

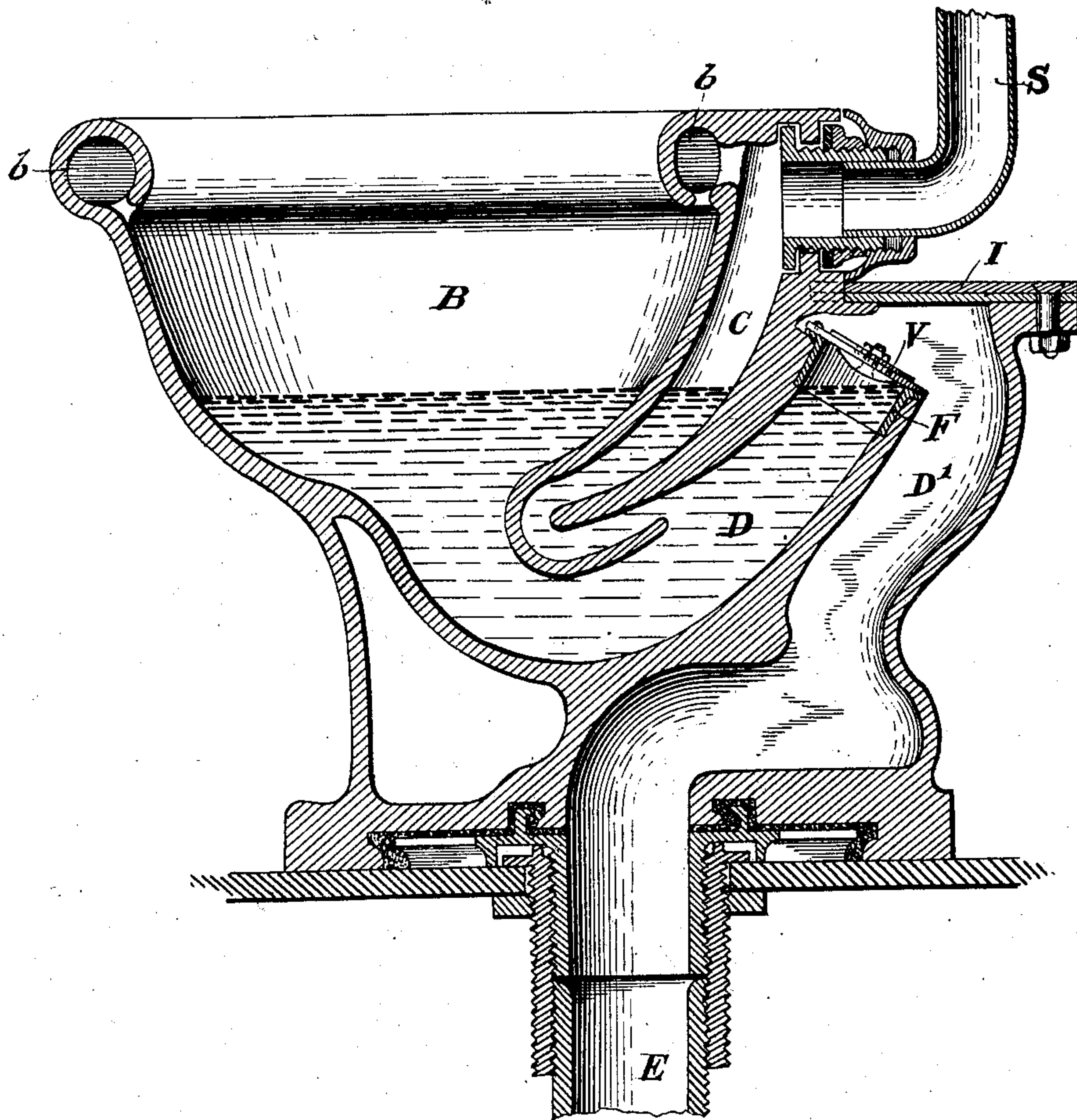
No. 763,561.

PATENTED JUNE 28, 1904.

L. M. HOOPER.
WATER CLOSET.

APPLICATION FILED MAR. 28, 1901.

NO MODEL.



Witnesses:

J. B. M. Givv.
H. L. Reynolds.

Inventor:

Louis M. Hooper
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UNITED STATES PATENT OFFICE.

