March 6, 1934. E. A. ZUNDEL 1,949,442

CLOSET SEAT

Original Filed Jan. 2, 1931

FIG. 1

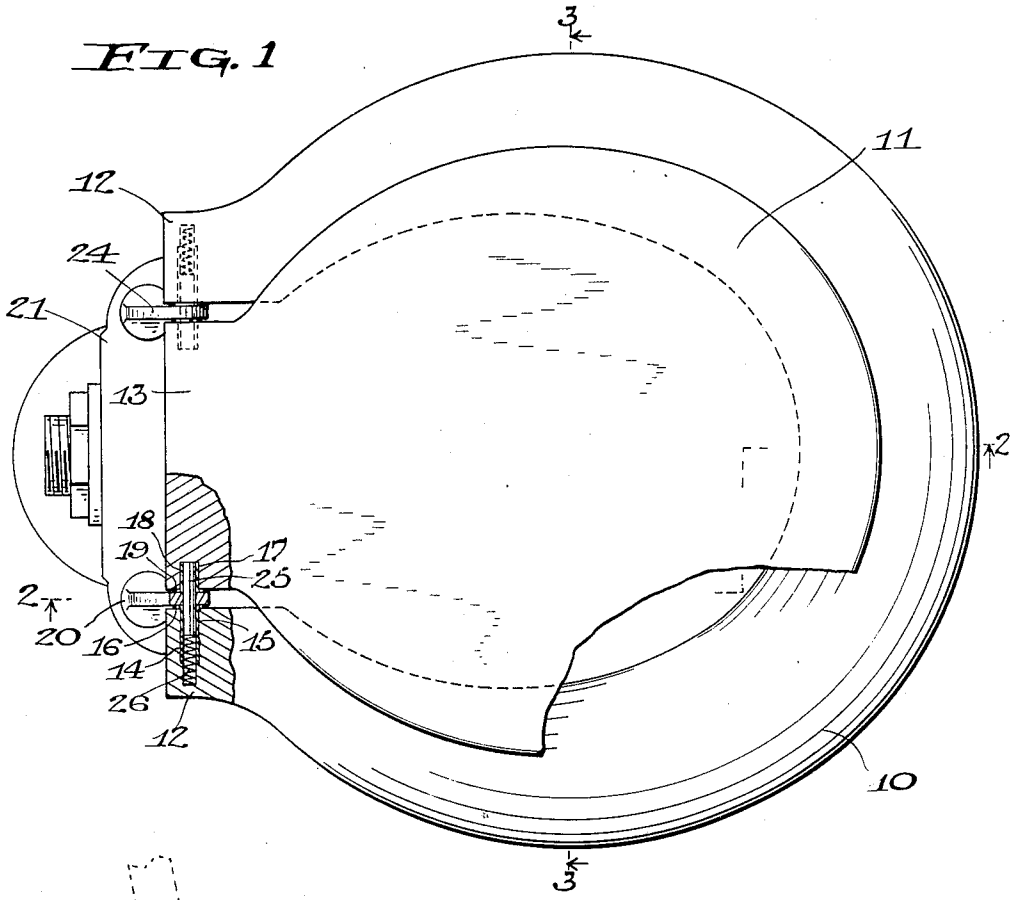


FIG. 2

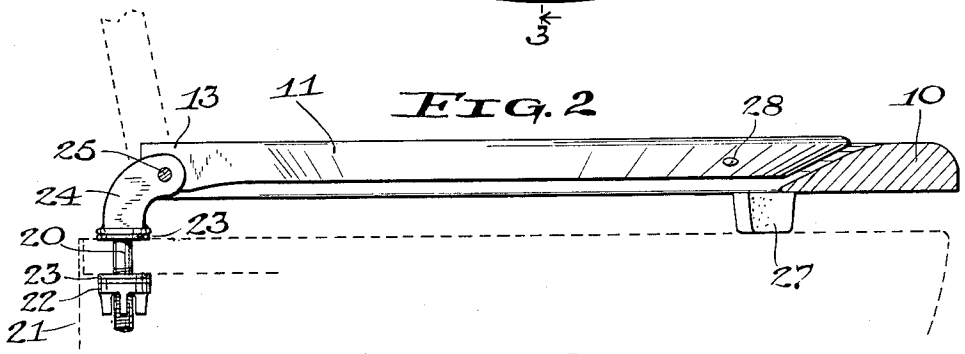
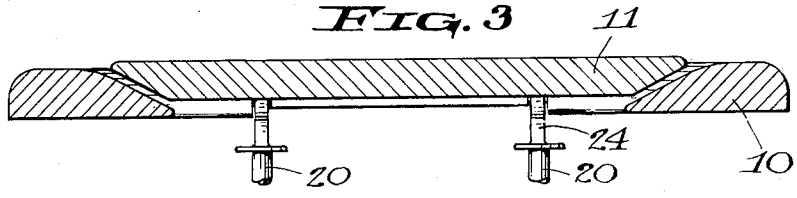


