

(No Model.)

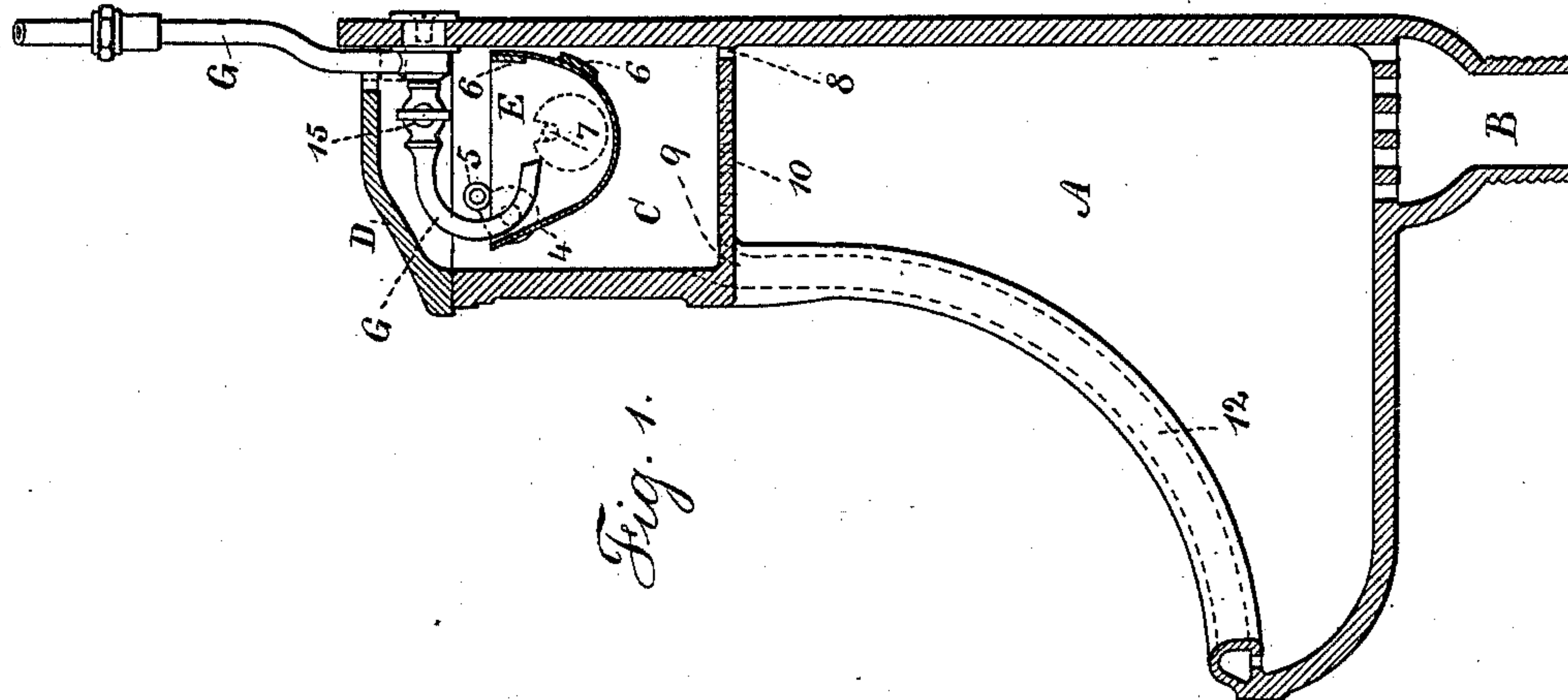
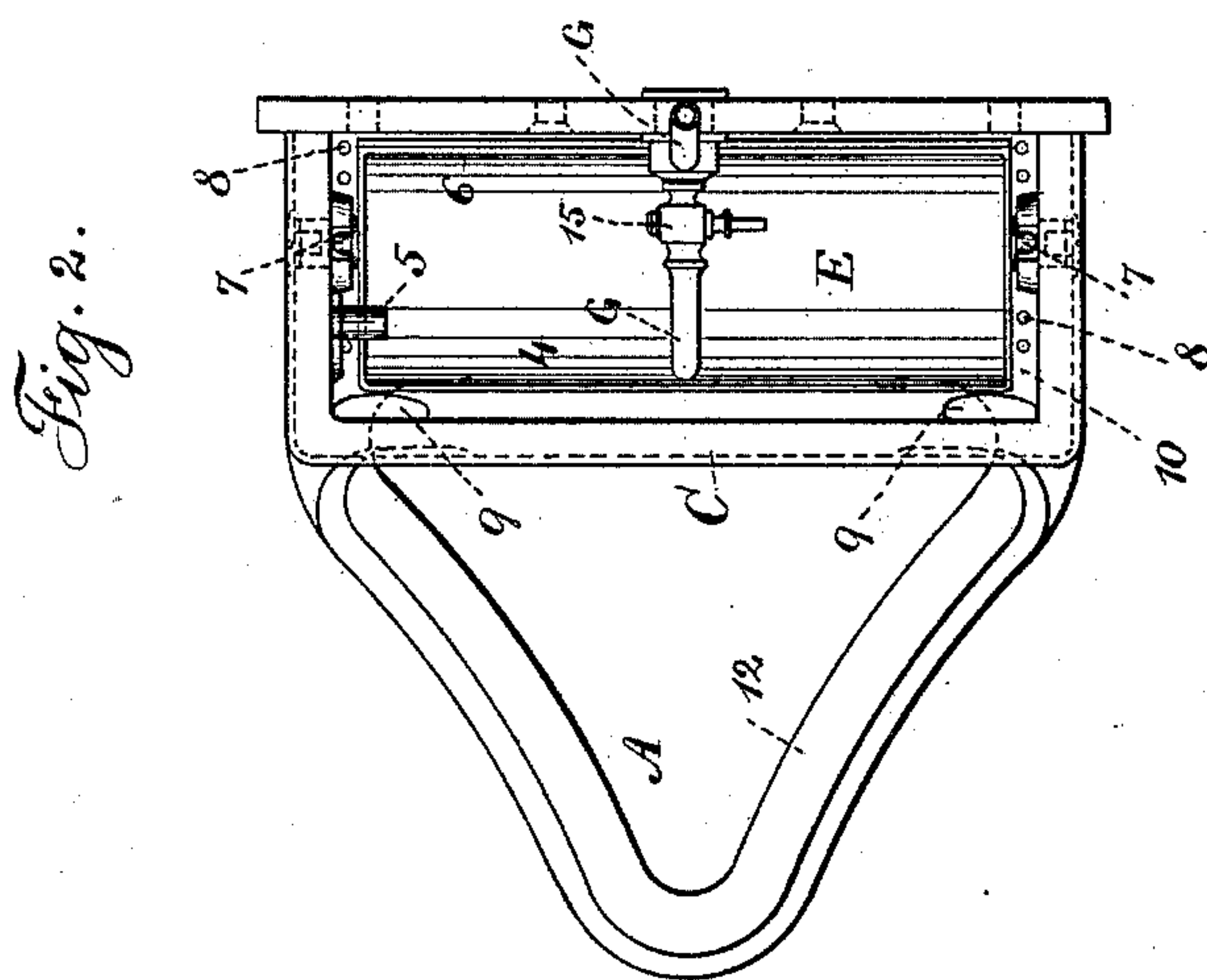
2 Sheets—Sheet 1.

