June 16, 1942. G. D. MANVILLE 2,286,632

DETACHABLE CLOSET SEAT SHELL

Filed Nov. 9, 1940

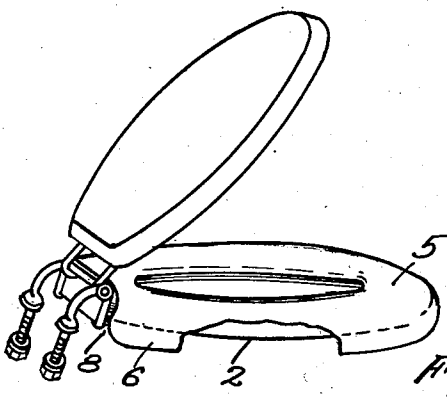


Fig. 1.

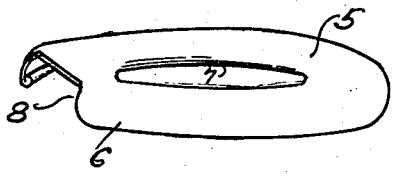
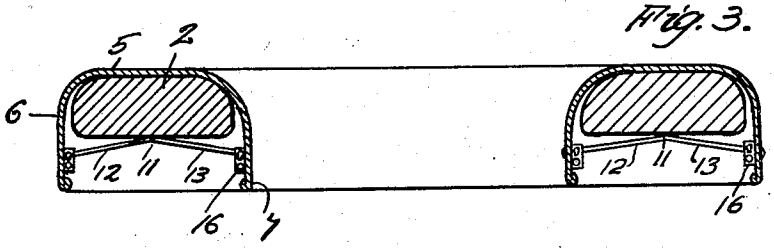


Fig. 2.

Fig. 3.



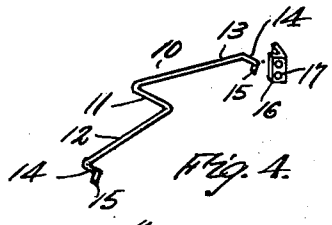
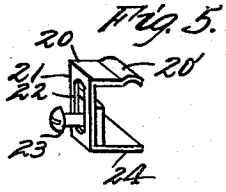


Fig. 4.

Fig. 5.



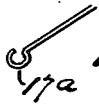


Fig. 6.

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DETACHABLE CLOSET SEAT SHELL

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Application November 9, 1940, Serial No. 365,063

4 Claims. (Cl. 4—242)

This invention is a sanitary, substantial shell to be readily applied to a given toilet bowl seat for as ready detachment after a period of service determinable for one or another of various reasons.

It is an object of the invention to provide for the practicable and effective covering of the used surface of a toilet seat with a substantial or firm, washable guard or shell which any one may easily apply to a given seat and which shell is to be left firmly in place until detachment therefrom when the owner or individual user thereof may remove from one place of residence or business to another, or as a traveller. It is a purpose to provide a low-cost, substantial shell that may be readily applied to old or disfigured toilet seats which may still be of good condition otherwise.

While the shell may be opaque and of any desired color and any appropriate material, an object is to provide a substantial, transparent shell for the clear exposure of a bowl seat which may have a finish color in harmony with the color finish of a given bath or toilet room or closet.

In this specification the word "substantial" is used to distinguish over cheap, fragile, paper, temporary protective sheets put on seat for one use only.

A further object is to provide a substantial shell having as a part thereof means for the effective attachment of the shell to a given seat without need of structurally marring, cutting, drilling or screwing the seat body per se.

Another object of this invention is to provide a shell of this class with means acting normally to firmly clinch or bind the shell detachably to the given seat; that is to provide a resilient, contracting grip device as an incorporated shell feature.

And another object of the concept is to provide a seat shell having means for its ready and effective attachment to seats of some range in size and thickness.

The invention consists in certain advancements in this art as set forth in the ensuing disclosure and having, with the above, additional objects and advantages as hereinafter developed, and whose constructions, combinations and details of means, and the manner of operation will be made manifest in the following description of the herewith illustrative embodiment; it being understood that modifications, variations and adaptations may be resorted to within the scope, spirit and principle of the invention as it is more particularly claimed presently.