FIG. 3



WITNESSES

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CLOSET SEAT

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9 Claims. (Cl. 4—237)

The invention relates to closet seats and has for an object the provision of a closet seat structure in which the closet seat and its cover are formed respectively from the outer and inner portions of a single wood blank, thus effecting substantial economies in manufacture and reducing the weight of the seat structure.

Another object of the invention is to provide a closet seat structure in which the cover, when closed, nests into the seat and provides a large and comfortable seating surface, the closet seat also having an extended bearing area when the cover is opened.

A further object of the invention is to provide a simple and durable closet seat structure in which the closet seat is of the open back type to obtain better sanitation.

A further object is to provide a closet seat structure having a simple but effective hinge in which a relatively small amount of metal surface is exposed, thus improving the appearance and facilitating cleaning.

The invention further consists in the several features hereinafter set forth and more particularly defined by the annexed claims.

In the accompanying drawing,

Fig. 1 is a top plan view of a closet seat structure embodying the invention, parts being broken away and parts being shown in section;

Fig. 2 is a longitudinal sectional elevation thereof taken generally on the line 2—2 of Fig. 1, and

Fig. 3 is a transverse sectional elevation of the seat taken on the line 3—3 of Fig. 1.

In the drawing, the numeral 10 designates a water closet seat and 11 designates a cover therefor. The seat includes rear extensions 12, which are spaced to present a gap therebetween, thus forming an open back seat. The cover, when closed, nests within the seat to lie substantially flush therewith at its upper surface and includes a rear extension 13, which is disposed between the spaced extensions 12 of the seat, there being narrow spaces left between the seat extensions and the cover extension. To obtain this relation the upper surfaces of the inner marginal portions of the seat are sloped and the lower surfaces of the marginal portions of the cover are correspondingly sloped, as seen in Figs. 2 and 3. However, the inner edges of the seat extensions 12 and the adjacent side edges of the cover extension 13 are substantially vertical and parallel. In this manner the seat and its cover may be sawn from a single wood blank of approximately the thickness of the seat, the seat being formed from the outer portions of the blank and the cover being formed from the inner portions of the blank, thus effecting substantial economies in the manufacture of the seat and reducing the weight of the seat structure.

The seat extensions 12 have aligned horizontal bores 14 formed therein from their inner edges, into which are pressed bushings 15 having terminal flanges 16 bearing against these inner edges. The cover extension 13 has aligned horizontal bores 17 formed therein from its opposite side edges, into which are pressed bushings 18 having terminal flanges 19 bearing against these edges.

Upstanding posts or standards 20 are secured in the usual apertures formed at the rear portions of a closet bowl 21 and are provided with the usual clamping nuts 22, resilient washers 23 being mounted on the posts to avoid marring of the finished surface of the bowl. The posts 20 include forwardly projecting flat upper portions 24 having apertured upper ends disposed between the rear extensions of the cover and seat to fit between the flanged portions 16 and 19 of the axially aligned bushings 15 and 18. Pintles 25 are each mounted in the pairs of aligned bushings 15 and 18 and extend through the upper apertured portions of the posts. A light coiled spring 26 is mounted within each bore 14 and serves to urge the pintle 25 into the adjacent bushing 18 of the cover extension. When the cover is to be mounted in place the pintles are urged into the bores 14 against the action of the springs 26 to permit the cover to enter between the posts, whereupon the pintles, when released, will enter the bushings in the cover extension. In this manner it is not necessary to drill the openings 14 entirely through the seat extensions, which would require the insertion of plugs at the outer ends of the openings. Obviously the coiled springs may be mounted in the cover instead of in the seat.

The seat and cover are preferably treated with finishing material after the pintle bores are formed therein but before the bushings are pressed into place, thus allowing the finishing material to penetrate into the wood within the bores and thus seal the wood against the entrance of moisture.

The seat 10 may be provided with the usual resilient bumpers 27 and the cover may be provided with bumpers 28, the latter being mounted on the sloping edge of the cover.

The cover is preferably reduced in thickness by removing material from its under side, as seen in Fig. 2, thus lightening the cover and obtaining

more space back of the seat when the cover is in open position.

