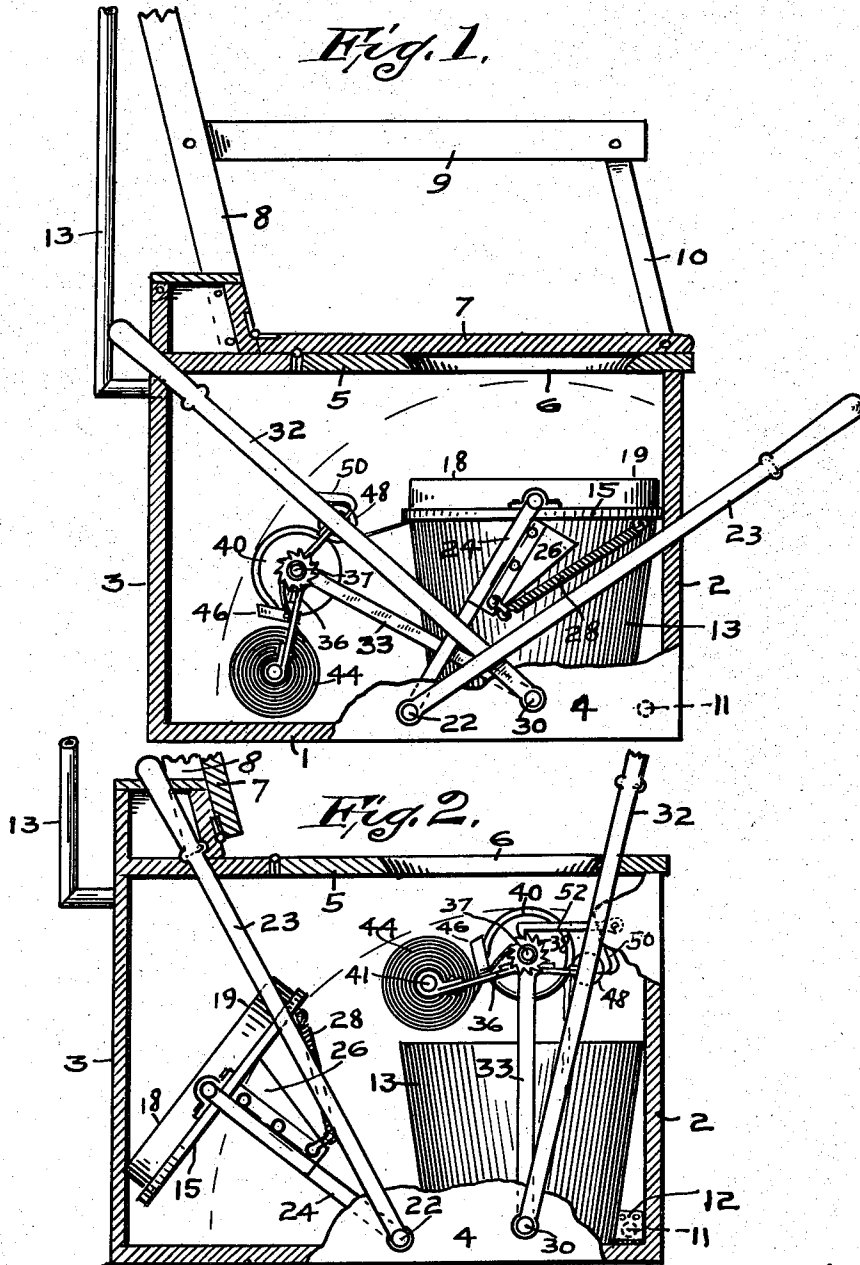


J. W. HULL, SR.
 COMMODE.
 APPLICATION FILED JULY 19, 1909.

1,019,154.

Patented Mar. 5, 1912.

