

No. 763,246.

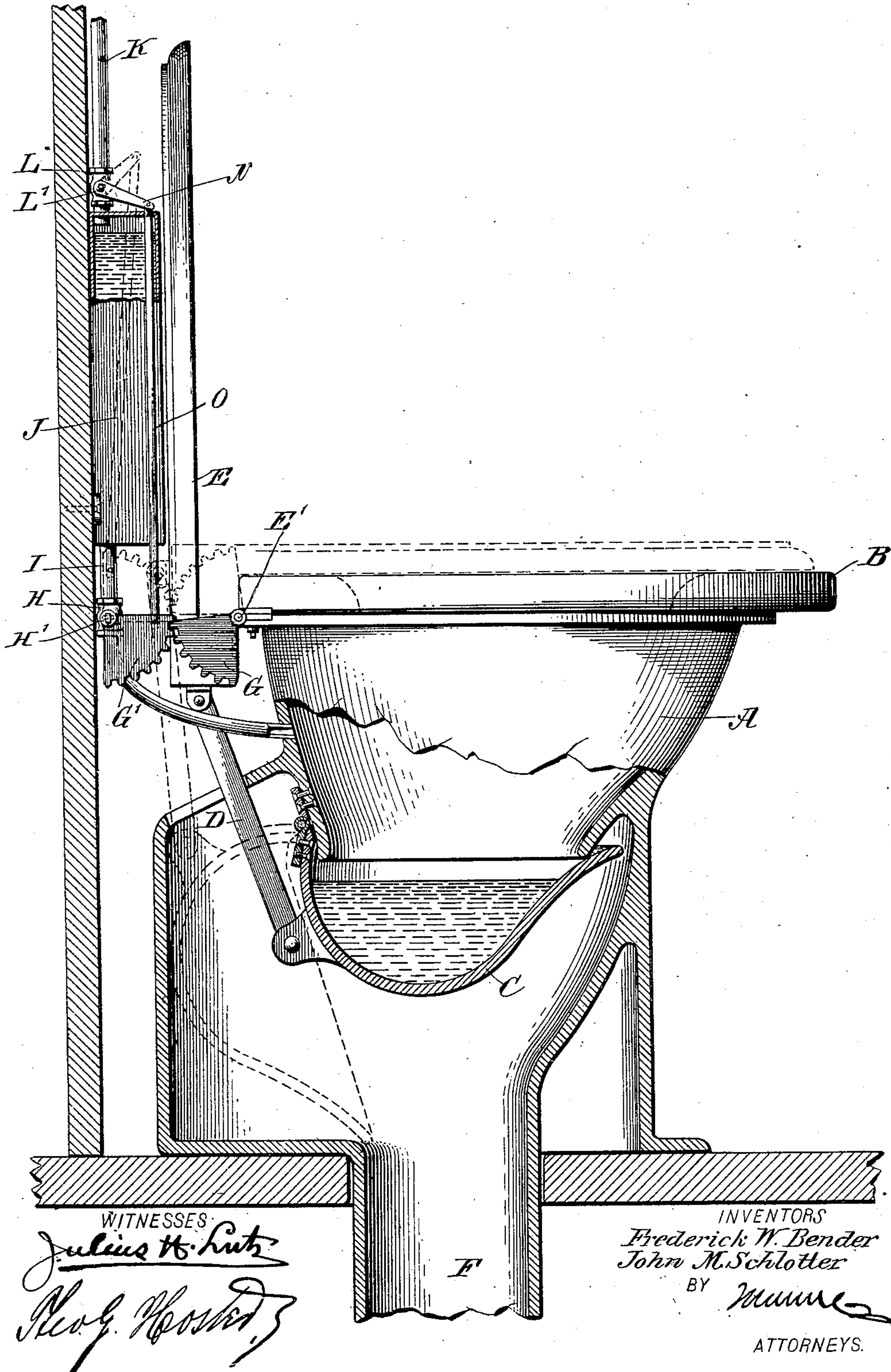
PATENTED JUNE 21, 1904.

F. W. BENDER & J. M. SCHLOTTER.

WATER CLOSET.

APPLICATION FILED APR. 23, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

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NEW YORK.

WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 763,246, dated June 21, 1904.

Application filed April 23, 1903. Serial No. 154,002. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK W. BENDER and JOHN M. SCHLOTTER, both citizens of the United States, and residents of New Rochelle, in the county of Westchester and State of New York, have invented a new and Improved Water-Closet, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved water-closet, more especially designed for use on railroad-cars, marine vessels, &c., and arranged to prevent upward draft in the bowl and to allow of flushing the bowl to keep the water-closet at all times in proper sanitary condition.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure is a sectional side elevation of the improvement.

