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(54) SPLIT PEE (SPLASHLESS URINAL INSERT)

(76) Inventor: **Dexter Alan Wise SR.**, Atlanta, GA (US)

Correspondence Address:
Dexter Alan Wise Sr.
1900 Niskey Lk. Rd. S.W.
Atlanta, GA 30331 (US)

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E03D 13/00 (2006.01)

(52) **U.S. Cl.** **4/309**

(57) **ABSTRACT**

This invention is an insert for use in conventional urinals which prevents urine splash-back and assists in air freshening. This apparatus includes a finned design housed in a plastic or hard rubber frame which is inserted into a urinal with the bottom positioned at water level in the base of urinal. The insert also employs changeable upper and lower deodorizer attachments that house solid deodorants used for air freshening. When utilized, this insert serves to prevent urine splashing back onto legs, shoes, clothing, hands, restroom walls, the floor, exterior walls of the urinal, or tiny urine particles becoming airborne.

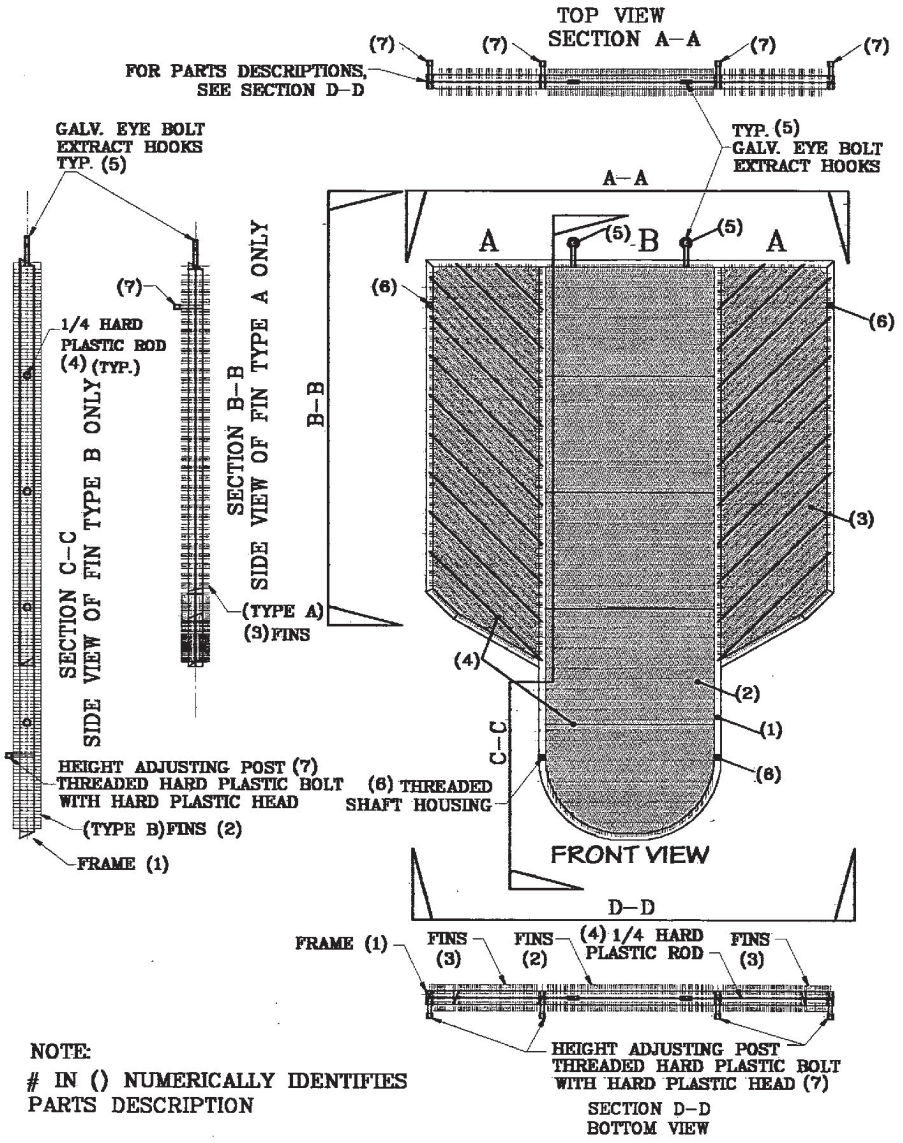

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FIGURE 1

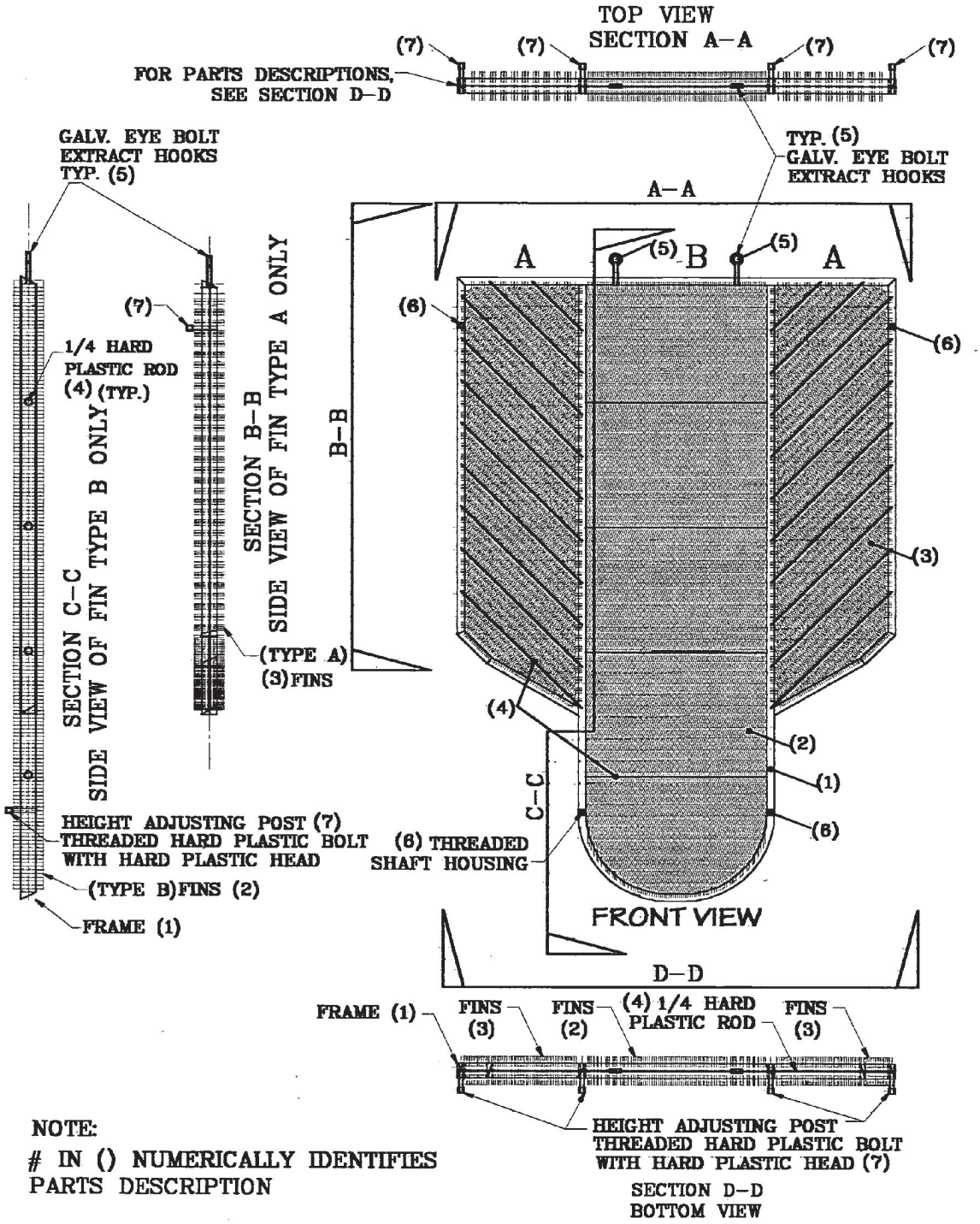

TOP VIEW
SECTION A–A
(7)
(7)
(7)
(7)
FOR PARTS DESCRIPTIONS, SEE SECTION D–D
GALV. EYE BOLT EXTRACT HOOKS TYP. (5)
TYP. (5) GALV. EYE BOLT EXTRACT HOOKS
A–A
A
(5)
B
(5)
A
(6)
(6)
(7)
1/4 HARD PLASTIC ROD (4) (TYP.)
SECTION B–B
SIDE VIEW OF FIN TYPE A ONLY
B–B
SECTION C–C
SIDE VIEW OF FIN TYPE B ONLY
(TYPE A) (3) FINS
(3)
(4)
(2)
(1)
C–C
(6)
HEIGHT ADJUSTING POST (7) THREADED HARD PLASTIC BOLT WITH HARD PLASTIC HEAD
(6) THREADED SHAFT HOUSING
(TYPE B) FINS (2)
FRAME (1)
FRONT VIEW
D–D
FRAME (1)
FINS (3)
FINS (2)
(4) 1/4 HARD PLASTIC ROD
FINS (3)
HEIGHT ADJUSTING POST THREADED HARD PLASTIC BOLT WITH HARD PLASTIC HEAD (7)
SECTION D–D
BOTTOM VIEW
NOTE:
IN () NUMERICALLY IDENTIFIES PARTS DESCRIPTION

