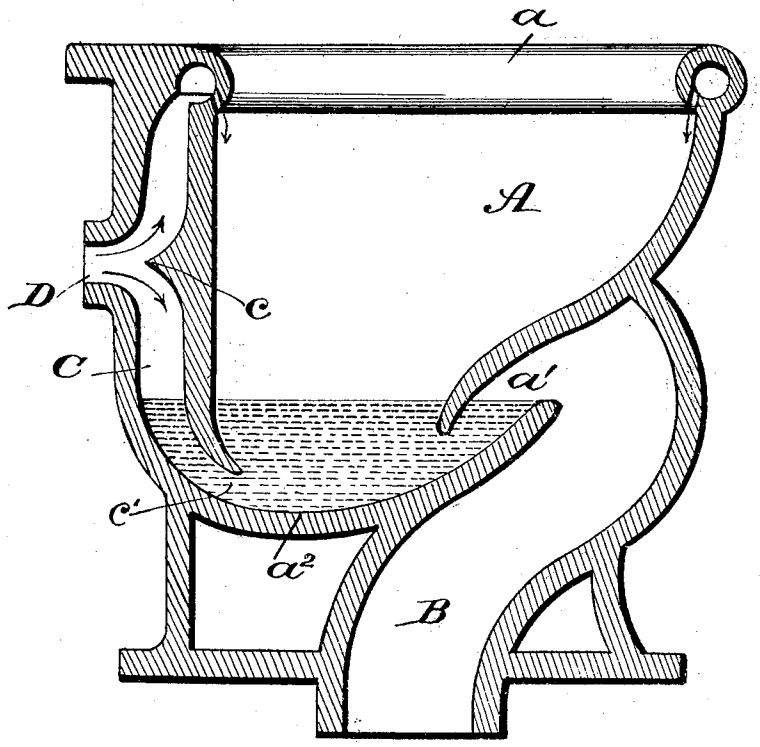
No. 771,098. PATENTED SEPT. 27, 1904.

R. SCHMALMACK.

WATER CLOSET BOWL.

APPLICATION FILED MAR. 23, 1904.

NO MODEL.



WITNESSES:
Jos. A. Ryan
Geo. E. Brock

INVENTOR
Robert Schmalmack
BY Munn & Co.
ATTORNEYS

No. 771,098. Patented September 27, 1904.

UNITED STATES PATENT OFFICE.

ROBERT SCHMALMACK, OF EVANSVILLE, INDIANA, ASSIGNOR TO MICHAEL D. HELFRICH, OF EVANSVILLE, INDIANA.

WATER-CLOSET BOWL.

SPECIFICATION forming part of Letters Patent No. 771,098, dated September 27, 1904.

Application filed March 23, 1904. Serial No. 199,573. (No model.)

To all whom it may concern:

Be it known that I, ROBERT SCHMALMACK, a citizen of the United States, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented a new and useful Improvement in Water-Closet Bowls, of which the following is a specification.

My invention relates to an improvement in wash-down water-closet bowls, its object being to produce a device wherein the flushing-water is divided into two parts, one going to the rim outlet and the other to the bottom outlet.

My invention consists in certain novel features of construction, arrangement, and combination of parts, as will be hereinafter fully described, and pointed out in the claims.

In the drawing the figure is a central vertical section of a wash-down bowl with my improvement forming a part thereof.

A represents a bowl having the rim outlet *a* and the bottom basin-outlet *a'*, said bottom outlet leading to the discharge-pipe B.

C is a passage or pipe made on the back of a water-closet bowl of the wash-down type, said passage being the same size as the water-supply pipe D at the point of connection. Said passage gradually decreases in size from its center at point of connection upwardly to the rim outlet and downwardly to an outlet *c'* at bottom of well-hole. Opposite the point of connection of this passage C and the water-supply pipe D is formed on the inner wall of said passage the pointed or wedge-shaped projection *c*, which will divide and guide the stream of water from the supply-pipe D, sending a portion of it upwardly to the rim outlet and a portion downwardly to the bottom outlet *c'*. By constructing a bowl in this manner—that is, by using the pipe or passage C with the pointed dividing projection *c*—one half of the water will be carried to the rim and one half to the bottom of the well-hole, both acting at the same time. A bowl will also be produced that will work instantly and wash the bowl and the contents of the bowl out with about one-half the water usually required by the bowl ordinarily used and without splashing.

