

(No Model.)

C. S. FRISHMUTH.

DEVICE FOR FASTENING SEATS TO WATER CLOSETS.

No. 533,453.

Patented Feb. 5, 1895.

Fig. 1

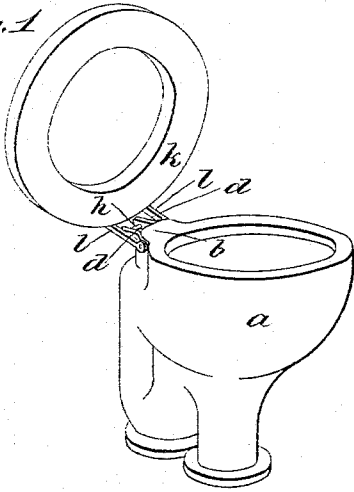


Fig. 2

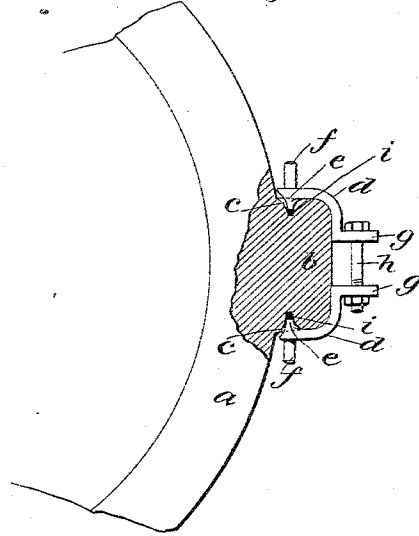


Fig. 3

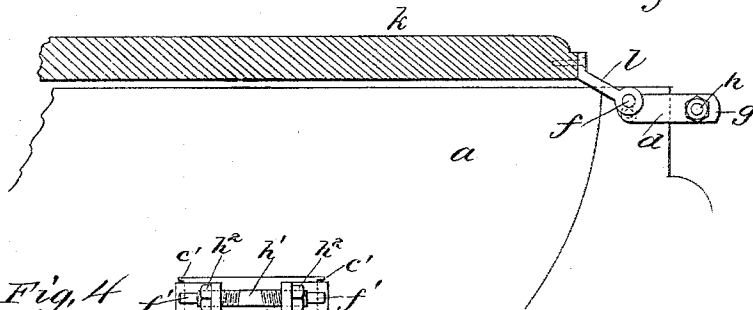


Fig. 4

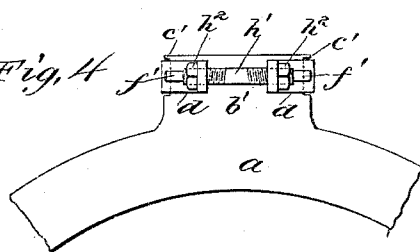


Fig. 5

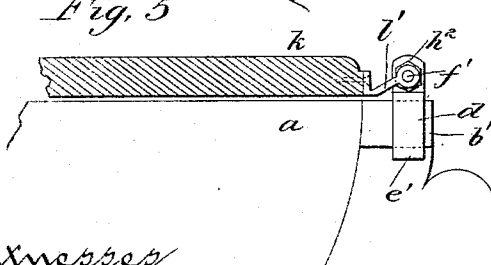
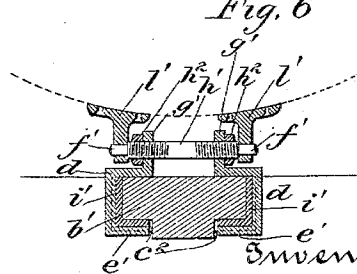


Fig. 6



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UNITED STATES PATENT OFFICE.

CHARLES S. FRISHMUTH, OF WILMINGTON, DELAWARE.

DEVICE FOR FASTENING SEATS TO WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 533,453, dated February 5, 1895.

Application filed February 9, 1894. Serial No. 499,644. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. FRISHMUTH, a citizen of the United States, residing at Wilmington, in the county of New Castle and State of Delaware, have invented a certain new and useful Improvement in Devices for Fastening Seats to Water-Closets, of which the following is a full, clear, and exact description.

This invention relates to means for hinging the seats of water-closets to the bowls; and the special object of the invention is to provide for hinging seats to bowls of earthenware, without the necessity of making holes in the bowl for the reception of the fastening mediums.

In my invention, I form the bowl with a solid projection to which is clamped one member of the hinging medium. The sections of the clamp may have the hinge pintles formed on or applied to them; or such pintles may be parts of the screw by which the clamp sections are bound to the projection on the bowl, but in either case, the hinge pintles are a part of the clamp.

