No. 765,643. PATENTED JULY 19, 1904.

W. C. TREGONING.

ATTACHMENT FOR WATER CLOSET SEATS.

APPLICATION FILED FEB. 10, 1904.

NO MODEL.

Fig. 1.

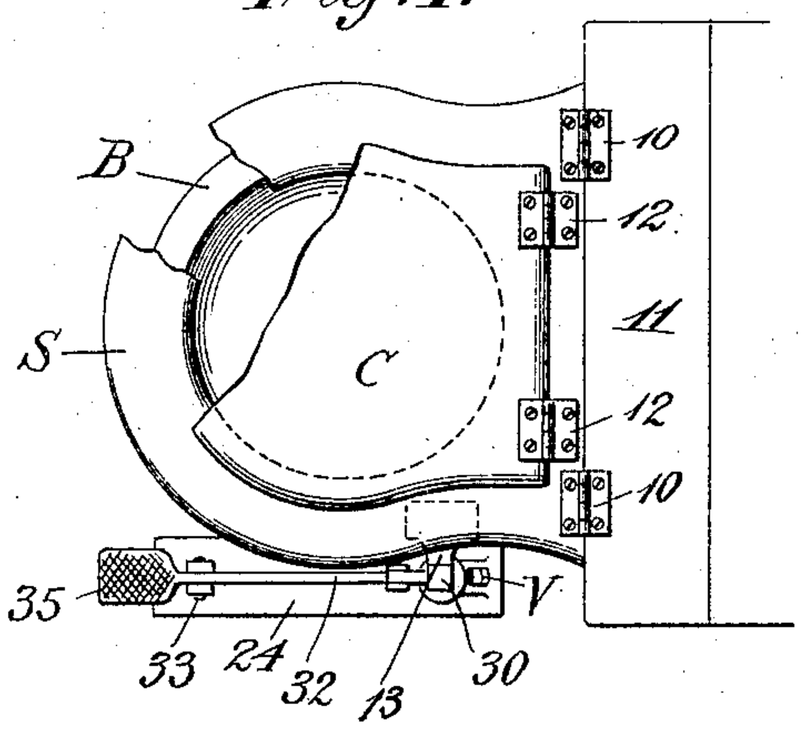


Fig. 2.

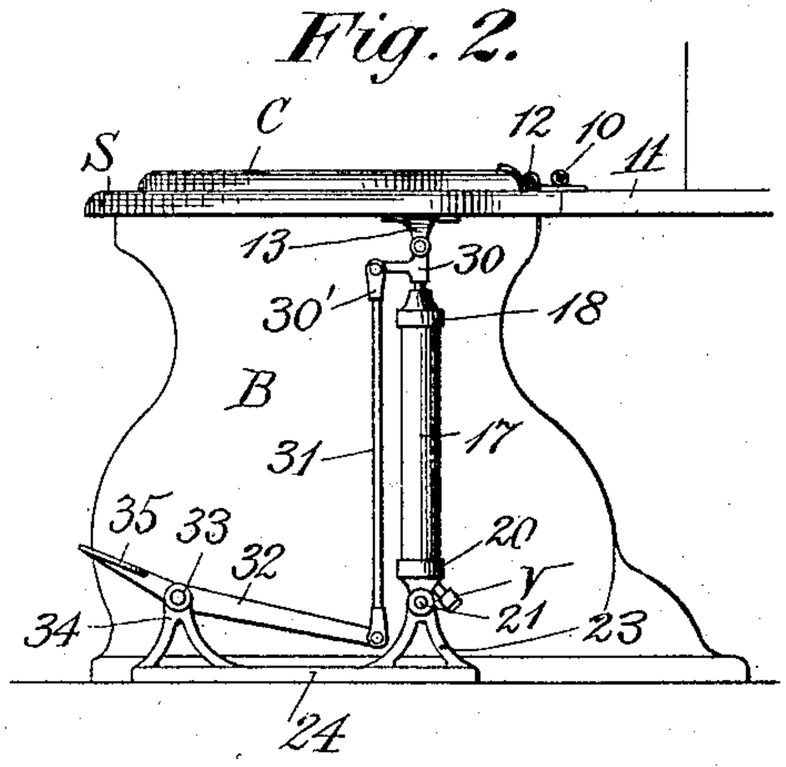


Fig. 3.

