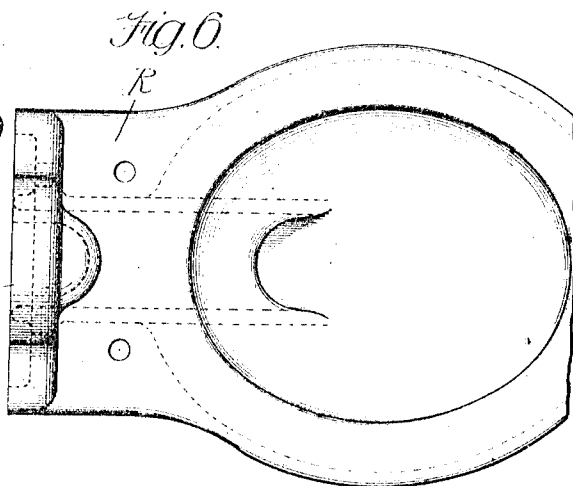
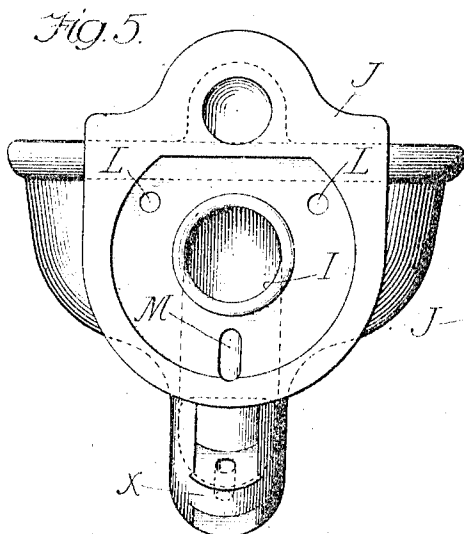
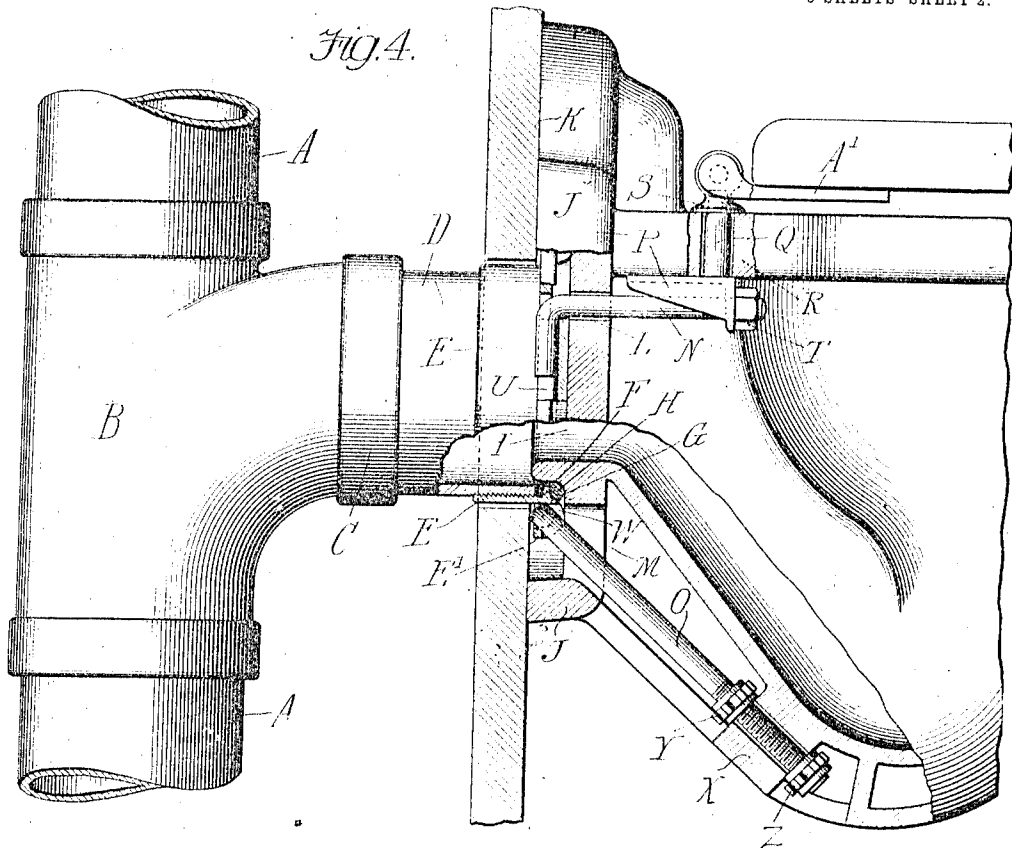


E. G. WATROUS.
SUPPORTING DEVICE FOR WATER CLOSETS.
APPLICATION FILED SEPT. 8, 1911.

1,040,823.

