

A. McGARY.
CLOSET.
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1,293,141.

Patented Feb. 4, 1919.

Fig. 1,

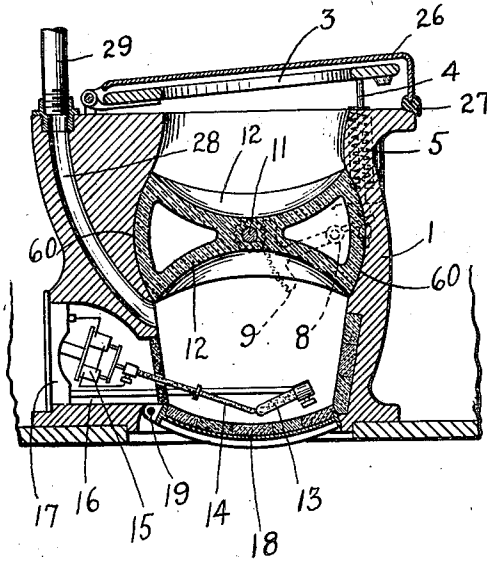


Fig. 2,

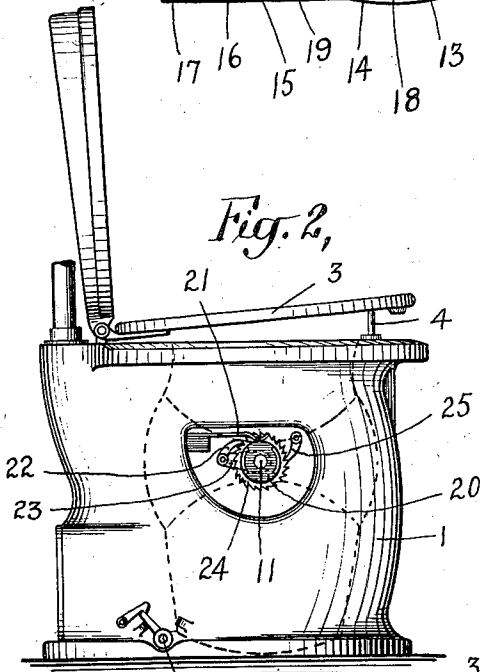


Fig. 3,

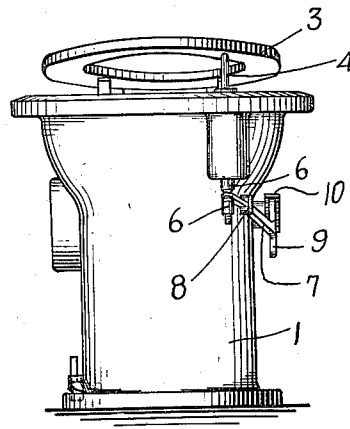
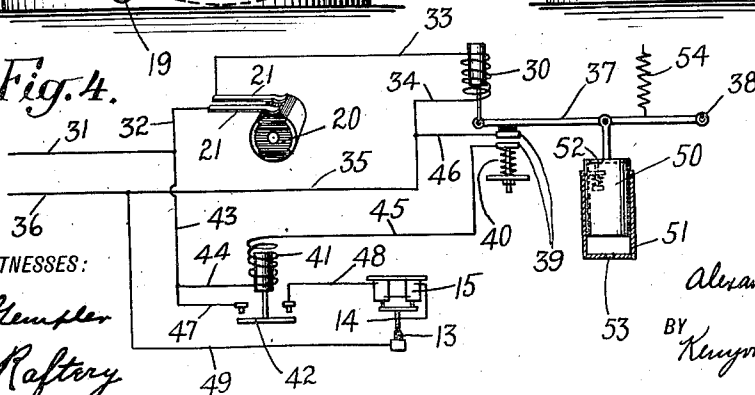


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALEXANDER MCGARY, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO
GOULD COUPLER COMPANY, A CORPORATION OF NEW YORK.

CLOSET.

1,293,141.

Specification of Letters Patent.

Patented Feb. 4, 1919.

Application filed August 4, 1913. Serial No. 782,784.

To all whom it may concern:

Be it known that I, ALEXANDER MCGARY, a citizen of the United States, and a resident of the borough of Bronx, city, county, and State of New York, have invented certain new and useful Improvements in Closets, (Case D,) of which the following is a specification.

My invention relates to improvements in closets. One object of my invention is to provide a closet with an improved electrical heating arrangement and improved means for automatically regulating the action of the same and preventing the escape of obnoxious gases from the closet. Further objects, features and advantages will more clearly appear from the detailed description given below, taken in connection with the accompanying drawing which forms a part of this specification.

In the drawing Figure 1 is a vertical section through a closet embodying my improvement in one form. Fig. 2 is a side view thereof. Fig. 3 is a front view thereof. Fig. 4 is a diagram illustrating the electrical circuit connections.