3 SHEETS—SHEET 1.



Witnesses;

B. C. Miller.

F. C. Dyner.

Inventor,

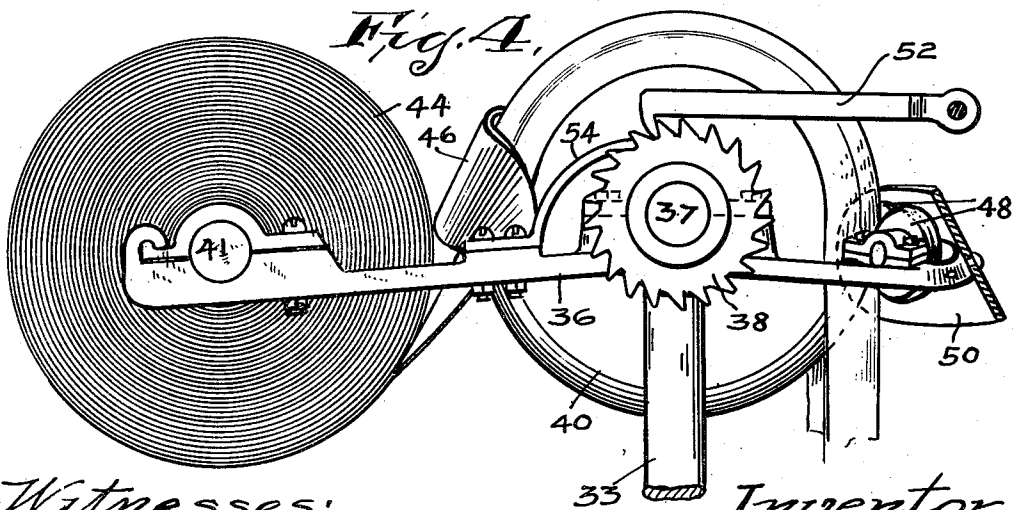
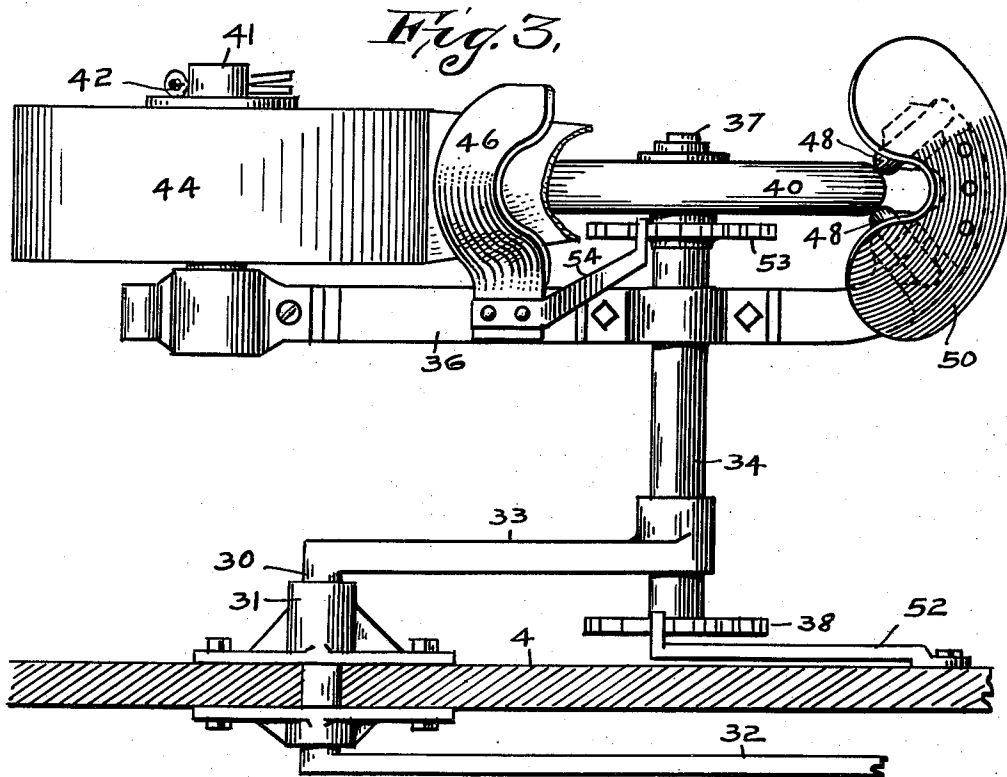
John W. Hull Sr.

