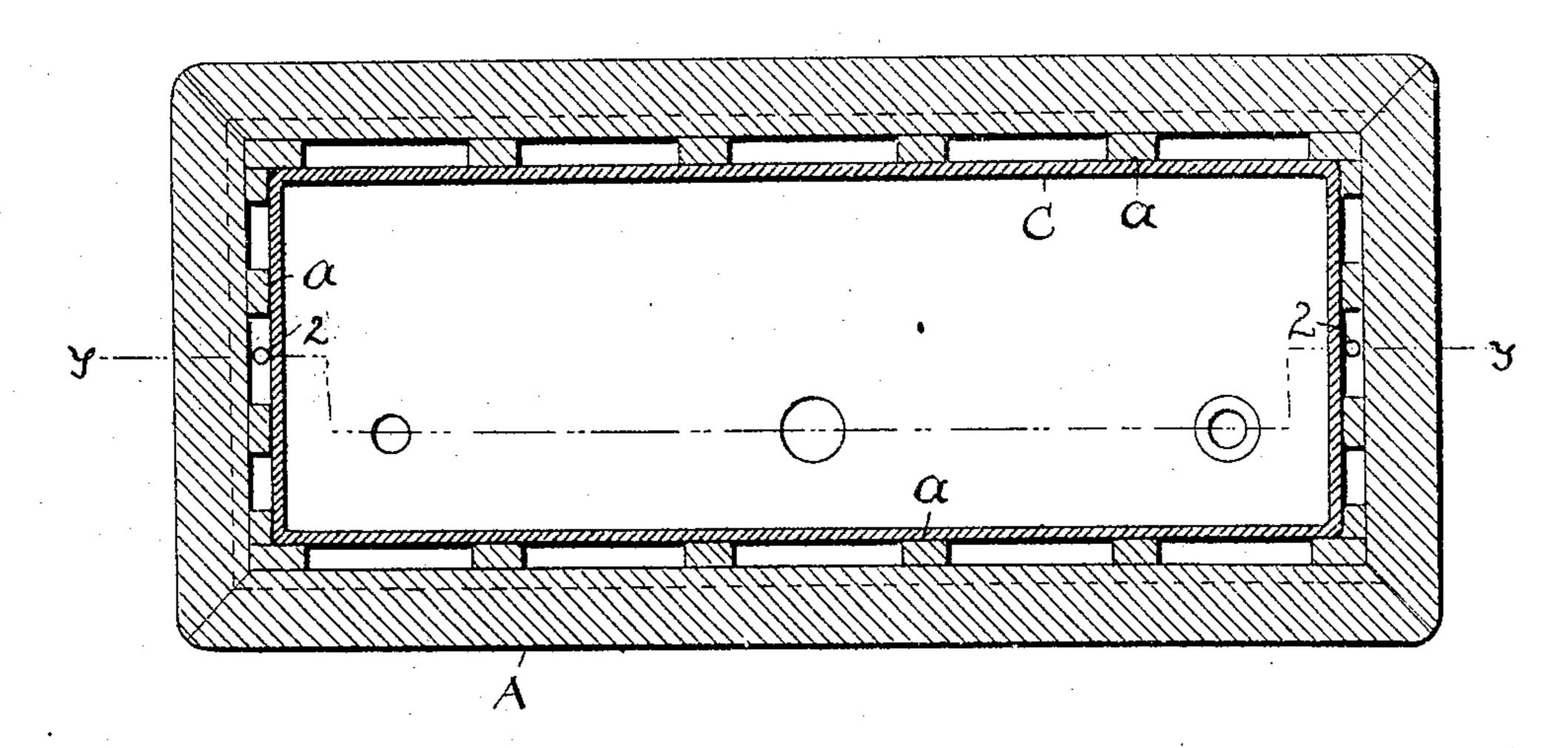
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