Referring to the various figures, 1 represents a suitable body portion having on its top a pivoted seat 3 adapted to be depressed and pushed down. A spindle 4 is normally pressed upwardly by a spring 5. The lower end of the spindle 4 is provided with abutments 6 which engage one end of the lever 7 pivoted at 8 and carrying on its other end a rack 9 engaging a gear 10 on the end of a shaft 11 passing centrally through the body portion 1. Fixed to the shaft 11 and located within the body portion, is a pan 12 adapted to receive the excreta. Situated below the pan 12 is a heater embracing horizontally arranged electrodes 13 and 14 of an electric arc heating device with suitable electrical regulating apparatus at 15. The body portion 1 is provided with a passage or cutaway portion at 16 through which the arc device may be easily removed, a cover 17 being adapted to normally close the said passage. Below the electrodes 13 and 14 is a trap door 18 adapted to form a bottom for the heater. The door 18 is pivoted at 19 so that any matter which remains after heating may be discharged therefrom by tilting the door.

On the end of the shaft 11 is loosely mounted a commutator or rotary switch 20 adapted to electrically connect two spring

contacts 21. The commutator 20 is given an intermittent rotary movement by means of a pawl 22 pivoted to an arm 23 fixed to the shaft 11, engaging a ratchet 24 fixed to the commutator 20. A pawl 25 engages the ratchet 24 to prevent backward movement of the commutator.

26 represents a hinged cover extending over the seat 3 and having a rubber band or strip 27 extending about the edges and adapted to closely engage the top of the body portion 1 in order to prevent any obnoxious gases from being given off from the closet.

A vent passage 28 is provided in the body portion leading from the space between the heater and the pan 12, which passage is continued by means of a vent pipe 29.

Upon the closet being occupied the seat 3 is depressed, thereby causing the pan 12 to be given a half revolution through the mechanical connections embracing pin 4, lever 7, rack 9, and gear 10. This movement, however, does not rotate the commutator 20 as the pawl 22 slips backward over the teeth of the ratchet 24. Upon one leaving the seat, however, the same is caused to rise by the spring 5, and the pan 12 is revolved one half revolution in the opposite direction so that the matter therein is discharged to the heating device below. At the same time the commutator 20 is given a half revolution, which momentarily closes an electrical circuit through the contacts 21 to energize the heater. Referring to Fig. 4 this action may be explained as follows. The closing of the circuit through the contacts 21 energizes a solenoid 30, the circuit being as follows: from main 31, conductor 32, contacts 21, conductor 33, solenoid 30, conductor 34, and conductor 35 back to the other main 36. The core of the solenoid 30 is connected to a lever 37 pivoted at 38, and when the solenoid 30 is energized the lever 37 is depressed, thereby closing two electrical contacts 39, the lower contact 39 being adapted to be depressed and held in its upper position by a spring 40. The closing of the contacts 39 energizes a solenoid 41 operating a switch 42. The circuit through the solenoid 41 may be traced as follows: from main 31, conductor 43, conductor 44, solenoid 41, conductor 45, switch contacts 39, conductor 46, and conductor 35 back to the other main 36. The closing of the switch 42 energizes the heat-

ing device, the circuit being from the main 31, through conductor 43, conductor 47, switch 42, conductor 48, regulating apparatus 15, electrodes 14 and 13, and conductor 49 back to the opposite main 36.

Accordingly when one leaves the seat 3 the circuit through solenoid 30 is momentarily closed so that the solenoid causes the contacts 39 to be closed. Connected to the lever 37 is a piston 50 operating in a dashpot 51, the piston being provided with a one-way valve 52 adapted to permit the easy egress of air from the dash pot, but allowing air to enter the dashpot only through a vent 53. Accordingly when the solenoid 30 is energized contacts 39 are closed, and the lower contact 39 considerably depressed against the action of the spring 40. This action energizes the solenoid 41 and connects the heater in circuit and energizes the same. Thereupon the piston 50 is slowly withdrawn from the dashpot 51 under the action of the spring 54, until after a predetermined interval of time, the contacts 39 are separated, thereby opening the circuit through the solenoid 41 opening the switch 42, and thus deenergizing the heater.

It will be noted that the pan 12 has its edges at 60 closely fitting the inside walls of the body portion so that most, if not all, of any obnoxious gases generated by the burner composed of the electrodes forming the arc, will be prevented from rising to the seat but will be withdrawn through the vent passage 28 and 29. Also the clean side of the pan is normally uppermost when the seat is not occupied and the heat from the heater acts directly on that side of the pan from which the excreta has been discharged.

If desired a movable platform may be provided in front of the closet which will act in the same manner as the seat to automatically control the movement of the pan and the energizing of the circuits, and I intend that such will come within the scope of my invention in its broader aspects.

Although I have described my improvement in great detail with respect to one particular embodiment thereof, nevertheless I do not desire to be limited to such details except as clearly specified in the appended claims, since many modifications and changes may well be made without departing from the spirit and scope of my invention in its broader aspects.