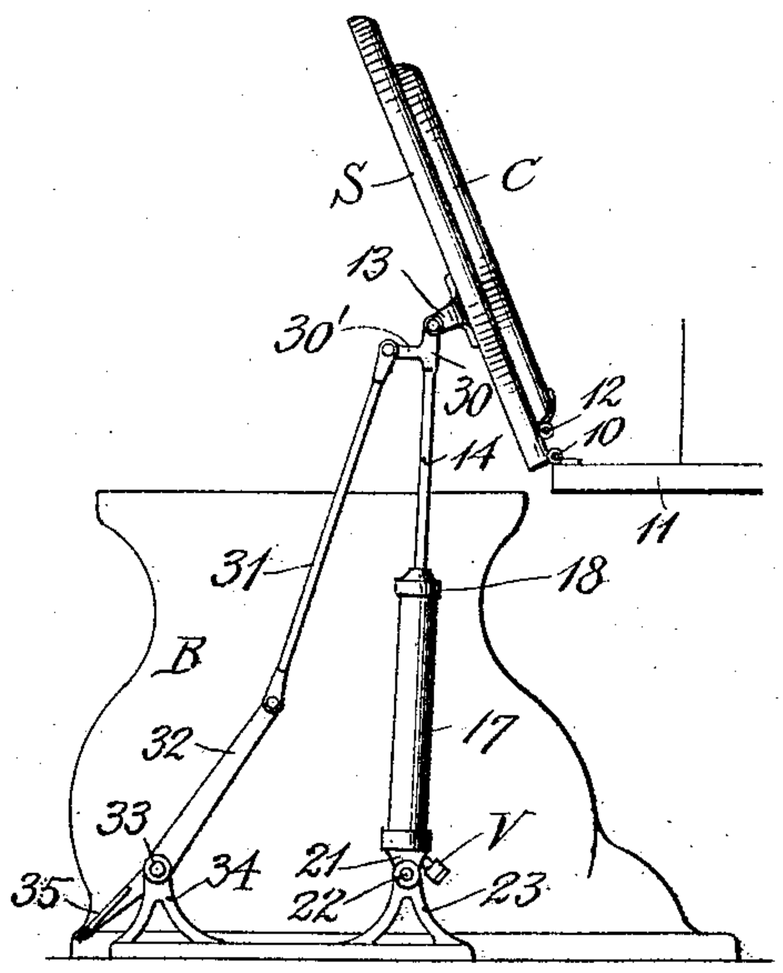
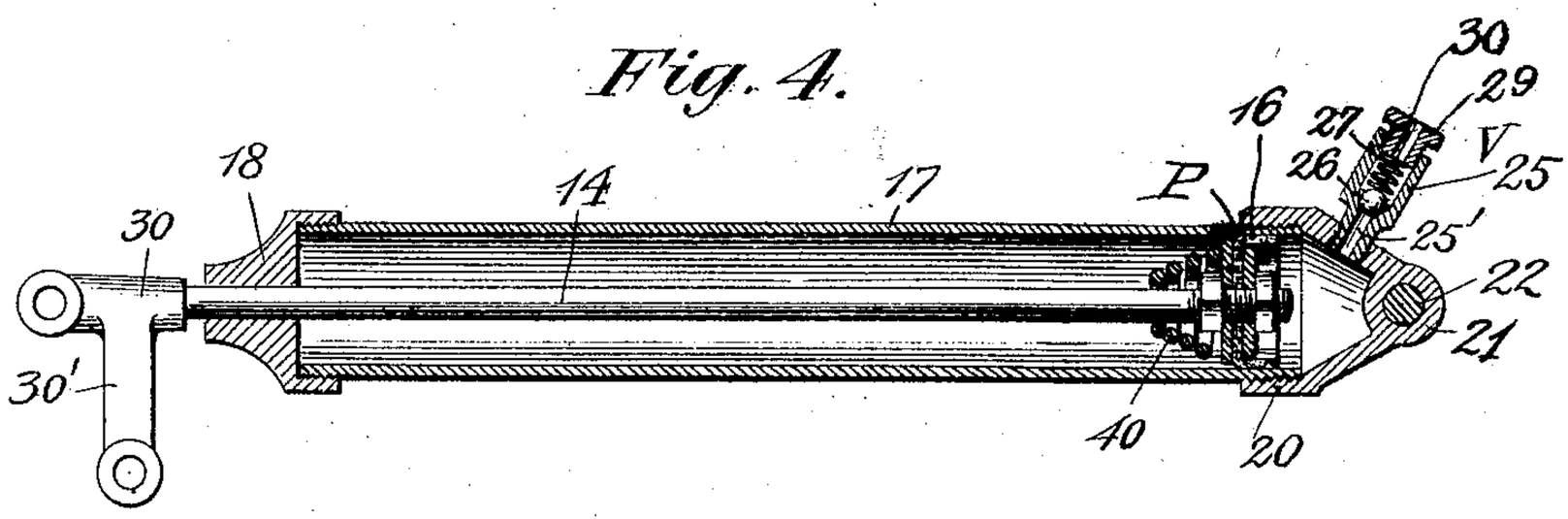


