

A. KLEIN.
ATTACHMENT FOR WATER CLOSET SEATS.
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1,308,596.

Patented July 1, 1919.

Fig. 2.

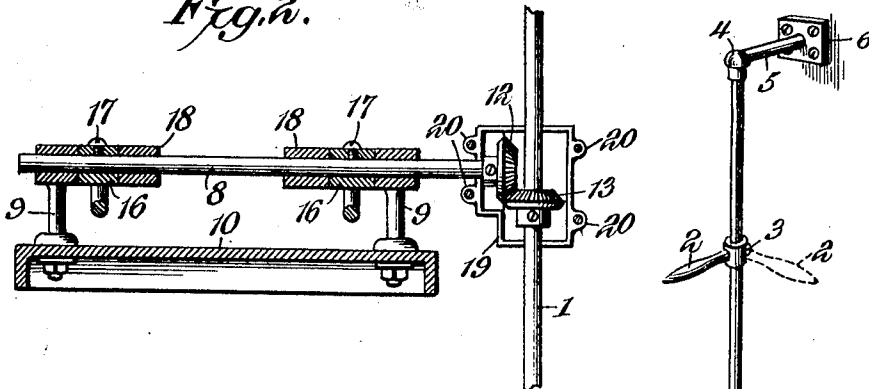


Fig. 3.

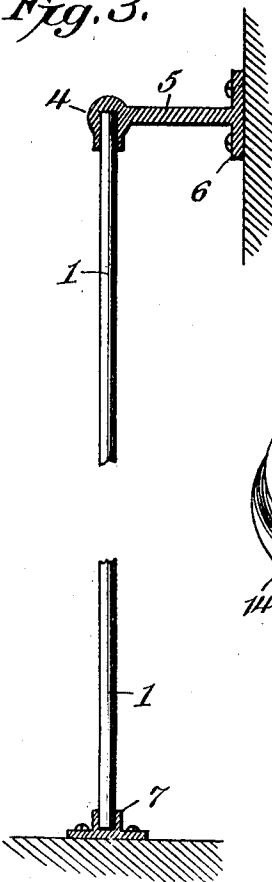
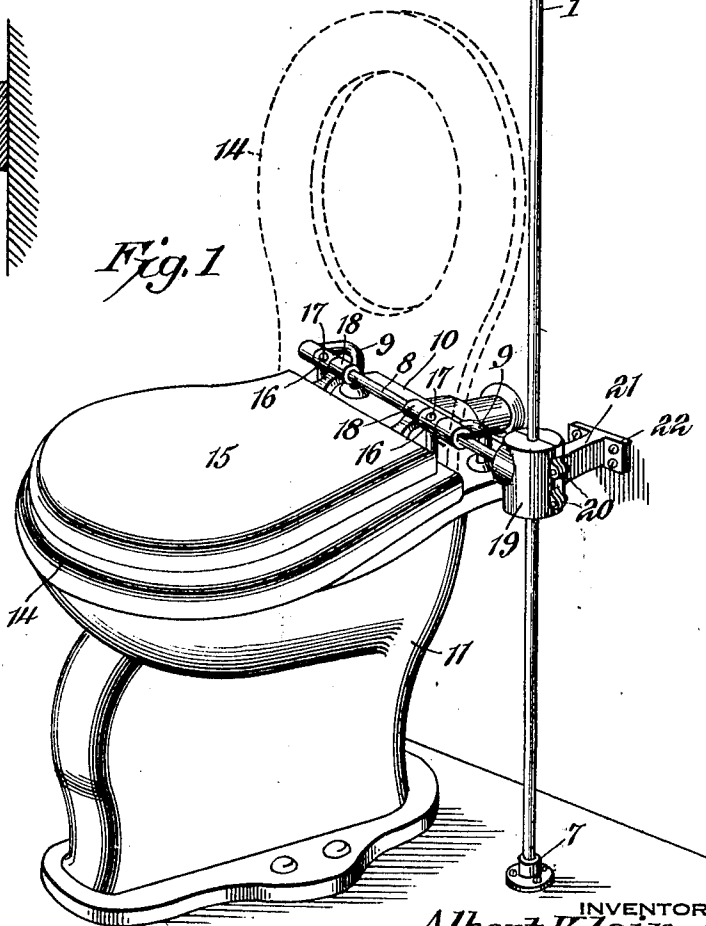


Fig. 1.



WITNESSES

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ATTACHMENT FOR WATER-CLOSET SEATS.

1,308,596.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT KLEIN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful attachment for Water-Closet Seats, of which the following is a specification.

This invention relates to attachments for water closet seats and the object is to provide means for manually raising or lowering the lid and seat without the necessity of taking hold of the same by the hand.

Another object is to provide operating means for the purpose which may be easily installed in connection with water closet seats already in use and which occupy a minimum amount of space at one side and to the rear of the seat in such position as to be within easy reach of an operator who may, by a simple movement of the hand, raise the seat of a water closet and at the same time, the lid thereof, which by reason of being placed above the said seat will automatically be lifted also, or lowered, as desired.

A full and complete understanding of the invention may be obtained from a consideration of the following detailed description taken in connection with the accompanying drawing forming a part of this specification; it being understood that while the drawing shows a practical form of the invention, the latter is not confined to strict conformity therewith, but may be changed or modified, so long as such changes or modifications mark no material departure from the salient features of the invention, as specifically pointed out in the appended claims.

In the drawing, in which similar reference characters designate corresponding parts throughout the several figures:—

Figure 1 is a perspective view of a water closet of ordinary construction having the improved operating means applied thereto and showing the seat thereof in raised position in dotted lines.