Having fully and clearly described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a closet, the combination of a seat and an electric heater for receiving excreta, said heater comprising electrodes for forming an arc to burn the excreta, means for automatically turning on the current to produce said arc upon one leaving said seat, and means for automatically turning off the

current from said arc after one has left said seat.

2. In a closet, the combination of a seat and an electric heater for receiving excreta, said heater comprising electrodes for forming an arc to burn the excreta, means for automatically turning on the current to produce said arc upon one leaving said seat, means for automatically turning off the current from said arc after one has left said seat, a pan for receiving the excreta, and means for automatically discharging the excreta from the pan to the heater upon one leaving said seat.

3. In a closet, the combination of a seat, a tilting pan below the seat, an electric heater below the pan, a vent passage leading from the space between the pan and heater, and a trap door forming the bottom of said heater and supporting the excreta which is being heated.

4. In a closet, the combination of a body portion, a discharging pan having its sides fitting closely the inside walls of the body portion when the pan is in normal position, heating means below said pan, a trap door below said heating elements for supporting the excreta which is being heated, and a vent passage leading from the space between said pan and door.

5. In a closet, the combination of a body portion, an electrical heater therein adapted to receive and heat the excreta, said heater comprising electrodes for forming an arc to burn the excreta, said body portion having a passage for the removal of said electrodes, and means for closing said passage, said means supporting said electrodes.

6. In a closet, the combination of a seat and an electric heater below said seat for receiving excreta, said heater comprising electrodes for forming an arc to burn the excreta, a tilting pan for receiving the excreta and discharging it to said heater, and means for turning on the current to said electrodes upon said pan being tilted to discharge it.

7. In a closet, the combination of a tilting pan for receiving the excreta, a heater below the pan for heating the excreta, said heater comprising electrodes for producing an arc to burn the excreta, means for energizing said heater to heat the excreta upon one leaving the closet, and means for automatically turning the pan upside down upon one leaving the closet, whereby the heat from the heater acts directly upon the side of the pan which received the excreta and the pan acts as a cover for the heater.

8. The combination of a closet seat adapted to be depressed, a tilting pan below said seat for receiving the excreta, a heater below said pan, means for turning the pan upside down upon a rise of said seat, whereby the heat from the heater acts

directly upon the side of the pan which receives the excreta, means for energizing the heater upon a rise of said seat, and means for automatically deenergizing said heater, said heater comprising electrodes for forming an arc to burn or consume the excreta.

9. In a closet, the combination of a body portion, a seat hinged to said body, a heater in operative relation thereto for heating the excreta, and a cover adapted when closed to extend over said seat with its edges fitting closely said body portion to prevent the escape of obnoxious gases from the closet.

10. In a closet, the combination of a body portion, a heater below said seat for heating the excreta, a seat normally elevated above said body, and a hinged cover adapted when closed to extend over said seat with its edges fitting closely said body portion to prevent the escape of obnoxious gases from the closet.

11. In a closet, the combination of a body portion, a movable seat, a heater below said seat for heating the excreta, means cooperating with said seat whereby the movement of said seat renders operative said heater, and a hinged cover adapted when closed to extend over said seat with its edges fitting closely said body portion to prevent the escape of obnoxious gases from the closet, said body portion having a vent passage leading from the space between the heater and seat.

12. In a closet, the combination of a body portion, a movable seat, a heater in operative relation thereto for heating the excreta, means cooperating with said seat whereby the movement of said seat renders operative said heater, and a cover having a rubber strip about its edges so that it is adapted when closed to extend over said seat with its edges fitting closely said body

portion to prevent the escape of obnoxious gases from the closet.

13. In a closet, the combination of a seat, an electric heater below said seat for receiving excreta, said heater comprising electrodes for forming an electric arc for burning the excreta, and means for turning on the current to said electrodes upon one leaving the seat.

14. In a closet, the combination of a seat, an electric heater below said seat for receiving excreta, said electric heater comprising electrodes for forming an electric arc for burning the excreta, a tilting pan for receiving the excreta and discharging it to said heater, and means operated by the movement of the pan to discharge the excreta for turning on the current to said electrodes.

15. In a closet, the combination of a seat and an electric heater below said seat for receiving excreta, said heater comprising electrodes for forming an arc to burn the excreta, a tilting pan for receiving the excreta and discharging it to said heater, and means depending upon said pan for controlling the flow of current to said heater.

16. In a closet, the combination of a seat, an electric heater below said seat and comprising electrodes for forming an arc to burn the excreta, a receiving member for excreta between said seat and heater adapted to discharge said excreta on to said heater, and means controlled by the discharge of said receiving member for controlling the flow of current in said heater.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ALEXANDER McGARY.

Witnesses:

GORHAM CROSBY,
JOHN P. SUNDERLAND.