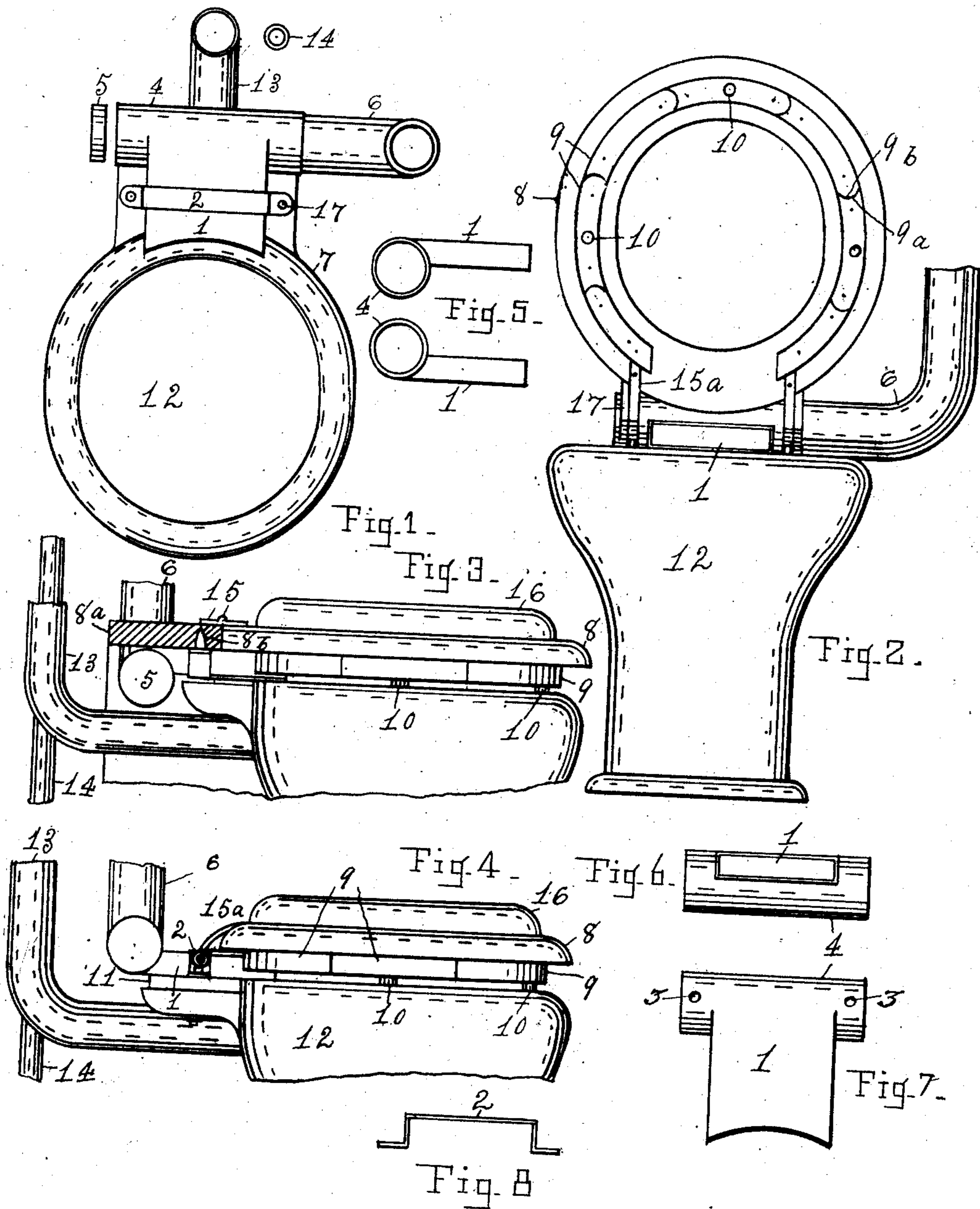


No. 854,365.

PATENTED MAY 21, 1907.

A. T. LUECKENBACH.
WATER CLOSET VENTILATING DEVICE.

APPLICATION FILED JAN. 10, 1907.



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ANTON T. LUECKENBACH, OF NEENAH, WISCONSIN.

WATER-CLOSET-VENTILATING DEVICE.

No. 854,365.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed January 10, 1907. Serial No. 351,636.

To all whom it may concern:

Be it known that I, ANTON T. LUECKENBACH, a citizen of the United States, residing at Neenah, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in a Water-Closet-Ventilating Device, of which the following is a specification.

My invention relates to a detachable ventilating device, for application to water closet bowls, such as are already installed, and is adapted to be inserted between the seat and bowl top in various styles of bowls and their fixtures, and it consists of a rectangular conductor formed of thin sheet metal, and adapted to be inserted between the seat and bowl top at the rear end of the bowl, the forward end of the conductor being curved to correspond approximately, with the curve of the inside of the bowl, and at its rear end having integral with it and arranged transversely of it, a tube, both ends of the tube being open, one end being provided with a detachable cover and the other being adapted to connect with a pipe leading to a chimney or other suitable ventilating flue, said device being adapted to be applied to a bowl top either side up and either one of its ends to be connected with a ventilating flue, and in combination with said conductor, a plurality of curved segments adapted to be secured to the under side of the seat, so as to be directly over the bowl top when the seat is closed down, and to extend from the mouth of said conductor at one side, around the sides and front of the seat to the other side, and to receive upon their lower side a plurality of rubber cushions which project below said segments and provide a space around the bowl for the admission of a supply of air for producing the necessary draft through the conductor, the device being shown in the accompanying drawing, in which,—