Fig. 2 is a detail horizontal sectional view taken through the rear portion of the water closet and showing the manner of hinging the seat and lid and the means for operating the same.

Fig. 3 is a detail vertical sectional view illustrating the manner of mounting the actuating bar for operating the seat and lid.

The device of the present invention is de-

signed primarily for use in department stores and houses, office buildings, public comfort stations and in any and all toilets in crowded places where many careless and unscrupulous persons are free to use the same and often totally ignore all rules of cleanliness and sanitation, although it is to be understood that the device may be found of equal advantage for use in private toilets and has been constructed with a view to its ready installation in connection with water closets already in use.

In the first mentioned class of toilets especially, it is possible to dispense with the use of ordinary urinals which are expensive to install and maintain, occupy a considerable amount of space and are often objectionable and unsanitary, the present device being calculated to operate the seats and lids of closets so that the latter may be used in the manner suggested.

To this end the device includes a vertically disposed operating shaft 1 of a length to extend from the floor to a point sufficiently above the elevated lid and seat of a water closet to permit of the attachment of an operating handle 2 in a position to be readily grasped by the hand of the operator. The handle 2 is provided with a collar surrounding the shaft 1 and adapted to be held in any desired adjustment by a set screw 3 thus enabling the same to be elevated or lowered upon the shaft.

The upper end of the shaft has a bearing in an inverted socket 4 carried by an arm 5 which is connected to an attaching plate 6 having suitable apertures for the reception of screws which are adapted to secure the same to the wall behind the closet, while the lower end of the said shaft 1 is mounted in a step bearing 7, suitably secured to the floor in vertical alinement with the socket 4, so that the shaft 1 is held against lateral displacement and permitted to freely rotate through the medium of the operating handle 2.

The socket 4, by reason of the exact length of the arm 5 and likewise the bearing 7 are both spaced a sufficient distance from the rear wall to position the shaft 1 in alinement with the hinge pintle 8 which is suitably mounted in the upwardly and forwardly extending posts 9 carried by the rear portion 10 of the water closet bowl 11, in the usual manner. The hinge pintle 8, in the present instance, is extended beyond

the bearing eye of the post 9 located adjacent to the shaft 1 and is adapted to have secured to the end thereof, as through the medium of a suitable set screw, a beveled pinion 12 in meshing relation with a similar pinion 13 mounted on the vertical shaft 1 and adapted to be rotated thereby, when the said shaft is actuated.

As illustrated in the drawing, the bowl 11 is equipped with a seat 14 formed in the usual manner and a lid 15 therefor, which are adapted to be raised or lowered simultaneously when operated by the handle 2, though it is to be understood that where it is desired to use the bowl as a seat and as a urinal, the lid 15 may be dispensed with and the device operated to raise the seat alone, as indicated in dotted lines in Fig. 1 of the drawing. In either event the seat is provided with the hinge eyes 16 secured to the said seat in the usual manner and adapted to fit between the eyes of the posts 9 and to be traversed by the hinge pintle 8, to which they are securely held by set screws 17 which insures the raising or lowering of the seat 14 when the said pintle is rotated.

The hinge eyes 18 of the lid 15 are loosely mounted upon the pintle 8 and fit between the eyes 16 of the seat 14 in the usual manner and it will be seen that the lid 15 may be readily raised or lowered by hand without disturbing the seat but when the device is actuated by the handle 2 the seat will act to lift the lid also, when the bowl may be used as a urinal without the necessity of taking hold of either by hand.

A gear casing 19 composed of equal sections surrounds the pinions 12 and 13 and is adapted to prevent the accidental engagement of the same with the clothing of a person, said casing being provided with appropriate apertures for the reception of the shaft 1 and the pintle 8 and having matching ears 20 for the reception of screws to hold the said sections together and an arm 21 extending from one of the sections and provided with an attaching plate 22 fitting against the wall and adapted to be secured thereto, as by screws, in vertical alinement with the aforesaid attaching plate 6, thus acting as an intermediate brace or stiffening means for the actuating shaft 1 in addition to supporting the gear casing 19.

From the foregoing it will be seen that a simple means has been devised for actuating the seats of water closets whereby the necessity for touching the same by hand is obviated and that the said means may be readily installed for use in connection with closets already in use without any alteration being necessary thereto and that the device is located in an out-of-the-way position, though within easy reach of the operator, the mechanism being of such a simple character as to be manufactured, sold and installed at a minimum cost and when once properly adjusted will not become deranged.

What is claimed is:—

1. In combination with a water-closet including a hinged seat, an attachment comprising a vertical rotary shaft having an actuating handle, a floor socket forming a bearing for the lower end thereof, a socket structure engaging the upper end of the shaft and including an arm extending from an attaching plate adapted to be secured to a wall, a bevel gear secured to the shaft intermediate of its ends and adjacent to the hinge-pintle of said seat, said pintle being extended on the side opposite the shaft and fast to the seat, and a bevel gear secured on said extension and in meshing relation with the first named gear to raise or lower the seat upon a manipulation of the actuating handle.

2. An attachment for water closets, comprising a vertically disposed shaft, upper and lower socket members adapted to be mounted on the wall and floor respectively adjacent to the bowl of the closet said sockets forming bearings for said shaft, an actuating handle secured to the shaft, a bevel gear mounted on the shaft in operative relation to the hinge-pintle of the water closet seat, said pintle being fast to the seat and extended toward the shaft, a bevel gear mounted on said extension and meshing with the first-named gear, and a casing inclosing the gears and attachable to the wall to shield the gears and brace said shaft.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

ALBERT KLEIN.

Witnesses:

OTTO GREENBERGER,
GERTRUDE JOHN.