Patented Oct. 8, 1912.
3 SHEETS—SHEET 2.



Witnesses
Martin H. Olsen.
Götrude Ellingen.

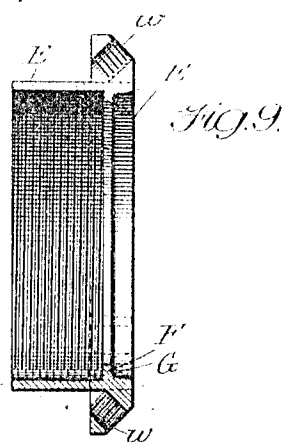
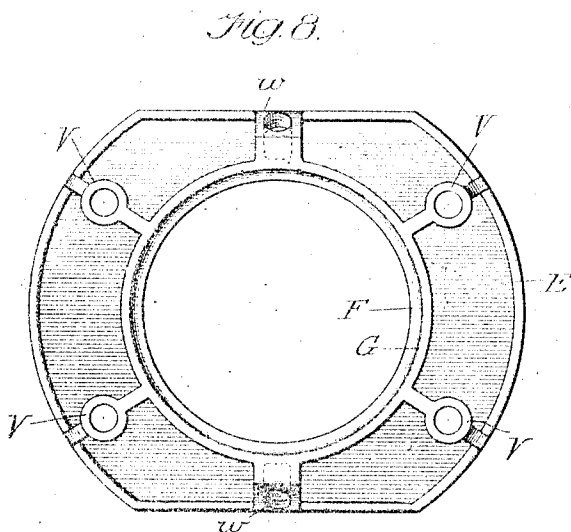
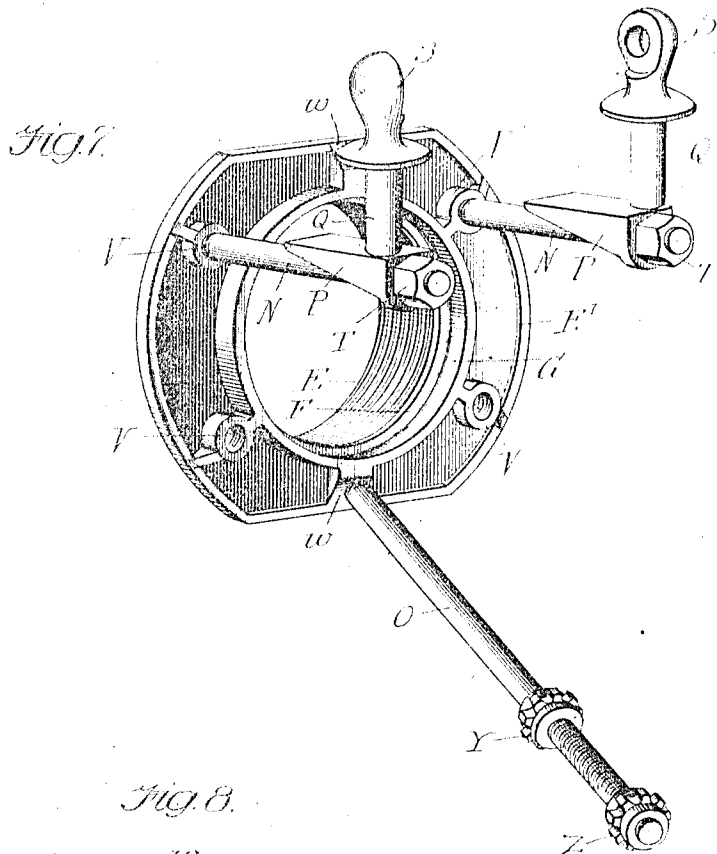
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UNITED STATES PATENT OFFICE.

EARL G. WATROUS, OF CHICAGO, ILLINOIS.

SUPPORTING DEVICE FOR WATER-CLOSETS.

1,040,823.

Specification of Letters Patent.

