(No Model.)

W. S. COOPER.

SEAT ATTACHING DEVICE FOR WATER CLOSET BOWLS.

No. 458,017. Patented Aug. 18, 1891.

FIG. 1.

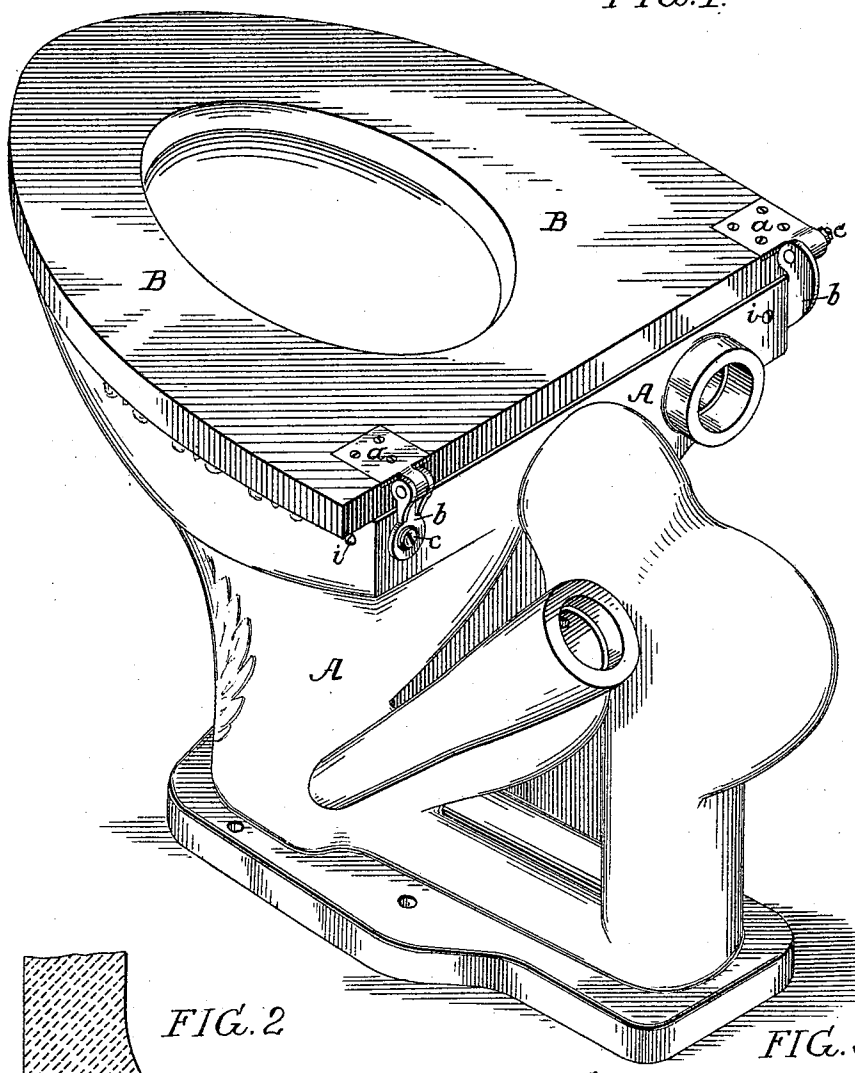


FIG. 2.

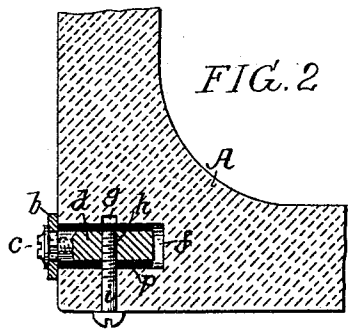
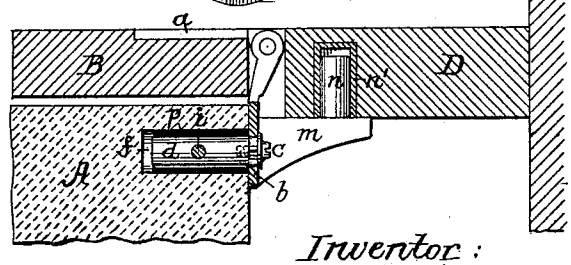


FIG. 3.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM S. COOPER, OF PHILADELPHIA, PENNSYLVANIA.

