

(No Model.)

2 Sheets—Sheet 2.

D. H. MURPHY.
COMMODE.

No. 479,897.

Patented Aug. 2, 1892.

Fig. 3

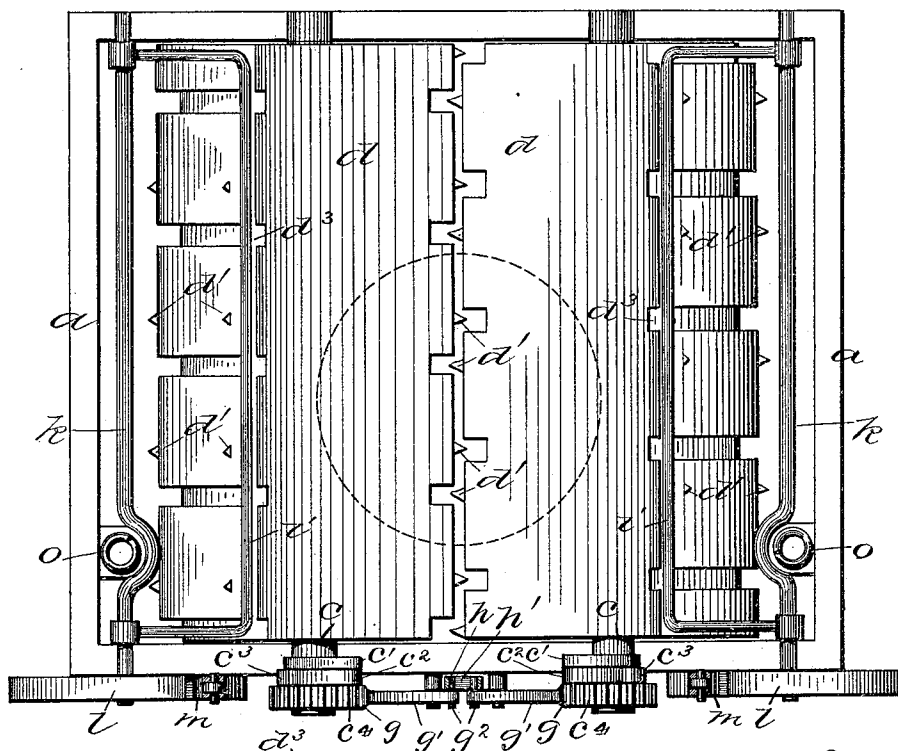


Fig. 4

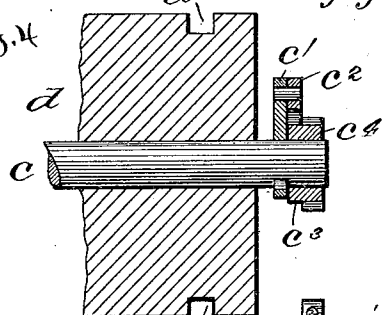


Fig. 5

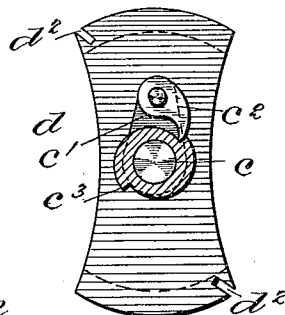
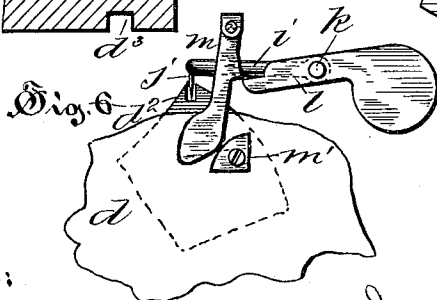


Fig. 6



Witnesses:
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Att'y.

UNITED STATES PATENT OFFICE.

DANIEL H. MURPHY, OF HARTFORD, CONNECTICUT.

COMMODOE.

SPECIFICATION forming part of Letters Patent No. 479,897, dated August 2, 1892.

Application filed May 25, 1891. Serial No. 393,944. (No model.)

To all whom it may concern:

Be it known that I, DANIEL H. MURPHY, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Commodes, of which the following is a full, clear, and exact specification.

The invention relates to the class of commodes or dry closets, more particularly adapted for railway-cars, which are sealed at all times to prevent the entrance of dust and dirtladen drafts of air through the closet and the diffusion through the compartment in which the commode is located of effluvia and fetid odors from the dregs deposited in the closet.

The object of my invention is to provide a cheaply-constructed device having simple mechanism which is liable not to become disarranged or damaged, for furnishing a new lining for the interior after the use, whereby the commode without constant cleaning is kept fresh, adding greatly to the comfort and convenience of the users and the occupants of the cars.