Having thus stated the principle of my invention, I will proceed now to set forth the best mode in which I have contemplated applying that principle and then will particularly point out and distinctly claim the part or improvement which I claim as my invention.

In the accompanying drawings illustrating my invention in the several figures of which like parts are similarly designated, Figure 1 is a perspective view of a water-closet bowl of conventional shape containing my invention. Fig. 2 is a partly sectional plan view, on a larger scale, of the bowl member of the hinge, and Fig. 3 is a side elevation and partial section, with the seat in place. Fig. 4 is a plan view; Fig. 5, a sectional elevation, and Fig. 6 a vertical sectional elevation, illustrating a modification.

Referring to Figs. 1, 2 and 3, the water-closet bowl *a* may be of any approved pattern, and constructed of earthenware. The bowl is made with a solid projection *b* at its rear and substantially on a level with its rim, which projection is provided with the indentations or notches *c, c*, on opposite sides.

The outer vertical face of this projection is curved substantially as shown in Fig. 2. A clamp, constituting the pintle member of the seat or cover hinge, is applied to this projection, and said clamp consists of like sections *d, d*, each made with an inwardly extending lug *e* to enter the notches *c*, and an outwardly extending lug or pintle *f*, to receive the eye of the hinge, and ears *g* at the rear which are perforated to receive the clamping bolt *h*. The body of the sections is shaped correspondingly with the contour of the projection *b* so as to be drawn snugly up about it as the bolt is screwed home. Rubber or other packing *i* is interposed in the notches between the projection and the lugs *e* to prevent chipping of the projection and obviate the other well known disadvantages of metallic contact with earthenware.

The seat or cover *k* is provided with the other members *l* of the hinge, which, in this case, are simple eyes to engage the pintles *f*, and provided with bases by means of which they may be screwed to the edge of the seat or cover.

In Figs. 4, 5 and 6, I show a modification, in which the lug *b'* is angular, and its sides provided with grooves or notches *c'* and its bottom provided with grooves *c''* continuous of the side grooves. The clamp sections *d, d*, instead of being arranged horizontally, as in Figs. 1, 2 and 3, stand vertically, their lower ends *e'* being returned to enter the bottom grooves *c''*, and packing *i'* is interposed between the projection and the clamp sections. Obviously, these returned ends prevent vertical displacement of the clamp sections. The bolt *h'* is made with threads at opposite sides of its center, which threaded portions extend through the ears *g', g'* of the clamp sections and are supplied with nuts *h''* by means of which the bolt may bind the clamps about the projection. The ends of this bolt are made to serve as pintles *f', f'*, to receive the hinge ears *l'* of the seat or cover.

In either form of my clamp, the pintle members of the hinge are a part of the clamp, in one case integral and in the other applied, and I mean to include both forms in my claims herein.

By my invention, I am enabled to hinge a

seat or cover to an earthenware water-closet bowl in a very simple, expeditious and durable manner, and without encountering the well-known disadvantage of forming holes in the bowl for the reception of the hinging devices. The projection on the bowl is molded with the bowl and any inequalities in it incident to shrinking or warping in baking the bowl, may be readily compensated for by the interposed packing.

Obviously, my invention is applicable to hinging covers to other earthenware vessels than water-closet bowls, as well as to vessels of other material than earthenware.

As is evident, my invention is applicable to any shape bowl; curved, angular, or otherwise, the projection being of such shape as may best suit the requirements of the manufacturer, and the clamp sections being adapted to such shape.

I may remark that strict proportions of parts are not observed in the drawings.

What I claim is—

1. A water-closet bowl having a dented or notched projection, combined with a seat or cover, and a connecting hinge consisting of eyes applied to the seat or cover, and a pintle member composed of clamping sections applied externally to the projection on the bowl, and a fastening bolt binding said sec-

tions together and to the projection, substantially as described.

2. An earthenware vessel having a dented or notched projection, and a clamp composed of members embracing such projection externally, a bolt for binding such members together and to the projection, and hinge pintles forming parts of such clamp, combined with a seat or cover, and hinge-eyes applied thereto and engaging the pintles, substantially as described.

3. An earthenware vessel having a dented or notched projection, and a clamp composed of like members engaging such notches and embracing the projection externally, perforated ears on said clamp members, a bolt passed through such ears and fastened to them and adapted to draw the clamp members together and bind them about the projection, and pintles forming part of such clamp, combined with a seat or cover, and the hinge-eyes applied thereto and engaging the pintles on the clamp, substantially as described.

In testimony whereof I have hereunto set my hand this 8th day of February, A. D. 1894.

CHARLES S. FRISHMUTH.

Witnesses:

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