Patented Oct. 8, 1912.

Application filed September 9, 1911. Serial No. 648,363.

To all whom it may concern:

Be it known that I, EARL G. WATROUS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Supporting Device for Water-Closets, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

My invention has for its object the provision of a simple and efficient device for supporting and securing in position water-closets of the type which have a rearward discharge through the wall to the soil pipe behind the same, and are supported from said pipe and have no support upon the floor.

The novelty of the invention will be hereinafter more fully set forth and particularly pointed out in my claims.

In the accompanying drawings Figure 1 is a perspective view of the parts constituting my novel device, in one of its forms, said parts being assembled together in the position which they occupy in use, but disconnected from a closet; Fig. 2 is a front view of the flanged hub of said device, and Fig. 3 a middle vertical section thereof; Fig. 4 is a side view, partly in elevation and partly in section, of a portion of a water-closet secured in position in front of a wall and supported from a soil pipe behind the same by means of said device, Fig. 5 an elevation of the rear side of the closet shown in Fig. 4, showing the face of the closet which fits against the wall, and Fig. 6 a top plan view of said closet, showing the seat-shelf and the seat post holes therein; Fig. 7 is a perspective view of a modified form of my novel device, showing its parts assembled but disconnected from the closet, as in Fig. 1, while Fig. 8 is an elevation of the front side of the flanged hub thereof, and Fig. 9 a middle vertical section of the same.

The same letters of reference are used to indicate corresponding parts in the several views.

In the form in which it is illustrated in the accompanying drawings, my novel device comprises an internally or externally threaded hub or sleeve, adapted to be secured to and supported by the soil-pipe coincident with the rearward discharge passage of the closet, and having a projecting flange or plate cast integral with it, and suitable bolts connecting said flange or plate

with the closet bowl to support the latter and secure it in position against the wall. Where the soil-pipe is sufficiently near the inner side of the wall in front of which the closet is to be secured the hub or sleeve of my device may be externally threaded and screwed directly into the internally threaded hub of the T section of the soil-pipe, which projects forward into the wall opening; but where the soil-pipe is not sufficiently near the wall to permit this direct connection with it there may be interposed between the hub of the T section of the pipe and the hub or sleeve of my device, a short nipple or section of pipe, externally threaded at each end and screwed at its rear end into the T of the soil-pipe and having the internally threaded hub or sleeve of my device screwed upon its front end. The latter being the more usual form of connection, I have shown it in the drawings of my present application, where in Fig. 4 A represents the soil-pipe, having interposed in it the usual T-section B having the forwardly projecting internally threaded hub C into which is screwed the rear end of the short pipe section or nipple D. The front end of the latter is externally threaded and has screwed upon it the internally threaded hub or sleeve E of my device, said hub or sleeve being surrounded, near its front end, with a flange or plate E' cast integral with it. The internally threaded portion of the hub member E of my device terminates at its forward end in an internal annular shoulder or ring F, Figs. 1, 2, 3 and 5, whose forward face, together with the flaring or beveled inner face G of the extreme forward end of the hub or sleeve E, in front of the shoulder F, constitutes a seat for a gasket or packing ring H, Fig. 4, which serves to form a tight but yielding joint between my novel fastening device and the discharge end I of the closet. The latter, as shown in Fig. 4, is suitably formed to project rearwardly into the front end of the hub or sleeve E of my device; the annular outer surface of such projecting end being suitably formed to constitute a seat for the outer or forward face of the gasket H.

The closet has formed upon its rear side a suitable base J to fit against the wall K and inclose the fastening device, such base being provided with openings L, L and M for the passage of the bolts N, N and O which serve to connect the closet to the flange or plate E' of the hub E of my device. The front ends

of the bolts N, N extend through brackets P, P formed upon the lower ends of the bolts Q, Q which extend upward through holes in the seat-shelf R, said brackets fitting against the under side of the seat-shelf and being clamped thereto by the hinge posts S, S, screwed upon their upper ends and bearing upon the upper surface of the shelf. The bolts N, N have nuts T, T screwed upon their front ends and bearing against the vertical front faces of the brackets P, P.

In the form of device illustrated in Figs. 1, 2, 3 and 4, the rear ends of the bolts N, N are bent at right angles to their forwardly extending horizontal portions and fit in vertical sockets U, U formed for them on the flange E' of the hub E, Figs. 1 and 2, while in the construction shown in Figs. 7, 8 and 9 of the drawings, the rear ends of the bolts N, N are externally threaded and screwed into internally threaded bosses V, V formed for them on said flange E'.