Figure 1 is a plan of a bowl top with its seat and cover removed and the conductor and ventilating pipe in position. Fig. 2 is a front view or elevation, of a bowl top with the conductor and ventilating pipe in position, the seat being raised and showing the curved segments thereon. Fig. 3 is a side elevation of the upper part of a bowl with its seat and its cover closed, and my improvement applied to it, the seat and bowl top being a modification of Fig. 2. Fig. 4 is a side elevation of the upper part of a bowl, top,

with its seat and its cover closed, and my improvement applied to it, the bowl top and seat being a modification of Fig. 3 and the conductor being applied the other side up. Fig. 5 is an end view of the tubular conductor, showing it both sides up. Fig. 6 is an elevation of the front end of the conductor. Fig. 7 is a plan of the conductor. Fig. 8 is a side elevation of a clamp for securing the conductor in position.

Similar numerals and letters indicate like parts in the several views.

The conductor 1, is made of thin sheet metal, and of a suitable thickness for entering the space between the seat and bowl, and may be secured in position on the bowl top, or to such other part as the particular style of fixtures makes necessary, one means being the clamp 2, (see in Fig. 1), or it may be secured by a nail or screw through the hole 3 in the end of the tube 4. In Fig. 3, a board 8^a, (shown in section), is arranged at the rear of seat, to which the seat is hinged, and to which the conductor is secured with screw 8^b. In using the clamp 2, the holes in the bowl top for receiving the seat hinges may be made use of in connection with the clamp 2 for securing the conductor in position, as they are in Figs. 1 and 4.

It may be noted that the conductor can be applied to one side of the bowl top and when so applied will produce equally as good results, as the raising of the seat will in no way affect the conductor, excepting possibly to lessen the draft of air into it, and the only additional fixture required will be a support to which the conductor can be secured.

The tube 4 is provided with a cover 5, adapted to fit either end of it. A pipe 6, is to be connected to the end of the tube most conveniently connected with a ventilating flue, and may run in any direction necessary for making said connection. For producing a suitable draft through the conductor, the space which is usually found between the bowl top 7 and seat 8, is narrowed up by securing segments 9, around the seat just over the bowl top, and rubber cushions 10, inserted in suitable holes in the segments for projecting below the segments and resting on the bowl top, they leaving a space of $\frac{1}{8}$ of an inch, more or less, which space has been found advantageous. These segments are formed of wood, or other suitable material, and the meeting ends, 9^a and 9^b, made one convex and the other concave so as to allow

them to be fitted to seats of different curvature. The ends of the segments adjoining the conductor sides are to be fitted to them.

Owing to the form of some bowl tops and of their fixtures, it is necessary to apply the conductor the side up which is shown in the upper one of Fig. 5, while in others, the lower one is better fitted for the place. The circumference of the tube upon one side of it forms a plain surface with one of the wider sides of the rectangular conductor, for adapting the conductor to be used either side up, see Fig. 5.

11, indicates a packing piece which may sometimes be necessary for placing above or below the conductor for filling the space between the seat and bowl top at the rear of the bowl. 12, indicates the bowl, 13, a pipe leading from a suitable tank for flushing the bowl, 14, a feed pipe for the tank, 15, and 15^a, hinges for seats, 16, seat cover, 17, holes in bowl top for hinges.

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

25 1. A water closet ventilating device, consisting of a rectangular conductor adapted to be secured in position at the rear side of the bowl top between it and the seat but entirely disconnected therefrom, a tube of greater diameter than the depth of said conductor connecting transversely thereof with the rear end of said conductor and being integral therewith, the circumference of the tube at one side thereof being in the same plane as one side of said conductor, and being adapted for use either side upward, one end of said tube being provided with a cover, and the other, adapted for connection with a pipe leading to a chimney or other suitable ventilating flue, substantially as described.

2. A water closet ventilating device, consisting of a rectangular conductor adapted to be secured in position at the rear side of

the bowl top between it and the seat but entirely disconnected therefrom, a tube of greater diameter than the depth of said conductor connecting transversely thereof with the rear end of said conductor, the circumference of the tube at one side thereof being in the same plane as one side of said conductor and being integral therewith, and being adapted for use either side upward, one end of said tube being provided with a cover, and the other, adapted for connection with a pipe leading to a chimney, or other suitable ventilating flue, in combination with a plurality of curved segments, adapted to be secured to the under side of the seat, from one side of said conductor around the seat to the other side, the meeting ends of which segments are formed one convex and the other concave, for preserving a close joint between their meeting ends, when the segments are arranged within circles of different diameter, and rubber cushions fixed in some of said segments which project below the same for bearing upon the bowl top, and leaving a space for the admission of air, around the front and sides of the bowl top, substantially as set forth.

3. A water closet ventilating device, consisting of a conducting inclosure formed in one piece, one part being adapted to be inserted between the water closet seat and bowl top, and being entirely disconnected from said seat, and another part being adapted for connection with a pipe leading to a suitable ventilating flue, said two parts being of such form as to be capable of use either side of its widest dimension, upward, as the design of the bowl top and its fixtures may require, substantially as described.

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Witnesses:

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