FIGURE 2

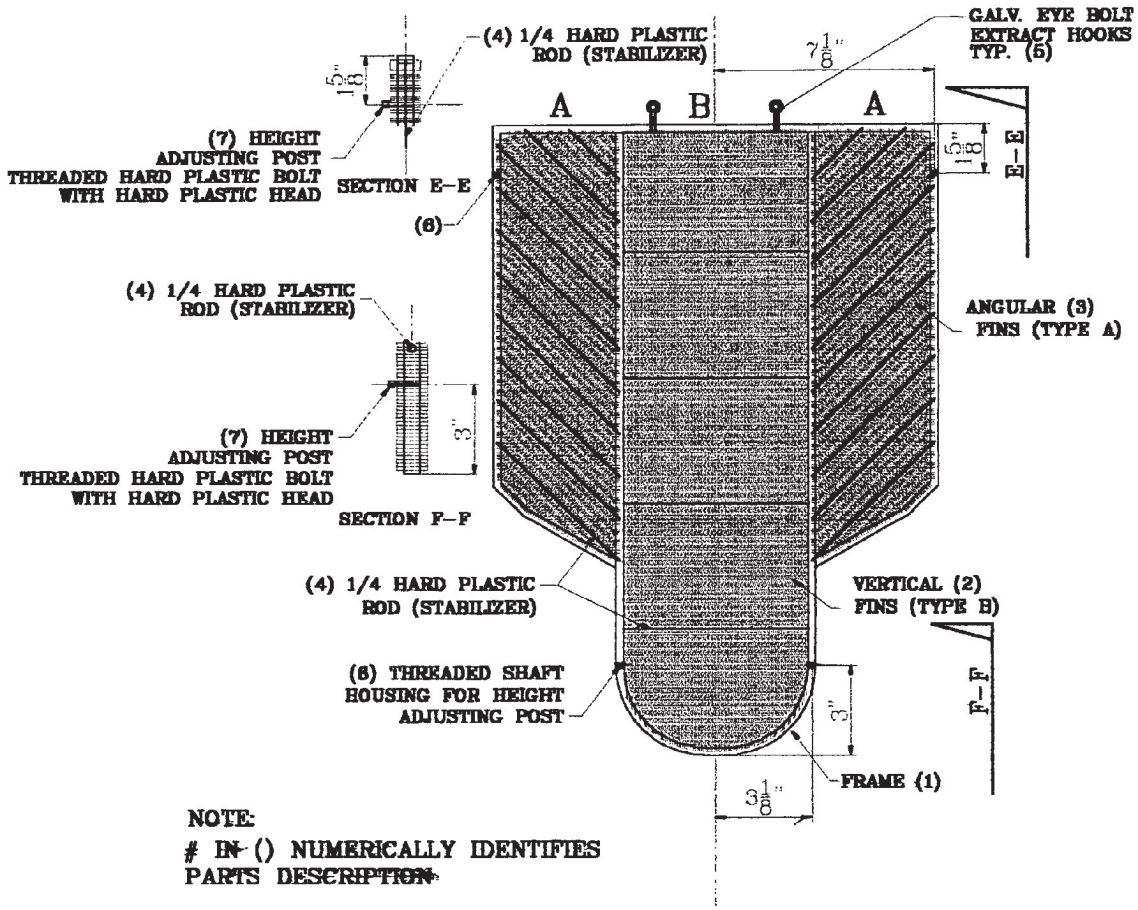

(4) 1/4 HARD PLASTIC ROD (STABILIZER)
GALV. EYE BOLT EXTRACT HOOKS TYP. (5)
7 1/8"
A
B
A
5/8"
(7) HEIGHT ADJUSTING POST THREADED HARD PLASTIC BOLT WITH HARD PLASTIC HEAD
SECTION E-E
(6)
E
E
ANGULAR (3) FINS (TYPE A)
(4) 1/4 HARD PLASTIC ROD (STABILIZER)
3"
(7) HEIGHT ADJUSTING POST THREADED HARD PLASTIC BOLT WITH HARD PLASTIC HEAD
SECTION F-F
(4) 1/4 HARD PLASTIC ROD (STABILIZER)
VERTICAL (2) FINS (TYPE B)
(6) THREADED SHAFT HOUSING FOR HEIGHT ADJUSTING POST
F
F
3"
FRAME (1)
3 1/8"
NOTE:
IN () NUMERICALLY IDENTIFIES PARTS DESCRIPTION
REAR VIEW

