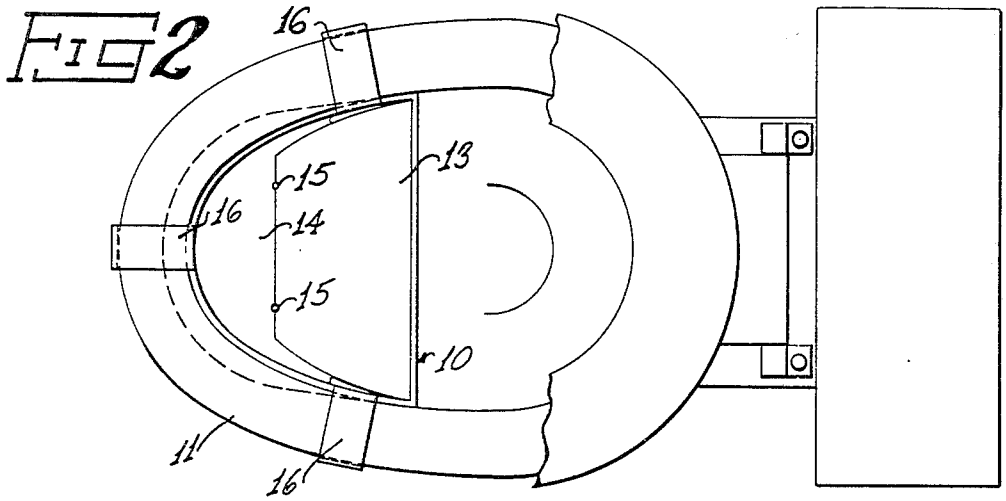
Dec. 30, 1969 A. A. GLEICHERT 3,486,172

URINE DEFLECTOR

Filed Dec. 26, 1967

FIG 2



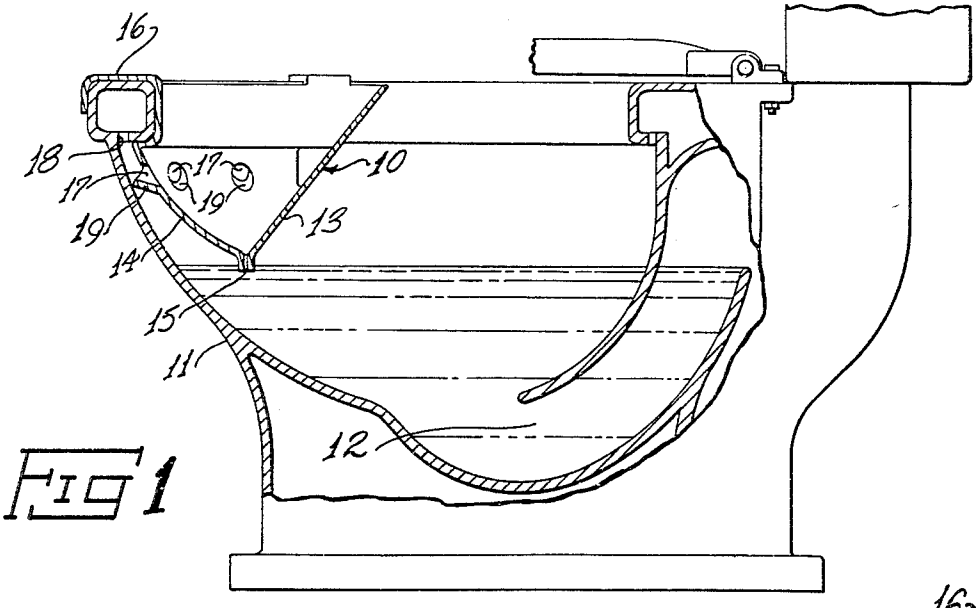


FIG 1

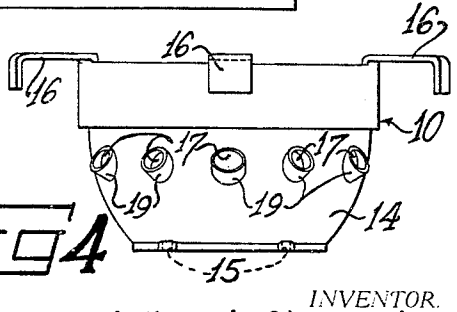


FIG 4

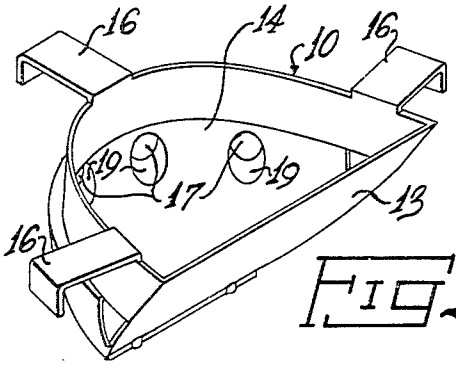


FIG 3

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3,486,172

URINE DEFLECTOR

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U.S. Cl. 4—1 8 Claims

ABSTRACT OF THE DISCLOSURE

A urine deflector embodying an upwardly and rearwardly extending deflector member mounted within the forward portion of a water closet having a water seal in the bottom thereof. The deflector member is supported in position to prevent direct contact of urine with the water during normal use of the water closet.

BACKGROUND OF THE INVENTION

This invention relates to a urine deflector for a water closet and more particularly to a deflector which may be mounted in the bowl of a water closet.

An object of my invention is to provide means for use in a water closet having a water seal in the bottom of the bowl thereof for preventing direct contact of urine with the water in normal use thus eliminating attendant noise which is highly objectionable.

