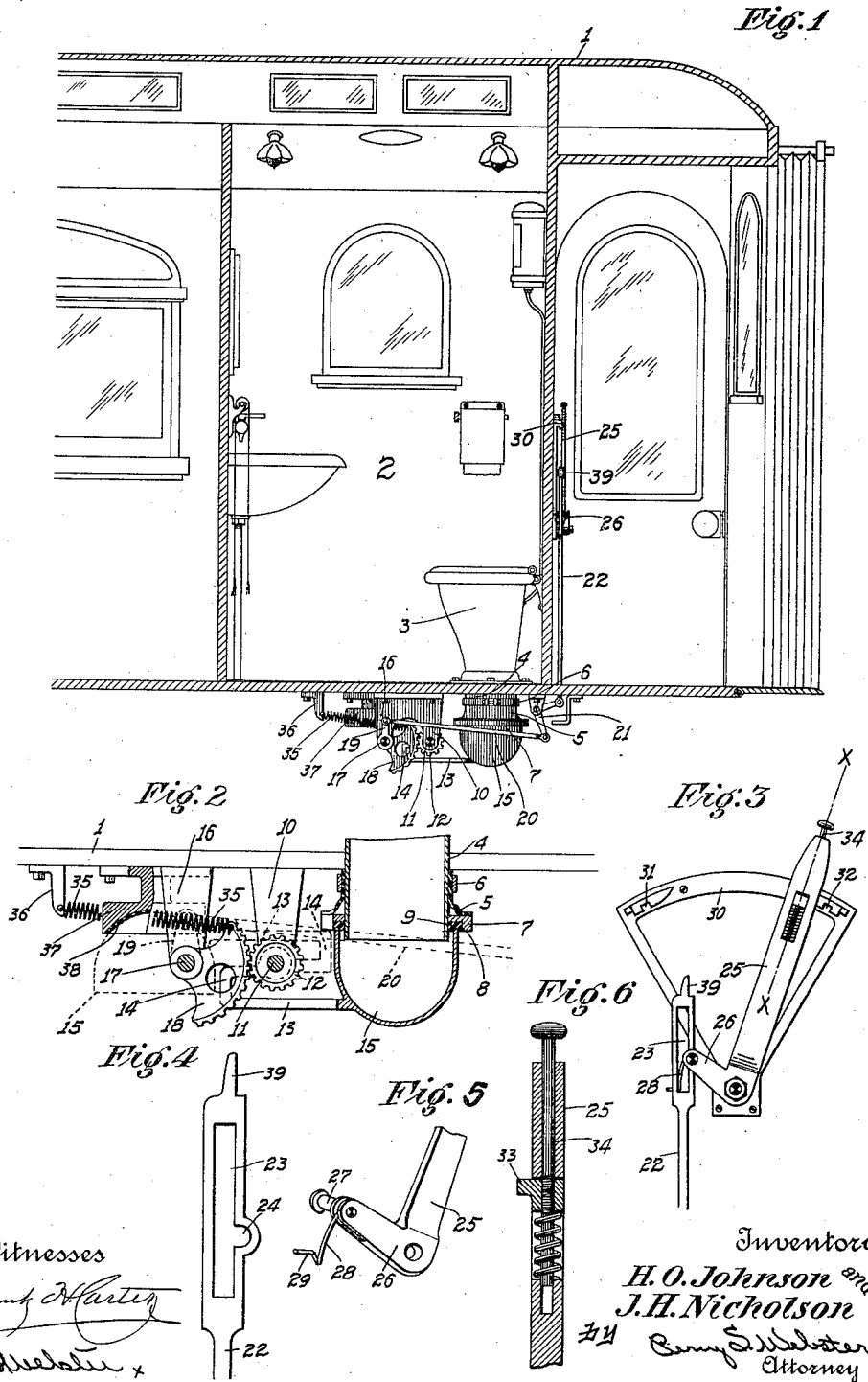


H. O. JOHNSON & J. H. NICHOLSON.
RAILWAY TOILET.

APPLICATION FILED FEB. 12, 1912.

1,030,782.

Patented June 25, 1912.



UNITED STATES PATENT OFFICE.

HANS O. JOHNSON AND JAMES H. NICHOLSON, OF SACRAMENTO, CALIFORNIA.

RAILWAY-TOILET.

1,030,782.

Specification of Letters Patent.

Patented June 25, 1912.

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To all whom it may concern:

Be it known that we, HANS O. JOHNSON, a citizen of the United States, and JAMES H. NICHOLSON, a subject to Great Britain, both residing at Sacramento, in the county of Sacramento, State of California, have invented certain new and useful Improvements in Railway-Toilets; and we do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in railway equipment and particularly to Pullman cars and day coaches equipped with toilets, the object of the invention being to produce a means whereby the outlet from the commode of said toilets may be closed when the train is in a station, which closure may be readily opened when the train pulls out of the station such opening means being operated in such a manner as to cause the deposits in said closure to be effectually emptied from said closure.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purposes for which it is designed.

These objects, we accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a sectional view of the toilet of a Pullman car showing our improved structure installed therein. Fig. 2 is a sectional view of the outlet and the commode of the toilet showing our improved closure connected therewith. Fig. 3 is a side elevation of an operating lever. Fig. 4 is a side elevation of a slotted guide. Fig. 5 is a fragmentary view of the operating lever. Fig. 6 is a sectional view taken on a line X—X of Fig. 3.