FIGURE 3

NOTE:
IN () NUMERICALLY IDENTIFIES PARTS DESCRIPTION

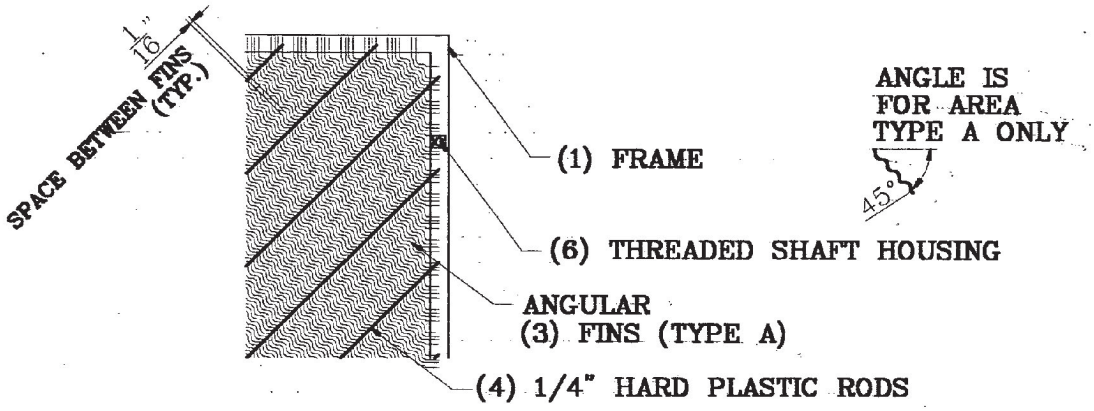
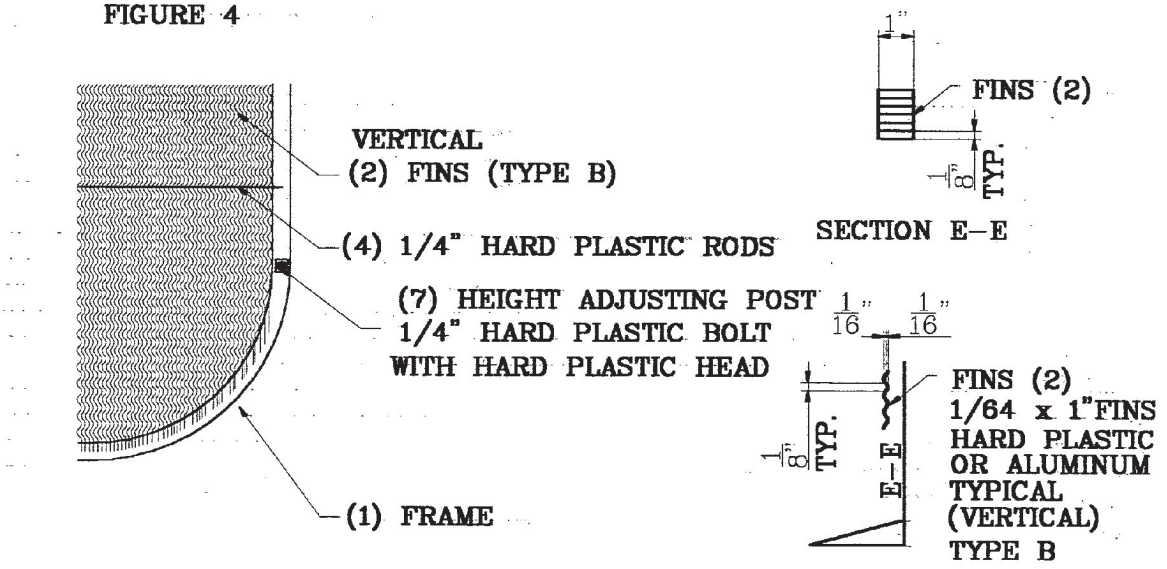
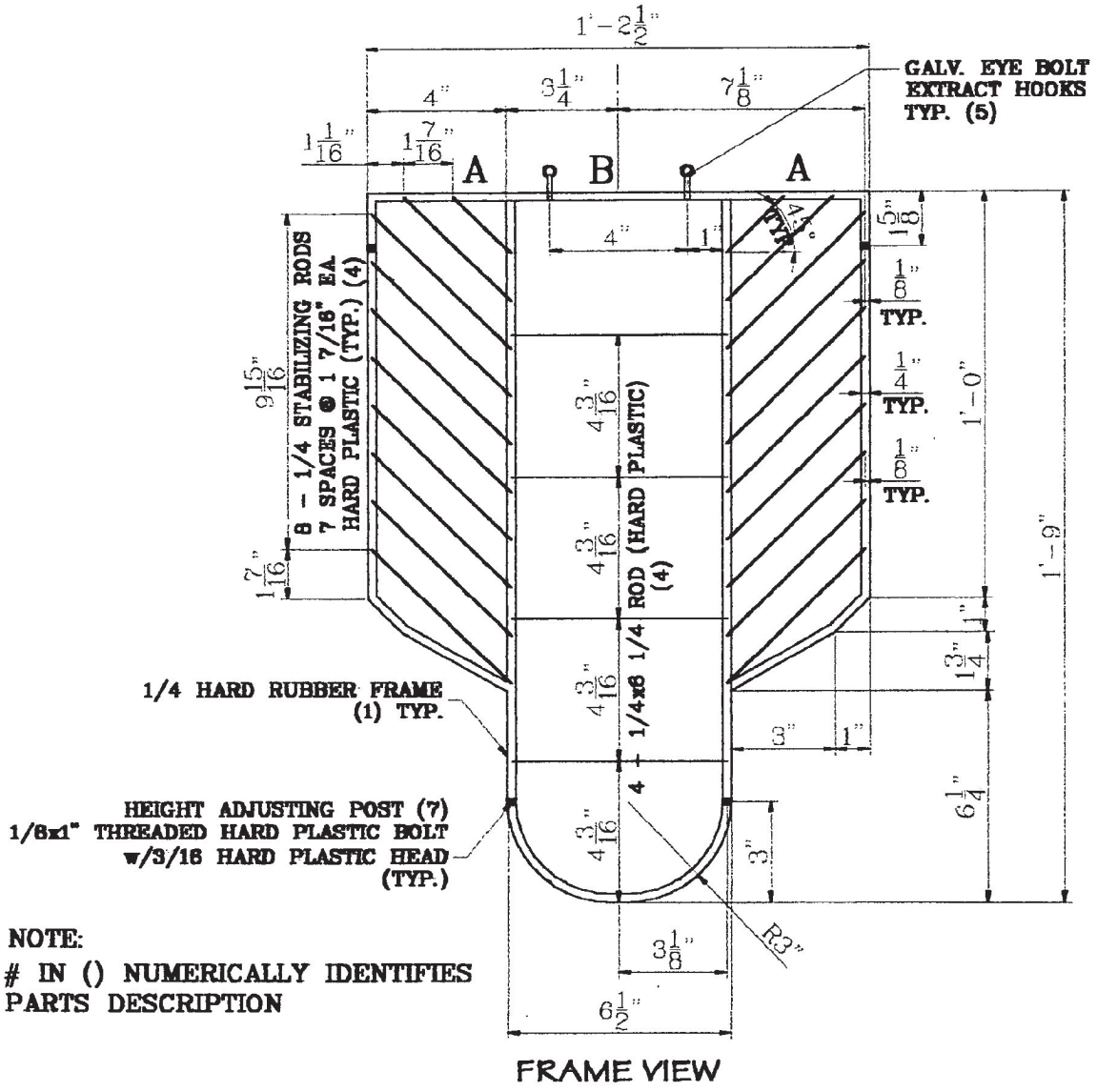