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3 SHEETS—SHEET 2.



Witnesses;
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1,019,154.

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3 SHEETS—SHEET 3.

Fig. 5.

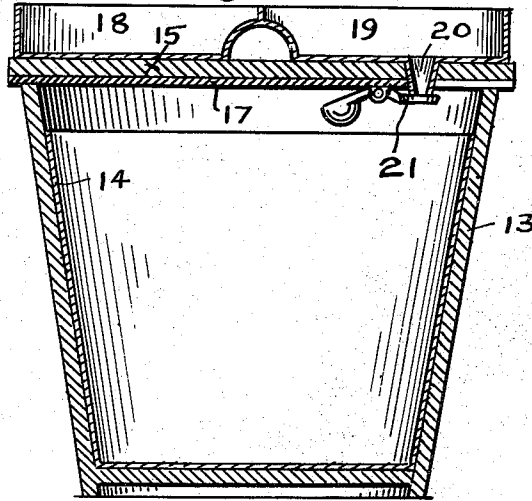
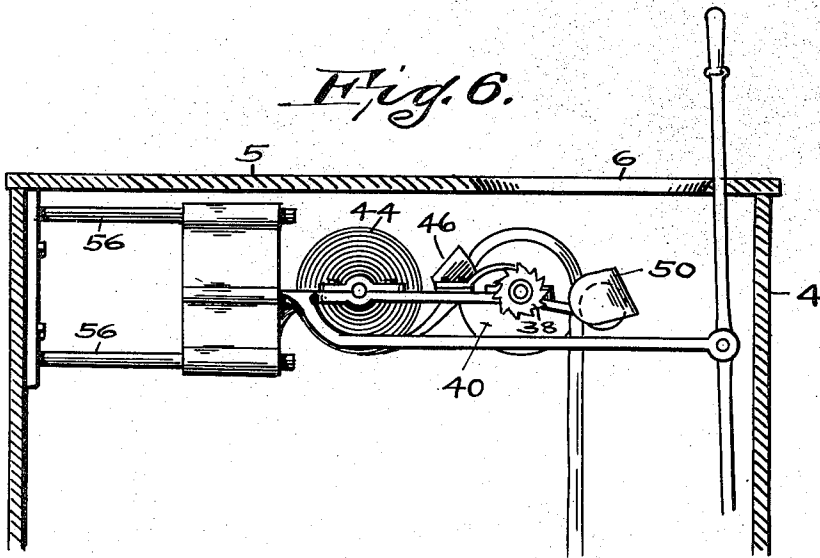


Fig. 6.



Witnesses;
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Inventor,
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UNITED STATES PATENT OFFICE.

JOHN W. HULL, SR., OF ZION CITY, ILLINOIS.

COMMODOE.

1,019,154.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed July 19, 1909. Serial No. 508,382.

To all whom it may concern:

Be it known that I, JOHN W. HULL, Sr., a citizen of the United States, residing at Zion City, in the county of Lake and State of Illinois, have invented certain new and useful Improvements in Commodes, of which the following is the specification.

This invention relates to improvements in commodes for convenient use in urinating and evacuating the bowels, and the object is to provide such a device with a receptacle that may be conveniently opened and closed while the user is on the seat in order thereby to prevent the escape of odors into the room. Second, to provide means for thoroughly ventilating the commode. Third, to guard against accidents should the user forget to remove the lid of the vessel. Fourth, to provide means for keeping the receptacle sanitary and clean. Fifth, to provide clean, comfortable and sanitary mechanism for cleansing the anus after the feces are discharged. Sixth, to provide a simple, inexpensive, durable, inoffensive and acceptable device for the purposes intended, which will be a boon to many afflicted and unfortunate people who unaided are now incapable of properly caring for themselves.

I accomplish the objects of my invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1, is a view in side elevation and partial vertical section of my invention showing the receptacle with its cover on and the paper roll and cleansing wheel thrown back into inoperative position. Fig. 2, is a like view showing the cover removed from the receptacle, and paper roll and cleansing wheel in operative position above the receptacle. Fig. 3, is a detail on a larger scale, in top plan view, of the paper roll and cleansing wheel and their supporting frame and associated parts. Fig. 4, is a view in side elevation and partial vertical section of said paper roll and wheel and associated parts. Fig. 5 is a detail in vertical section of the receptacle to catch the refuse, and Fig. 6, is a vertical section of a modified form of my invention.

