

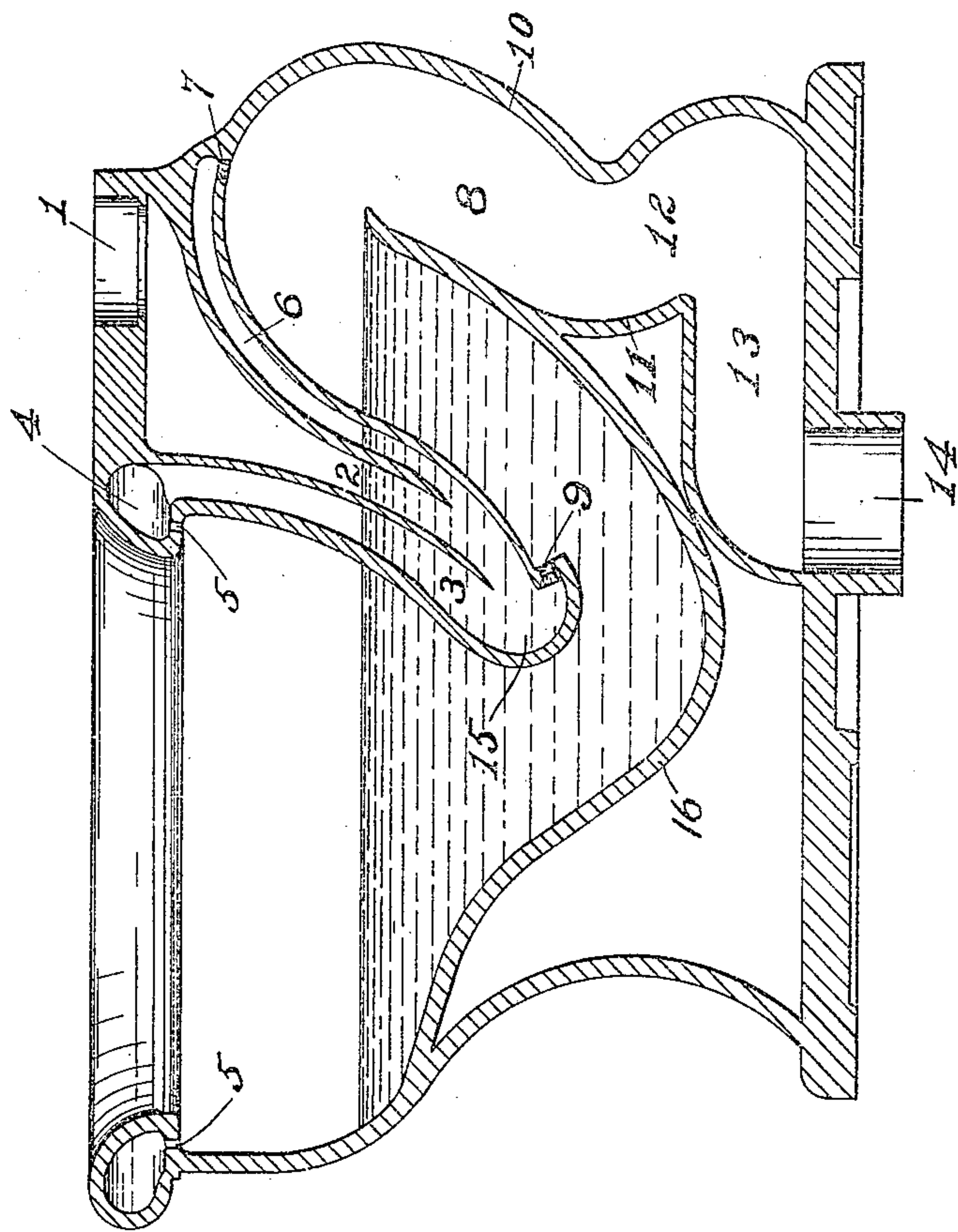
No. 816,185.

PATENTED MAR. 27, 1906.

J. RHEAD.

WATER CLOSET.

APPLICATION FILED MAY 18, 1904.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN RHEAD, OF CAMDEN, NEW JERSEY.

## WATER-CLOSET.

No. 816,185.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed May 18, 1904. Serial No. 208,510.

*To all whom it may concern:*

Be it known that I, JOHN RHEAD, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented a new and useful Water-Closet, of which the following is a specification.

My invention relates to improvements in water-closets, my object being to provide improved means for inducing an efficient siphonic action and at the same time provide adequate flushing means.