FIGURE 4



FINS VIEW

FIGURE 5



NOTE:
IN () NUMERICALLY IDENTIFIES PARTS DESCRIPTION

FRAME VIEW

Figure 6

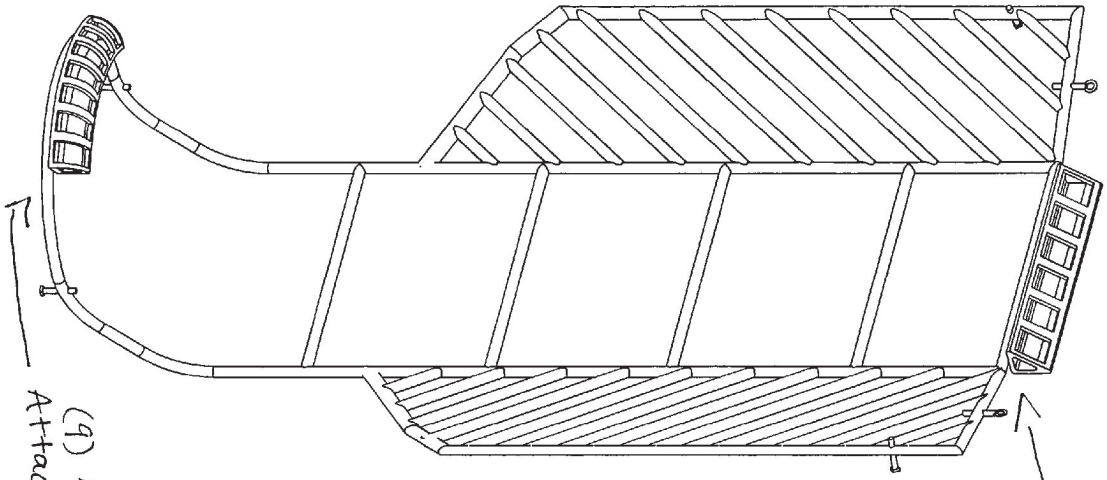


Figure 7

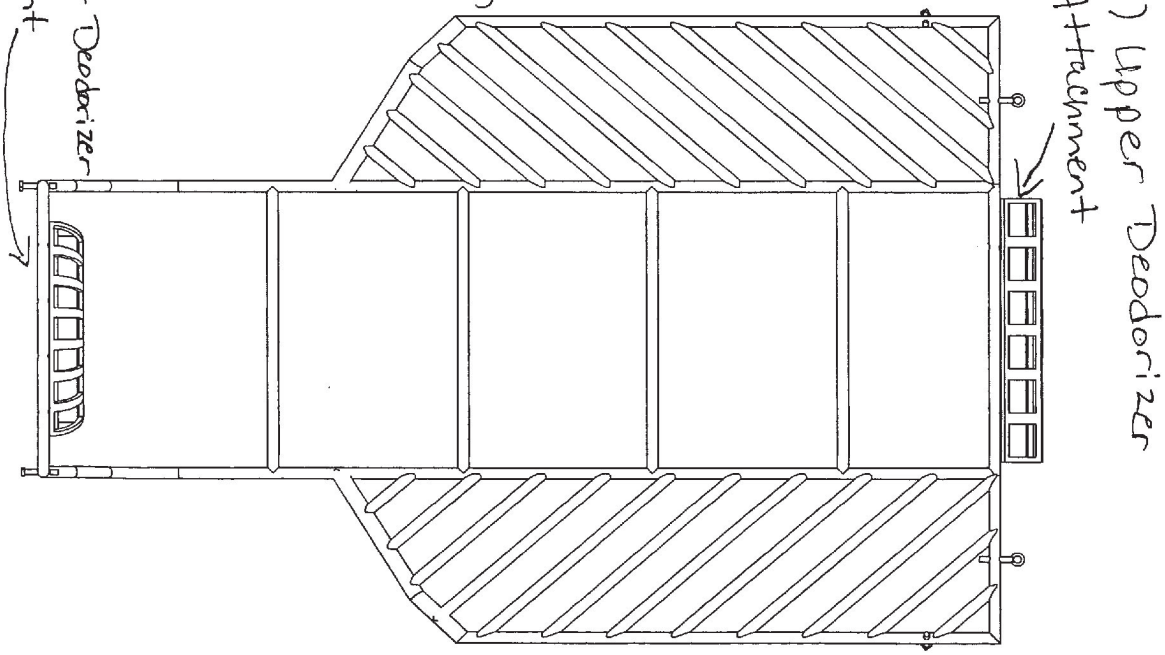
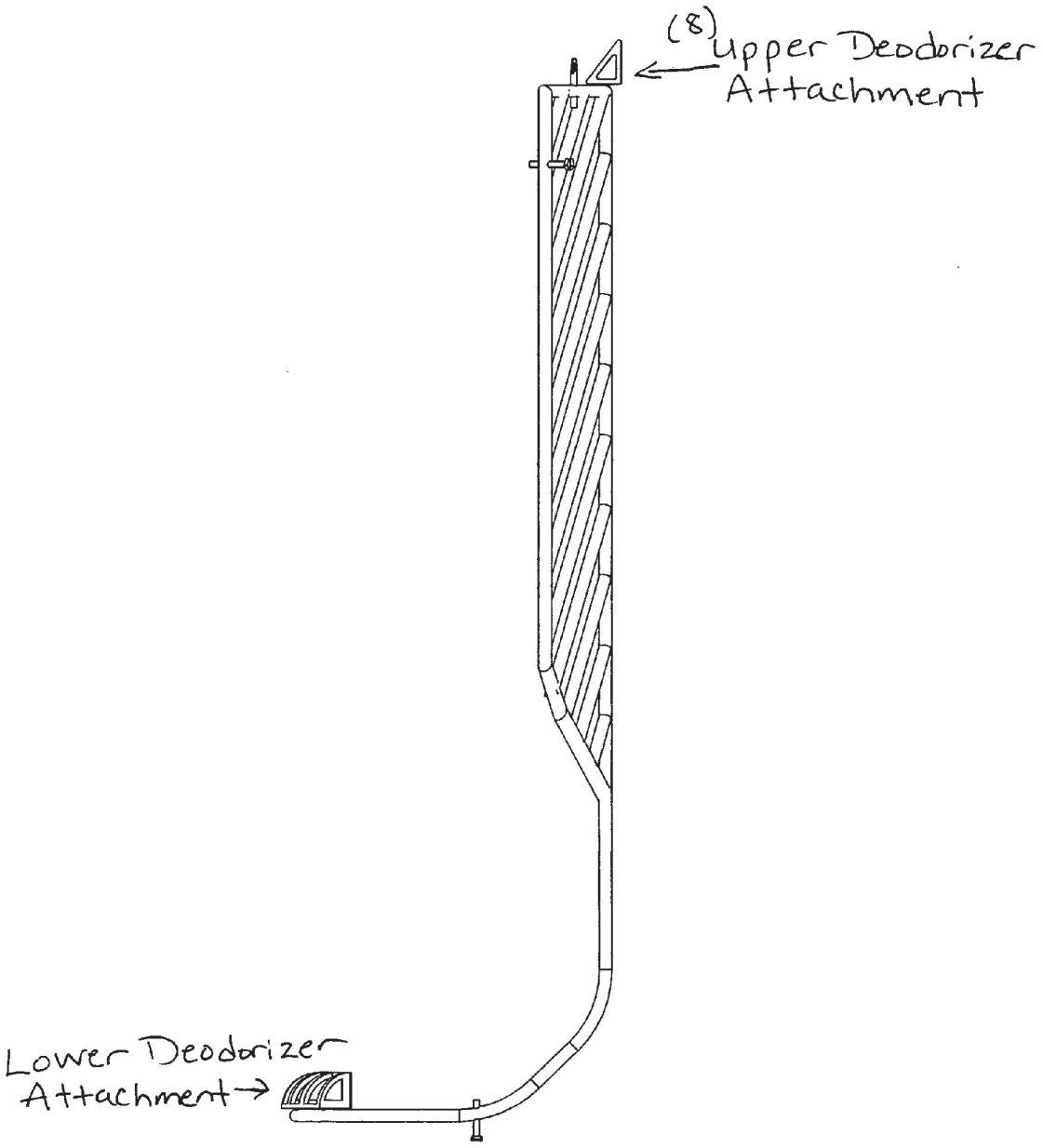