The bowl A of the water-closet is provided on top with the usual seat B, and the bottom of the bowl is open and adapted to be closed by a cup or pan C, hinged to the lower end of the bowl, as plainly shown in the drawing. The cup C is pivotally connected by a link D with the cover E, connected by a hinge E' with the seat B, to allow of swinging the cover into a closed position on the seat, as shown in dotted lines, or into an open vertical position, as shown in full lines in the drawing. Now when the cover E is in an open position the cup C closes the open bottom of the bowl A, and when the cover is swung into a closed position then the cup C swings into an open position, and thereby discharges its contents into a discharge-tube F, extending through the bottom of the car, vessel, &c., to the outside, to discharge the contents of the cup to the railroad-track or into the water, as the case may be. The discharge-tube F preferably forms an integral portion of the bowl A, but may be made as a separate piece.

In order to flush the bowl A and to fill the cup C with water at the time the cup moves into a closed position, the following device is

provided: On the hinge end of the cover E is secured a segmental gear-wheel G, having its center coinciding with that of the hinge E', and this gear-wheel is in mesh with a like segmental gear-wheel G', secured on the stem H' of a valve H, arranged in a discharge-pipe I, leading from the bottom of an overhead closed tank J to one side of the bowl A, to deliver water to the latter and the cup C. When the cover E is swung into an open position, then the cup C closes the bottom of the bowl, and the valve H is opened to allow the water in the tank to flow into the bowl to flush the latter and to fill the cup C, and when the cup, with the water and excrement, swings into an open discharging position then the valve H is closed, and during this time the tank J is refilled. For this purpose the closed tank is connected by a supply-pipe K with a reservoir or other water-supply, and in this supply-pipe K is arranged a valve L, carrying on its stem L' an arm N, connected by a link O with the segmental gear-wheel G', so that when the valve H is open the valve L is closed, and vice versa, and both valves are controlled from the cover E. Thus when the valve H is closed and the valve L is open the closed tank J is refilled at the time the cover is closed, and when the cover is swung back into an open position the valve L is closed and the valve H opened for the purpose above mentioned. Now by the arrangement described the bowl is closed at its bottom while being used, and hence all upward draft in the bowl is prevented and the user is not liable to the ill effects of a cold blast. Furthermore, by the use of the tank J, its supply-pipe K, and the valves controlled from the cover the bowl is properly flushed and water is retained in the cup to keep the latter clean and allow a ready discharge of the excrements, thus maintaining the water-closet at all times in a good sanitary condition.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A water-closet comprising a bowl having an open bottom, a cup hinged to the said bowl and adapted to close the said open bottom, a

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hinged cover for the seat of the bowl, a link
directly connected at one end with the said
cup and at the other end with the said cover,
to swing the cup into an open discharge po-
5 sition on closing the cover, and to swing the
cup into a closed position on opening the
cover, an overhead tank, a pipe connecting
the tank with the said bowl, above the bot-
tom thereof, a valve in the said pipe, a seg-
10 mental gear-wheel on the cover having its
center coinciding with that of the hinge of
the cover, the said gear-wheel meshing with
a segmental gear-wheel on the valve-stem, to
open the valve at the time the cover swings
15 into an open position, a supply-pipe for fill-
ing the said closed tank, provided with a
valve, and a connection between the said sup-
ply-pipe valve and the said segmental gear-
wheel on the valve-stem, to open the valve at
20 the time the cover swings into a closed po-
sition, as set forth.

2. A water-closet comprising a bowl having
an open bottom, a cup hinged to the said bowl
and adapted to close the said open bottom, a
25 hinged cover for the seat of the bowl, a link
directly connected at one end with the said

cup and at the other end with the said cover,
to swing the cup into an open discharge po-
sition on closing the cover, and to swing the
cup into a closed position on opening the 30
cover, an overhead tank, a discharge-pipe
connecting the tank with the said bowl, a
valve in the said discharge-pipe, a gear-wheel
on the stem of the valve, a gear-wheel on the
cover having its center coinciding with that 35
of the hinge of the cover, the said gear-wheel
being in mesh with the gear-wheel on the
valve-stem, a supply-pipe for filling the said
closed tank, a valve in the said supply-pipe,
an arm on the said supply-pipe valve, and a 40
link connecting the said arm with the gear-
wheel on the said discharge-pipe valve, as set
forth.

In testimony whereof we have signed our
names to this specification in the presence of 45
two subscribing witnesses.

FREDERICK W. BENDER.
JOHN M. SCHLOTTER.

Witnesses:

EMIL A. TRENCK,
WM. S. CURTIS.