

(No Model.)

A. C. TIEDEMANN.
SUPPORT FOR WATER CLOSET SEATS.

No. 543,952.

Patented Aug. 6, 1895.

FIG. 1.

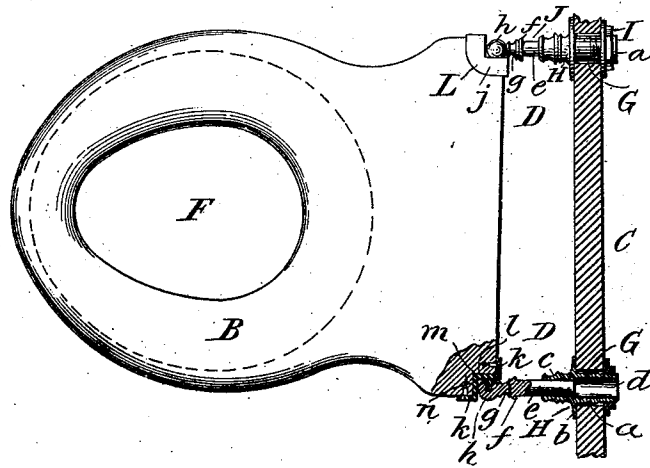


FIG. 2.

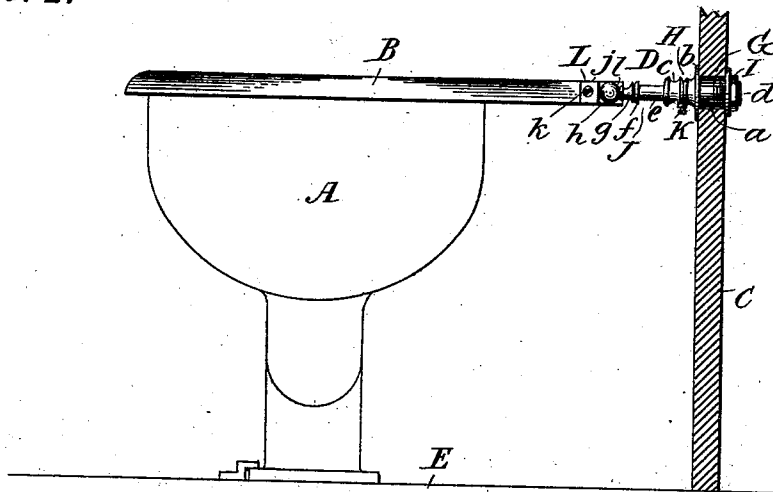


FIG. 3.

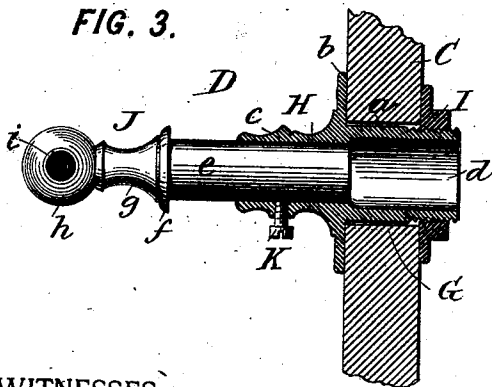
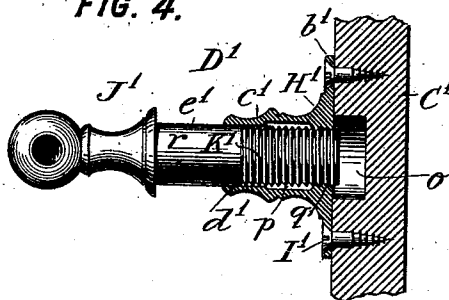


FIG. 4.



INVENTOR

WITNESSES:
John A. Rennie,
Fred White

Adolf C. Tiedemann,
By his Attorneys,
Arthur C. Orason & Co.

UNITED STATES PATENT OFFICE.

ADOLF C. TIEDEMANN, OF NEW YORK, N. Y.

SUPPORT FOR WATER-CLOSET SEATS.

SPECIFICATION forming part of Letters Patent No. 543,952, dated August 6, 1895.

Application filed November 30, 1892. Serial No. 453,623. (No model.)

To all whom it may concern:

Be it known that I, ADOLF C. TIEDEMANN, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Supports for Water-Closet Seats, of which the following is a specification.

This invention relates to supports for water-closet seats, and aims to provide a support adapted for attachment to a vertical wall and to maintain the seat on a hinged connection in advance of such wall in such manner that the support will constitute merely a guide for maintaining the position of the seat relatively to the bowl when the seat is down without sustaining a great proportion of the weight on the seat, the latter resting upon the bowl for this purpose and only resting entirely upon the hinge-support when turned up.

The invention aims to provide such a device which can be adjusted with facility to properly locate the seat relatively to its bowl, which will be extremely simple in construction, easy of operation, and ornamental in appearance.

