

(No Model.)

J. H. STEVENS, Jr.  
WATER CLOSET.

No. 524,515.

Patented Aug. 14, 1894.

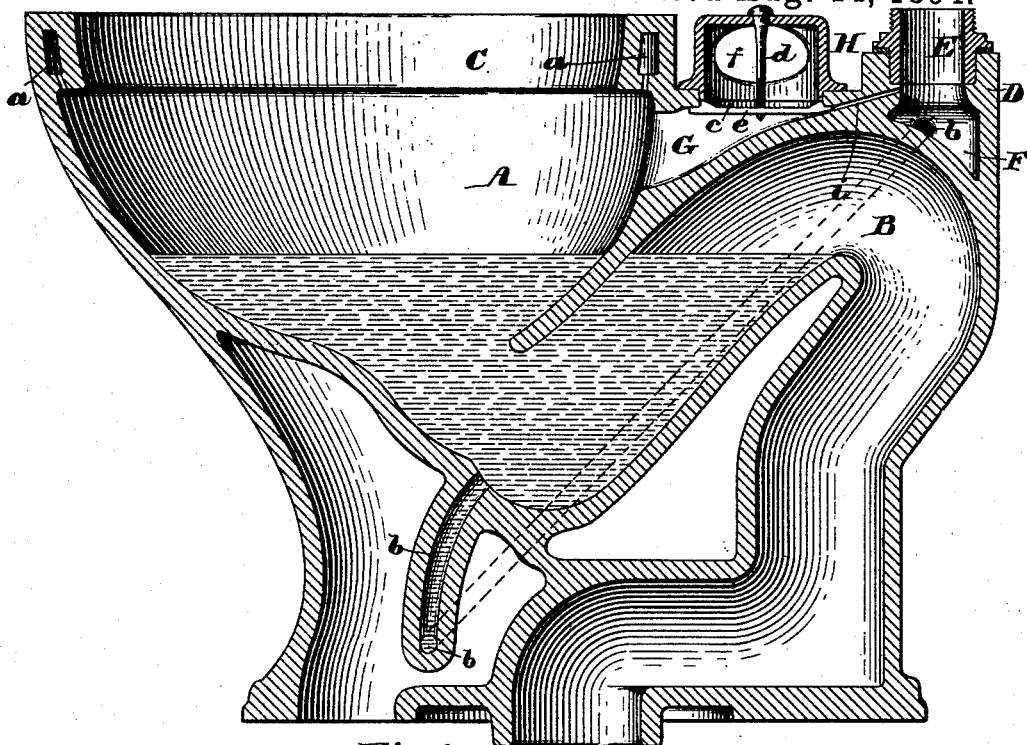


Fig. 1.

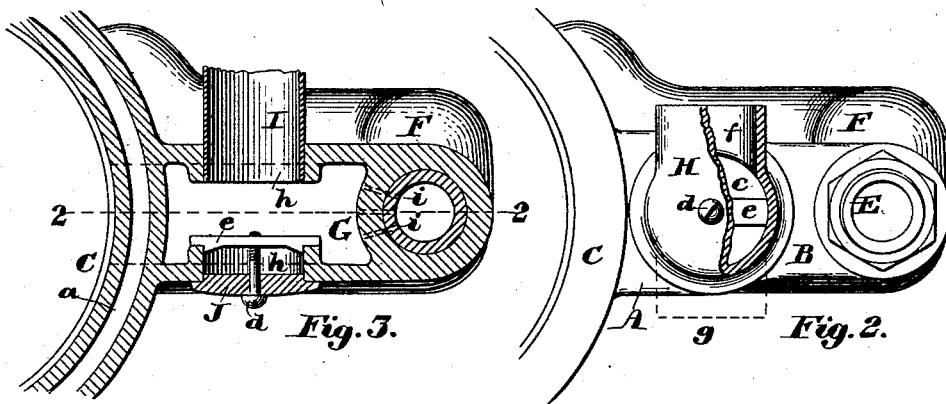


Fig. 3.

Fig. 2.

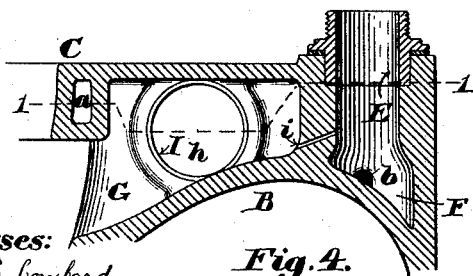


Fig. 4.



Fig. 5.

Witnesses:  
Hatter E. Lombard.  
H. Theodore Fletcher

Inventor:  
John H. Stevens, Jr.,  
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# UNITED STATES PATENT OFFICE.

JOHN H. STEVENS, JR., OF CAMBRIDGE, MASSACHUSETTS.

## WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 524,515, dated August 14, 1894.

Application filed January 2, 1894. Serial No. 495,332. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. STEVENS, JR., of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Water-Closets, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to porcelain water closets of the siphon jet pattern and particularly to the ventilation of the bowl thereof, and it consists in certain novel features of construction, arrangement and combination of parts which will be readily understood by reference to the description of the accompanying drawings and to the claims hereto appended and in which my invention is clearly pointed out.

Figure 1 of the drawings is a central vertical section of a porcelain closet illustrating my invention, the cutting plane extending from front to rear. Fig. 2 is a sectional plan of so much of the rear portion of the closet as is necessary to illustrate my invention. Fig. 3 is a partial sectional plan of a closet illustrating a modification of my invention the cutting plane being on line 1, 1 on Fig. 4. Fig. 4 is a partial vertical section on line 2, 2, on Fig. 3, and Fig. 5 is a perspective view of the clamping bar for securing the ventilator pipe, or cover to the ventilator openings in the closet.

