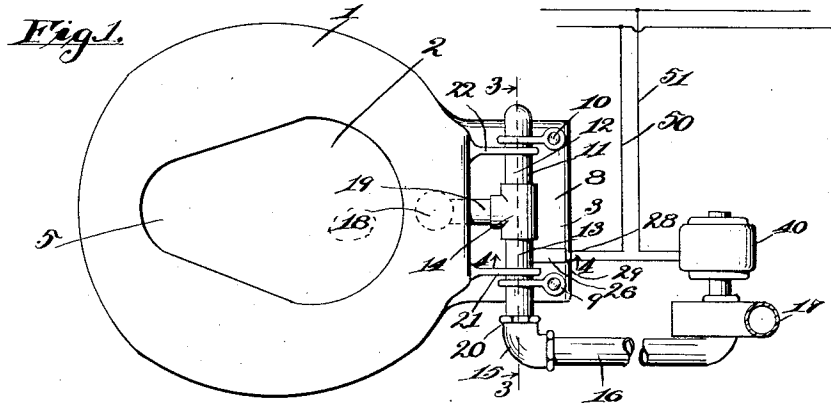
April 17, 1928. 1,666,465

C. C. NORRIS

VENTILATING SEAT FOR TOILET BOWLS

Filed Dec. 29, 1926

Fig. 1.



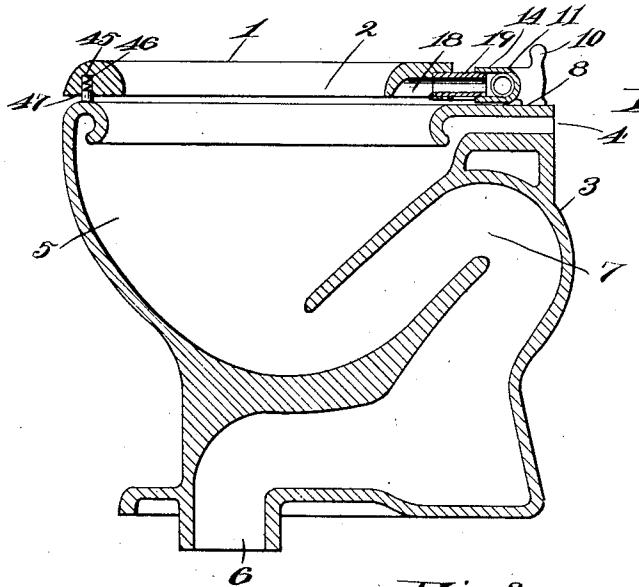


Fig. 2.

Fig. 3.

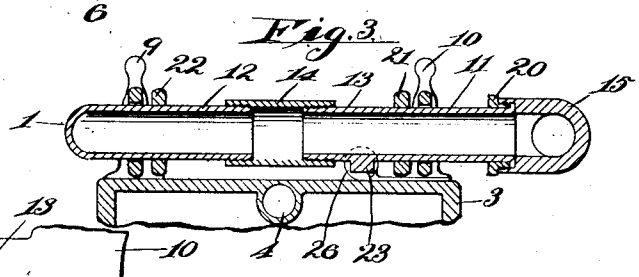
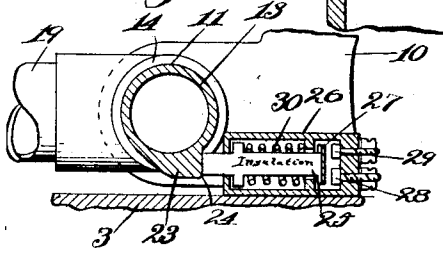


Fig 4



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UNITED STATES PATENT OFFICE.

CHARLES C. NORRIS, OF RIVERSIDE, CALIFORNIA.

VENTILATING SEAT FOR TOILET BOWLS.

Application filed December 29, 1926. Serial No. 157,684.

This invention relates to ventilated seats for toilet bowls.

An object of this invention is to provide a seat and attachment therefor which may be applied to toilet bowls for household use or the like.

Another object of this invention is to provide ventilation which will remove odorous gases from closet bowls when the same are in use.

A further object of this invention is to provide a ventilating seat which is inexpensive to manufacture, which has relatively few movable parts and is not likely to get out of order, and which is well adapted to perform the service which is required of it.

With the foregoing and other objects in view which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention.

Figure 1 is a plan view of my ventilating seat as attached to a toilet bowl showing the operative connection between the same and the electric blower used in connection with my device,

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1 showing the closet bowl, seat and pipe connections in section;

Fig. 3 is a view taken along the line 3—3 of Fig. 1 showing the pipe connections in cross section, and

Fig. 4 is a detailed sectional view taken along the line 4—4 of Fig. 1 showing the electrical switch in cross section used in connection with my invention.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, 1 designates the actual seat used in connection with my invention and is of the usual configuration having an aperture 2 therethrough. This seat hingedly rests upon a closet bowl 3, which bowl is also of a conventional type having a water inlet 4, a chamber 5 and an outlet 6. A gas trap is shown at 7. I make no claims however as to novelty in connection with this closet bowl.