SEAT-ATTACHING DEVICE FOR WATER-CLOSET BOWLS.

SPECIFICATION forming part of Letters Patent No. 458,017, dated August 18, 1891.

Application filed December 8, 1890. Serial No. 373,853. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. COOPER, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Seat-Attaching Devices for Water-Closet Bowls, of which the following is a specification.

My invention consists of an improvement in or modification of the seat-attaching device for water-closet bowls shown in my patent, No. 385,167, dated June 26, 1888, one of the objects of my present invention being to provide means for securely fastening the hinge-plate to the earthenware bowl, and a further object being to provide for the support of a removable slab or panel at the rear of the bowl, so as to cover and hide the rear connections. These objects I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of part of a water-closet bowl and its seat, showing two different forms of hinge connection for the latter made in accordance with my invention. Fig. 2 is an enlarged sectional plan view illustrating the method of securing the hinge-plate to the earthenware bowl; and Fig. 3 is a view, partly in section and partly in elevation, illustrating one of the features of the invention.

A represents part of the bowl of the closet, and B the seat, the latter having at the rear edge hinge-plates *a*, which are hung to hinge-plates *b*, secured to the earthenware body of the bowl, two different forms of hinge being illustrated and the character of the hinge being immaterial, this part of my invention relating to the means employed for securing the hinge-plates to the earthenware bowl. Each plate is, as shown in Fig. 2, secured by a cap-screw *c* to the squared end of a stem *d*, the body of which may be round, square, or of any other desired form, said stem entering an opening *f* of corresponding form in the earthenware bowl A, or the stem *d* may be formed in one piece with the hinge-plate, if desired. In the bowl is also formed a transverse opening *g*, which, when the stem *d* of the hinge-plate is inserted in the opening *f*, coincides with a threaded opening *h*, formed in said stem for the reception of a transverse securing-bolt *i*, which is inserted from the side or back of the bowl and engages with the internally-threaded opening in the stem, as shown in Fig. 2, so as to securely retain said stem and the hinge-plate in proper position on the bowl, both as regards outward movement and also as regards any swinging or twisting movement. More than one bolt *i* may be used, if desired.

Between the stem *d* of the hinge-plate and the walls of the opening *f*, formed in the bowl, is interposed a tube *p*, of rubber, so as to provide an elastic seat for the stem and absorb any sudden shock or jar upon the hinge-plate, thereby preventing the transmission of any injurious strain to the earthenware bowl.

In practice the water-closet bowl is located at some little distance from the wall of the room, so that the water-supply pipe can pass down behind the bowl and enter the same at the rear, and in order to cover the space between the bowl and the wall it is sometimes desirable to employ a slab or strip D, as shown in Fig. 3.

In order to provide for the convenient support and retention of said strip, I form upon the hinge-plate *b* a projecting bracket *m*, with one or more upwardly-projecting dowel-pins *n*, each adapted to enter a tube *n'*, inserted into a recess formed in the under side of the strip D, adjacent to the front edge of the same, said bracket and pin serving to prevent accidental displacement of the strip when the same is adjusted to the position shown in Fig. 3, but offering no resistance to the ready removal of the strip when necessary.

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

1. The combination of the earthenware bowl of the closet, the hinge-plate having a stem projecting into an opening in said bowl, and a transverse set-screw adapted to a transverse opening in the bowl and engaging with an internally-threaded opening in said stem, substantially as specified.

2. The combination of the earthenware bowl of the closet, the seat, the hinge-plate having a stem adapted to an opening formed in the bowl, an elastic tube interposed between said stem and the walls of the opening, and a transverse set-screw adapted to a transverse opening in the bowl and to a threaded

transverse opening formed in the stem of the hinge-plate, substantially as specified.

3. The combination of the bowl and its seat, the cover-strip interposed between the bowl and the wall, the hinge-plates having brackets for supporting said strip, and dowel-pins adapted to openings in the strip, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM S. COOPER.

Witnesses:
EUGENE ELTERICH,
HARRY SMITH.