Dec. 1, 1925. 1,564,071

C. E. JACKSON

VENTILATING CLOSET

Filed Dec. 15, 1923

Fig. 1.

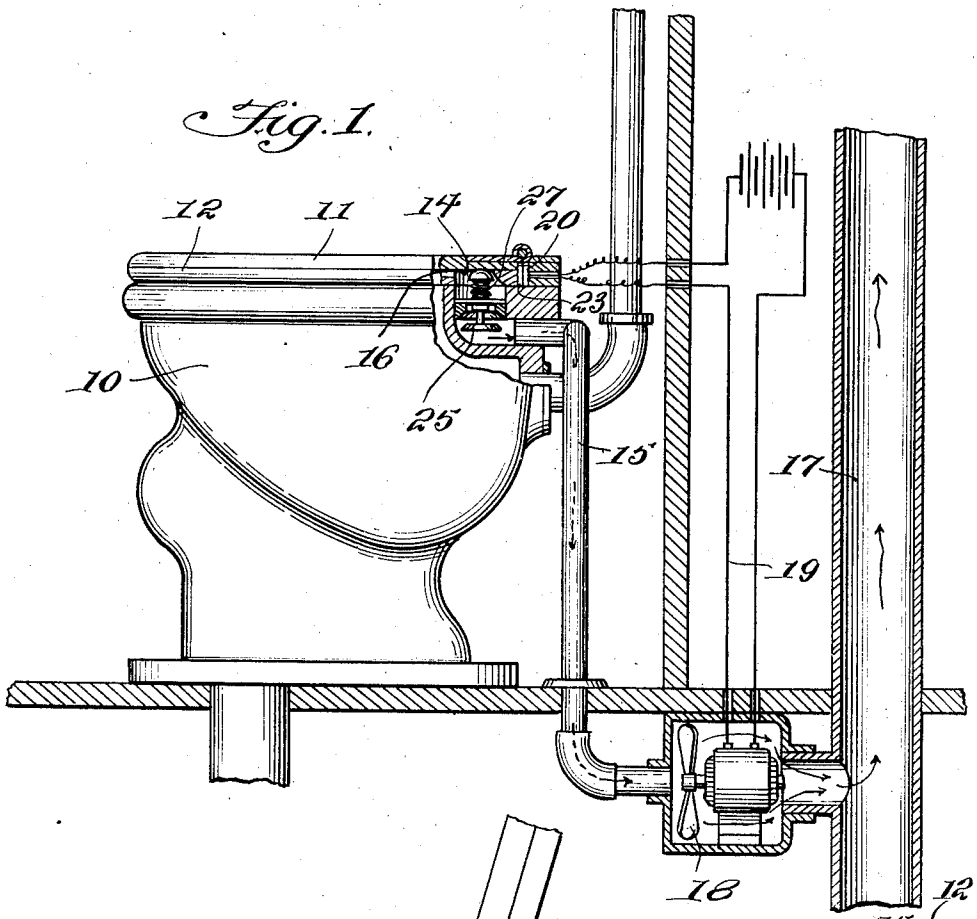


Fig. 2.

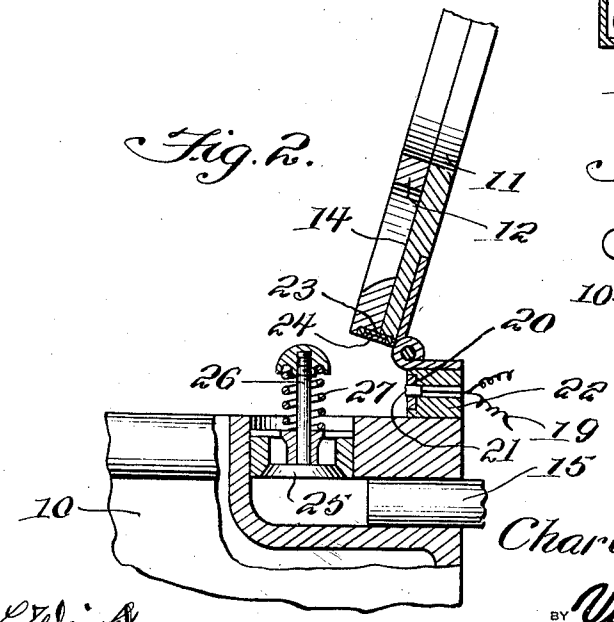
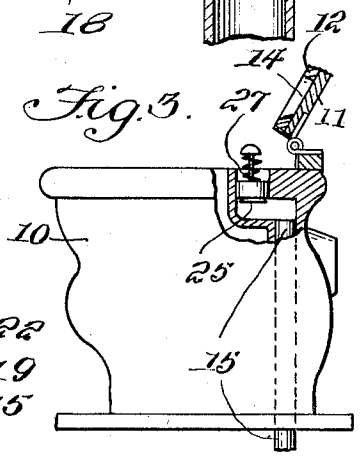


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES E. JACKSON, OF MINNEAPOLIS, KANSAS.