Like characters of reference indicate like parts throughout the several views of the drawings.

1 is the bottom of the commode, 2 the front, 3 the back and 4 the sides. The top of the commode-box is covered and this

cover is provided with a hinged seat 5 having the usual seat-opening 6.

7 is a hinged lid which is connected by the link-bar 10 with the arm 9. The arm 9 is pivotally secured to the back 8.

By the above construction, when the arms 9 are raised or lowered the lid 7 will be correspondingly raised or lowered. A hole 11 through one of the sides 4 near its lower front corner admits air to the bottom of the commode-box. Exit through this hole is prevented by a leather flap 12, and compels the air in the commode to discharge through a pipe 13 leading out through the back 3. This pipe will discharge outside of the room in any desired manner.

A receptacle or bucket 13, of any suitable size and material is placed below the opening 6 in seat 5, for the usual purpose in articles of this character. For sanitary reasons and for ready cleansing, the receptacle will be provided with a paper lining 14, preferably waterproof, which may be removed after each use and burned, the inexpensive character of this lining making it practicable to destroy the old and substitute a new one after each use.

15 is a lid (see Figs. 1, 2 and 5) with which the receptacle 13 is covered at all times except when in actual use as a catch-basin, and it will preferably be provided with an under-side layer of rubber or other suitable material 17 which will aid in making a tight joint between the lid and top of the bucket. A pan will be provided on the top of the lid 15, preferably divided into two compartments 18 and 19, for the purpose of catching ordure or urin, respectively, should the user of the commode forget to remove the lid before attempting to attend to the wants of nature. A drain from the compartment 19, into the bucket, is provided through a hole 20, which drain is automatically closed by a weighted valve 21. The means for removing and replacing the lid is as follows: A rock-shaft 22 is mounted in the side 4 of the commode and is rocked by means of a lever 23 which extends up within reach of the occupant of the seat 5. The inner end of the rock-shaft has an arm 24 rigidly attached to it and to the upper end of the arm 24 the lid 15 is pivotally secured or hinged. The arm 24 has a lateral bracket 26 which forms a stop to limit the downward movement on that

side of the arm of the lid 15, and the lid is drawn constantly toward the bracket by an elastic tie, here shown as the compression spring 28. Fig. 1, of the drawings, shows the lid on the bucket and Fig. 2 shows the lid off.

I will now describe my mechanism for removing all traces of adherent alimentary refuse or feces, the essentials of which operation is a plentiful supply of clean paper and means for applying same with a rubbing pressure to the parts to be cleaned. A rock-shaft 30 (see Fig. 3) passes through the side 4 of the commode and is supported in suitable bearings 31. The outer end of the rock-shaft is provided with a hand lever 32. An arm 33 is rigidly secured to the inner end of the rock-shaft and at the upper end of this arm is a rigid sleeve 34 to which is rigidly secured a frame 36. Revolvably mounted in the sleeve 34 is a shaft 37. A ratchet wheel 38 is mounted on the outer end of the shaft 37, and mounted on the inner end of the shaft is a cleansing wheel 40, of wood or other suitable material, having a round face as shown, which best adapts it to readily reach the parts of the person to be cleansed. The frame 36 carries a stub-shaft 41 on which a sleeve or spool carrying a ribbon of thin paper in a roll 44 is placed. This is readily accomplished by removing the pin 42 and slipping the roll on over the free end of the shaft 41. The paper ribbon from roll 44 is drawn over the top of the wheel 40, in the manner clearly shown in Figs. 1, 2 and 4, and is deposited without being disconnected from the roll, into the underlying bucket 13. A shield and guide of strap metal 46 is fastened to the frame 36 and extends across the cleansing wheel 40 above the ribbon of paper. The shield is curved in a manner to bend the paper down on each side of the wheel 40, and at the same time it serves as a protection or shield to prevent the entanglement or tearing of the paper where the latter comes off the roll. A pair of obliquely set wheels or rollers 48 bear against the front periphery of the wheel 40 and hold the paper in its bent condition on said wheel. There is sufficient space between the two wheels 48 and between the wheel 40 and the adjacent portion of frame 36 to allow foreign matter on the paper to pass without contact. A curved and upwardly oblique plate 50 is fastened to the frame 36 in front of the wheels 48 to protect those parts of the person using the apparatus from injury by being caught between the cleaner wheel 40 and the small wheels or rollers 48. A pawl 52 is pivotally secured to the inside of the wall 4 of the commode, and the end of the pawl is bent as shown in Fig. 3 so as to cross the path of the ratchet wheel 38 when the cleaning mechanism described in this paragraph is