J. SHANKS.

FLUSHING DEVICE FOR URINALS AND CLOSETS.

No. 473,715.

Patented Apr. 26, 1892.



Witnesses:
J. Staib
Chas. H. Smith

Inventor:
John Shanks
per Lemuel W. Serrell atty.

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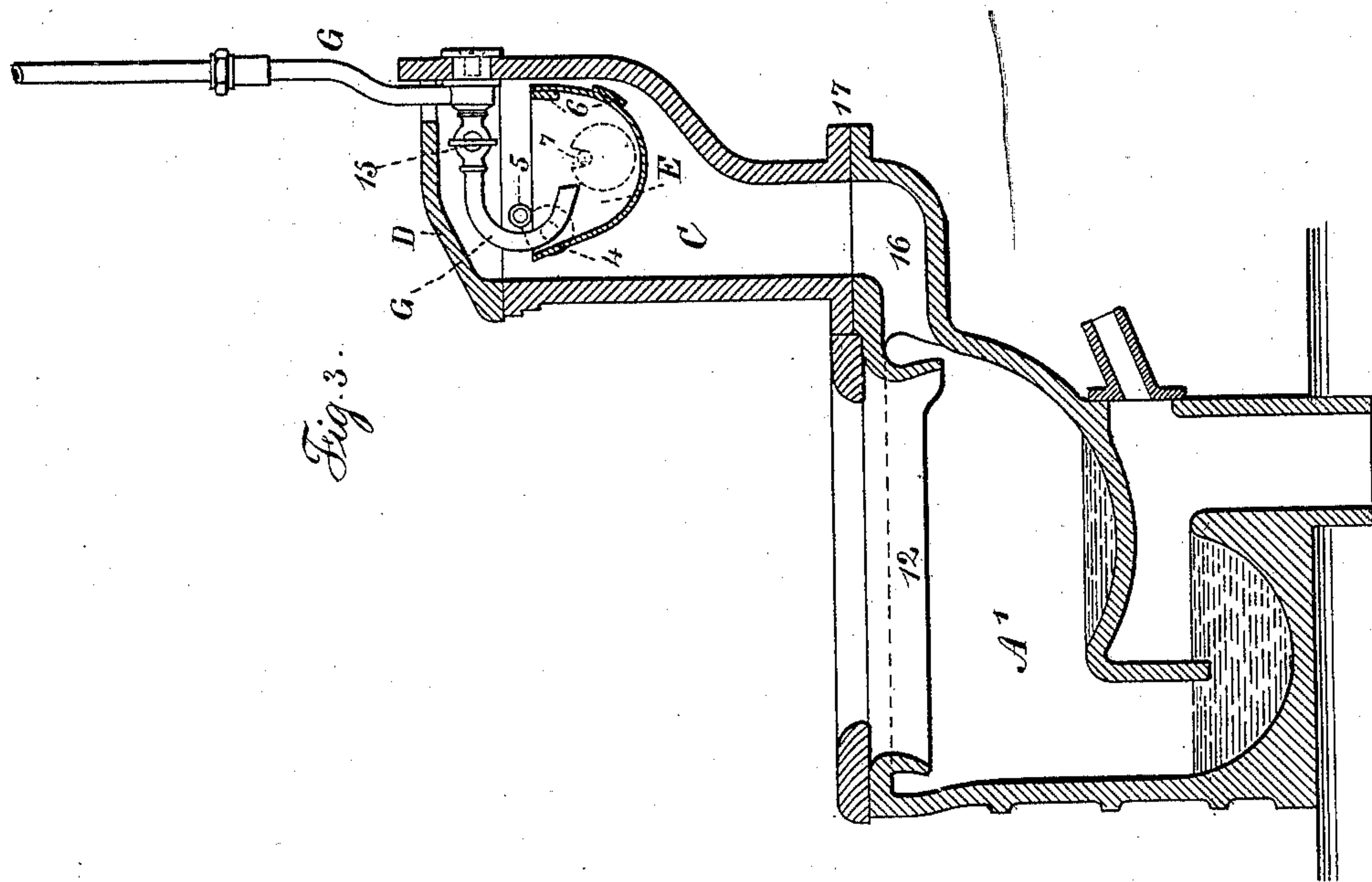
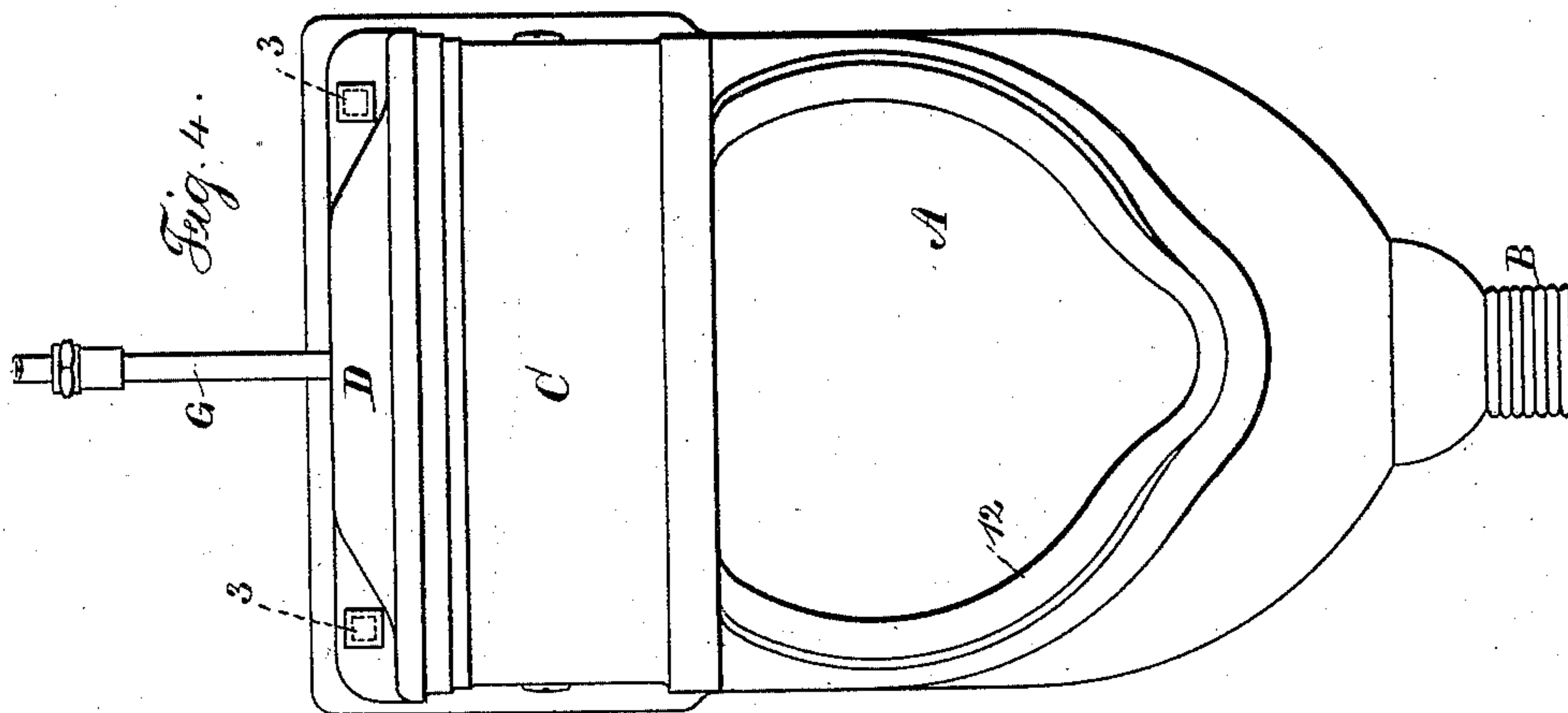
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UNITED STATES PATENT OFFICE.