My invention can be used equally well on wash-down bowls using siphonic action, as well as those without such action, and will materially increase the efficiency of both types of bowl.

The pipe or passage C will preferably be cast or molded in one piece with the bowl A; but it may be a separate pipe and suitably joined to the bowl.

As the lower end of the passage or pipe C is close to the bottom of the basin a^2, it will be seen that said basin will be thoroughly cleaned and washed out by the water coming in at that point, and splashing will also be prevented.

In the ordinary form of back-supply water-closets the supply connection is usually made just beneath and attached to seat attachment. This is objectionable both in construction and in the application of same for use, as it is very unhandy and difficult to get at. With my improvement built onto a water-closet bowl these objections are done away with, because the supply connection being in the center of the back of the bowl and standing free to itself a person can have free access to same either in the construction as well as when making speed connections for use.

By the use of the pointed or wedge-shaped projection *c* very important results are attained, as this projection prevents the full force of water from striking the back wall of bowl, as if it did its force to the rim and bottom outlets would be greatly reduced. By using said projection the water-supply to either the rim or bottom is unobstructed, both points getting the benefit of the full force of the feed-supply.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A wash-down water-closet bowl comprising a basin proper, a rim outlet and bottom outlet, and provided at its rear with a vertical passage or pipe connected at its center, with

a water-supply, and leading to said rim and bottom outlets, said passage decreasing in size from its junction with the water-supply to its junction with the rim-outlet and bottom-outlet passages, substantially as described.

2. A wash-down water-closet bowl comprising a basin proper, rim and bottom outlets and provided at its rear with a vertical passage or pipe connecting with said outlets, said rear passage connected at its center with a water-supply pipe of equal size and decreasing upwardly and downwardly to its junction with the rim and bottom outlets, and a pointed or wedge-shaped projection extending from the inner wall of said passage opposite the junction of the supply-pipe and rear passage, whereby the water-supply will be divided and directed upwardly and downwardly to the rim and bottom outlets respectively, as described.

3. The herein-described improvement in water-closet bowls consisting of a bowl having a trap-seal and bottom outlet, a hollow rim outlet, a main supply-passage leading downwardly to the trap-seal and bottom outlet and gradually diminishing in area to its lower end, and a passage leading upwardly from the main supply-passage to the hollow rim outlet, said upwardly-leading passage gradually diminishing in area toward its upper end.

4. The herein-described improvement in wash-down water-closet bowls consisting of a basin having a trap-seal and bottom outlet, a hollow rim, and provided at its rear with a vertical passage connecting with said outlets, said rear passage connected at its center with a water-supply pipe of equal size, and a pointed or wedge-shaped projection extending from the inner wall of the vertical passage directly opposite the center of the junction of the supply-pipe and said vertical passage, whereby the water-supply will be equally divided and directed upwardly and downwardly to the rim and bottom outlets respectively.

5. The herein-described improvement in water-closet bowls consisting of a bowl having a trap-seal, a hollow rim outlet, a bottom outlet and a main supply-opening, independent passages leading directly from the main supply-opening to the rim and bottom outlets, the bottom outlet being contracted in area.

6. The herein-described improvement in water-closet bowls consisting of the bowl having a trap-seal and bottom outlet, a hollow rim outlet, a supply-passage leading downwardly to the bottom outlet and upwardly to the rim outlet, said upwardly-leading passage gradually diminishing in area toward its upper end.

ROBERT SCHMALMACK.

Witnesses:
PAUL C. SMITH,
WALTER F. HERNDORN.