

(No Model.)

H. C. MONTGOMERY.
BASIN WASTE OR OVERFLOW.

No. 507,237.

Patented Oct. 24, 1893.

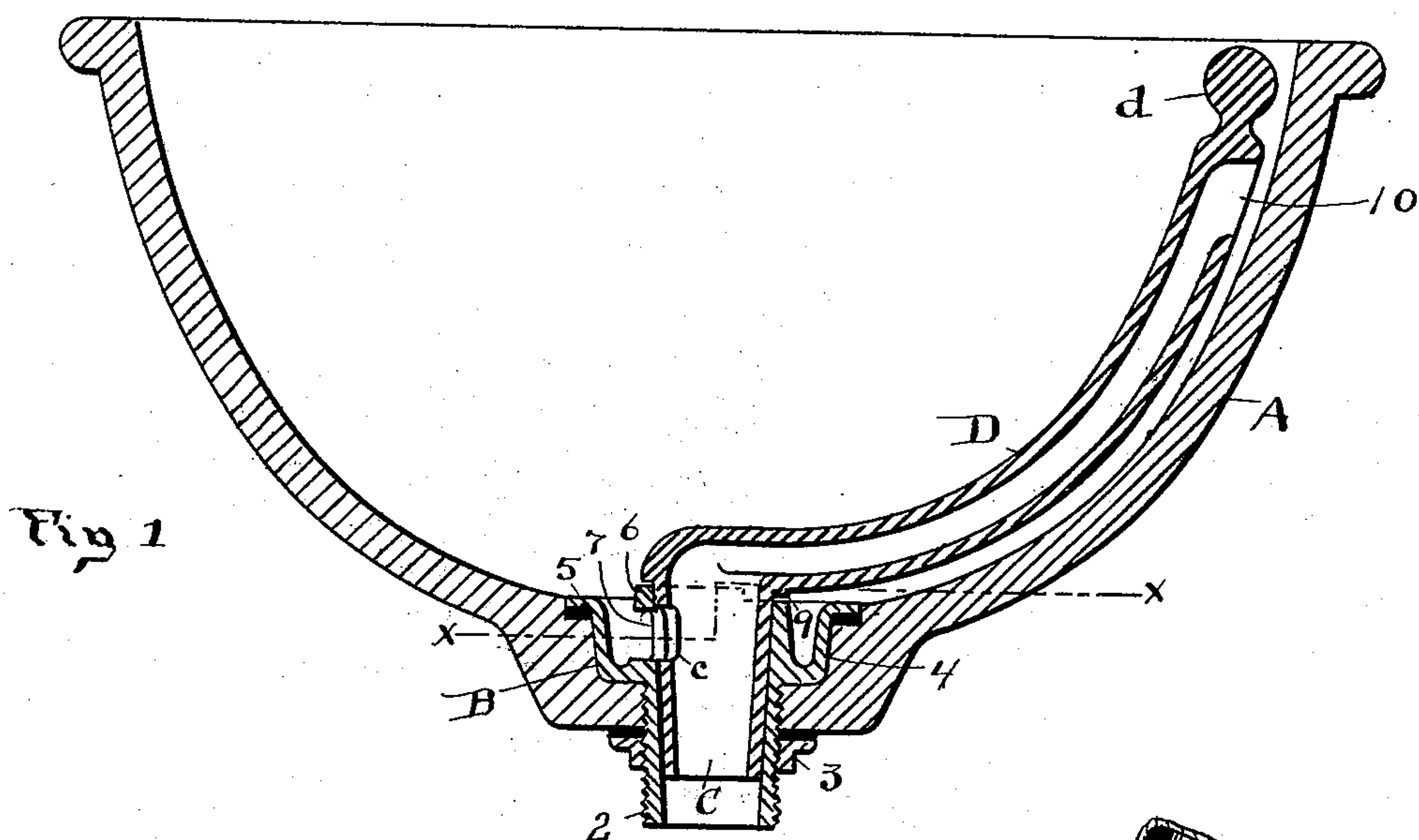


Fig 2

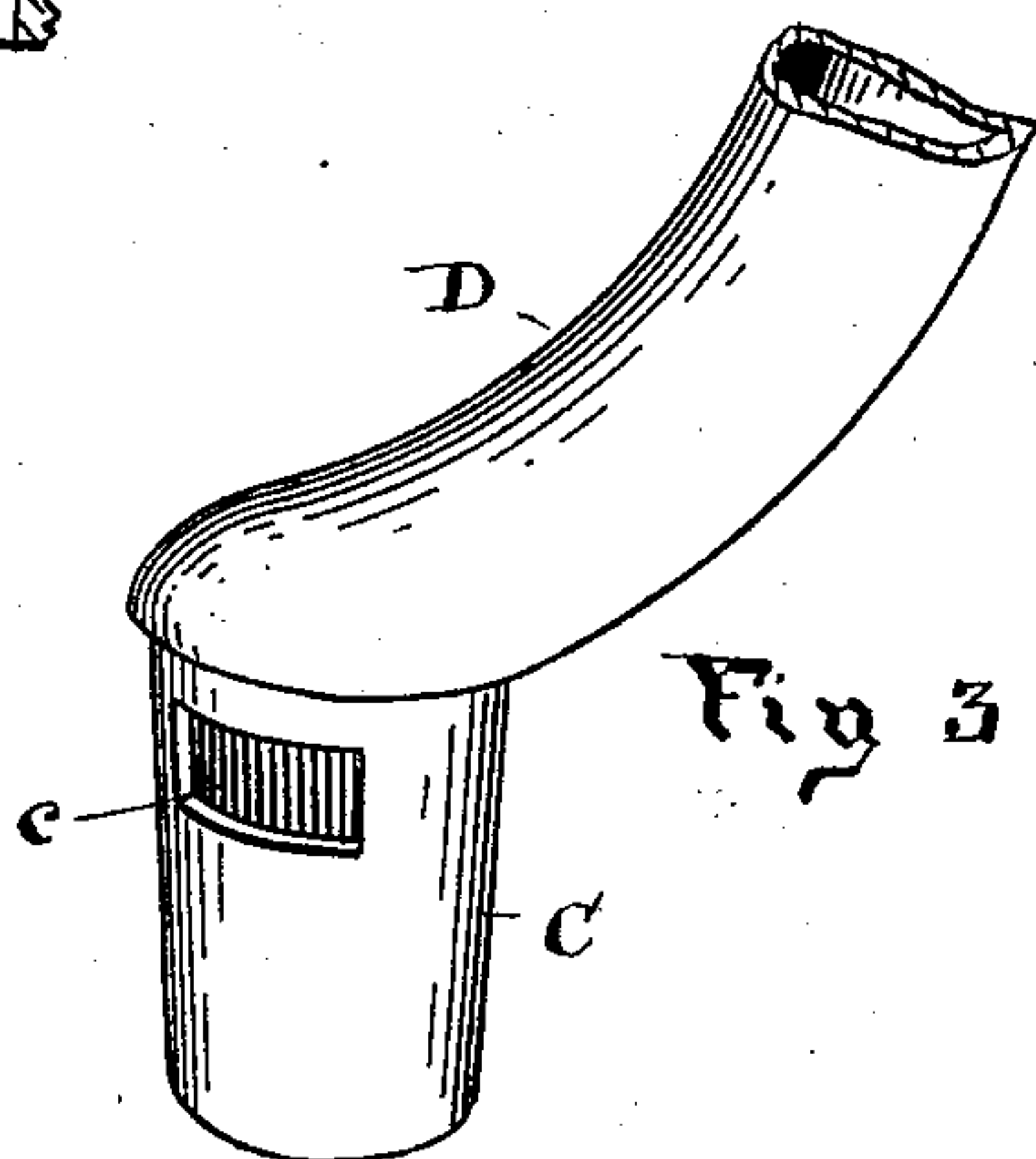