JOHN SHANKS, OF BARRHEAD, SCOTLAND.

FLUSHING DEVICE FOR URINALS AND CLOSETS.

SPECIFICATION forming part of Letters Patent No. 473,715, dated April 26, 1892.

Application filed November 14, 1891. Serial No. 411,862. (No model.) Patented in England July 29, 1884, No. 10,687.

To all whom it may concern:

Be it known that I, JOHN SHANKS, a subject of the Queen of Great Britain, and a resident of Tubal Foundry, Barrhead, in the county of Renfrew, North Britain, have invented an Improvement in Flushing Devices for Urinals and Closets, of which the following is a specification.

This invention was patented by me in Great Britain July 29, 1884, No. 10,687.

Flushing devices have heretofore been employed in which there is a tipping or tumbling cistern, into which the water is allowed to run in a small continuous stream, and when the weight of the accumulated water is sufficient the cistern partially rotates upon its pivots, the contents are emptied for flushing the closet or urinal, and the cistern returns to its normal position.

In my present improvement the parts are constructed with reference to placing the flushing-cistern in close proximity to the urinal or closet, and this is especially advantageous in earthenware urinals, because the separate cistern in an elevated position is dispensed with and the parts are all in a position convenient for access and the pipe heretofore employed between the urinal or closet and the cistern is dispensed with.

