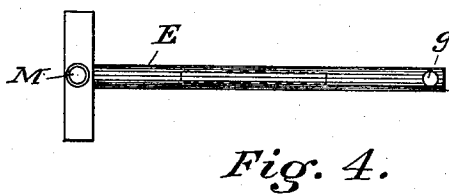
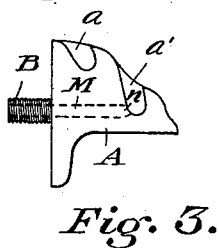
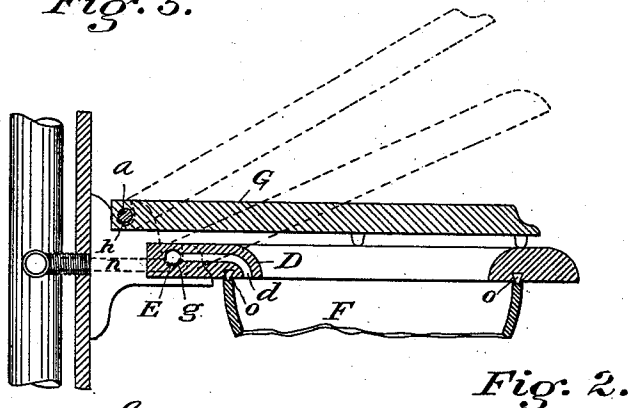
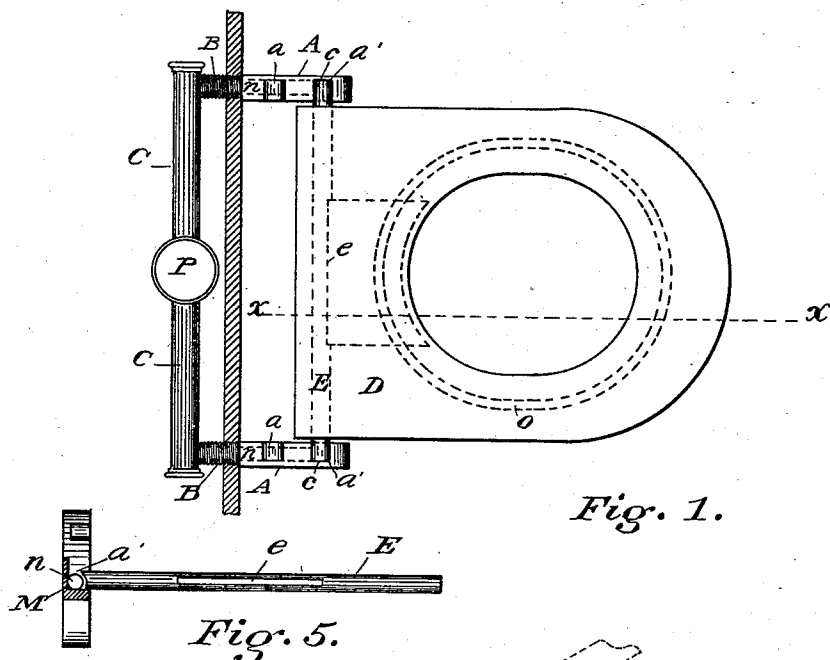


(No Model.)

A. O'BRIEN.
WATER CLOSET.

No. 567,498.

Patented Sept. 8, 1896.



Witnesses
Edward C. Russel
Charles W. Helmick

Arthur O'Brien Inventor

by Edward C. Russel Attorney

UNITED STATES PATENT OFFICE.

ARTHUR O'BRIEN, OF HELENA, MONTANA, ASSIGNOR OF ONE-HALF TO
C. B. MILLER, OF SAME PLACE.

WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 567,498, dated September 8, 1896.

Application filed June 19, 1893. Renewed February 27, 1896. Serial No. 581,081. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR O'BRIEN, a citizen of the United States, and a resident of the city of Helena, county of Lewis and Clarke, State of Montana, have invented a new and useful Improvement in Water-Closets, of which the following is a specification.

The cleaning and ventilating of water-closets is an important feature in improving the sanitary condition of buildings. My invention is intended to promote both by a combined hinge and ventilating arrangement.

Similar letters refer to similar parts in all the drawings.

Figure 1 is a plan view of seat, hinge, and pipes. Fig. 2 is a side elevation, in section, on line *x y*. Fig. 3 is a side elevation of hinge-piece. Fig. 4 is a rear elevation of pipe in seat and hinge-piece. Fig. 5 is a front elevation of pipe in seat and hinge-piece.

The metal hinge-pieces A A each have two slots *a a'* cut upon their inner surfaces, as shown in Fig. 3, and a screw B upon the back for penetrating the wall and screwing into the pipes C C. The screw B is hollow and the air-passage M continues through the piece A, opening into the lower slot *a'* at *n*. Passing horizontally through the rear of the seat D is the pipe E, closed at the ends. The ends project and act as pins *c c* for engagement in the slots *a' a'*, and thus form the hinge on which the seat swings. In this pipe E is a slot or opening *e* at the center, facing the slot *d*, which is cut in the wood of the seat D and opens into the bowl F. Near each end of the pipe E are openings *g g*, which correspond and fit to the openings *n n* in the slots *a' a'*, thus forming continuous closed air-passages from the bowl F to the pipes C C. These pipes C C are closed at one end, and at the other end fit into the main ventilating-pipe P. The seat D has a rubber gasket *o* around it, thus fitting closely upon the bowl F. The cover G has two pins *h*, one upon

each side, that engage in the upper slots *a a*, of the pieces A A, thus forming the hinge for the cover. It is thus seen that my invention serves both as a hinge for seat and cover and as means for ventilating the bowl when the seat is down. The hinge is very simple in construction and permits both seat and cover to be readily removed for cleaning or repairing parts or connections. The smooth outer face of the pieces A may be nickel-plated and add neatness to the appearance of the apparatus. If preferred, only one of the metal hinge-pieces A need have the air-passage and connections with the bowl and ventilating-pipe. The hinge may also be used apart from the ventilating function where proper connections cannot be made.

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

1. In a water-closet the combination with a metal hinge-piece fixedly secured and having two vertical slots and an air-passage leading from the lower one of said slots to a ventilating-pipe, a cover having a pin engaging the upper slot, and a seat having a slotted pipe the ends of which project and engage the lower slot substantially as and for the purpose set forth.

2. In a water-closet, a seat, slotted in the rear portion a slotted pipe in said seat, having projecting ends, a hinge-piece, slotted to receive the said ends, and having a screw, an air-passage through the screw and hinge-piece to the slot, and a ventilating-pipe, all substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 16th day of March, 1893.

ARTHUR O'BRIEN.

Witnesses:

EDWARD C. RUSSEL,
CHARLES W. HELMICK.