June 24, 1958 L. M. GARDNER 2,839,764

TOILET SEAT HINGE COVER

Filed July 20, 1956

FIG. 1

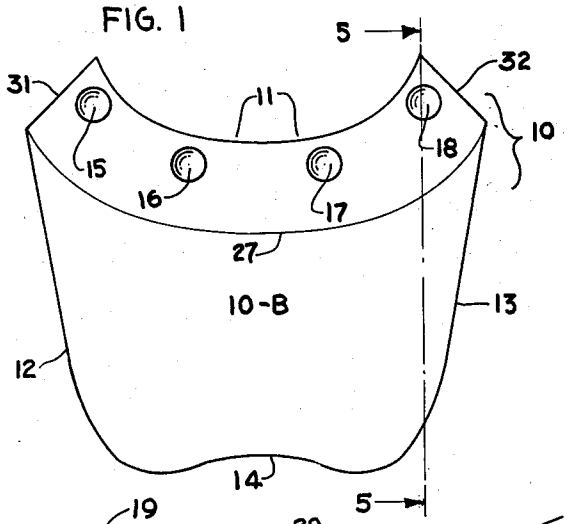


FIG. 2

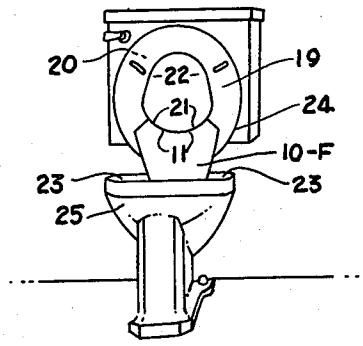
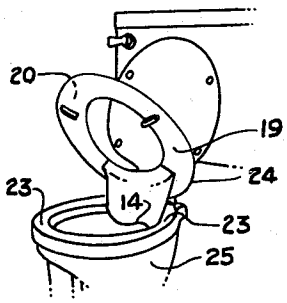


FIG. 3



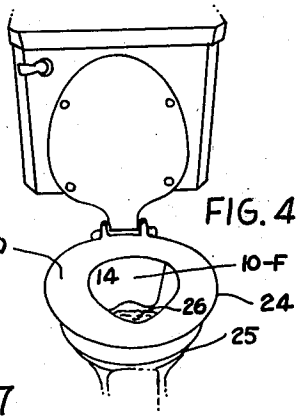


FIG. 4

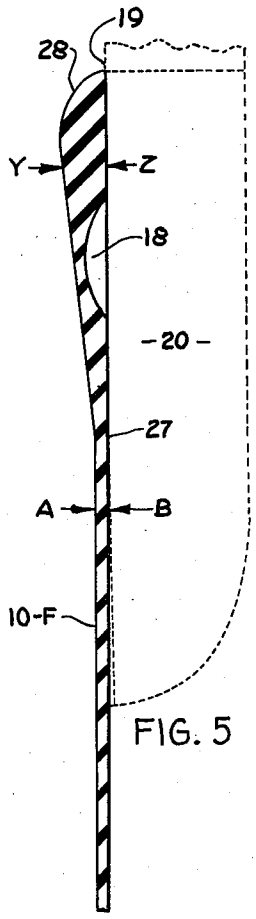


FIG. 5

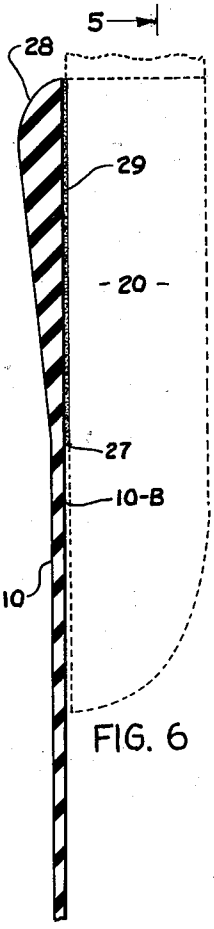


FIG. 6

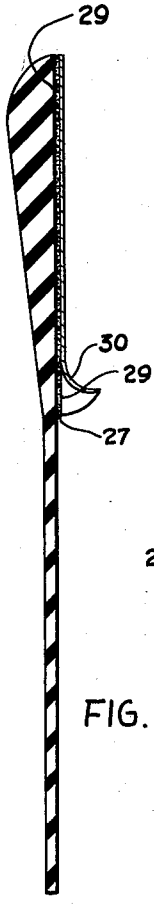


FIG. 7

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TOILET SEAT HINGE COVER

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Application July 20, 1956, Serial No. 599,103

1 Claim. (Cl. 4—237)

This invention relates to bathroom accessories including removable toilet seat covers and protective devices, and more particularly to a toilet seat hinge cover, shaped like a child's bib, made of flexible waterproof material, and removably attachable to the undersurface of a toilet seat so as to cover the hinges when the seat is positioned upwardly.