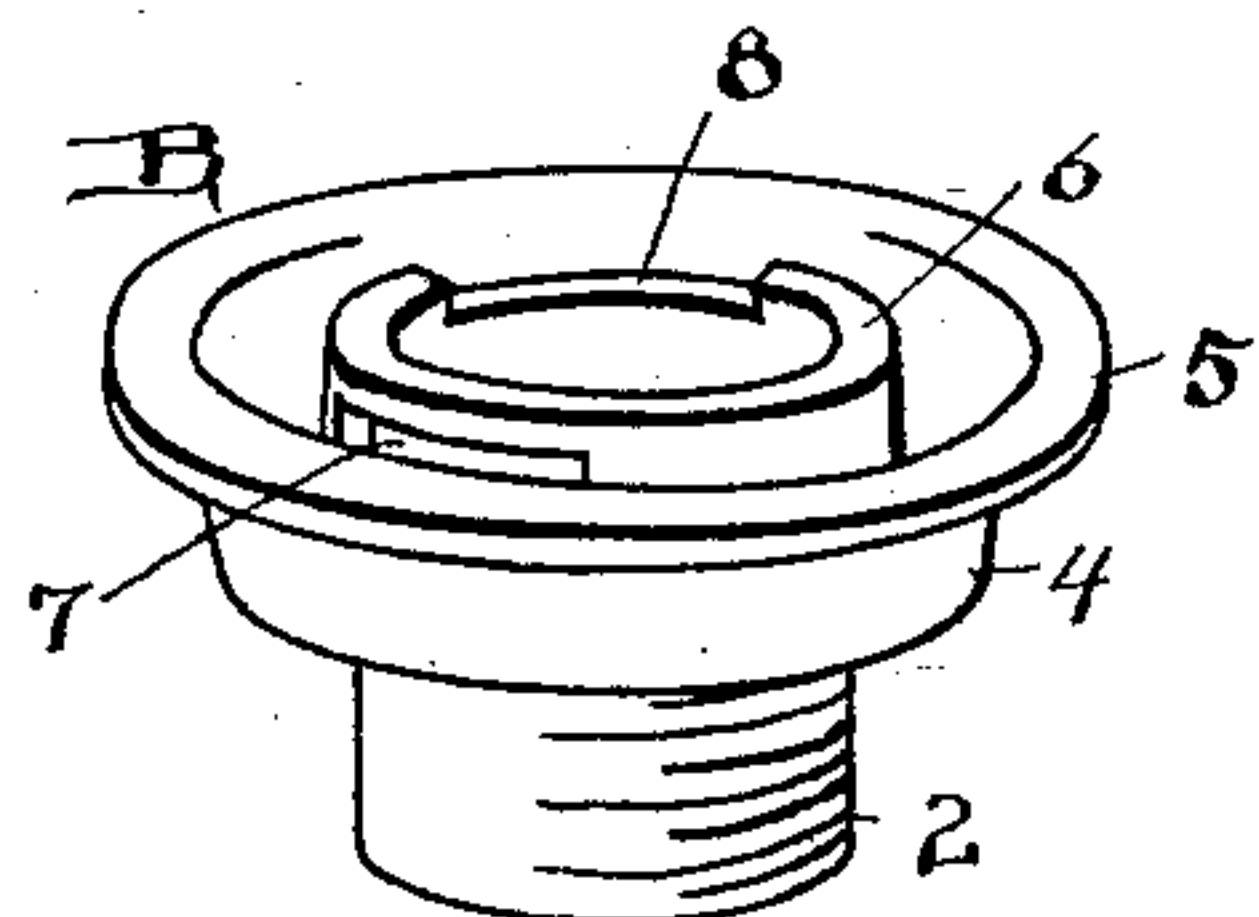
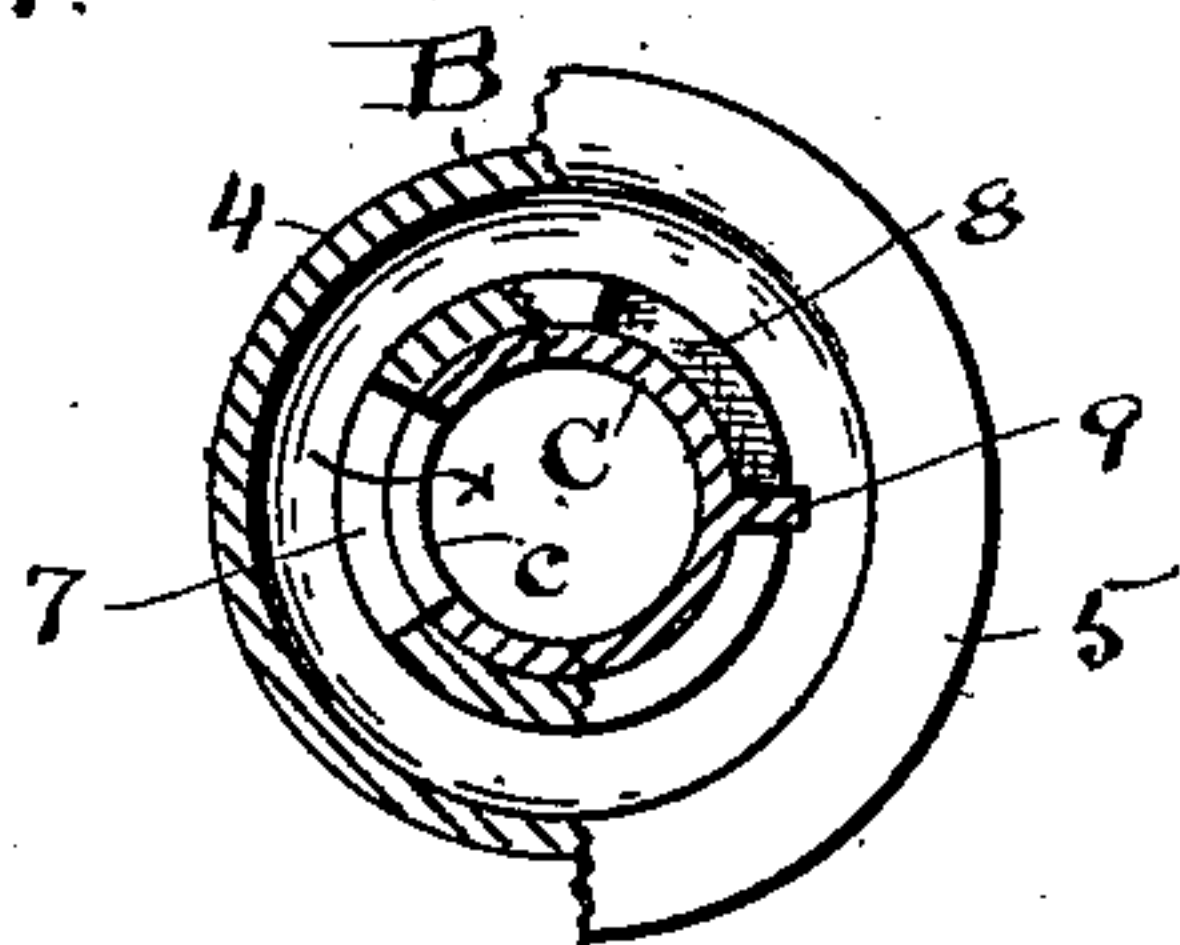