The attachment of the closet to the underside of the flange E' of the hub E is secured by means of the bolt O whose upper rear end, in the construction shown in Figs. 1, 2, 3 and 4, is bent at right angles to its body portion and engaged with a horizontal socket W formed to receive it at the middle of the lower side of the flange E', while its lower and forward end is externally threaded and extends through a hole in a lug X formed for it on the lower rear side of the trap of the closet bowl, Figs. 4 and 5. The threaded lower end of the bolt O carries two nuts, Y and Z, by means of the latter of which the underside of the closet may be drawn rearward to the extent desired, and by means of the former of which it may be then locked in such position. Under the construction shown in Figs. 7, 8 and 9 the upper rear end of the bolt O is externally threaded like the bolts N, N, and screwed into an internally threaded boss w provided for it at the middle of the lower side of the flange E'.

Under the construction and arrangement of the parts above described, and referring first to the form of my novel device shown in Figs. 1, 2, 3 and 4 of the drawings, the manner of mounting the closet and securing it in position upon the wall is as follows: The flanged hub or sleeve E of the attaching device is first tightly screwed upon the nipple D projecting from the soil-pipe. The two upper bolts N, N are then properly engaged with their sockets U, U, and the upper rear end of the lower bolt O is engaged with the socket W. The brackets P, P and bolts Q, Q having been placed in position and secured to the seat-shelf of the closet by the hinge-posts screwed upon the upper ends of the bolts Q, Q, and the gasket H having been placed around the projecting rear end I of the discharge opening of the closet, the

latter is slipped rearwardly over the bolts N, N, said bolts being directed through holes L, L in the base J of the closet, while the lower bolt O is directed first through the opening M provided for it in the base J of the closet, and finally through the opening in the lug X upon the underside of the trap of the closet, this bolt having sufficient swinging play in its socket W to accommodate the necessary movement of the parts. When the base J of the closet has in this manner been brought into position adjacent the wall K the forward ends of the upper bolts N, N will have passed through the holes provided for them in the brackets P, P, and the nuts T, T will then be applied to them and the nut Z to the bolt O, the nut Y having been previously applied to the bolt O after the passage of the front end of the bolt through the opening M in the base J of the closet and prior to its passage through the hole in the lug X. With the parts now assembled in this position, the closet may be secured to the hub of the fastening device with the desired security and rigidity, and the gasket H be properly compressed to form a tight joint between them, by tightening up the nuts T, T and Z upon the bolts N, N and O, the nut Y upon the bolt O being left loose and screwed sufficiently far up on the bolt O to permit this operation; and when the parts are brought into the desired position the nut Y is screwed down upon the bolt O, against the rear face of the lug X, to lock them in such position. The provision of the two nuts Y and Z on the bolt O, on opposite sides of the lug X, not only permits the parts to be locked in position, but also furnishes a means for leveling and truing the closet if it should not originally rest in exactly true position.

The operation of mounting and securing the closet, with the modified construction of my novel device shown in Figs. 7, 8 and 9, is substantially the same as that above described excepting in respect to the lower bolt O, which latter, in the construction of Figs. 7, 8 and 9, has to be secured to the flange E' of the hub E, (by screwing its upper rear end into the internally threaded boss w provided for it thereon,) after the closet has been brought into position against or adjacent the wall, with the upper bolts N, N projecting forward through the holes L, L in its base and their front ends extending through the holes in the bracket P, P, this necessity being due to the fact that in this construction the bolt O projects rigidly downwardly and forwardly from the flange E' of the hub E when attached thereto, whereas in the construction of Figs. 1, 2, 3 and 4 it has a hinged connection with such flange.

As shown in Figs. 1, 2 and 3, the sockets U, U are duplicated as sockets U', U', on

the lower side of the flange E' of the hub E, and the socket W is duplicated, as socket W', upon the upper side of said flange, and in Figs. 7, 8 and 9 the internally threaded bosses corresponding to these sockets, in the construction there shown, are likewise duplicated on the upper and lower sides of the plate. This is for the purpose of making the hub E and its flange E' reversible, so that if, in screwing the hub upon the nipple D, it should not be tight thereon when the flange has been brought into proper position for one of its sets of sockets or internally threaded bosses to receive the bolts N, N' and O, it may be given another half turn.