As is generally known the hinge members which attach the toilet seat and seat cover to the porcelain bowl base of a toilet fixture, are highly susceptible to rust and corrosion because of the chemical and moisture characteristics of the environment in which they are situated. This tendency toward corrosion is further aggravated by the inaccessibility of the hinges, making it difficult to keep them dry and polished at all times, and active rusting is constantly encouraged by random drops of water deposited on and around the hinges during the normal flushing cycles.

As a result, the seat and seat cover hinge assemblies of a majority of toilet fixtures, regardless of the regular attention of the housewife or janitor in charge or the quality of the plating job applied to them by the manufacturer, are constant eyesores in otherwise immaculate bathrooms and a continuing source of embarrassment to the homeowners.

My invention has been made with the foregoing considerations in mind, and can be said to have a plurality of important objectives.

One important object of my invention is the provision of a device adapted to cover and protect the hinge assembly attaching a toilet seat and cover to the main basal fixture.

Another important object of my invention is the provision of a device of the character described which will be removably attachable to the rear undersurface of the toilet seat and will thereby be moved out of the way when the seat is down and upwardly in front of the hinges when the seat is up.

A further important object of my invention is the provision of a device of the character described which is conformed of generally flexible waterproof elastomeric material and is thickened throughout its area of attachment to provide greater lateral stability and prevent it from sagging between the individual points of attachment.

In brief, my invention includes a bib-shaped cover of flexible and waterproof material having an arcuate cutout in the middle of its upper edge shaped to fit the curve of the seat aperture adjacent the hinge point, and being removably attachable to the rear undersurface of the toilet seat by means of vacuum cups or pressure sensitive adhesive.

The attachment means are positioned adjacent the upper edge of the irregular outline of the cover, and follow the curve of the central arcuate cutout therein. The sides of the cover are tapered inwardly toward the bottom, and the distance from the top to the bottom is so dimensioned that when the cover is attached to the undersurface of the seat with the cutout in its upper edge aligning with the hinge end of the seat aperture, the bottom will hang slightly above the level of the water normally present in the bowl. When the seat is raised, and the cover is moved upwardly therewith, the lower edge of the cover is positioned slightly below the rounded upper rim of the bowl fixture, thereby completely covering the hinges and keeping water from being splashed rearwardly between the seat and the water tank cabinet normally secured to the wall.

Certain variations of the embodiment and further important objects of my invention will become apparent in the following detailed specification when examined with reference to the accompanying drawings, in which:

Figure 1 is a plan view of the rear surface of the cover device showing the vacuum cup method of attachment;

Figure 2 is a frontal elevational view of a toilet fixture with the device of my invention attached to the seat which is shown in the upward position;

Figure 3 is a perspective view of the fixture seen in Figure 2 showing the seat with the cover attached partially lowered;

Figure 4 is a frontal perspective view of the fixture seen in Figures 2 and 3 showing the seat in the down position and the cover disposed thereunder;

Figure 5 is a sectional view taken along the line and in the direction indicated by the arrows 5—5 in Figure 1;

Figure 6 is a similar sectional view showing a similar cover device attached to a seat by pressure sensitive adhesive means, and

Figure 7 is a sectional view similar to Figure 6 showing the cover having pressure sensitive adhesive attached thereto from which the covering cloth is partially removed.

Reference is again made to Figure 1 in which a toilet seat hinge cover constructed according to my invention is designated generally by the numeral **10** with the back surface thereof which is shown in this figure being designated as **10**–B to distinguish it from the frontal surface indicated in subsequent figures as **10**–F. Although the device consists of a flat sheet, it will be described as having upper and bottom edges, front and back surfaces, and substantially vertical sides since when in use it is normally disposed vertically in space.

Clearly shown in Figure 1 is the arcuate conformation of the upper edge **11**, the inward taper of the sides **12** and **13** and the rounded lines of the lower corners which come together in a shallow reverse curve in the center of the bottom edge **14**.

A plurality of vacuum cups **15**, **16**, **17** and **18**, are disposed adjacent to the arcuate upper edge **11**, and serve to attach the cover **10** to the undersurface **19** of a seat such as **20** in Figures 2, 3 and 4.