Fig 4



Witnesses.

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UNITED STATES PATENT OFFICE.

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BASIN WASTE OR OVERFLOW.

SPECIFICATION forming part of Letters Patent No. 507,237, dated October 24, 1893.

Application filed December 19, 1892. Serial No. 455,556. (No model.)

To all whom it may concern:

Be it known that I, HARRY C. MONTGOMERY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Basin Wastes or Overflows; and I do hereby 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 has reference more especially to basin wastes or overflows, though it may be used as well in bath-tubs and other places where an overflow waste is desirable. For convenience I have herein confined the drawings and description more particularly to stationary wash basins.

It is well-known that in the old and very generally used basin waste or overflow, the basin has an opening near its top from which a small pipe leads to the bottom discharge pipe. This waste pipe is permanently fixed at both ends and is inaccessible for any purpose. Hence, when it gets clogged, it cannot be cleaned without absolutely removing it from position, and this requires a plumber and much trouble and expense. It follows that generally it is allowed to remain clogged for an indefinite period and the offensive accumulations therein become a source of offensive odors and disease germs that have a fatal effect on the health of the family. My invention is designed to overcome these and other objections incident to the old construction, and my invention consists in a tubular plug and arm or stem therefor extending up along the inside of the basin or tub, and provided with a water inlet near its upper end at about the point where the usual overflow occurs, and adapted to be rotated to open or close the bottom outlet, all substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical central cross section of a basin equipped with my novel plug and stem, the said part being split longitudinally so as to reveal its internal construction. Fig. 2 is a side elevation slightly in perspective of the plug bearing or seat which occupies the bottom of the basin, and Fig. 3 is a perspective

view of the lower half of the plug and its tubular stem and handle shown in section in Fig. 1. Fig. 4 is a cross section of the basin and its attached parts, taken on line, *x, x*, Fig. 1.