VENTILATING CLOSET.

Application filed December 15, 1923. Serial No. 680,976.

To all whom it may concern:

Be it known that I, CHARLES E. JACKSON, a citizen of the United States, residing at Minneapolis, in the county of Ottawa and State of Kansas, have invented new and useful Improvements in Ventilating Closets, of which the following is a specification.

It is the purpose of this invention to provide a ventilator designed for use in combination with stools of ordinary construction in bath room fixtures, and wherein use is made of a suction pipe for conveying the fumes to a stack or discharge pipe with which the suction pipe communicates.

In carrying out the invention I employ a small electric motor for creating a suction in said suction pipe, the motor being included in a normally open circuit which is automatically closed when the seat of the stool is lowered, thereby operating the motor and continuing the latter in operation as long as the seat is occupied.

Another object of the invention resides in the provision of a normally closed valve for controlling communication between the stool and said suction pipe, the valve being automatically opened by lowering the seat of the stool and maintained in an open position while the seat is occupied.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:

Figure 1 is a view showing the ventilating device associated with a stool of the character above mentioned, the seat of the latter being in a closed position.

Figure 2 is a fragmentary view of a stool showing the seat in its normally elevated position and the position of the valve with relation to the suction pipe.

Figure 3 is a view of the modified construction.

Referring to the drawings in detail, 10 indicates a stool of the ordinary well known construction in bath room fixtures, while 11 represents the seat for said stool. In connection with the seat 11, I make use of an auxiliary seat 12 which is arranged beneath the seat 11 and attached thereto for opening and closing movement therewith. The upper side of this auxiliary seat is provided with an annular channel or passage through which the fumes pass through the exit opening 14 formed at the rear of the auxiliary seat, and which opening, when the seat is closed coincides with the receiving end of a suction pipe 15. This annular passage or channel communicates with the stool 10 by a plurality of openings 16 arranged at spaced points about the inner edge of the auxiliary seat as shown. The suction pipe 15 conveys the fumes received from the channel or passage into a discharge pipe or stack represented at 17, from which the fumes pass to the atmosphere.

For the purpose of creating a suction in the pipe 15 I employ a small electric fan 18, the latter being included in a normally open circuit, which also includes a switch adapted to be actuated by the closing of the seats 11 and 12. An electric core or wire 19 extends from the switch just referred to to the electric fan. This switch includes a stationary plate 20 which is provided with spaced contact points 21, the plate 20 being secured to the seat support 22 immediately at the rear of the seat. The switch further includes a movable plate 23 which carries an elongated contact element 24, the plate 23 being secured to the rear edge of the seat 11, and normally spaced from the contact points 21 of the plate 20, as the seat is normally supported in a raised or elevated position. However, when the seat is lowered for use, the contact 24 is brought into engagement with the contact points 21 thereby closing the circuit to the fan 18, putting the latter into operation, and continuing the latter in operation as long as the seat is occupied.

For the purpose of controlling communication between the stool 10 and the suction pipe 15 I employ a normally closed valve 25 having a stem 26 arranged in the path of movement of the seat 11. This valve prevents the return of fumes into the stool 10 and into the room from either the suction pipe 15 or the discharge pipe 17. By reason of the position of the stem 26 of this valve with relation to the seat 11 it is obvious that when the seat is lowered for use, the valve is moved to an opened position, which position is maintained as long as the seat is in its

lowered position. A spring 27 is utilized to return the valve to its normal position when the seat is elevated.

In Figure 3, I have shown a modified form of the invention, wherein the stool 10 is cast with a bore or opening 15′ which takes the place of the suction pipe 15 shown in Figure 1, thereby eliminating the arrangement or use of the pipe exteriorly of the stool. However the invention shown in Figure 3 is used in the same manner as described in connection with the preferred embodiment of the invention.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

Having thus described the invention, I claim:

The combination with a toilet bowl provided with a compartment in one side which has communication with the interior of the bowl, a ventilating pipe leading from one end of the compartment, a spider arranged in the compartment provided with a valve seat, a valve adapted to normally engage the seat, a knob on the upper end of the valve and adapted to be engaged by the bowl seat upon lowering the same whereby to move the valve to open position, and a spring engaging the spider and knob for normally holding the valve seated.

In testimony whereof I affix my signature.

CHARLES E. JACKSON.