

Sept. 4, 1934.

H. E. HARTWELL

1,972,774

CLOSET

Filed July 25, 1932

Fig. 1.

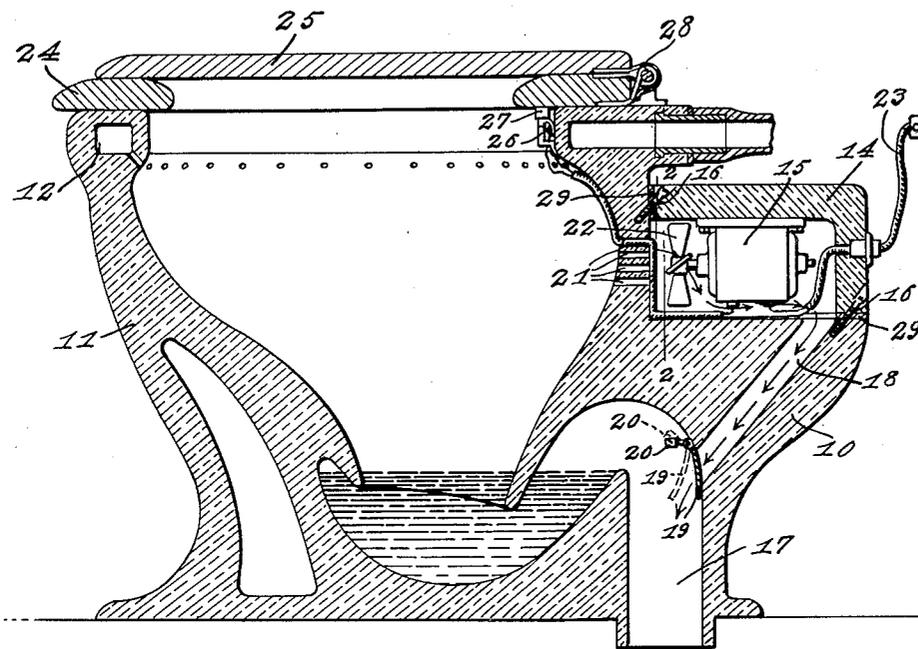


Fig. 2.

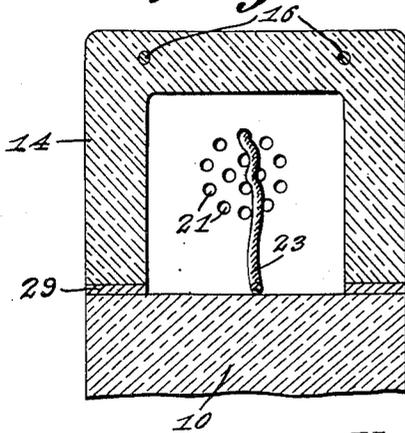
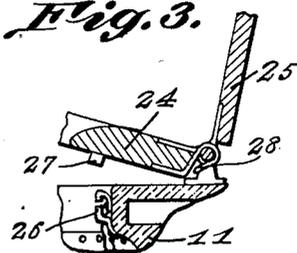


Fig. 3.



Harold E. Hartwell, INVENTOR

BY Victor J. Evans & Co.

ATTORNEY

UNITED STATES PATENT OFFICE

1,972,774

CLOSET

Harold Edward Hartwell, Brooklyn, N. Y.

Application June 25, 1932, Serial No. 624,609

1 Claim. (Cl. 4—213)

The object of the invention is to provide a closet particularly adapted to promote sanitation by effectively eradicating odors by their transfer direct to the waste pipe; to provide a closet in which the odor eradicating function is carried out at the time of occupancy and only at that time; and generally to provide a device of this character which is of simple form, susceptible of cheap manufacture and of a character permitting it to be readily installed as a replacement for the conventional closet.

With this object in view, the invention consists in a construction and combination of parts of which a preferred embodiment is illustrated in the accompanying drawing but to which embodiment the invention is not to be restricted further than may be imposed by the terms of the annexed claim.

In the drawing:

Figure 1 is a central vertical sectional view of a closet constructed in accordance with the invention.

Figure 2 is a sectional view on the plane indicated by the line 2—2 of Figure 1.

Figure 3 is a detail sectional view showing the hinged end of the seat and cover in raised position.

Modified over the general practice to the extent of being formed with an enlargement 10 at the rear, the closet 11 is otherwise like the conventional closet which is provided with a rim flush such as indicated at 12.

The enlargement 10 is of such a character as to constitute a shelf for the reception of a cover member 14 which together with the shelf constitutes a housing for an electric motor 15, preferably swung from the top wall of the housing, so that when the latter is detached the motor will be removed with it. The housing may be of the same or different material from the closet, but whatever the material, it is secured jointly to the shelf and to the body of the closet by means of screws 16 passed diagonally through the top and rear walls and treadingly engaged in holes in the body portion of the closet and in the shelf.

The down-leg 17 of the siphon which communicates with the waste pipe is placed in communication with the motor compartment defined by the housing and shelf by means of a duct 18 formed in the enlargement and communicating with the motor compartment at the rear end thereof, the point of communication with the down-leg being normally closed by means of a gate valve 19, retained in its closed position through the instrumentality of a weight 20. Except when there is a passage of air through the duct 18 from the housing to the down-leg, the weight 20 retains the gate valve in closed position and prevents the passage of obnoxious odors from the waste into the housing.

Communication between the interior of the bowl or closet and the motor compartment is through breathing holes 21 formed in the rear wall of the closet. By means of this construction, when the motor is put in operation, the fan 22 with which the motor is provided, draws air from the interior of the closet into the motor compartment and transfers it to the waste pipe through the duct 18 and down-leg 17.

The motor is actuated from the service line to which the feed conductors 23 are connected through the instrumentality of a suitable receptacle which may and preferably does incorporate a switch, so that the motor may be manually started when desired.

To provide for automatically actuating the motor, as when the seat 24 is occupied, or when the cover 25 of the latter is down, a normally open switch 26 is mounted on the rim in series with the manual switch if one is used. The switch 26 is moved to closed position by a projection 27 mounted on the under face of the seat, when the seat is occupied or the cover closed. With the cover open, the spring 28 incorporated with the hinge tends to normally elevate the seat to a point which will free the projection 27 from the switch, so that the motor under such circumstances will not be set in motion. A gasket 29 of cork or other acceptable material is interposed between the housing and the shelf to act not only as a noise dampener but to prevent air leakage from the compartment to the exterior.

By reason of the motor being carried by the housing and the latter secured in place by screws, the whole becomes readily accessible for repairs, replacements and the like.

The invention having been described, what is claimed as new and useful is:

A closet of the kind indicated having a siphon down-leg for connection with a waste pipe and being formed with an enlargement at the rear constituting a shelf, said enlargement being formed with a duct in communication with the down-leg and opening on the top face of the shelf, a cover removably secured to the shelf on the top face thereof to define with the latter a compartment, the closet having an opening in the wall intervening between the bowl and said compartment, a motor secured to the cover member, and a fan carried and driven by said motor.

HAROLD E. HARTWELL.