To this end my invention provides certain features of improvement, which will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a plan view of a water-closet seat and its hinge-support, the latter and the wall to which it is attached being partially in horizontal section. Fig. 2 is a side elevation thereof. Fig. 3 is a vertical section showing the preferred form of support for attachment to a marble wall, and Fig. 4 is a similar view showing the preferred construction for attachment to a wooden wall.

Referring to the drawings, let A indicate a water-closet bowl; B, its seat; C, the wall, and D my improved hinge-support as a whole.

The bowl A and seat B may be of any suitable construction. In that shown the bowl is of well-known construction, resting at base on the floor E and extending thence upwardly without other supporting provisions than its own body. The seat B is in general of usual construction, consisting of a single board constructed at front to conform with the contour of the bowl, having the usual aperture F thereover, extending rearwardly from the

bowl toward the wall C and hinged at its rear part to the supports D D. The seat is constructed to rest on or be supported by the top of the bowl, so that no supporting-leg or other framework is necessary between the seat and the floor, thus leaving the space around the bowl entirely free for access and open to a free circulation of air. When the seat is down, its weight is supported by the bowl. When it is swung up past the vertical, its weight is supported by the hinge-supports D, while its upper edge can be tilted against the upper part of the wall C. The wall C, as shown in Figs. 1 to 3, inclusive, is a vertical marble or other slab rising back of the bowl and constructed with apertures G, through which pass the supports D. The latter are clamped to the wall and project forwardly, having at their forward parts a hinge connection with the seat.

According to my invention I provide certain improvements in the supports D and their hinge connection to the seat, whereby the parts are simplified, rendered adjustable to dispose the seat relatively to the bowl to compensate for any irregularities in the direction of the wall or the setting of the bowl, durably constructed, and have an ornamental and similar appearance when relatively adjusted.

According to the preferred form of my invention, as illustrated in Figs. 1 to 3, for use with a marble or similar wall into which screws cannot be conveniently tapped, I construct the support D of two parts relatively adjustable, the one constituting a socket and the other a slide engaging said socket, and the one connected to the seat by a hinge connection and the other rigidly fixed to the wall. Preferably the support is constructed of a tubular socket H, having hollow spud *a* passing through the aperture G in the wall C, terminating at front in a wide projecting flange *b*, adapted to contact with the face of the wall, having external screw-threads at its rear end projecting beyond the back of the wall C and engaged by a nut I, by screwing up which against the back of the wall the spud is drawn through the aperture until the wall is tightly clamped between the flange *b* and the nut I, whereupon the socket H is rigidly fixed in position. At front of the flange *b* the

socket is preferably constructed with a projecting tubular portion *c* externally ornamented. The socket is preferably constructed with a smooth cylindrical bore *d* traversing from front to rear through its portion *c* and spud *a*. The slide preferably consists of a bar *J*, hinged at its forward end to the seat *B*, and extends thence rearwardly into adjustable engagement with the socket *H*. Preferably it is constructed with a cylindrical shank *e*, entering and snugly fitting the bore *d* of the socket *H*, and constructed to be adjustable therein, terminating at its forward end in a collar *f*, in front of which is an ornamental neck *g*, fitting at its other end in a substantially-spherical head *h* having a central recess *i*. The shank *e* is of length sufficient to permit considerable extension of the bar *J* relatively to the socket *H*. In the construction shown in these figures this adjustment is effected by sliding the bar inwardly or outwardly from the socket until the desired position is reached. Any suitable means for locking the parts together in the desired position may be utilized, but I prefer in the construction described to use a screw *K*, which is preferably tapped through the under side of the portion *c* of the socket *H*, whereby it is concealed from view and acts at its inner end against the shank *e* of the bar *J*, whereby upon setting the screw the bar can be clamped relatively to the socket.

The flange *b* and portion *c* of the socket are externally ornamented to correspond with and constructed to symmetrically approach the shank *e* and to correspond with the ornamentation of its shoulder *f* and neck *g*, the shape from the beginning of the neck to the flange *b* being in general of a gradually-increasing size and the fit between the shank and tubular interior of the socket being a close fit, whereby to the ordinary observer the support appears to be a continuous piece of metal without joints. Should the bar *J* of one support be adjusted, say a half an inch farther out than that of the other, by reason of their peculiar contour and corresponding ornamentation the difference in their length will scarcely be noticeable to an ordinary observer.

According to my invention the rear corners of the seat *B* are constructed with right-angle notches, into which fit similarly-notched corner-plates *L*. Preferably these plates have top and bottom flanges *j* set into the top and bottom surfaces of the seat to be flush therewith, end walls *k* engaging, respectively, the side and rear edges of the seat, through which walls are tapped screws engaging the seat for clamping the pieces thereto, and the pieces *L* are constructed with vertical side walls *l*, from which project pivotal studs *m*, which side walls are disposed inwardly from the side edges of the seat a distance substantially equal to the width of the bar *J* and are connected with the outer end walls of the pieces *L* by vertical intervening walls *n*. Prefer-

ably the socket *i*, formed in the head *h* of each support, receives the pivotal stud *m* of the adjacent corner-plate *L* of the seat *B*, the head *h* in doing so entering the notched corner-piece. The engagement between the pins and recesses is a hinge connection, on which the seat can swing relatively to the supports *D*. The main portion of the supports, by reason of the notched corners, is brought within the width of the seat.