Figure 8


(8) Upper Deodorizer Attachment
Lower Deodorizer Attachment

SPLIT PEE (SPLASHLESS URINAL INSERT)

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] I claim the benefit of the filing date of provisional application No. 60/710,488 filed on Aug. 24, 2005 Split Pee (Splashless Urinal Insert)

BACKGROUND OF THE INVENTION

[0002] This invention refers to a cleaner and more sanitary urinal system. This design will help to reduce unsanitary areas in restrooms, provide air freshening deodorants, and prevent urine splashing back onto a person's shoes, clothing, body, walls, and the immediate floor area when one employs an upright urinal. It employs an insert designed to fit into a variety of styles of conventional upright urinals. This insert when urinated onto eliminates the occurrence of urinal splash back.

SUMMARY OF THE INVENTION

[0003] The object of this invention is to provide a clean and sanitary means by which a person may urinate when employing conventional stand-up urinals. This insert offers the benefit of helping to keep restroom urinal areas drier and more sanitary by reducing urine backsplash. This insert also provides deodorizing properties which aid in bathroom air freshening, These benefits are achieved through the finned inserts designed to conform to any size urinal. The finned insert serves to encourage a person to stand closer when urinating. It thereby reduces the occurrence of urine backsplash and/or urinating directly on the floor. The deodorizing properties are a benefit achieved through the employment of changeable deodorizer attachments which store solid deodorants.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] FIG. **1** is a front view of a splashless urinal insert illustrating the $frame_1$. The vertical $fins_2$, the angled $fins_3$, the ¼" hard plastic $rods_4$ the extract $hooks_5$, and the threaded shaft $housings_6$. There are also four other sectional views which further illustrate components, including height-adjusting $posts_7$.

[0005] FIG. **2** is a rear view of a splashless urinal insert illustrating the finned design showing the $frame_1$, vertical $fins_2$, angled $fins_3$, the ¼" hard plastic $rods_4$, the extract $hooks_5$, the threaded $shafts_6$, and the hard plastic height adjusting $posts_7$.

[0006] FIG. **3** is a partial frontal view of the splashless urinal insert illustrating the $frame_1$, angled $fins_3$, ¼" hard plastic $rods_4$, and a threaded $shaft_6$.

[0007] FIG. **4** is a partial frontal view of the splashless urinal insert illustrating the $frame_1$, vertical $fins_2$ a ¼" threaded rod_4, and a threaded $shaft_6$.

[0008] FIG. **5** is a dissected frontal view of the splashless urinal insert illustrating the various components and measurements.

[0009] FIG. **6** is a dissected front angular view of the splashless urinal insert illustrating the various components, including the upper deodorizer $attachment_8$ and the lower deodorizer $attachment_9$

[0010] FIG. **7** is a dissected frontal view of the splashless urinal insert illustrating the various components, including the upper deodorizer $attachment_8$ and the lower deodorizer $attachment_9$

[0011] FIG. **8** is a side view of the splashless urinal insert illustrating the upper deodorizer $attachment_8$ and the lower deodorizer $attachment_9$

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0012] The invention will now be explained with reference to the accompanying drawings. In FIG. **1** a frontal view of a splashless urinal insert numeral $_1$ denotes the frame (composed of a plastic or hard rubber material) which serves as the housing to hold the finned insert together. Numeral $_2$ depicts the vertical fins (composed of aluminum or hard plastic) which serve in slicing urine streams. The angled $fins_3$ (composed of aluminum or hard plastic) also serve in slicing urine and stabilizing vertical $fins_2$. The ¼" plastic $rods_4$ serve in holding the entire fin and frame components together. The extract $hooks_5$ are utilized in the removal and replacement of the splashless urinal insert. Utilizing extract $hooks_5$ prevent the hands having direct contact with insert during cleaning or replacement. The threaded $shafts_6$ are the housings for the height adjusting $posts_7$ (explained in FIG. **2**). The four additional illustrations are sectional views depicting insert (and various components) from various angles.