A represents the basin, which is of any usual style but made without an opening for overflow, and B is the plug seat or bearing set into the bottom of the said basin in such way as to be perfectly water tight therein. This bearing has a threaded portion 2, which extends below the basin some distance so as to provide room for the tightening nut 3, and to make connection with the waste pipe. The discharge through the said bearing for the plug, tapers slightly toward its lower extremity so that the said plug may, by simply seating itself therein, close the passage way tightly. About its upper portion, the said bearing has two distinct features of construction, consisting, first, of the laterally and upwardly extending flange 4 with a right angled rim 5, overlapping a portion of the basin and flush with the surface of the basin about said rim. Then, the seat or bearing proper for the plug extends up so as to be about level or even with the bottom of the basin, and in one side of said extension 6 is the escape or discharge opening 7. An annular depression occurs between the outwardly and upwardly extending flange 4, which forms something like a bowl, and the upper portion 5 of the plug bearing, and the outlet opening 7 occurs in this annular space so as to drain the same perfectly dry when the plug is open.

The plug proper, C, is shown in this instance as having tubular extension D, preferably formed integral therewith, though the two parts may be made in separate pieces and united, and the said part D is curved to conform to the curvature of the bowl and extends up to about the top thereof, where it has a handle extremity by which the plug is turned in its bearing, and near which extremity is an opening out into the bowl, so that when the plug of the bowl becomes nearly filled with water, the water will flow in through this opening and down through the said plug stem or arm and out through the common waste pipe provided for the basin. The said stem or extension D of course may

be made straight or any other form to suit the place where it is used.

It will be noticed that the plug C with its handle may be removed by simply lifting it 5 out of place, and it may be inserted with the same ease, and so it is very convenient to clean by merely holding it under a faucet and letting the water pour through. The said plug C has an opening c in its side to 10 match with the opening 7 in the seat bearing. When the said plug has been turned to discharge the water out of the bowl the two openings register or are opposite one another. The said plug is limited in its rotation just 15 enough to enable these openings to be brought together in this way, or to close the said openings when the basin is being filled. The limit of rotation in this instance is defined by the notch or slot 8, Fig. 2, cut in the upper edge 20 of the bearing extension 6, and a lug 9 on the under side of the arm D in the angle with the plug, as shown in Figs. 1 and 4. When the parts are in the position shown in Figs. 1 and 4, the basin is open and the water is free to 25 escape without any impediment whatever, and as rapidly as it can ordinarily escape from a stationary basin. If the plug C were turned so as to close this passage way, and the basin were to fill with water, the water would 30 rise until it reached the inlet opening 10, Fig. 1, and it would then overflow through the tubular stem or arm D and out through the plug, and this channel affords all the accommodation that a basin requires for waste or 35 overflow purposes. The said arm C is preferably made with a smooth ornamental finish so that in appearance it will rather add to than detract from the appearance of the basin, and it is designed to be carried to the rear of 40 the basin when closed, so as to be out of the way in using the basin. This construction has the further advantage of convenience, because it does away with the chain and stopper and enables one to simply take hold of the 45 handle portion d, and, without any special effort, simply giving a slight rotation to the

plug thereby closing or opening the same, as may be desired.

Having thus described my invention, what I claim is—

1. The basin herein described having a suitable bearing for a plug in its bottom, in combination with a tubular plug seated in said bearing, and an arm on said plug having the curvature substantially of the basin, and an inlet 55 near its top for the overflow of water, substantially as described.

2. A basin and a plug bearing in its bottom formed with an outwardly and upwardly extending flange having its top edge flush with 60 the bottom of the basin, and an annular depression between said flange and the top portion of the plug seat, said plug seat provided with an opening in its side from said annular depression below the bottom of the basin, substantially as set forth. 65

3. The basin herein described having a plug bearing in its bottom formed with the flange 4 and the extension 6 of the plug seat substantially flush with the bottom of the basin, 70 in combination with a tubular plug C, and a tubular bent arm D, a water passage being provided through said plug and arm, and an opening through the flange 6 and the plug, substantially as set forth. 75

4. The basin, the plug bearing seated in a depression therein and having a plug seat with an extension 6, and an annular depression about said extension, in combination with the tubular plug in said seat and openings 80 through said extension and plug for escape of water below the surface of the basin, the bent arms to turn the plug, and the said arm and the said extension constructed to limit the rotation of the plug, substantially as set forth. 85

Witness my hand to the foregoing specification this 9th day of December, 1892.

HARRY C. MONTGOMERY.

Witnesses:

H. T. FISHER,
GEORGIA SCHAEFFER.