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM C. TREGONING, OF HARTFORD, CONNECTICUT.

ATTACHMENT FOR WATER-CLOSET SEATS.

SPECIFICATION forming part of Letters Patent No. 765,643, dated July 19, 1904.

Application filed February 10, 1904. Serial No. 192,933. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. TREGONING, a citizen of the United States, and a resident of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Attachments for Water-Closet Seats, of which the following is a full, clear, and exact specification.

This invention relates to attachments for water-closet bowls comprising a seat and a cover therefor, the latter being pivotally held on the former; and it has for one of its objects the provision of a foot-operated mechanism for raising the seat, and with it the cover, thus leaving the top of the bowl open and practically converting said bowl into a urinal.

My invention has, furthermore, for its object the improved organization of the seat-raising mechanism, which includes a foot-lever and a linkage whereby after the seat has once been raised a slight foot-pressure will be sufficient to maintain the seat in its raised position.

My invention has, furthermore, for its object the combination, with the seat, of a check whereby the descent of the same may be regulated as desired, so as to avoid undue slamming, and consequently prevent breakage.

Further objects of my invention will be apparent hereinafter and pointed out in the claims.

In the accompanying drawings, in which similar characters denote similar parts, Figure 1 is a top view of a water-closet bowl embodying my invention. Fig. 2 is a side view thereof. Fig. 3 is a view similar to Fig. 2, illustrating the seat in its raised position; and Fig. 4 is a central longitudinal section of the check.

As above stated, my invention has for its primary object the provision of a foot-operated mechanism for raising the seat, so as to convert the bowl substantially into a urinal without the necessity of stooping over and manipulating the seat by hand.

In many toilet-rooms the covers and seats are arranged to drop by gravity, so that they must be held up by hand, and inasmuch as this circumstance is an objectionable feature on account of sanitary conditions, especially in public places, the advantage of a foot-operated device is self-evident.

It may be stated at this time that my invention is applicable to the cover and seat of any ordinary bowl without rendering it necessary to make any changes and also that my device may be cheaply and easily attached.

