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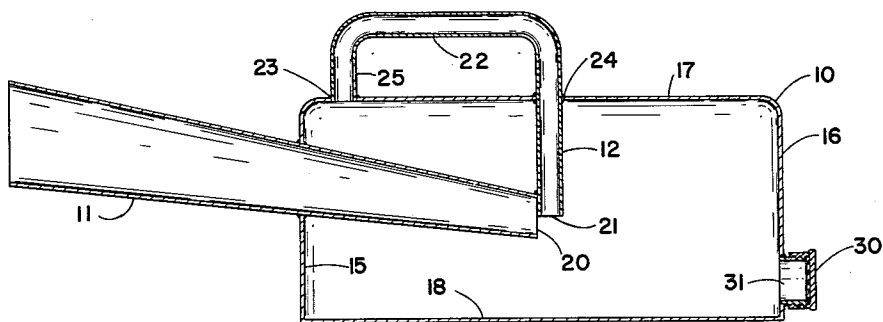


Fig. 1

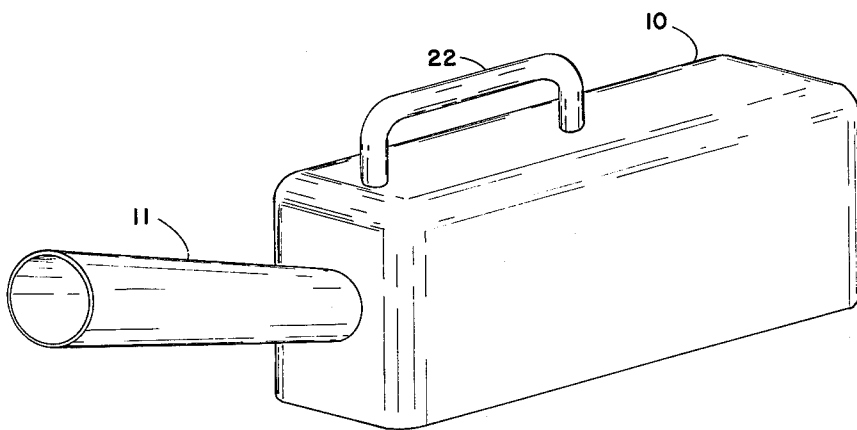


Fig. 2

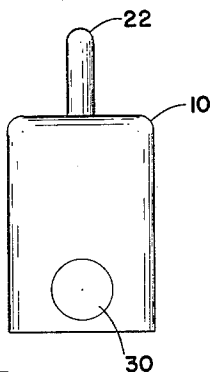


Fig. 3

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1

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This invention relates to a portable urinal for bed patients and others who are unable to use conventional facilities.

The general object of the invention is to provide a portable vented urinal which will not spill its contents when the urinal is tipped over or even when it is inverted.

The device comprises a closed container having an inlet tube leading to a central point spaced equidistantly from the opposite walls of the container. A vent tube has its inner end also located at the same central point so that when the container is less than half full the contents will not spill out of the inlet tube or vent tube in any position of the container. The vent tube extends outside of the container and is shaped to provide a convenient handle for carrying the urinal.

The invention will be better understood and the foregoing and other objects and advantages will become apparent from the following detailed description of the preferred embodiment illustrated on the accompanying drawing. Various changes may be made, however, in the details of construction and arrangement of parts and all such modifications within the scope of the appended claims are included in the invention.

In the drawing:

FIGURE 1 is a longitudinal sectional view of a urinal embodying the principles of the invention;

FIGURE 2 is a perspective view of the urinal; and

FIGURE 3 is an end view.

The preferred embodiment comprises essentially three parts, these being a container or vessel 10, an inlet tube 11 and a vent tube 12. The container may be of any desired shape but to facilitate manufacture it is preferably made of generally rectangular shape having two opposite side walls, two opposite end walls 15 and 16 and top and bottom walls 17 and 18.

The inlet tube 11 has a large outer end projecting from the end wall 15 of the container and a smaller inner end 20 spaced midway between the pairs of opposite walls of the container. If the container is of more irregular shape, the position of the inner end 20 of the inlet tube may be described as located at the volumetric center of the container. This is a general condition which must be satisfied in any event, regardless of the shape of vessel. A central portion of the inlet tube is integrally connected with the end wall 15 so that there is a liquid-tight joint between these parts.

The vent tube 12 has an inner end 21 also located at the volumetric center of the container whereby it may be mechanically connected with the inner end 20 of inlet tube 11 to provide a support or brace for the inlet tube. Vent tube 12 preferably extends through the top wall 17 of the container and then bends rearwardly to form a carrying handle 22. This handle portion is made rigid by connecting its downturned extremity 23 with the top

2

wall 17. The joint at 24 where the vent tube passes through top wall 17 is made rigid and liquid-tight both to provide a sturdy carrying handle and to provide secure support for the inner end of inlet tube 11. When the parts are made of metal the various joints and connections may be made rigid and liquid-tight by soldering or welding. A small aperture at 25 allows the escape of air from the container when the device is being used.

The container may be emptied by removing a screw cap 30 on a short tubular outlet neck 31 provided at the lower end of end wall 16. When this screw cap is in place, the container will not spill liquid when it is tipped over or inverted, provided it is kept at least slightly less than half full.

Having now described my invention and in what manner the same may be used, what I claim as new and desire to protect by Letters Patent is:

1. A urinal comprising a liquid container, an inlet tube having its inner end at the volumetric center of the container, and a vent tube having an inner end supporting the inner end of said inlet tube and an outer end forming a carrying handle for the urinal.

2. A urinal comprising a liquid container, an inlet tube having its inner end at the volumetric center of the container, and a vent tube extending through a wall of the container, said vent tube having an inner end at the volumetric center of the container connected with the inner end of said inlet tube and an outer end looped back and connected with the container to form a carrying handle for the urinal.

3. A urinal comprising a liquid container, an inlet tube having its inner end at the volumetric center of the container, and a vent tube handle on the container having an inner end connected to the inner end of said inlet tube.

4. A urinal comprising a liquid container having top, bottom, side and end walls, an inlet tube in one end wall having an inner end at the volumetric center of the container, a capped drain opening in the opposite end wall, and a vent tube extending through the top wall of the container, the inner end of said vent tube being connected with the inner end of said inlet tube, said vent tube having a looped outer portion connected at its extremity with said top wall to form a carrying handle.

5. A urinal comprising a liquid container, an inlet tube having its inner end at the volumetric center of the container, and a hollow handle on said container having a vent aperture therein, said hollow handle forming the exterior portion of a vent tube, said vent tube having a portion within the container supporting said inlet tube with the inner end of the vent tube also at the volumetric center of the container.

References Cited in the file of this patent

UNITED STATES PATENTS

2,358,850	Chenault	Sept. 26, 1944
2,731,648	Clement	Jan. 24, 1956

FOREIGN PATENTS

1,393	Great Britain	Jan. 20, 1899
152,722	Switzerland	Feb. 15, 1932