In the drawings A is the bowl of the closet; B, the siphon discharge passage; C, the flushing rim provided with the annular chamber *a*.

D is a boss to receive the metal bushing E.

F is a passage leading to the chamber *a* in the flushing rim, and *b* is the jet passage, all, except the bushing E, formed in a single piece of porcelain or earthenware in a well known manner.

Heretofore in closets of this kind the bowl of the closet has been ventilated by means of a tubular horn like boss projecting from the bowl near its top and at one side of the inclosing wall of the rear portion of the siphon passage B, with which the ventilating pipe was connected in any suitable manner. This arrangement served a good purpose for ventilating the bowl, but as the closets have to be set under widely differing conditions, as to location, as a consequence in one case the

ventilating pipe would be placed at the left side of the rear portion of the bowl and perhaps the next closet set would require the ventilating pipe to be at the right side of the rear portion of the closet. This is found to be an objectionable feature because it necessitates having the closets made rights and lefts, and that the dealer shall carry a much larger stock in trade than would otherwise be necessary. To obviate this objection and produce a porcelain or earthenware closet having facilities for ventilating the bowl from either side is the object of my present invention, and to this end I utilize the triangular space at the rear of the rear upper portion of the wall of the bowl and above the upper portion of the wall of the outlet passage as heretofore constructed, for a ventilating passage, by cutting away the rear wall of said bowl, between the wall of the siphon passage and the flushing rim, for about three inches more or less in width to form a chamber G at the rear of the bowl and directly above the siphon passage B as shown in Figs. 1, 3, and 4.

In Fig. 1 the top plate or cover to the chamber G is at a lower level than the top of the bowl and a circular opening *c* is formed therein as shown in Figs. 1 and 2. H is an inverted cup like cap placed over said opening and clamped to said upper plate by means of the bolt *d* and the bar *e* said cap having formed integral therewith a boss which projects horizontally therefrom and through which is formed an opening *f* preferably oval in form in which is fitted the ventilating pipe leading to the exterior of the building in any well known manner. This cap H may be placed as shown in full lines in Fig. 2, or its discharge boss may be turned more or less toward the bowl or toward the boss D or it may be turned so that it shall discharge upon the other side of the closet as indicated in dotted lines at *g* in Fig. 2, or at any desired angle between the flushing rim and the boss D upon that side of the closet.

In Figs. 3 and 4 a modification of the closet is shown in which the cover of the chamber G is on a level or nearly so with the top of the bowl and has no opening through it but in each of the side walls of the chamber G a circular opening *h* is formed into one or the other of which is fitted the ventilating pipe I

according to whether it is desired to lead said ventilating pipe to left or right while the opening *h* in the opposite wall is closed by the cap *J* held in position by the bolt *d* and bar *e* as shown in Fig. 3. The chamber *G* is flushed by water passing thereto through the vent holes *i* shown in full lines in Figs. 1 and 4 and in dotted lines in Fig. 3. By this construction I produce a closet the bowl of which can be effectually ventilated by a pipe leading either to the right or left and that is more symmetrical in form than those now in general use on account of doing away with the somewhat unsightly ventilating horn heretofore formed on the side of the bowl.

The caps *H* and *J* may be made of metal or of porcelain as may be preferred.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In an earthenware water closet provided with a trap formed integral therewith and having its upper bend at the rear of, and projecting radially beyond, the outer circumference of the main body of the closet bowl, a ventilating chamber occupying the angular space between the wall of said upper bend the rear wall of the bowl, two side walls and a horizontal top wall or plate, and communicating with the interior of the bowl between the water seal and the flushing rim; in combination with a ventilating pipe leading from said ventilating chamber.

2. A porcelain or earthenware water closet provided with a trap the upper bend of which is at the rear of and projects radially beyond the outer circumference of the main body of the closet bowl; a ventilating chamber above the upper bend of said trap and at the rear of the main body of the bowl and communicating with the interior of the bowl through its rear wall between the water seal and the flushing rim; a ventilating pipe leading from said

ventilating chamber; and the passage *i* extending from the flushing pipe to said ventilating chamber for flushing said chamber.

3. A porcelain or earthenware water closet provided with a trap the upper bend of which is at the rear of, and projects radially beyond, the outer circumference of the closet bowl, in combination with a ventilating chamber formed by the upper wall of said bend the rear wall of the bowl, two vertical side walls and a horizontal top plate, and communicating with the interior of the bowl between the water seal and the flushing rim; an opening through the top plate of said chamber; the cup like cap *H* secured over said opening and provided with a horizontally projecting tubular hub; and the passage *i* extending from the flushing pipe to said ventilating chamber for flushing said ventilating chamber.

4. A porcelain or earthenware water closet provided with a trap, formed integral therewith, the upper bend of which is at the rear of, and projects radially beyond, the outer circumference of the main body of the closet bowl, in combination with a ventilating chamber formed by the upper wall of said bend, the rear wall of the bowl, two vertical side walls and a horizontal top plate, an opening from said chamber to the interior of said bowl between the water seal and the flushing rim; and a ventilating pipe fitted to an opening into said chamber and adapted to be led to the right or left to accommodate the same closet to different localities.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 27th day of December, A. D. 1893.

JOHN H. STEVENS, JR.

Witnesses:

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WALTER E. LOMBARD.