

F. LEVENHAGEN & A. H. HALDER.
 VENTILATOR FOR CLOSET BOWLS.
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988,273.

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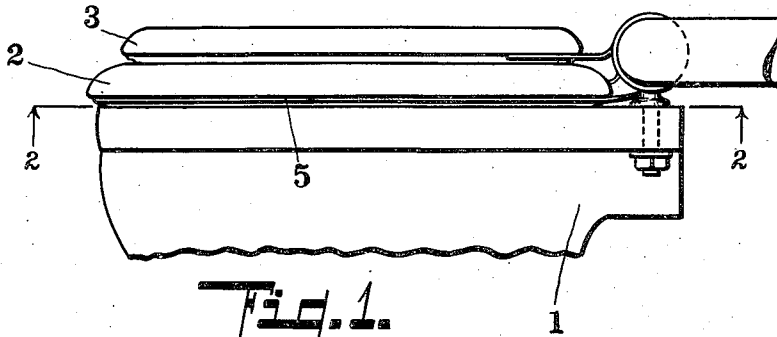


Fig. 1.

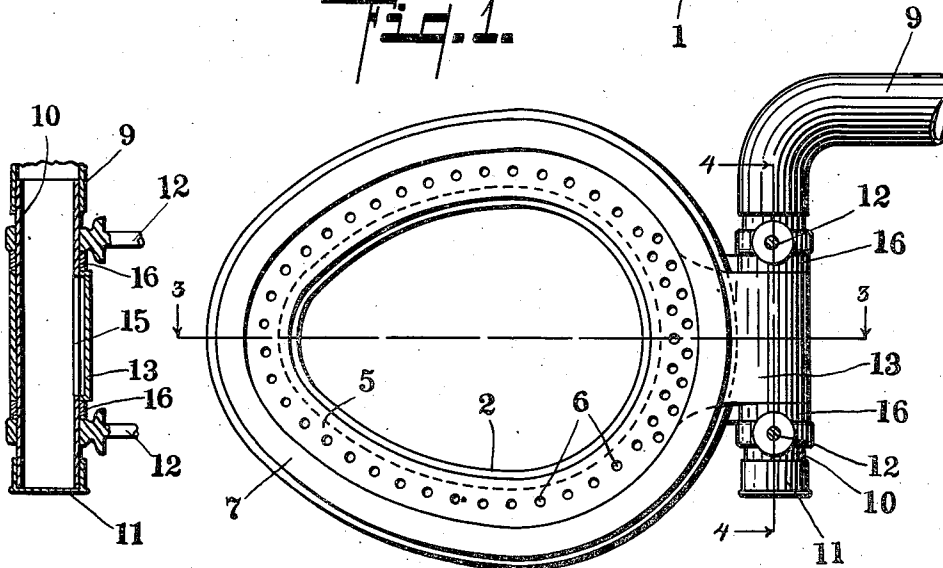


Fig. 4.

Fig. 2.

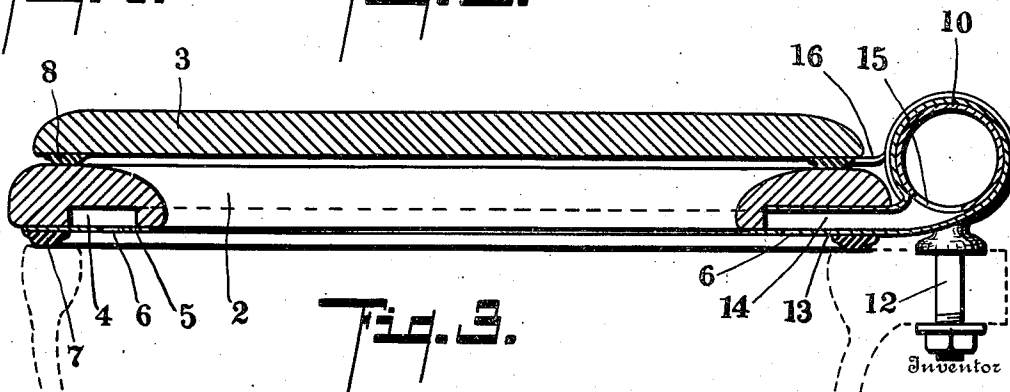


Fig. 3.

Witnesses

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FRED LEVENHAGEN AND ALBERT H. HALDER, OF WAUSAU, WISCONSIN.

VENTILATOR FOR CLOSET-BOWLS.

988,273.

Specification of Letters Patent. Patented Mar. 28, 1911.

Application filed March 4, 1908. Serial No. 419,156.