I claim:

1. A supporting device for water-closets of the class described, comprising a threaded hub adapted to have a screw connection with and be supported by the soil-pipe, and provided with a peripheral flange, a pair of bolts and nuts for connecting the upper part of the closet with the upper part of said flange on opposite sides of the hub, and a third bolt and nut for connecting the bottom of the closet with the bottom of said flange; substantially as described.

2. A supporting device for water-closets of the class described, comprising a threaded hub adapted to have a screw connection with and be supported by the soil-pipe, and provided with a peripheral flange, a pair of combined brackets and seat-post bolts with means for securing them to the closet, a pair of bolts and nuts for connecting said brackets with said flange on opposite sides of the hub, and a third bolt and nut for connecting the bottom of the closet with the lower side of said flange; substantially as described.

3. In the herein described supporting device for water-closets, comprising the threaded hub E having the peripheral flange E' and adapted to be connected with and supported by the soil-pipe, the brackets P P and bolts Q Q formed integral with each other and the seat-post nuts S S for securing them to the seat-shelf of the closet, the bolts N N and nuts T T for connecting the brackets P P with the flange E' of the hub E, and the bolt O and nut Z for connecting the bottom of the flange E' with the bottom of the closet; substantially as described.

4. The herein described supporting device for water-closets, comprising the threaded hub E having the peripheral flange E' provided with the sockets U U and W, the bolts N N adapted to be engaged with said sockets at their rear ends and to be secured to the closet at their front ends, and the bolt O adapted to be engaged with the socket W at its upper rear end and to be connected with the bottom of the closet at its lower forward end; substantially as described.

5. The herein described supporting de-

vice for water-closets comprising the threaded hub E having the peripheral flange E' provided with the sockets U U and W, the combined brackets and bolts P P and Q Q and the seat-post nuts S S for securing them to the seat-shelf of the closet, the bolts N N engaged at their rear ends with the sockets U U and connected at their front ends with the brackets P P by the nuts T T, and the bolt O engaged at its upper rear end with the socket W and provided at its lower forward end with the nut Z for connecting it with the bottom of the closet; substantially as described.

6. The herein described supporting device for water-closets, comprising the threaded hub E having the flange E' provided with the two sets of sockets U U, W, and U' U', W', such duplicate sets of sockets permitting the flanged hub to be used in reversed positions, the bolts N N adapted to be engaged at their rear ends with either the sockets U U or the sockets U' U' and provided at their front ends with means for securing them to the closet, and the bolt O adapted to be secured at its upper rear end to either the socket W or the socket W' and provided at its lower forward end with means for connecting it to the bottom of the closet; substantially as described.

7. The combination, with a vertical soil-pipe having a horizontally projecting hub, of a closet-attaching and supporting hub having screw connection with and supported by said soil-pipe hub, and provided with a vertically disposed peripheral flange, a closet having a wall-base adapted to fit over and conceal said flange, a pair of horizontally disposed brackets bearing against the bottom of the seat-shelf of the closet on opposite sides thereof and provided with integrally formed bolts extending vertically through said seat-shelf, seat-post nuts screwed upon the upper ends of said bolts, a pair of horizontally disposed bolts engaged at their rear ends with the flange of the hub and extending at their forward ends through said brackets and provided with nuts in front of the latter, and a third bolt engaged at its upper rear end with the lower side of the flanged hub and extending at its lower forward end through a lug formed on the bottom of the closet and provided with nuts upon opposite sides of said lug for securing it thereto; substantially as described.

8. The combination, with the vertical soil-pipe A having the T-section B provided with the horizontally disposed hub C, of the closet having the wall-base J adapted to fit against the wall and provided with the bolt holes L L and M, said closet also having formed upon its bottom the lug X provided with a bolt hole, the hub E having screw connection with and supported by the soil-pipe hub C and provided with the flange E',

the pair of bolts N N passed through the holes L L in the closet-base J and engaged at their rear ends with the flange E' and suitably connected at their forward ends 5 with the closet structure, and the bolt O passed through the opening M in the closet-base J and engaged at its upper rear end with the flange E' of the hub E, and at its lower forward end extending through the lug X and provided upon opposite sides 10 thereof with the nuts Y and Z; substantially as described.

EARL G. WATROUS.

Witnesses:

EDWARD RECTOR,
ROBERT DOBERMAN.