Figure 1 is a perspective showing a broken away shell on a seat; the cover of which is raised. Figure 2 is a top perspective of the shell per se. Figure 3 is transverse section of the assembled shell and seat. Figure 4 is a perspective of one means for attaching the shell to seats of varying thicknesses, and being in the form of a spring truss. Figure 5 is a perspective of an adjustable, resilient gripping finger for seats of different size and thickness and being a permanent part of the shell flanges to avoid loss therefrom. Figure 6 is a perspective of a modified or interlinked end of the truss form of fastener.

Conventional toilet bowl seats 2 are more or less oval in shape and vary in thickness and in their over-all width and in the size of their central holes. Therefore the present shell 5 is of a generally oval shape in plan and has an exterior flange 6 and an interior flange 7 both down turned to a depth to extend well below the bottom face of the seat 2, within its size range, to which it is to be attached.

The shell is preferably made of a fairly stiff but possibly somewhat resilient material of a substantial nature to be capable of a long period of use and the invention includes a provision for the ready attachment and detachment of the shell to or from a given seat 2, and for holding it firmly in place against looseness or play when applied. The shell may be of any suitable metal, stamped or cast, or may be of any desired molded plastic of opaque or translucent or transparent character within the various range of ornate finishes here contemplated as will be determined for a particular service in any given case.

To provide for the facile attachment of the shell to various seats the rear end of the shell is cut away at 8 for a portion of its flange to provide a good clearance for the usual bolt fixtures at the rear of the seat.

The device incorporates at suitable locations in its rim portions or flanges 7 features to be firmly effective in holding the shell in applied position. The holding means may be incorporated in various forms and are preferably so incorporated as to be inseparable, without intention, from the shell so that they will not be accidently lost or misplaced. And preferably the holding means is of such a character as to have the normal function of resiliently clamping onto the seat to hold the shell snugly without play, and yet be of easy attachment and as ready detachment.

One form of a fastener comprises a resilient, wire bar 10 having an axial or shaft part 11 from each side of which extend radial arms 12 and 13 well shown in Fig. 3 as each inclining up-

ward to the shaft part 11. The outer ends of the bar, or truss as it may be called, are each bent unidirectionally at 14 in parallelism and then slightly bent down to form short hooks 15; the arms being at the ends of the shaft part 11. When this form of fastener is employed there are provided on the inner faces of opposite inner flange 7 and outer flange 6 fixed keeper wings 16 with, each, one or more hook-holes 17 in a vertical row so that the bar hooks 15 may be adjustably interhooked into such of the holes 17 as will cause the apex-position shaft part 11 of the fastener 10 to firmly press upwardly against the bottom face of the seat 2 over which the shell has been telescoped; the vertical row of holes 17 thus providing for use of the shell on seats of different thickness. One arm of the truss bar is shown in Fig. 6 as having an eye 17*a* to interlink with its wing 16 against accidental separation therefrom.

Another form of seat clinching fastener is shown in Fig. 5 as including a presser finger 20 bent at a right angle inwardly from a shank 21 which is vertically slotted at 22 to receive a bolt 23 mounted in one of the flanges of the shell 5; the nut of the bolt setting at one side on a bottom or push lug 24 of the shank 21 and whereby the presser finger may be pushed up snugly against the bottom face of the seat 2 as in the right, sectioned part of Fig. 3. The finger 20 is slightly crowned at 20' and is sufficiently resilient to exert a constant gripping pressure on the seat to pull the shell firmly onto the seat in the same manner as the spring truss bar of Fig. 4.

It will be seen that the shell can be kept in a thoroughly sanitary state as it may be removed from the seat and then sterilized and cleaned in any preferred manner.

The member 10 may be of spring metal of any preferred cross-sectional form.

What is claimed is:

1. A toilet bowl seat cover or shell of stiff material and of channel section to telescope on the inner and outer edges of the given seat and provided with resilient truss-like means to grip adjacent seat portions and normally press the shell in applied position on the seat.

2. A substantial, sanitary, readily attachable and easily detachable shell for covering a toilet seat; said shell having stiff, channel-section sides with means for gripping an interposed seat; said means including a resilient bowed truss with its ends mounted on the relative channel wall.

3. A shell of the kind set forth including a generally oval shaped body having a seat aperture and whose structure is an inverted channel to telescope over a given seat, perforated supports attached to the inner faces of the walls of the channel, and a bowed spring truss bridging from one support to another of a related pair and selectively adjustable thereon in said perforations for seat thickness accommodation.

4. The shell of claim 3, and one end of the truss having a hinge interconnection.

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