As seen in Figure 2, the arcuate upper edge **11** of the cover **10**, the frontal surface **10**–F of which is seen in this view, is placed in substantial alignment with the lower edge **21** of the oval aperture **22** in the seat **20**. It will also be observed in Figure 2 that the bottom edge **14** of the cover is disposed substantially below the rolled rim **23** of the bowl fixture **25**, and completely covers the normally open area between the edge **24** of the seat **20** and the upper surface of the rim **23** of the bowl **25**, as can be seen also in the perspective view of Figure 3 in which the seat **20** is shown partially lowered.

In Figure 4 the seat **20** is shown completely lowered upon the upper edge **23**, which cannot be seen in this figure, of the bowl fixture **25**. In the perspective view of Figure 4 it will also be observed that the lower edge **14** of the cover **10** is positioned slightly above the surface of the water **26** which normally remains in the bottom of the bowl **25**. Obviously any drops of moisture that might have accumulated on the frontal surface **10**–F

of the cover 10 during a previous flushing cycle, whether the seat was raised or lowered, would drain downwardly into the bowl.

The cover device in this preferred embodiment is conformed of a waterproof, generally flexible elastomer and is the same thickness throughout its entire area below the line designated by the numeral 27 in Figure 1, and in the sectional views of Figures 5, 6 and 7. Between the point 27, as indicated in the sectional views and the upper edge 28, the elastomeric material is progressively increased in thickness as indicated by the arrows Y—Z to several times that of the lower area indicated by the arrows A—B. The additional thickness in the upper area serves a dual purpose in that it provides sufficient thickness for the disposition therein of the vacuum cups, one of which 18 is shown in the sectional view of Figure 5, and furthermore provides lateral and vertical directional stability in the attachment area so that the upward edge 28 of the device is closely held against the undersurface 19 of the seat 20, a portion of which is indicated in phantom by dotted lines in the figure.

A variation in the means of attachment is shown in the sectional view of Figures 6 and 7 wherein a section of pressure sensitive waterproof adhesive material 29 is affixed to the back side 10–B of the cover 10 with which it is readily applied to the undersurface 19 of the seat 20 after removal of the cover cloth 30 as seen in Figure 7. This adhesive material is disposed across the entire upper area of the back surface 10–B from the point of reduced thickness 27 to the upper edge 11 and from one side 12 to the other 13.

A main advantage in this latter type of attachment is the fact that the waterproof adhesive material when disposed over the entire attachment surface prevents water from being admitted through small cracks that might otherwise exist along the upper edge 11 and the diagonal edges 31 and 32 seen in Figure 1. However, either of the suggested methods of attachment would permit removal and replacement of the device as frequently as desired for purposes of cleaning the cover and the seat adjacent thereto. It would not, however, be necessary to remove a cover of either type for purposes of cleaning the rim 23 of the bowl fixture 25 since it could be lifted upwardly from adjacent its lower edge 14 and held out of the way.

Numerous modifications and variations of the present invention will occur to those skilled in the art after a careful study hereof. All such, properly within the basic spirit and scope of the present invention are intended to be included and comprehended herein as fully as if specifically described, illustrated and claimed herein.

The exact compositions, configurations, constructions, relative positionings, and cooperative relationships of the various component parts of the present invention are not critical, and can be modified substantially within the spirit of the present invention.

The embodiments of the present invention specifically described and illustrated herein are exemplary only, and are not intended to limit the scope of the present invention, which is to be interpreted in the light of the prior art and the appended claim only, with due consideration for the doctrine of equivalents.

I claim:

A cover device for covering the open space between the downwardly disposed edge of a toilet seat when raised to an upright position and the rearward upper rim of the toilet bowl, comprising: a sheet of waterproof and acid resistant elastomeric material having a generally semicircular cutout portion defined by a concave upper edge which is concavely directed away from the remaining lower portion of said sheet, said cutout being substantially the same as that of the inner aperture of a toilet seat adjacent the hinge section thereof, the sides of said sheet converging toward the bottom of said sheet and terminating in round corners at the bottom edge of said sheet; fastening means on said sheet adjacent said upper edge for removably attaching said sheet to the undersurface of said toilet seat, and said sheet being dimensioned in size from said top to bottom edges whereby when it is attached to said undersurface of said seat with its concave upper edge aligning with the arc of the inner aperture of said seat adjacent the hinge assembly of said fixture, the bottom edge of said sheet will be disposed below the rounded rim of said bowl fixture when the seat is up and positioned slightly above the level of the water normally remaining in said bowl when said seat is down; said sheet of elastomeric material being substantially thicker adjacent its area of attachment to the undersurface of said seat around its concave upper edge to stiffen the area of attachment and prevent sagging between the individual points of attachment.

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