LOUIS M. HOOPER, OF RUTHERFORD, NEW JERSEY, ASSIGNOR TO THE
J. L. MOTT IRON WORKS, OF NEW YORK, N. Y., A CORPORATION OF
NEW YORK.

WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 763,561, dated June 28, 1904.

Application filed March 28, 1901. Serial No. 53,163. (No model.)

To all whom it may concern:

Be it known that I, LOUIS M. HOOPER, a citizen of the United States, and a resident of Rutherford, in the county of Bergen and State
5 of New Jersey, have invented a new and Improved Water-Closet, of which the following is a full, clear, and exact description.

My invention relates to an improvement in water-closets and comprises novel features
10 which will hereinafter be particularly pointed out in the claims.

Reference is to be had to the accompanying drawing, forming a part of this specification.

The drawing is a sectional elevation of a
15 water-closet embodying one method of constructing my invention.

The form of construction shown in the figure is given simply as an illustration of the preferred construction and not as represent-
20 ing the only construction which may be available. I do not therefore wish to be limited to this construction alone.

My invention is particularly designed for use upon ships, yachts, and other vessels where
25 the closets are located at some elevation above the water-line and in which the use of a pump for discharging the closets is not necessary. In such locations gravity is relied upon for discharging the closets; but closets located in
30 this manner a short distance above the water-line are subject to the action of the waves which dash against the sides of the vessel and which force water back through the discharge-pipes and unless some means is provided for
35 preventing such action it will often flood the closets. To prevent such action, I have introduced a check-valve between the basin and the outer end of the discharge-pipe which will open freely outward, but will close so as to
40 prevent inflow of water.

In the drawing, B represents the bowl or hopper of the closet, which may be of any preferred or desired construction. I have herein shown a construction in which a hol-
45 low perforated rim *b* is used which discharges the water inwardly from the margin of the upper part of the bowl and one in which a passage C is provided, the lower end of which

turns upwardly into the discharge-passage D, so as to act as a jet to facilitate the discharge
50 of the bowl. The flushing-water is supplied to the closet through the pipe S. The passage D connects with a passage D', which extends downwardly and which connects with a discharge or soil pipe E.
55

A check-valve V is shown as located at the upper end of the passage D, said location being at the upper end of the siphon formed by the two passages D and D'. The check-valve may be of any desired construction. The construction herein indicated consists of a plain
60 leather or rubber disk B, which is provided with stiffening-washers and is hinged at its upper edge. This valve is also shown as being mounted upon a sleeve or thimble F, which
65 is inserted within the upper end of the passage D.

It will be observed that the check-valve is located as near as may be to the water of the seal. I have discovered that if the valve be
70 located at this point siphonic action is not interfered with, whereas if the valve be located at a considerable distance from this point the siphonic action is delayed at starting, so that the water rises to an undesirable level in the
75 bowl, and the breaking of the siphon is retarded; so that siphonic action continues and empties the bowl of water. Both these difficulties are overcome by locating the valve at or about the position shown in the drawing.
80

I am aware that check-valves have heretofore been used in connection with siphonic water-closets, as shown and described in the patent to Bunting, No. 210,003, dated November 19, 1878; but such valves are located at a
85 considerable distance from the crown of the siphon, and such constructions I disclaim.

The check-valve is made readily accessible by means of an opening left at the upper end of the passage D' and which is covered by
90 means of a plate I, which is secured by means of bolts or other devices, so that it may be readily removed.

By the term "closet" or "water-closet" as employed in the specification and claims I
95 mean the structure which includes the hopper,

bowl, or basin and the pedestal which contains the discharge-passages leading from the bowl and not to include the supplying and discharging pipes connected therewith and
5 lying outside thereof.

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

1. In a water-closet the combination with a
10 bowl, a siphonic discharge-passage therefrom, of a check-valve located at the junction of the long and short legs of said siphon.

2. In a water-closet the combination with a bowl, a siphonic discharge-passage therefrom,

of a jet-aperture from which water is dis- 15
charged into said siphon in the direction of flow therethrough, and a check-valve located at the junction of the long and short legs of said siphon against which water impelled by
said jet directly impinges. 20

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

L. M. HOOPER.

Witnesses:

JOHN REID, Jr.,

CHARLES H. BANTJE.