In the drawings, Figure 1 represents the improvement as applied to a urinal, and Fig. 2 is a plan view of the same with the cover removed. Fig. 3 is a section illustrating the improvement as applied to the water-closet, and Fig. 4 is a front elevation of my improvement as shown in Fig. 1.

The basin A is of the desired size and provided with the flushing-rim 12 and an escape-pipe B, and it is preferable in manufacturing urinals to provide a chamber or box C upon the upper part of the back of the urinal, the same being of one piece of porcelain or other suitable material, with a bottom 10 to such chamber, having holes or perforations at 8 for the passage of the water and the openings at 9 leading to the tubular flushing-rim 12, and the cover D to the chamber C is preferably of porcelain or similar material, secured by bolts 3 to the vertical back portion of the article. The tipping cistern E is made with a projecting side at 4, and the opposite side of the tipping cistern or vessel is counterweighted at 6, so that

in the normal position the tipping cistern will bear against the stop 5, which is preferably covered with rubber and connected to one end of the box or chamber 6, and there are pivots 7 at the ends of the tipping cistern E, upon which the same may revolve after the accumulation of water acting at the projecting side 4 is sufficient to overcome the counter-weight 6 and cause such cistern E to partially rotate and discharge the water suddenly, after which the counter-weight 6 will restore the parts to their normal positions. The supply-pipe G is comparatively small and provided with a cock 15, by which the flow of water into the cistern can be regulated at will, and it is advantageous to support the lower end of the supply-pipe G and the cock 15 by a plug passing through the back of the porcelain or other material forming the urinal and a screw and nut to hold the parts in position.

In cases where the article is made of porcelain the pivot-pins 7 are preferably of metal and pass through the porcelain and are provided with heads at the outside and nuts against the inside surfaces of the porcelain for retaining such pivots in position, and the stop 5 is similarly constructed.

Where the present improvement is applied in connection with a water-closet, as represented in Fig. 3, the tipping cistern, the supply-pipe, regulating-cock, pivots, and stop are constructed in the manner before described, but the lower portion of the backs or chamber C is branched off horizontally, as shown at 16, to connect with the flushing-rim 12 of the closet bowl or basin A', which bowl or basin can be of any desired character. I have represented the same as being adapted to rest upon the floor and having an ornamental exterior surface, so that an inclosing case is unnecessary.

Where the chamber or box C is made separate from the bowl or basin, the parts are preferably connected by flanges, as represented at 17, Fig. 3. In all instances a separate pipe between the cistern and the bowl or basin is dispensed with and the closet or urinal and the cistern become one complete article.

I claim as my invention—

1. The combination, in a urinal, of a bowl, a hollow flushing-rim, and a box with a back

extending above the box, the bottom of the box being perforated and the flushing-rim opening into such box, the whole being in one piece of earthenware, a tipping cistern pivoted within the box, and a water-supply pipe and regulating-cock, substantially as specified.

2. The combination, in a urinal, of a bowl, a hollow flushing-rim, and a box with a back extending above the box and having an opening in the same, the bottom of the box being perforated and the flushing-rim opening into such box, the whole being in one piece of earthenware, a tipping cistern pivoted within the box, and a water-supply pipe and regulating-cock and a connection for the same to the back at the aforesaid opening, substantially as specified.

3. The combination, in a urinal, of a bowl, a hollow flushing-rim, and a box with a back extending above the box and having an opening in the same, the bottom of the box being perforated and the flushing-rim opening into such box, the whole being in one piece of

earthenware, a tipping cistern pivoted within the box, and a water-supply pipe and regulating-cock and a connection for the same to the back at the aforesaid opening, and a cover resting upon the top of the box and setting against the back and having a notch for the supply-pipe, substantially as specified.

4. The combination, with a closet or urinal, of a box having a back extending above the box and a downwardly-descending pipe in one piece of earthenware, a tipping cistern within the box, pivots and a stop for the cistern, a supply water-pipe and connection to the back of the box, and a cover resting upon the box and against the back and notched for the supply water-pipe, substantially as specified.

Signed by me this 2d day of November, 1891.

JOHN SHANKS.

Witnesses:

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Clerks-at-Law.*