In operation the seat *B*, having its corner-pieces *L* fixed in place, is placed on the bowl, whereupon the opposite bars *J J* are connected to it by passing their recessed heads over the pivotal pins of the seat, and the sockets *H*, having been previously clamped into the apertures *G* in the wall *C*, the shanks *e* of the respective bars are passed into the tubular apertures in the sockets until the position of the seat relatively to the bowl is that desired. The bars are then fixed relatively to the sockets by the screws *K*, or in any other equivalent manner, whereupon the seat can be swung toward and from the bowl. Should the seat require further adjustment, the one of the bars which must be moved to give this adjustment will be freed sufficiently to permit its movement within the socket, whereupon the seat can be adjusted, after which the freed bar can be again fixed in position.

It will be seen that my invention provides an improved support for water-closet seats, which can be variously availed of without departing from the essential features of the invention, and that the invention can be modified as circumstances or the judgment of those skilled in the art may dictate without departing from its essential features.

Fig. 4 shows a modification where the support is to be attached to a wall (here lettered *C'*) of wood or other material, to which the support may be affixed from the outside. In this construction the socket (here lettered *H'*) has no rearwardly-extending spud, but its flange (here lettered *b'*) has apertures through which pass wood-screws (lettered *I'*) for clamping the socket to the wall *C'*. The wall is here constructed with a shallow recess *o* at rear of the socket. The socket has the forward ornamental tubular portion, (here lettered *c'*), which in this construction has at front a smooth cylindrical tubular portion (lettered *d'*) rearwardly thereof, an enlarged hollow portion *p*, and rearwardly thereof a contracted screw-threaded portion *q*. The bar (here lettered *J'*) differs only from that heretofore described in that its shank (here lettered *e'*) is constructed at its front portion with a smooth cylindrical portion *r*, closely fitting the cylindrical portion *d'* of the socket, and at rear of this portion *r* the shank is constructed with an external screw-threaded portion *K'*, the screw-threads of which engage the screw-threads of the portion *q* of the socket, whereby, by the rotation of the latter relatively to the bar, or

vice versa, the projection of the bar in front of the socket can be adjusted. The smooth portion *r* of the bar is of sufficient length to meet all requirements of adjustment, so that it is never necessary for the screw *K'* to be visible at the front of the socket *H'*. The screw in this case serves as the provision for locking the parts together. The weight supported by the support is in this instance transmitted through the smooth portion *r* of the bar to the outer portion of the socket. In operating according to this construction, the bars being connected to the seat as before, the sockets are screwed onto the ends of the bars, the seat is put in position, and the sockets adjusted while against the face of the wall until the proper position of the seat is found. Then the sockets are fixed to the wall by their screws *I'*. The recess *o* coincides with the tubular interior of the socket, receiving the inner end of the shank *e'* when the latter is adjusted inwardly.

What I claim is the following-defined novel features and combinations, substantially as hereinbefore specified, namely:

1. A support for water-closet seats consisting of the socket *H* constructed to be attached to a vertical wall, the bar *J* having a pivotal connection for engagement with the seat at its outer end, and adjustably supported by said socket at its other end, and a screw for preventing the displacement of said socket and bar.

2. In supports for water-closet seats, the combination with the seat, of a bar, as *J*, pivotally connected thereto, and a socket, as *H*, constructed to be fixed to a vertical wall, said

bar and socket connected adjustably together, and a screw for preventing their relative movement.

3. A support for water-closet seats consisting of a socket *H*, constructed to be secured to a vertical wall, having a hollow interior, and a forwardly extending portion *c*, in combination with a bar, as *J*, having a pivotal connection for engagement with the seat at its outer end, and having a cylindrical shank *e* entering the hollow interior of said socket, adjustable therein and snugly fitting the interior of said portion *c*, and means for preventing the displacement of said parts.

4. In a support for water-closet seats, the socket *H* and bar *J* adjustably connected together, in combination with the angle plate *L* constructed to embrace the corner of the seat, and having a notched corner constructed to receive the outer end of said bar *J*, said bar and plate constructed with reciprocal interengaging provisions constituting a pivotal connection therebetween.

5. A support for a water closet seat consisting of two members adjustably connected together, the one having a pivotal connection for engagement with the seat and the other constructed to be supported from a wall, and means for locking said members together, for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ADOLF C. TIEDEMANN.

Witnesses:

GEORGE H. FRASER,
CHARLES K. FRASER.