Referring now more particularly to the characters of reference on the drawings, 1 designates a Pullman car and 2 the toilet therein provided with the usual commode 3 having an outlet 4 and a flexible rubber sleeve 5 which is clamped in position by

means of a clamping ring 6. Suspended on the sleeve 5 is a collar 7 surrounding the outlet member 4 such collar being provided with an inner recess 8 in which is disposed a rubber washer 9. On a bracket 10 secured underneath the car 1 is a shaft 11 carrying a gear wheel 12. An arm 13 has an elbow 14 secured to said shaft 11, such arm 12 carrying on its free end a bowl 15 adapted to fit over the outlet 4 and impinge against the washer 9 to make a tight joint.

The numeral 16 designates a bracket underneath the car 1 in which is journaled a shaft 17 carrying a geared quadrant 18 which engages the gear 12. On the outer end of the shaft 17 is a crank 19 connected by a link 20 with a bell crank 21 having an upwardly projecting connected rod 22 having a slot 23 in its upper end and a recess 24 opening from said slot 23.

The numeral 25 designates a lever having a projecting arm 26 provided with a pin 27 slidably mounted in the slot 23 and being capable of engagement with the recess 24 there being a spring 28 secured to the member 26 and bearing against the side of the slot 23 by means of a bent portion 29. The lever 25 is movable over a quadrant 30 having two fixed notches 31 and 32 adapted to be engaged by a lug 33 on a spring pressed pin 34 movable through the top of the sleeve 25 as shown in Figs. 3 and 7.

The numeral 35 designates a spring connected with the upper end of the quadrant 18 and fixed to an independent bracket 36 underneath the car 1.

The numeral 37 designates a stop member having an inner padding 38 to receive the bottom of the bowl 15 when the thereafter described operation takes place.

In practice when a station is reached and it is desired to close the outlet 4 the lever 25 is moved to engage the lug 33 with the notch 31. In this position the pin 27 is in the recess 24 and then when the lever 35 is pulled to that position in which the lug 33 is in the notch 32 it pulls the lever 22, the bell crank 21, link 20 and the lever 19 to turn the quadrant 18. This operation turns the gear wheel 12 and carries the elbow 14 and bar 13 to carry the bowl 15 to close over the outlet 4 as shown in Figs. 1 and 2. This then permits the toilet to be used while the train is in a station without the necessity of locking the toilet doors as is the case at the present time. Then after the train pulls

out of the station any member of the train crew may press a finger member 39 on the top of the lever 22 which disengages the pin 27 from the recess 24 and the spring 35 then
 5 pulls all the parts in the reverse direction which throws the bowl 15 back into the stop member 37 and against the padding 38 and the impact of this throws the deposit from
 10 the bowl 15 upon the ground. Then when the bowl 15 is to be closed again the above operation as described is then repeated. The member 20 may be a link as shown, or may be a chain or cable or in fact any mechanical expedient desired.

15 From the foregoing description it will be readily seen that we have produced such a device as substantially fulfils the objects of the invention as set forth herein.

20 While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention.

25 Having thus described our invention what we claim as new and useful and desire to secure by Letters Patent is:—

30 1. A device of the character described comprising the combination with a railway toilet having an outlet, of a flexible sleeve secured around the lower end of said outlet, a weighted collar on the lower end of said sleeve, a washer in said collar, a bowl adapted to fit over the lower end of said outlet
 35 and engage said washer and means for moving said bowl away from or toward said outlet, as described.

40 2. A device of the character described comprising the combination with a railway toilet having an outlet, of a bowl adapted to fit over said outlet, an arm on said bowl, a shaft fixed independently of said bowl and

being connected with said arm, a gear wheel on said shaft, another shaft fixed independently of said first named shaft, a geared
 45 quadrant mounted on said second named shaft and engaging said gear wheel, a resilient means connected between said quadrant and a point independent of said quadrant and a lever mechanism connected with
 50 said second named shaft to move said quadrant, as described.

3. A device of the character described comprising the combination with a railway toilet having an outlet, of a bowl adapted
 55 to fit over said outlet, an arm on said bowl, a shaft fixed independently of said bowl and being connected with said arm, a gear wheel on said shaft, another shaft fixed independently of said first named shaft, a geared
 60 quadrant mounted on said second named shaft and engaging said gear wheel, a resilient means connected between said quadrant and a point independent of said quadrant, a lever mechanism connected with said second
 65 named shaft to move said quadrant, such lever mechanism comprising a crank on said shaft, a bell crank fixed independently of said lever, a link connecting said bell crank and said crank, a rod on said bell
 70 crank, said rod being provided with a slot in its upper end and a recess opening into said slot, a lever fixed independently of said rod, a spring pressed arm on said lever, such arm being provided with a
 75 pin movable in said slot and adapted to fit into said recess, as described.

In testimony whereof we affix our signatures in presence of two witnesses.

HANS O. JOHNSON.

JAMES H. NICHOLSON.

Witnesses:

JOSHUA R. WEBSTER,

PERCY S. WEBSTER.