When the cover is in closed position it is substantially flush with the upper surface of the seat, thus providing a much larger seating area and consequently more comfortable seating than is obtained with closet seat structures including an elevated cover. When the cover is lifted the seat itself has an extended bearing area to insure comfortable seating.

The hinge is of such construction that it can be inexpensively manufactured and permits the closet seat assembly to be easily cleaned since very little metal is exposed.

While many of the advantages of the invention are incident to its construction of wood, the invention is not entirely limited thereto for it is obvious that some of the advantageous features of the invention may be obtained by a molded composition or other material, and the claims are therefore not limited to wood except where it is mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. A closet seat structure comprising a rearwardly opening U-shaped seat member pivotally mounted at its spaced rear portions, and a cover pivotally mounted at its rear portions between the rear portions of said seat member and nested within said seat member with its upper surface substantially flush with the upper surface of said seat member for presenting an extended seating area.

2. A closet seat structure comprising a U-shaped seat having an open back and including spaced rear projections provided with vertical parallel inner edges, and said seat having sloping upper surfaces along its inner marginal portions, a cover nesting within said seat and having sloping marginal portions along its under face to lie adjacent the sloping upper surfaces of said seat, the upper surface of said cover being substantially flush with said seat to present an extended seating area therewith, said cover having a rear projection in its plane disposed between the rear projections of said seat, and hinge means for said seat and cover operatively connected with the rear extensions of said seat and cover.

3. A closet seat structure comprising a rearwardly opening U-shaped closet seat and a cover therefor, said seat having upper surfaces sloping downwardly to an opening in the seat and said cover having under marginal surfaces sloping upwardly at substantially the same inclination, the top surface of said cover being substantially flush with the top surface of said seat, and the rear portions of said cover being interposed between the spaced rear portions of said seat, and hinge means connected to the rear portions of said seat and cover.

4. A closet seat structure comprising a pair of seat members forming a closet seat and cover respectively, the rear portions of one of said seat members being disposed between the rear portions of the other of said seat members and there being aligned bores formed in the adjacent edges of said rear portions, a pair of standards disposed between said rear portions and having apertures in register with said bores, a pintle extending within each pair of bores and through the interposed standard, and spring means urging said pintles axially into operative position within said bores.

5. A closet seat structure comprising a pair of seat members forming a closet seat and cover respectively, the rear portions of the cover being disposed between the rear portions of the seat and there being aligned bores formed in the adjacent edges of said rear portions, a pair of standards disposed between said rear portions and having apertures in register with said bores, a pintle extending within each pair of bores and through the interposed standard, and a coiled spring disposed in one of each pair of said bores for urging the pintle therein into operative position.

6. A closet seat structure comprising a pair of seat members forming a closet seat and cover respectively, the rear portions of the cover being disposed between the rear portions of the seat and there being aligned bores formed in the adjacent edges of said rear portions, bushings inserted in said bores and having flanged ends bearing against the adjacent edges of said seat members, a pair of standards disposed between the flanged ends of each pair of said bushings and having apertures in register with said bushings, a pintle extending within each pair of bushings and through the interposed standard, and a coiled spring disposed in one of each pair of said bores for urging the pintle therein into operative position.

7. A closet seat structure comprising a pair of seat members forming a closet seat and a cover respectively, the rear portions of one of said seat members being disposed between the rear portions of the other of said seat members and there being aligned bores formed in the adjacent edges of said rear portions, bushings inserted in said bores and having flanged ends bearing against the adjacent edges of said seat members, a pair of standards disposed between the flanged ends of each pair of said bushings and having apertures in register with said bushings, and a pintle extending within each pair of bushings and through the interposed standard.

8. A closet seat structure comprising a rearwardly opening U-shaped closet seat and a cover therefor, the upper surface of said cover being substantially flush with the upper surface of said seat, and said cover having a rear projection in its plane interposed between the rear ends of said U-shaped seat.

9. A closet seat structure comprising a seat having spaced rear projections presenting substantially parallel inner edges, there being aligned bores in said projections opening at said inner edges and terminating at their outer ends in spaced relation to the outer edges of said projections, a cover for said seat having a rear projection interposed between the spaced inner edges of said seat projections, said cover projection having substantially parallel side edges and aligned bores opening at said edges in alignment with said first-named bores, there being spaces between the adjacent parallel edges of said cover and seat projections, a pair of standards disposed in said spaces between said cover projection and said seat projections, and pintles carried by said standards and received within the aligned bores of said cover and seat projections.

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