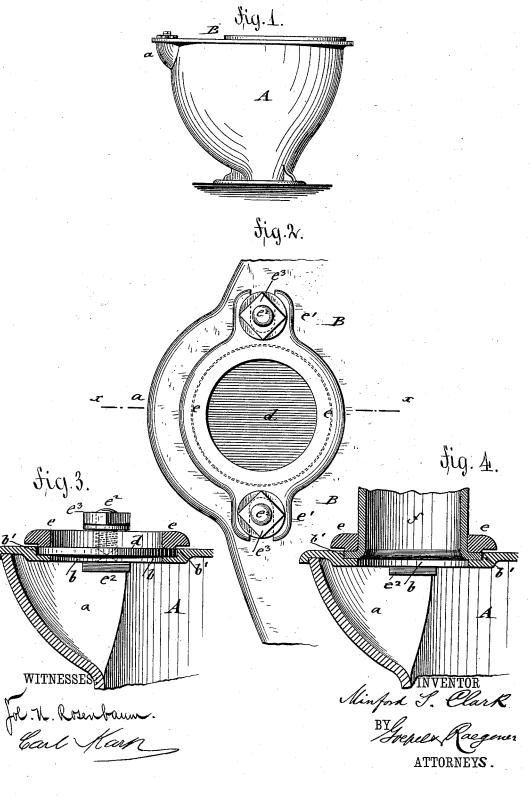
## M. S. CLARK.

VENTILATING ATTACHMENT FOR WATER CLOSETS.

No. 307,526.

Patented Nov. 4, 1884.



## UNITED STATES PATENT OFFICE.

MINFORD S. CLARK, OF BROOKLYN, NEW YORK.

## VENTILATING ATTACHMENT FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 307,526, dated November 4, 1884.

Application filed April 11, 1884. (No model.)

To all whom it may concern:

Brooklyn, Kings county, and State of New York, have invented certain new and useful Improvements in Ventilating Attachments for Water-Closets, of which the following is a speci-

This invention has reference to an improved attachment for water closets by which the ventilating-pipe may be conveniently attached to the hopper of the closet; and the invention consists of a water-closet the hopper of which is provided at the rear part with an enlargement or bulge, the top of the hopper 15 having an opening above the bulge, with a depressed seat and a detachable plate retained by a collar and fastening-screws, which collar also serves to attach the ventilating-pipe after the plate is removed.

In the accompanying drawings, Figure 1 represents a side elevation of a water-closet with my improved ventilating attachment. Fig. 2 is a plan of said ventilating attachment drawn on a larger scale. Figs. 3 and 4 are vertical transverse sections of the same on line x x, Fig. 2, showing, respectively, the ventilating-opening of the hopper closed by a detachable plate and opened and connected to the ventilating-pipe.

Similar letters of reference indicate corresponding parts.

A in the drawings represents the hopper of my improved water-closet, which is made of cast-iron or other suitable material. At the

35 upper rear end of the hopper A is arranged an outwardly bulging portion, a, which is made integral with the hopper A. The top B of the closet is provided with an opening, b, and having a circumferential seat, b', said 40 opening being closed by a disk-shaped plate or cover, d, which is set into the seat flush with top B of the closet, and retained by a collar, e, having recessed ears e' at diametri-

cally-opposite points, said cover being tightly 45 secured to the top B by screw-ports  $e^2$ , that are screwed tightly up through the top B from the under side of the same, so as to prevent gases from passing up along the threaded shanks. The bolts are provided above the

50 top B with nuts and washers e3, that are applied to the upper ends of the threaded shanks of the bolts at the top of the collar e. The

covering-plate d is permanently retained in Be it known that I, MINFORD S. CLARK, of | position by the bolted collar e, the ventilating-opening being kept closed while the closet 55 is shipped and in case it is not desired to ventilate the hopper of the closet. Whenever it is desired to attach a ventilating-pipe to the hopper, the plate d is removed and the outwardly bent flange of the ventilating-pipe f 60 secured to the seat b' by the collar e, as shown in Fig. 4, the collar being then secured in position by the bolts  $e^2$ . By this arrangement it is not necessary to cut a hole in the top B or hopper A, for soldering on the ventilating- 65 pipe, as heretofore, whereby labor is saved to the plumber and a more convenient mode of attachment of the ventilating pipe provided.

Having thus described my invention, I claim as new and desire to secure by Letters Patent— 70

1. The combination of a water-closet hopper, A, having an enlargement or bulge, a, at the upper rear end, top B, having an opening, b, a detachable plate, d, a collar, e, and screw-bolts  $e^2$ , for fastening the plate d to the 75 top B, substantially as set forth.

2. In a water-closet, the combination of the hopper A, having a bulge, a, a top, B, having an opening, b, and seat b', a detachable covering-plate, d, a collar, e, having recessed ears 80 e', and fastening nuts and bolts  $e^2$   $e^3$ , substantially as set forth.

3. The combination of the hopper A, having a bulge, a, made integral therewith, a top, B, having an opening, b, a detachable cover- 85 ing-plate, d, a collar, e, and bolts  $e^2$ , screwed

from the under side through the top, and nuts e3, applied to the upper ends of the bolts, substantially as set forth.

4. The combination of a water-closet hop- 90 per A, having an enlargement or bulge, a, at the upper rear end, a top, B, having an opening, b, above the bulge a, a collar, e, and screwbolts  $e^2$   $e^2$ , for fastening the collar to the top, so as to secure either a detachable covering- 95 plate, d, or the ventilating-pipe f, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

MINFORD S. CLARK.

Witnesses:

PAUL GOEPEL, SIDNEY MANN.