In the drawings, B denotes a bowl of ordinary construction and generally made of porcelain. The seat S is supported by the upper rim of the bowl and may be pivoted, as at 10, to the flush-board 11, while the cover C in turn is hinged or pivoted, as at 12, on the seat S. Secured to the under side of the seat S is a bracket 13, pivotally supporting the butt-end 30 of a rod 14, which carries at its lower end a piston P, comprising a cup-leather 16. This piston is guided in a tube or cylinder 17, provided at its upper end with a cap 18, in which the rod 14 is guided for straight-line movement in the cylinder and which serves to limit the upward movement of said rod when operated by foot, as will be hereinafter described. The lower end of the cylinder is secured in a cap 20, having an ear 21 to receive a pin 22, which constitutes a fulcrum or pivot for the cylinder 17, as its upper end is guided by the bracket 13, swinging around the hinge 10, above mentioned. The pin 22 is preferably carried by a lug 23, projecting upward from a floor bracket or base 24. The piston P and cylinder 17 form a device for checking and controlling the descent or downward swing of the seat, as desired and in a manner commensurate with its weight and resultant force.

In order to regulate the rapidity of the descent of the seat, I provide in the lower cylinder-cap 20 a vent V in a screw-threaded engagement therewith and comprising a body portion 25, having a passage 25′, adapted to be closed by a valve preferably in the form of a sphere 26, forced against the valve-seat 27 by a spring 28, the tension of which may be regulated by a screw-plug 29, which is provided with an aperture 30 to permit the escape of air passing the valve 26 when the piston P descends.

The mechanism for raising the seat is connected in the present instance with the piston-

rod 14, the butt-end 30 having an extension 30′, which is connected by a link 31 with a foot-lever 32, pivoted intermediate its ends, as at 33, on a post 34, extending upwardly from the base 24, above described.

By referring to Fig. 3 it will be seen that when the foot-lever 32 is depressed the rear end thereof rises and, in connection with the link 31, assumes the function of a toggle-lever age, so that a very slight foot-pressure suffices to maintain the seat S in elevated position, and in order to avoid breakage of any of the parts when the seat is thrown upward by the pressure of the foot on the treadle-pad 35 I deem it expedient to employ a spring 40 between the piston 15 and the cap 18 to serve as a buffer and cushion for the piston-rod, as will be readily understood.

Many changes may be made in the construction of the several elements without departing from the spirit of my invention.

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

1. In combination with the base, bowl, seat and cover of a water-closet, an attachment therefor adapted to simultaneously elevate the seat and cover, comprising a supporting member provided with a pair of brackets thereon mounted upon the base, a foot-lever pivotally mounted upon one of said brackets, a cylinder pivoted upon the other bracket, a piston mounted therein secured to the seat for checking the descent thereof, and a link pivotally connected to the lever and to the piston whereby the seat and cover may be raised simultaneously.

2. In a device of the character set forth, the combination with a base, of a bowl, a seat and cover carried thereby, and an attachment for simultaneously raising the seat and cover, comprising a cylinder pivotally mounted on the base, a piston vertically movable therein, means carried by the upper end of the piston pivotally secured to the seat, a link pivotally secured to said means, and a foot-lever secured to the link whereby the seat and cover may be raised.

3. An attachment for water-closet seats comprising a supporting member having a pair of brackets thereon adapted to be placed adjacent the base of the closet-seat, a pivoted foot-lever carried by one bracket, a link secured to the lever, a cylinder pivotally mounted upon the other bracket of the supporting member, a piston reciprocating therein, means mounted at the upper end thereof pivotally secured to the seat and having a pivotal connection with said link.

4. In an attachment for water-closet seats, the combination with a supporting member, oppositely-disposed brackets carried thereby, an air-cylinder having an adjustable pressure-regulating valve therein pivotally mounted on one of said brackets, a foot-lever pivoted upon the other bracket, a lever pivotally secured thereto, a vertically-reciprocating piston carried within the cylinder, a member having an outwardly-extending portion, mounted at the upper end of the piston, pivotally connected with the seat, and said link being pivotally secured to the outwardly-extending portion of said member.

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