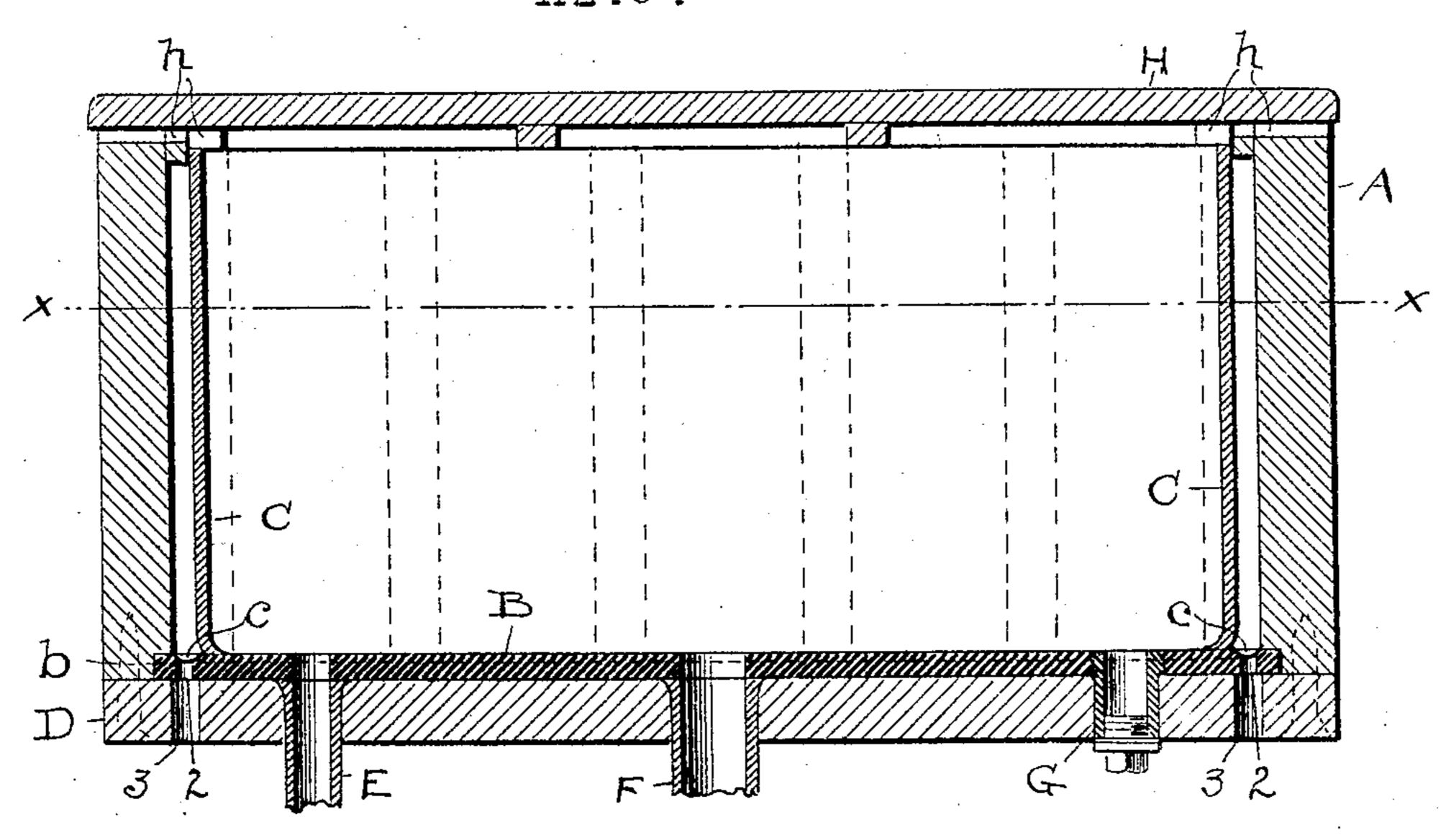
NO MODEL.

