

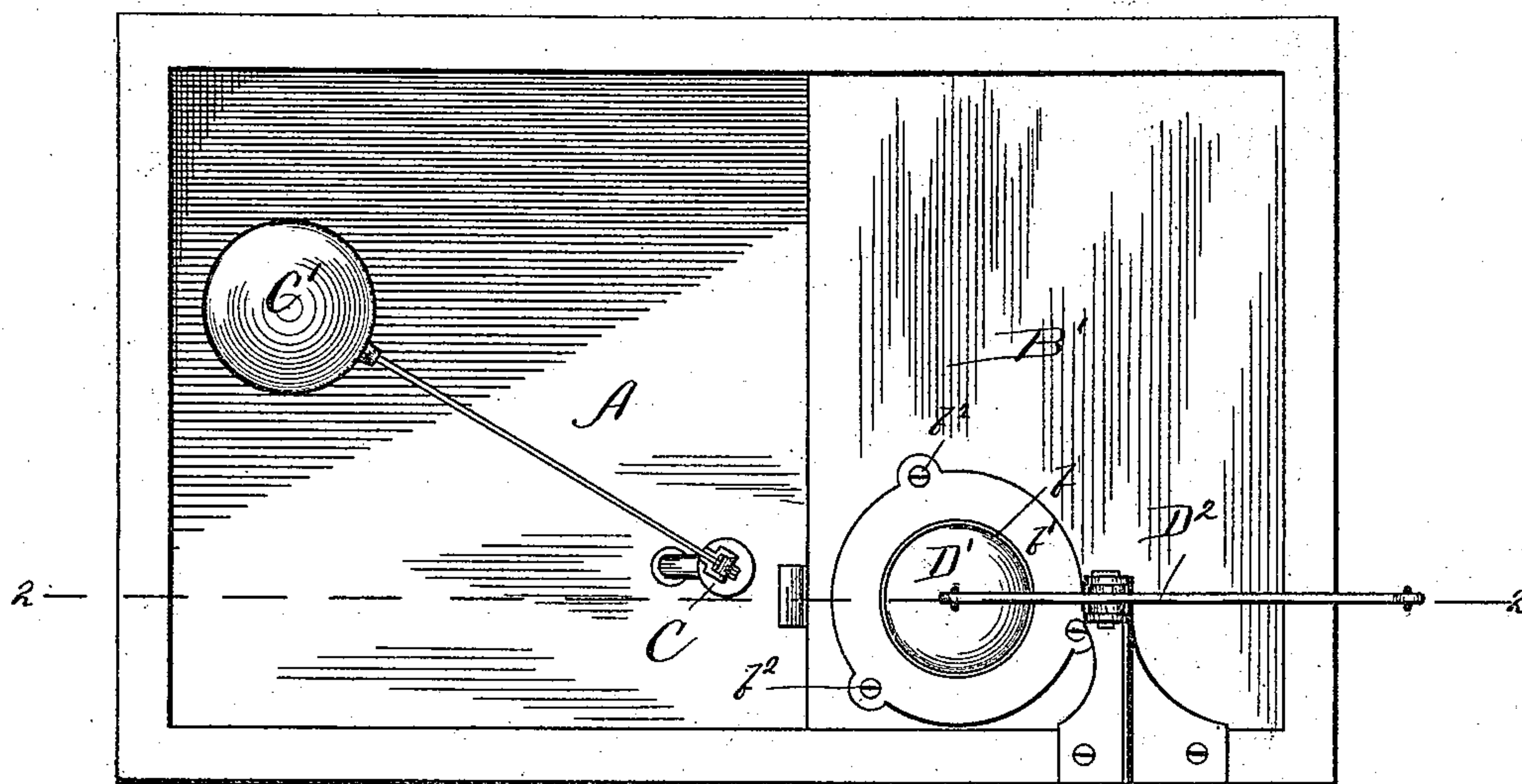
(No Model.)