Another object of my invention is to provide a device which is simple of construction, economical of manufacture and which may be quickly installed with a minimum of effort.

Another object of my invention is to provide a device of the characters designated which may be readily removed for disposal or cleaning whereby the device is maintained in a sanitary condition.

BRIEF SUMMARY OF THE INVENTION

In accordance with my invention I provide deflector means which is adapted to be located within the forward portion of a water closet to prevent direct contact of urine with the water. The deflector means comprises one or more deflector plates. Preferably it comprises two upwardly flaring deflector plates. Preferably it comprises two upwardly flaring deflector plates joined adjacent their lower edges and provided with drain means therebetween. The plates are positioned within and extend transversely across the forward portion of the water closet with one deflector plate extending upwardly and forwardly to overlie the front wall of the water closet and the other deflector plate extending upwardly and rearwardwardly. Preferably, the front deflector plate is provided with openings adjacent the upper edge thereof through which water passes when the water closet is flushed to maintain the deflector means in a clean condition. Baffles are provided subjacent these openings to direct the flushing water therethrough. Preferably, the deflector means is detachably connected to and supported by the water closet bowl.

Apparatus embodying features of my invention is illustrated in the accompanying drawing forming a part of this application, in which:

FIG. 1 is a side elevational view, partly in section and partly broken away, showing a water closet with my improved apparatus associated therewith.

FIG. 2 is a top plan view of the apparatus shown in FIG. 1, partly broken away;

FIG. 3 is a perspective view of the deflector means; and

FIG. 4 is a front elevational view of the deflector means.

Referring now to the drawing for a better understanding of my invention, I show my improved deflector means generally at **10** mounted on a water closet bowl **11** having the usual seal **12** disposed at the bottom of the bowl and extending into the rear thereof, as shown in FIG. 1.

My deflector means **10**, may be made of a suitable disposable material, such as stiff waterproof paper, papier-mache or waterproof cardboard or the like, plastic material, or any suitable sound-deadening material. The deflector means **10** comprises an upwardly and rearwardly extending rear deflector plate **13** and an upwardly and forwardly extending forward plate **14** which is connected adjacent its lower edge to the rear deflector plate **13** and is provided with drain openings **15** adjacent the bottom thereof, as shown in FIG. 1.

If the water closet is of the type that the water extends under the lower edge of the device, the lower edge is adapted to be disposed in the water so that the device can drain without noise. If the water closet is of the type that the water is only in the rear portion of the bowl, then the device drains on the inclined forward portion of the bowl and does not produce any objectional noise.

The deflecting device **10** is mounted on the forward portion of bowl **11** so as to be supported in position within the forward portion of the bowl by a mounting member connected to or integral with the deflector plates. The deflector means is thus mounted in position to deflect urine and prevent it from engaging directly the water in the water closet in the normal use of the same. While the mounting member can be interlocked or connected to the bowl in any suitable manner, I show the mounting member as comprising a plurality of downwardly opening hook-like members **16** which extend over and engage the upper edge of the forward portion of the bowl **11**, as shown in FIGS. 1 and 2, to support and properly hold the deflector means **10** in position thereon and yet permit it to be readily removed for cleansing or for disposal.

The forward deflector plate **14**, overlies the inner surface of the forward portion of the bowl **11**, and is provided with openings **17** therethrough subjacent the inner rim **18** of the bowl **11** through which the flushing water passes and is provided with forwardly extending baffles **19** for deflecting flushing water entering the bowl and directing this water through the openings **17** into the deflector means **10** for flushing and cleansing the deflector means while in use.

From the foregoing it will be seen that I have devised an improved deflector for urine which may be readily made by either molding in one piece or by shaping the elements from separate parts and assembling them in a simple assembly operation. Also, the deflector unit may be easily installed and removed for disposal, cleansing or replacement.

While I have shown my invention in but one form, it will be obvious to those skilled in the art that it is not so limited, but is susceptible of various other changes and modifications without departing from the spirit thereof, and I desire, therefore, that only such limitation shall be placed thereupon as are specifically set forth in the appended claims.

What I claim is:

1. In a urine deflector for a water closet bowl having a water seal in the bottom portion thereof:

(a) an upwardly and rearwardly extending deflector member within the forward portion of the water closet,

(b) the lower end of said upwardly and rearwardly extending deflector member is connected to the lower end of an upwardly and forwardly extending deflector member which extends over the inner surface of a

forward portion of the water closet bowl, and there being at least one drainage passageway adjacent the juncture of the deflector members, and

(c) means supporting said deflector member in position to prevent direct contact of urine with the water during normal use of the water closet.

2. A urine deflector for a water closet bowl as defined in claim 1 in which the deflector member is formed of a disposable material and is detachably mounted within the water closet.

3. A urine deflector for a water closet bowl as defined in claim 1 in which the deflector member is formed of a sound-deadening material.

4. A urine deflector for a water closet bowl as defined in claim 1 in which the drainage passageway is in position to discharge urine beneath the surface of the water in said bowl.

5. A urine deflector for a water closet bowl as defined in claim 1 in which passageways are provided adjacent the upper end of said upwardly and forwardly extending deflector member in position to receive flushing water.

6. A urine deflector for a water closet bowl as defined in claim 5 in which forwardly extending baffles are carried

by said upwardly and forwardly extending deflector member subjacent said passageways for deflecting flushing water through said passageways.

7. A urine deflector for a water closet bowl as defined in claim 1 in which the means supporting said deflector member comprises support members engaging the upper edges of said bowl.

8. A urine deflector for a water closet bowl as defined in claim 7 in which said support members extend over and interlock with the upper edges of said bowl.

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