2 SHEETS-SHEET 2.

Frg-4



IIG.5.



ATTEST

K. Sbornik.

INVENTOR Henry J Luff PIX H 7 Fil ATTY

# United States Patent Office.

### HENRY J. LUFF, OF CLEVELAND, OHIO.

#### FLUSHING-TANK.

SPECIFICATION forming part of Letters Patent No. 774,766, dated November 15, 1904.

Application filed February 14, 1903. Serial No. 143,316. (No model.)

To all whom it may concern:

Be it known that I, Henry J. Luff, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, 5 have invented new and useful Improvements in Flushing-Tanks; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in flushing-tanks for water-closets; and the object of the invention is to provide means which will both disclose leakage therein and provide to the escape of leaking water therefrom to the end that the tank may not be injured by such leakage and the parts therein protected from rust and corrosion and also whereby certain soldered pipe connections may be made and not hitherto possible, all substantially as shown and described, and particularly pointed out in the claims.

The inner wall of the casings may be tarred or shellacked to further protect it, and its bottom D is a removable part fastened in place by screws and among other things serves to bear up against the outer grooved flange b of tank-bottom B and press it to its seat in the outer casing and hold the water-tank in position.

Another material advantage of my construction is the possibility of soldering the usual service-pipes connected with the bottom of the tank instead of fixing them thereto by

In the accompanying drawings, Figure 1 is a perspective elevation of a water-closet equipment, including bowl and tank connections. Fig. 2 is a perspective view of the tank alone, showing the cover lifted in inclined position; and Fig. 3 is a perspective view of the tank-lining and its supporting-base. Fig. 3 is a plan view of the tank complete on a cross-line corresponding, say, to x x, Fig. 5. Fig. 5 is a vertical sectional elevation on a line corresponding to y y, Fig. 4.

The tank or reservoir thus shown is constructed with an outer casing A, of wood preferably, and the tank or reservoir within the same having a preferably brass or other like hard plate bottom B about three-sixteenths of an inch in thickness and having lead, copper, or other like soft metal side C soldered thereon or otherwise permanently affixed thereto. The said inner or water tank is separated from the wall of casing A by ribs or cleats a vertically at intervals, and which afford ventilation in the intervening space, and the bottom B has a flange b all around let into recesses in the adjacent sides of the casing all

around relatively, as seen in Fig. 5, so as to intercept any moisture which may come from leakage in tank C or otherwise into that space, 50 and I form a groove c all around on the said flange b, and which has one or more outlets 2 in its bottom corresponding with openings 3 in the bottom of casing A. These openings serve to give warning if leakage occurs be- 55 fore it will become serious, and a pail or other vessel can be used to intercept the drippings. The inner wall of the casings may be tarred or shellacked to further protect it, and its bottom D is a removable part fastened in place 60 by screws and among other things serves to bear up against the outer grooved flange b of tank-bottom B and press it to its seat in the outer casing and hold the water-tank in position.

Another material advantage of my construction is the possibility of soldering the usual service-pipes connected with the bottom of the tank instead of fixing them thereto by a joint or connection requiring nuts and gas-70 kets, as heretofore, and which were liable to become leaky. This I can do because I have a brass bottom B, with which this pipe E is connected by soldering, as shown, and whereby a rigid and durable connection is made. 75

The cover H and casing A have coincident vent-channels h to promote ventilation within the tank structure.

The advantage of two metals for the tank C lies in having the body of the tank of lead, 80 as usual, and by making the bottom of brass I can solder directly thereto and avoid the expense of a special coupling connection to do the soldering upon, as heretofore.

What I claim is—

1. In flush-tanks, a water-tank having a laterally-extending flange about its bottom all around, a casing therefrom recessed about its bottom to receive said flange, and a separate bottom for said casing overlapping said flange, 90 substantially as described.

2. In flush-tanks, a water-tank having a grooved flange about its bottom outside the wall of the tank and an outlet down through

said channel, in combination with an inclosing casing for said tank recessed to receive said flange and provided with a hole in its bottom coincident with the outlet from said channel, substantially as described.

3. In flush-tanks, a casing having a recess on its inside about its bottom edge, a tank having a flange extending into said recess, and a

removable bottom overlapping said recess and flange, substantially as described.

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Witness my hand to the foregoing specification this 31st day of January, 1902.

HENRY J. LUFF.

Witnesses:

R. B. Moser, R. Zborink.