C. R. BLAKE.

SANITARY CAR TOILET.

APPLICATION FILED JAN. 31, 1910.

966,158. Patented Aug. 2, 1910.

Fig. 1.

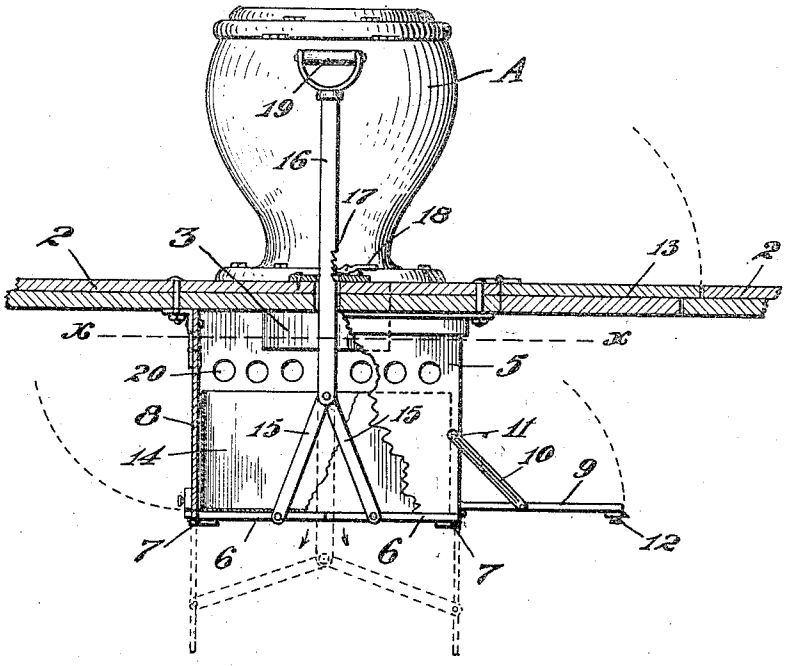
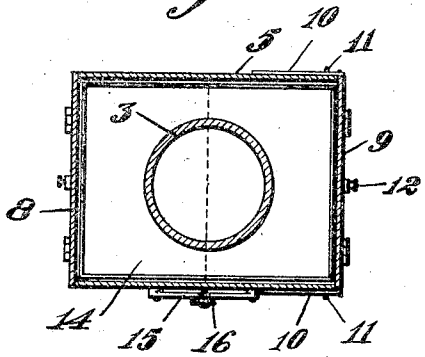


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES R. BLAKE, OF RICHMOND, CALIFORNIA.

SANITARY CAR-TOILET.

968,158 Specification of Letters Patent. Patented Aug. 2, 1910.

Application filed January 31, 1910. Serial No. 541,015.

To all whom it may concern:

Be it known that I, CHARLES R. BLAKE, a citizen of the United States, residing at Richmond, in the county of Contra Costa and State of California, have invented new and useful Improvements in Sanitary Car-Toilets, of which the following is a specification.

This invention relates to commodes, and is designed as an attachment to passenger car toilets and the like.

It is the object of this invention to provide a sanitary means for the collection and disposal of excremental matter, etc., in passenger car toilets, and which permits of the toilet being used during a stoppage of the car at depots or other points.

A further object is to provide an attachment to car toilets having means by which the feces may be delivered to a sewer, cesspool, or other suitable manner of disposition, thus obviating the unsanitary and disagreeable method now generally in use of distributing the excreta along the roadbed and at the side of the railway tracks.

Another object is to provide a device of this character having means for preventing the rise of noxious exhalations and fetid odors into the interior of the toilet compartment, and in which all parts are readily accessible for cleansing with antiseptics so as to render it absolutely sanitary.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is an elevational view of the invention with parts broken away. Fig. 2 is a horizontal section on the line X—X, Fig. 1.

In the drawings, A represents the ordinary toilet bowl and seat mounted on the floor 2 of a passenger coach or the like.

3 is the tubular discharge portion of the bowl A which extends beneath the floor 2.

The invention resides in attaching a box or compartment 5 to the under side of the floor 2 beneath the outlet 3 of the toilet A, the bottom of the compartment 5 being formed of a pair of drop-doors 6 oppositely hinged at 7 to the sides of the compartment 5 and adapted to swing downward in the direction of the arrows, Fig. 1. One side of the compartment 5, or the side which is outermost or adjacent to the side of the car, is provided with an upwardly swinging door 8 which is provided with suitable hinges and catches. The opposite side of the compartment has a door 9 which is hinged at the bottom, so as to swing outward and downward, as shown in Fig. 1; the downward movement of the door 9 being limited by the slotted bar 10 and pin 11, or any other suitable means commonly employed for such purposes, a snap-catch 12 being provided to latch the door 9 in a closed position.