C. GIELOW.  
FLUSHING TANK FOR WATER CLOSETS.

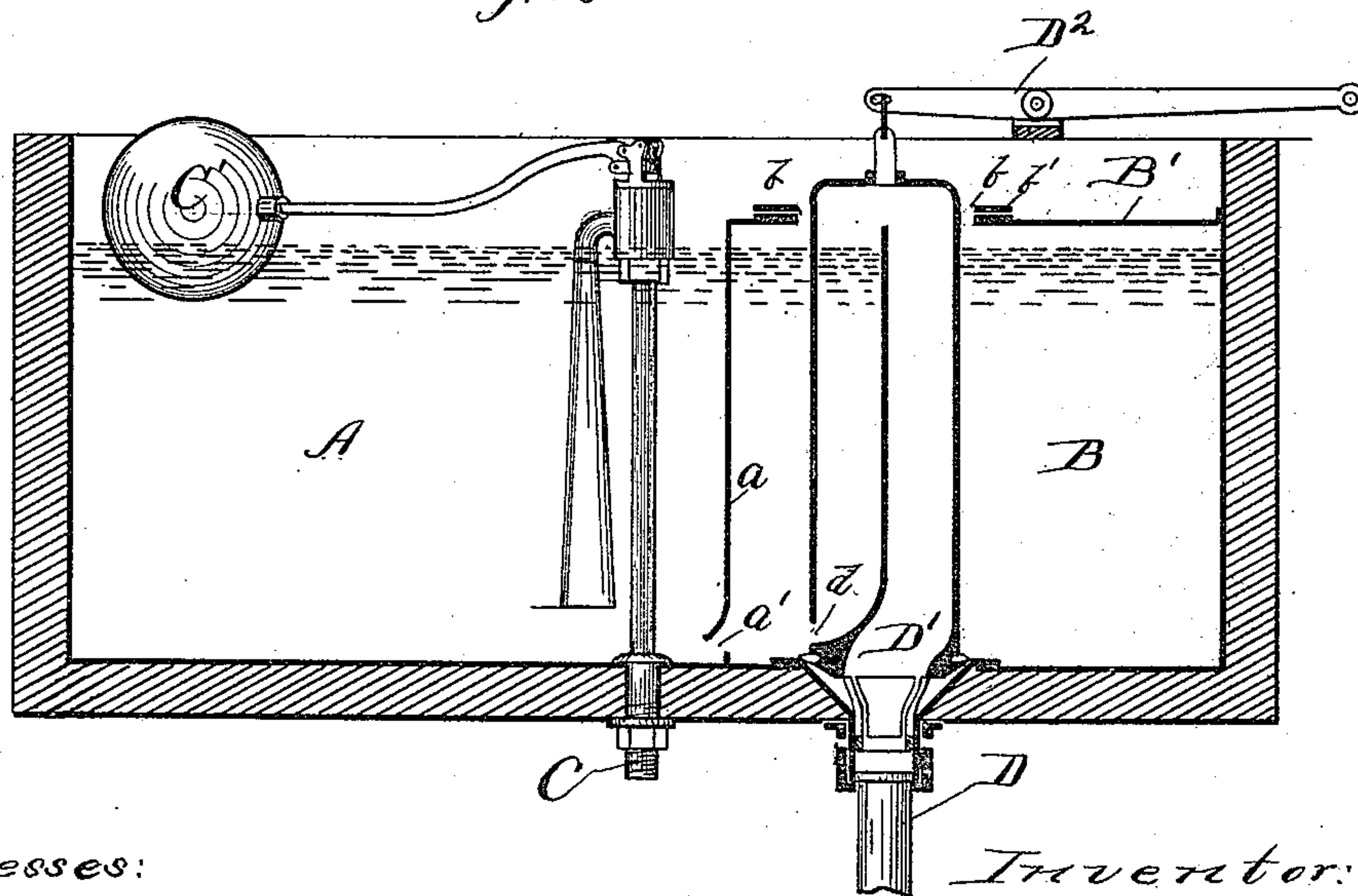
No. 442,804.

Patented Dec. 16. 1890.

*Fig. 1*



*Fig. 2*



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## FLUSHING-TANK FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 442,804, dated December 16, 1890.

Application filed April 12, 1889. Serial No. 306,924. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES GIELOW, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Flushing-Tanks for Water-Closets, of which the following is a specification.

My invention relates to overhead cisterns or tanks used for flushing water-closets.