Referring to the accompanying drawings, Figure 1 is a front elevation with the casing cut away to show the interior with the seat raised as in its normal position. Fig. 2 is a similar view showing the seat depressed as when the closet is in use. Fig. 3 is a plan view of the closet with the seat cut away. Fig. 4 is a detail sectional view of one of the feed-rolls and its shaft. Fig. 5 is a detail end view of the same. Fig. 6 is a detail view illustrating the position of the knife when severing the lining.

In the views the letter *a* indicates a casing constructed of any suitable material of the desired shape, with a seat *b* hinged to the back. On shafts *c*, preferably extending from front to rear of this casing below the seat, are supported feed-rolls *d*, so located as to close the opening through the commode. A portion of the periphery of these rolls *d*, which form a rotary bottom for the commode, is usually cut away or hollowed out, while a portion is formed on the arc of a circle. The circular portion is provided with teeth *d'*, adapted to grasp the lining material *e*, which is wound upon rolls *f*, that in the form shown are

loosely supported by bearings formed on the sides of the casing below the feed-rolls, and of course these rolls may be located outside of the casing in the closet adjacent to the commode, if desired. To the shafts *c* are secured leaves *c'*, bearing spring-pawls *c''*, that engage with the teeth on the ratchets *c'''*, secured to the pinions *c''''*, that are mounted loosely upon the shafts. In mesh with these pinions are segmental gears *g*, cut on the end of the levers *g'*, pivoted to the casing. In the construction shown the ends of these levers are connected by pins *g''*, that project into the slot *h'* with a slide *h* that is attached to the under side of the seat.

Supported by rods *i*, adjacent to the surface of each of the feed-rolls, are knives *j*, adapted to reciprocate toward and from the rolls to sever the lining material at the proper moment. These rods *i* are secured to shafts *k*, to which are secured levers *l*, having one end weighted or provided with an equivalent means for normally holding those ends downward, while the opposite ends are adapted to engage teeth on the trips *m*, that are hinged to the seat. Blocks *m'* are so located upon the casing in the path of the trips that the teeth are withdrawn from contact with the levers *l* at the desired moment when they descend with the seat. The knives *j* may be made plain blades, or the cutting-edge may be made saw-toothed, and to insure the severing of the lining material they may be made to reciprocate into longitudinal grooves *d''* in the periphery of the feed-rolls, which also have peripheral grooves *d'''* to allow the passage of the teeth that project from the rolls when the rolls are revolved. Thin metal guards *n* may be secured to the casing to protect the rolls of lining material, and the upper edges of these guards may be turned so as to very nearly come in contact with the periphery of the feed-rolls as they revolve to remove any of the lining material that should accidentally adhere to the surface of the rolls.

The seat is normally lifted a slight distance by means of springs *o*, or by weights, if desired, and the ends of the lining material, which may be thin cheap paper or a similar material, are thrust upon the teeth projecting from the feed-rolls, which are returned so that the sealing material covers the rolls and lines the

interior. When the seat is depressed by the weight of a person, the slide descends, causing the levers and racks to rotate the ratchet-pinions one-half a revolution freely, so that the
 5 pawls slide over the teeth to the proper position, which on the return movement of the levers and pinions will turn the feed-rolls one-half of a revolution in the opposite direction. At the same time when the seat is depressed
 10 the trips oscillate the weighted levers, so that the knives move toward the rolls and sever lengths of the lining material, and when the trips come in contact with the blocks and are thrown out of engagement with the levers the
 15 weights retract the knives from the rolls. When the weight is taken from the seat and it is free to rise, the lifting of the slide oscillates the levers and the racks, which drive the pinions and cause the feed-rolls to make one-half
 20 a revolution, as above described, allowing the severed portions of the lining material upon which the deposit has been made to pass between them and escape through the bottom of the closet, while a fresh lining is carried over
 25 the interior to receive the next deposit. The opening through the commode is always closed by the feed-rolls which form the bottom, and upon each revolution after use a fresh lining is brought over the bottom, so that no drafts
 30 of air can enter through the closet and bring dust, dirt, and offensive odors into the compartment.

I claim as my invention—

1. The combination, with a rotary receiver,

of a destructible lining passing over said receiver, and a knife for severing a portion of the lining before each rotation of the receiver, substantially as specified. 35

2. The combination, with a movable seat, of a receiver rotated by the movement of the seat, a destructible lining passing over said receiver, and a knife for severing a portion of the lining before each rotation of the receiver, substantially as specified. 40

3. The combination, with a movable seat, of a receiver connected with and rotated by the movement of the seat, a destructible lining passing from each side over the receiver, and a knife for severing a portion of the lining before each rotation of the receiver, substantially as specified. 45 50

4. A commode having a bottom formed of two rolls, a destructible lining passing over each of the rolls, and knives for severing portions of the lining before each movement of the rolls, substantially as specified. 55

5. A commode having a movable seat, a bottom formed in two parts connected with the seat, a destructible lining passing from each side over the parts, and knives connected with the seat for severing portions of the lining at each movement of the seat, substantially as specified. 60

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Witnesses:

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