A trap-door 13 is built in the floor 2 of the passenger coach, approximately above the door 9 when in its extended position, so that the door 9 may be opened or closed, and a receptacle 14 placed in or removed from the compartment 5 from within the interior of the toilet room.

The receptacle 14 is intended to be destroyed, and is preferably constructed of cheap waterproof material, such as oiled or paraffined paper, and may also be coated or otherwise provided with suitable deodorizing and disinfecting substances in any desired manner.

The drop-doors 6 are manipulated and normally retained in a closed or horizontal position by means of links 15 which connect one side of each door 6 to a vertically disposed rod 16 which extends upward through the floor 2, and is provided with ratchet teeth 17 adapted to be engaged by a pawl 18, or other suitable catch device for retaining the rod 16 in its uppermost position, shown in Fig. 1. The upper end of the rod 16 may have a handle 19 by means of which an attendant may readily grip the rod 16 to open or close the bottom hinged sections or doors 6; the base of the hand-hold 19 also serving as a stop to limit the downward movement of the rods 16 when released from the pawl 18.

The compartment 5 is provided on opposite sides with ventilating holes 20 which are disposed above the upper edge of the receiver 14 and below the discharge opening 3 of the bowl A, so that a current of air may pass between the extended portion 4 of the bowl and the receptacle 14.

The operation of the invention is as follows: The bottom or drop-doors 6 being closed, as shown in Fig. 1, the rod 16 being in its uppermost position and engaged by the pawl 18, the receptacle 14 is placed within the compartment through either door 9

when the car is standing still, or through door 8 when the car is in motion; the trap-door 13 being opened to give access thereto from the interior of the toilet room. The doors 8 and 9 are then closed and latched, the receptacle 14 resting on the drop-doors 6 and in position below the bowl.

When it becomes necessary or desirable to remove the receptacle 14, it may be accomplished while the car is in motion, by releasing the pawl 18 out of engagement with the bar 16, whereupon the drop-doors 6 will open downward into the position shown in dotted lines, thus permitting the receptacle and its contents to be discharged from the compartment 5. The attendant then closes the drop-doors 6 by lifting up the rod 16 by the hand-hold 19 until the pawl 18 reëngages with the ratchet teeth 17. A new receptacle is then placed in the compartment 5, as before described.

If it is desired, the receptacle may be removed from the compartment 5 through the doorway 8 when the car is stationary, and where it would be objectionable to discharge it through the doors 6, as before mentioned. However, it is obvious that suitable connections may be made from beneath the compartment 5 to a sewer or cesspool where the car stops at a station.

The receptacle or receptacles 14 are made of such size as to nearly contact the sides of the compartment 5, so that there will be no bulging and consequent possibility of bursting.

The essential purpose of this invention is that it renders the car toilet accessible at all times to car passengers, no matter whether the train is standing at a station or not, and that the consequent use is without offense to the public in and about the station, or in contravention of any municipal ordinances.

The receptacle 14 is a receptacle of suitable size so that it will only need to be removed at some convenient time, when the train is traversing an unoccupied or sparsely settled section of the country, or when the train is stopped and the doors 6 stand directly over a sewer, cesspool, or the like.

The device is absolutely sanitary and it can easily be kept so since all parts are readily accessible and can be easily cleaned with antiseptics, if necessary, or easily flushed out with hot water.

Discharging the receptacle 14 or putting in a new one is an easy matter and can be done no matter at what rate of speed the train is traveling.

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

1. The combination with a toilet-seat, of a normally closed compartment therebeneath, said compartment having hinged sides and bottom, means independent of the seat for opening and closing the bottom of said compartment, and a receptacle or box within the compartment and adapted to be discharged therefrom when the bottom is opened.

2. In a car, the combination with the toilet-seat thereof, of a compartment situated beneath the car and seat, said compartment having oppositely acting hinged door sections forming a bottom therefor, and said compartments having a movable side affording ingress to the compartment when the sections are closed, and means for opening and closing said sections from inside the car.

3. In a car, the combination with the toilet-seat thereof, of a compartment situated beneath the car and seat, said compartment having oppositely acting hinged door sections forming a bottom therefor, and said compartments having a movable side affording ingress to the compartment when the sections are closed, and means for opening and closing said sections from inside the car, said last-named means including a rack-bar having downwardly divergent link connections with the sections, and a catch engageable with the rack on said bar to hold the sections closed.

4. In a car, the combination with the toilet-seat thereof, of a compartment situated beneath the car and seat, said compartment having oppositely acting hinged door sections forming a bottom therefor, means for opening and closing said sections from inside the car, said sections having hinged sides, means by which one of said sides may be opened from within the car, and a removable receptacle insertible into the compartment through said hinged side.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES R. BLAKE.

Witnesses:
B. H. GRIFFINS,
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