10 The object of my invention is to provide means for preventing the somewhat disagreeable and objectionable gurgling noise which attends the use of these overhead tanks, especially at the last end of the water-dis-

15 charge.  
My invention consists in the means I employ to accomplish this result—that is to say, in providing the tank or the flushing or measuring compartment thereof, if it is divided, as  
20 usual, into two compartments, with a cover having a limited opening for the admission of air, whereby the violence of the final discharging of the water and the noise occasioned thereby may be prevented.

25 It also consists in the novel devices and novel combinations of parts and devices herein shown and described, and more particularly pointed out in the claims.

30 In the accompanying drawings, which form a part of this specification, Figure 1 is a plan view of a device embodying my invention, and Fig. 2 is a section on line 2 2 of Fig. 1.

35 In said drawings, A represents the tank or cistern; B, the measuring or flushing compartment thereof; C, the water-inlet or supply pipe furnished with a float-valve C' of any ordinary or usual construction; D, the discharge or flushing pipe leading to the water-closet bowl, for example; D', the discharge-valve,  
40 and D<sup>2</sup> the lever for operating it. The flushing-valve D' may be of any ordinary or known construction; but I have shown in the drawings and prefer to employ the now well-known siphon-plunger form of valve, so that the  
45 valve requires to be only momentarily opened to start the siphon.

50 The partition *a*, between the compartments A and B, is furnished with a small opening or passage *a'*, so that after the compartment B is emptied it may refill from the cistern A.

The compartment or flushing-tank proper B is closed at the top by a cover B', preferably of sheet metal, having an opening *b* for the siphon-plunger D' to project through, and in which the plunger fits somewhat loosely, 55 so as to leave a limited passage around the plunger for the admission of air to the closed tank B when the valve D' is raised or open. As the opening *a'* between the cistern A and the tank B is also of limited area, the violence 60 of the discharge of water through the flushing-pipe D will be controlled by the comparatively small openings through which air or water may enter the closed tank B to replace the water flowing out through the flushing- 65 pipe D. By thus simply providing the overhead cistern or the discharging-compartment thereof, if it is divided into two compartments, with a closed cover having a passage of limited size for the admission of air, I prevent 70 the disagreeable noise heretofore incident to the use of these overhead flushing-tanks.

The opening *b* in the cover B is surrounded with a collar *b'* to re-enforce the tin or sheet metal of which the cover B is composed. The 75 collar or ring *b'*, being secured by screws to the cover B, also serves as a guide for the plunger D'. The air-inlet around the plunger D' and the water-inlet *a'* are of small area as compared with the discharge-pipe D. 80

The opening *b* in the cover B is made large enough to permit the removal and insertion of the siphon-plunger, the collar *b'* serving to somewhat contract the opening and being removably secured to the arms B by the 85 screws *b<sup>2</sup>*.

The water in the compartment B is discharged more rapidly than it enters through the opening, *a'* and the water in the main tank A being above this opening *a'* no air 90 enters therefrom, and the limited air-supply at *b* is not sufficient to interfere with the comparative noiseless service of the water through the opening *d* in the siphon-plunger; but the air is fed through this opening *b* at 95 the finishing of the discharge gradually or in limited quantity to break the siphon slowly.

I claim—

1. The combination of a cistern or tank A, having a closed compartment B, its discharge- 100

pipe D, and valve D', said closed compartment having air and water inlets of small size as compared with the discharge-pipe and said air-inlet being open during the discharge of  
5 water from said closed compartment B, substantially as specified.

2. The combination, with an overhead flushing-tank, of its discharge pipe and valve and a closed cover for said tank having a comparatively small air-inlet to prevent disagreeable noise, said air-inlet being open during  
10 the discharge of water from said flushing-tank, said discharge-valve being a siphon-plunger D', substantially as shown and described.  
15

3. The combination of a cistern or tank A, having closed compartment B, water-inlet *a'*, discharge-pipe D, valve D', and an air-inlet to said closed compartment of small size compared with the discharge-pipe, said air-inlet  
20 being open during the discharge of water from said compartment B, substantially as specified.

CHARLES GIELOW.

Witnesses:

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