To all whom it may concern:

Be it known that we, FRED LEVENHAGEN and ALBERT H. HALDER, citizens of the United States, residing at the city of Wausau, county of Marathon, State of Wisconsin, have invented certain new and useful Improvements in Ventilators for Closet-Bowls, of which the following is a specification.

This invention relates to improvements in ventilators for water-closets.

The main object of this invention is to provide an improved ventilator for water-closets which shall be effective in use, inexpensive to produce and simple and attractive in appearance.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

We accomplish the objects of our invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of our invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which,

Figure 1 is a detail side elevation of a structure embodying the features of our invention. Fig. 2 is a detail view taken on a line corresponding to line 2—2 of Fig. 1. Fig. 3 is an enlarged vertical section taken on a line corresponding to line 3—3 of Fig. 2. Fig. 4 is a detail section taken on a line corresponding to line 4—4 of Fig. 2, showing details of the hinge connection.

In the drawing, similar numerals of reference refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, 1 represents the bowl of a water-closet; 2 the seat; and 3 the cover. The seat is provided with a conduit 4 in its under side, the conduit being provided with a bottom plate 5, having a plurality of perforations 6 therein, the conduit preferably surrounding the seat opening. The seat is preferably provided with a gasket, as 7, adapted to rest upon the top of the bowl when the seat is in its closed position. The cover 3 is adapted to rest upon the top of the seat when closed, as is usual, and is preferably provided with a gasket 8,— see Fig. 3.

The ventilator pipe 9—a detail only of which is illustrated—is adapted to deliver as may be desired. To the lower end of the ventilator pipe 9, we connect the tubular pintle 10, it being preferably a piece of pipe closed with a cap at one end, as 11, the other end being secured to the ventilator pipe. The pintle is preferably mounted upon the bowl by means of a pair of eye-bolts, the pintle being arranged through the eyes of the bolts, as is illustrated. The seat hinge member 13 is mounted upon the pintle and is provided with a conduit 14, which is adapted to register with the opening 15 in the side of the pintle, the inner end of the conduit opening into the conduit 4 of the seat. In practice, we prefer to make this hinge member integral with the bottom plate 5 of the conduit, as we find that it can be satisfactorily made of sheet metal, which not only affords a very secure method of attachment for the hinge member to the seat, but also provides an economical and attractive construction.

The cover is provided with a pair of hinge members 16, which are mounted on the pintle, preferably at each side of the seat hinge member, as clearly appears from the drawing. These hinge members are held against longitudinal movement on the pintle by means of the eye-bolts for securing the pintle to the bowl.

We thus in a very simple structure, secure a device which is effective for the purpose intended, and, at the same time, is very economical and attractive in appearance.

We have illustrated and described our improved ventilator for water-closets in detail in the form preferred by us on account of its structural simplicity and economy. We are, however, aware that it is capable of considerable variation in structural details without departing from our invention, and we desire to be understood as claiming the same in detail in the form illustrated, as well as broadly.

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

1. In a water-closet, the combination with the ventilator pipe, of a bowl; a seat having a conduit in the under side thereof encircling the seat opening; a perforated flat bottom plate for said conduit extended and curved into a hinge member for said seat;

a tubular pintle connected to said ventilator pipe, said pintle having an opening in the side thereof; a pair of eye-bolts for securing said pintle to said bowl, said pintle
5 being arranged through said eye-bolts; a cover; and a pair of hinge members for said cover mounted on said pintle at each side of said seat hinge member, said seat and cover hinge members being held against
10 axial movement on said pintle by the said securing bolts therefor.

2. In a water-closet, the combination with the ventilator pipe, of a bowl; a seat having a conduit in the under side thereof encircling the seat opening; a perforated bottom plate for said conduit extended and curved into a hinge member for said seat; a tubular pintle for said seat hinge member connected to said ventilator pipe, said pintle
15 having an opening in the side thereof; a pair of eye-bolts for securing said pintle to

said bowl, said pintle being arranged through said eye-bolts.

3. In a water-closet, the combination with the ventilator pipe, of a bowl; a seat having a conduit in the under side thereof encircling the seat opening; a perforated flat bottom plate for said conduit extended and curved into a hinge member for said seat; a tubular pintle for said seat hinge member
25 connected to said ventilator pipe, said pintle having an opening in the side thereof; and means for securing said pintle to said seat.

In witness whereof, we have hereunto set
our hands and seals in the presence of two
witnesses.

FRED LEVENHAGEN. [L. S.]

ALBERT H. HALDER. [L. S.]

Witnesses:

CATHERINE MARX,

GEORGE GOGG.