[0013] In FIG. **2** a rear view of a splashless urinal insert $numeral_1$ denotes the frame (made of a plastic or hard rubber material) which serves to hold the finned insert together. The vertical $fins_2$ serve in slicing streams of urine with angled $fins_3$ serving in slicing urine and stabilizing vertical $fins_2$. The vertical $fins_2$ and the angled $fins_3$ are housed in the $frame_1$.

[0014] $Numeral_4$, is an illustration of the ¼" hard plastic rods which serve in holding the entire fin and frame components together. $Numeral_5$ denotes the galvanized eye bolt extract hooks utilized in the removal and replacement of the insert. The threaded $shafts_6$ are the housings for the height adjusting $posts_7$. The height adjusting $posts_7$ are composed of hard plastic with hard plastic heads. These height adjusting $posts_7$ serve as spacers between the insert $frame_1$, the urinal walls, and water in the bottom of the urinal. The space the height adjusting $posts_7$ provide between the insert $frame_1$ and the urinal walls allow the water and urine to flow freely to the drain during the flush cycle.

[0015] In FIG. **3** a partial view of a splashless urinal insert $numeral_1$ denotes the frame, which serves as the housing and holds the finned insert together. $Numeral_3$ depicts angled fins, which serve to slice streams of urine. The angled $fins_3$ further serve in stabilizing the vertical fins. The ¼" hard plastic $rods_4$ serve in holding the entire fin and frame components together. $Numeral_6$ the threaded shaft serve as housing for the height adjusting post.

[0016] In FIG. **4** a partial view of a splashless urinal $numeral_1$ denotes the frame, which serves as the housing and holds the finned insert together. $Numeral_2$ depicts the vertical fins which serve to slice streams of urine. The ¼" hard plastic $rods_4$ serve in holding the entire fin and frame components together. $Numeral_7$ the height adjusting posts

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serve as spacers between the splashless urinal insert $frame_1$, the urinal walls, and water in the bottom of the urinal. The space the height adjusting $posts_7$ provide between the urinal $frame_1$ and the urinal walls allow water and urine to flow freely to the drain during flush cycle.

[0017] FIG. **5** is a dissected frontal view of the splashless urinal insert illustrating the various components and measurements.

[0018] In FIG. **6** a front angular view of the splashless urinal insert $numeral_8$ depicts the upper deodorizer attachment. This changeable attachment is employed in the housing of solid deodorants, which serve in air freshening. The upper deodorizer $attachment_8$ has a wedge shape which serves to smoothly channel water onto the finned surface of the insert thereby assisting in preventing water splashing during the urinal flush cycle. $Numeral_9$ the changeable lower deodorizer attachment houses solid deodorants which serves in air freshening.

[0019] FIG. **7** a frontal view of the splashless urinal insert $numeral_8$ depicts the upper deodorizer attachment. This changeable attachment is employed in the housing of solid deodorants which serve in air freshening. The upper deodorizer $attachment_8$ has a wedge shape which serves to smoothly channel water onto the finned surface of the insert thereby assisting in preventing water splashing during the urinal flush cycle.

[0020] $Numeral_9$ the changeable lower deodorizer attachment houses solid deodorants which serve in air freshening.

[0021] FIG. **8** is a dissected side view of the splashless urinal insert illustrating the changeable upper deodorizer $attachment_8$ employed in the housing of solid deodorants which serve in air freshening. The changeable lower deodorizer $attachment_9$ houses solid deodorants which serve in air freshening.

What is claimed:

1. I claim as my invention an insert designed for conventional urinals, which will prevent the occurrence of urine or urinal water splashing back onto legs, hands, shoes, or clothing, of person urinating.

This design prevents urine or urinal water making contact with the floor, walls, exterior of urinal, or tiny particles of urine becoming airborne.

Further this insert serves as an air freshener. This system comprises of:

1—An insert with vertical frontal and angled side fins housed in a hard rubber or plastic frame which fits into a conventional upright urinal seated above the water line and serves to slice streams of urine preventing splattering of urine and urinal water onto person, shoes, clothing, the floor, walls, or becoming airborne.

2—An insert designed with angled side fins that serve in stabilizing frontal vertical fins with ¼" hard plastic rods serving to hold entire fin and frame components together with two galvanized eye extract hooks housed in said frame used for insert extraction and replacement, also housed in said frame are four threaded shafts which are housings for height adjusting posts, the plastic bolts with plastic heads.

3—An insert designed with upper and lower replaceable deodorant attachments each storing a solid deodorant which aids in air freshening with upper attachment being of a wedge shape serving to smoothly channel water across finned surface preventing splashing and further serving to rinse finned area at each flush.

* * * * *