oscillated by means of the handle-lever 32. This causes the ratchet wheel 38 to be moved forward at each forward stroke of the lever 32, thereby rotating its shaft and the cleaner wheel 40. The friction between the wheel 40 and the rollers 48 causes the paper to be fed forward at each movement of the wheel 40 thereby bringing fresh clean paper into position for use at every stroke. A backward movement of the wheel 40 is prevented by ratchet wheel 53 mounted on the hub of wheel 40, and pawl 54 carried by the frame 36.

The cleansing operation is accomplished by swinging the lever 32 back and forth as many times as is desired, and it is believed that the drawings illustrate the invention so clearly that further explanation is unnecessary.

In the modification shown in Fig. 6, the cleaner, instead of having an oscillatory travel as above described, travels with a reciprocatory movement in a horizontal path controlled by the guide-bars 56.

While I have shown and described the preferred embodiment of my invention it will be understood that I do not wish to be limited to the precise construction herein set forth, since various changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus fully described my invention, what I claim as new and wish to secure by Letters Patent of the United States, is—

1. A commode-box, a receptacle in said box, a lid for said receptacle, a rock shaft extending through a side of the box, an arm from the inner end of the shaft to which the lid is hinged, said arm having a stop to limit the swinging movement of the lid in that direction, a spring to force the lid toward said stop, and a hand lever connected on the outside of the box with said shaft.

2. In a commode, a receptacle, a frame having a to and fro travel over said receptacle, means including a hand lever terminating outside of the commode for imparting to and fro movement to said frame, a wheel mounted on said frame, a pair of oblique rollers contacting with the periphery of said wheel, a roll of paper carried by said frame, the paper from said roll being carried over the periphery of said wheel and between said wheel and the two oblique rollers, and means for imparting a forward rotary movement to said wheel.

3. In a commode, a receptacle, a frame having a to and fro movement above said receptacle, a wheel mounted on said frame said wheel having a half-round periphery, a paper roll mounted on said frame, a pair of oblique rollers mounted on said frame and contacting with said wheel on the oppo-

site side of the latter from the paper roll, the paper from said roll passing over the wheel and between it and the two oblique rollers, means for intermittently moving
5 said wheel in a forward rotary direction, a shield between the paper roll and wheel above the paper passing to the wheel and a shield above the two oblique rollers.

4. The combination with a commode-box,
10 of a receptacle located therein, a rock shaft mounted in the side of the box and passing transversely therethrough, a hand lever on the outer end of the shaft, an arm on the inner end of the shaft terminating above
15 the top of said vessel, a frame carried by the upper end of said arm, a wheel having a half-round periphery mounted in said frame, a pair of oblique friction rollers mounted on the frame and contacting with

the periphery of the wheel, a shield above 20 said oblique rollers, a paper roll mounted on the frame on the opposite side of the wheel from said oblique rollers, a guide and shield between the paper roll and wheel, a ratchet wheel on the same shaft on which 25 the first wheel is mounted, a pawl carried by the commode-box and adapted to engage the ratchet wheel, and means to prevent the first wheel from rotating in a backward direction. 30

In witness whereof, I have hereunto set my hand at Zion City, Illinois, this 9th day of July, 1909.

JOHN W. HULL, Sr.

Witnesses:

JACOB GAMERDINGER,
WM. WITTE.