My invention also comprises means for reducing the noise usually attending the flushing of the closet and breaking of the siphon. I provide means for directing a jet from the central portion of the bowl through the water upwardly in an inclined direction toward the upper portion of the trap-chamber and another downwardly-inclined jet from the top of the trap-chamber, so as to impinge the rear wall thereof. I also provide that these two jets shall combine in impinging the rear wall of the trap, so as to be deflected across the underlying channel to impinge the opposite wall, thus forming an efficient spray to induce an air suction and a resultant siphonic action in said trap. I also provide that the said upwardly-directed jet and the downwardly-directed jet shall both proceed from a source beneath the surface of the water in the bowl. A similar provision is made for the supply which is directed into the rim and through the apertures therein. In other words, I provide that the supply from the tank above shall be prevented from making the usual rumbling noise as it pours into the bowl because of this water seal resulting from the construction above described. The air which normally resides in the pipe connecting the tank with the bowl must be driven from the pipe before the supply of water from the tank reaches the bowl. This air tends to mix with and carry the water about the lower end of channel 2 through the jet 9 and the conductors 3 and 6 and is thereby prevented from making the rumbling noise which is so objectionable in the many closets now in use.

Referring to the drawing, which is a longitudinal vertical section through its middle of the usual type of chamber and trap with my improvements added thereto, 1 indicates the inlet from the supply-tank, 2 the channel leading therefrom to the distributing-cham-

ber 15, located approximately the central portion of the basin or bowl 16 and beneath the water, and 3 the channel leading from chamber 15 and near the discharge-point of 2 to the rim-channel 4 of the basin.

5 indicates a series of outlets or jets from the rim downwardly into the basin.

6 represents a channel from near the outlet of 2 to the jet-opening 7, which discharges downwardly into trap-chamber 8.

9 is the jet discharging upwardly from chamber 15 into trap-chamber 8. 10 is the rear wall of chamber 8, approximately the point encountered by the cooperating jets from 7 and 9.

11 is the lower opposite wall of trap 8, toward which the deflected spray is directed, and 12 is the opening below trap-chamber 8 into the horizontal channel 13, which discharges into soil-pipe at 14.

The operation of my device is as follows: When the water is admitted into the pipe leading to opening 1 and channel 2, as above suggested, the air contained in the pipe must first be forced through the water in the distributing-chambers 15 and lower ends of the channels 2, 3, and 6. This results in the air carrying water through channel 3 to rim-channel 4, through channel 6 to jet-opening 7, and also through jet-opening 9, with the result that the usual noise attending the forcing out of the air from the supply-pipe connected with the tank is prevented. The forcing of a jet of water from jet-opening 9 through the water contained in the bowl above said opening results in causing a spray into the upper part of trap-chamber 8. This spray is encountered by the downwardly-directed spray from jet-opening 7, forming a cooperating spray which strikes against the rear wall of trap-chamber 8 approximate the point 10. The spray is then deflected toward the opposite wall in the direction of point 11, thereby filling the opening between trap-chamber 8 and the horizontal channel 13. This results in causing a suction of air and a consequent efficient siphonic action from the bowl. In locating the position of the distributing-chamber 15 with respect to bowl 16 in referring to the bowl I refer to the entire portion of the device holding or containing the water, as shown in the drawing. It is also obvious that a proper proportioning of channel 3 with respect to the jet-openings 7 and 9 will result in securing a sufficient and



proper flow of water into rim-channel 4 and the apertures 5, located around the under side of same.

What I claim is—

5 1. In combination with a water-closet bowl, a distributing chamber or pocket located centrally within the bowl and beneath the normal water-level in the bowl, a supply-conduit leading thereto, a jet discharging  
10 from near the bottom of said pocket, and a conduit leading from beneath the normal water-level in the pocket to the rim.

15 2. In combination with a water-closet bowl, a distributing chamber or pocket located centrally within the bowl and beneath the normal water-level in the bowl, a supply-conduit leading thereto, a jet discharging from beneath the normal water-level in the

pocket, and a discharge-conduit leading from beneath the normal water-level in the pocket. 20

3. In combination with a water-closet bowl, a distributing chamber or pocket located centrally within the bowl and beneath the normal water-level in the bowl, a supply-conduit leading thereto, a jet discharging 25 from beneath the normal water-level in the pocket, and a discharge-conduit leading from beneath the normal water-level in the pocket, the partition between the conduit delivering to, and the conduit leading from the pocket, 30 projecting beneath the normal water-level in the pocket to form a water seal therebetween.

JOHN RHEAD.

Witnesses:

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