The bowl table is shown at 8 and supported on this table by means of the brackets 9 and 10 is a pipe connection 11 formed in sections 12 and 13, which sections are suitably joined by means of the T joint 14. The section 12 is closed at one end while the section 13 is open ended and one end of the same communicates with the elbow 15, the pipe 16 and the blower 17. Indicated at 18 is a passageway communicating with the interior of the closet bowl 5. A short section of pipe 19 is associated with this passageway, which section is adapted to be threaded into the leg of the T joint, thereby establishing an operative air passageway between the closet bowl 5 and the blower 17.

I will now describe in detail the electrical connections used with my invention, by which connections the operation of the blower is commenced. The pipe connections 12, 13 and 14 are rotatably mounted in the brackets 9 and 10 and in the elbow 15 as may be seen in Fig. 3. The means whereby the piece 13 is rotated in the elbow is shown at 20. The seat proper is rigidly secured to the sections 13 and 12 by means of the brackets 21 and 22. The seat is therefore hingedly connected to the closet bowl structure. Formed on the connection 13 and on the under side of the same is a lug 23 having a bearing surface 24. The bearing surface 24 is adapted to abut against a bus bar plunger 25, which plunger is formed of insulation material and is suitably housed within a casing 26. One end of the bus bar plunger has fastened thereon a metal bus bar 27. A pair of contacts 28 and 29 extend through one end of the casing in alignment with the bus bar and a coil spring 30 serves to hold the bus bar away from the contacts. When the bearing surface 24 presses against the plunger 25, the bus bar 27 completes the circuit between the contacts 28 and 29 and the source of electro-motor 40 is set into operation. The forward end of the seat 1 is provided with a socket 45 in which is housed a coil spring 46 and a plunger 47, which plunger as shown in Fig. 2 is adapted to maintain the seat in elevated relationship from the closet bowl. Pressure on the seat 1 will overcome the action of the plunger 47 and the seat will rotate through a minute angle .

The operation of my device is as follows: As stated above, when the action of the plunger 47 is overcome, the seat 1 being rotated through an angle causes the bearing surface 24 to bear against the bus bar plunger and the bus bar forms an operative connection between the contacts 28 and 29, thereby completing the electrical circuit through the leads 50 and 51 to the motor

40. The fan or blower 17 is set into operation and a vacuum is created in the connections 12, 13, 14, 15 and 16, so that a continuous suction is created through the passageway 18 in the seat. This will relieve the closet bowl 5 of all odorous and obnoxious gases. The blower 17 and the electric motor 40 may be suitably concealed within the wall of a building, or if desired may be located at any suitable point adjacent the closet bowl.

I have thus provided a ventilating toilet seat which is efficient in its operation and which is well adapted for household use.

It will be understood that various changes may be made in the detail of construction without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. A toilet bowl of the class described having a seat thereon, there being a passage-way through said seat adjacent the rear of the same communicating with the interior of said bowl, said passage-way comprising the sole means whereby the interior of said bowl may be ventilated, brackets on said seat, a hollow pintle extending through said brackets and being rigidly secured thereto, said pintle being mounted for rotation on said bowl, thereby establishing a hinged connection between said seat and bowl, said hollow pintle communicating with said passage-way in said seat, a lug on said pintle, a bus bar plunger casing on said bowl, a bus bar plunger slidably mounted in said casing and projecting therefrom, said lug being adapted to engage said bus bar to depress the same, a pair of electrical contacts adjacent said plunger whereby when said plunger is depressed, an electrical circuit is formed through said contacts, said circuit serving to operate a blower, said blower communicating with said hollow pintle, whereby gases may be removed from said closet bowl, a socket in the forward end of said seat, a spring-pressed plunger in said socket, said plunger serving to resiliently elevate said seat and release said bus-bar plunger from engagement with said contacts.

2. A toilet bowl of the class described having a seat thereon, supports mounted upon the bowl, a hollow pintle mounted for rotation upon said supports, means forming a connection between the interior of the pintle and the under side of the seat, a pipe leading to the pintle, means providing a swivel joint between the pipe and the pintle, a blower for creating a partial vacuum within said pipe, means for operating said blower, and brackets rigidly connecting the seat to the pintle so that when the seat is lifted the pintle will be rotated with it.

In testimony whereof I have signed my name to this specification.

CHARLES C. NORRIS.