

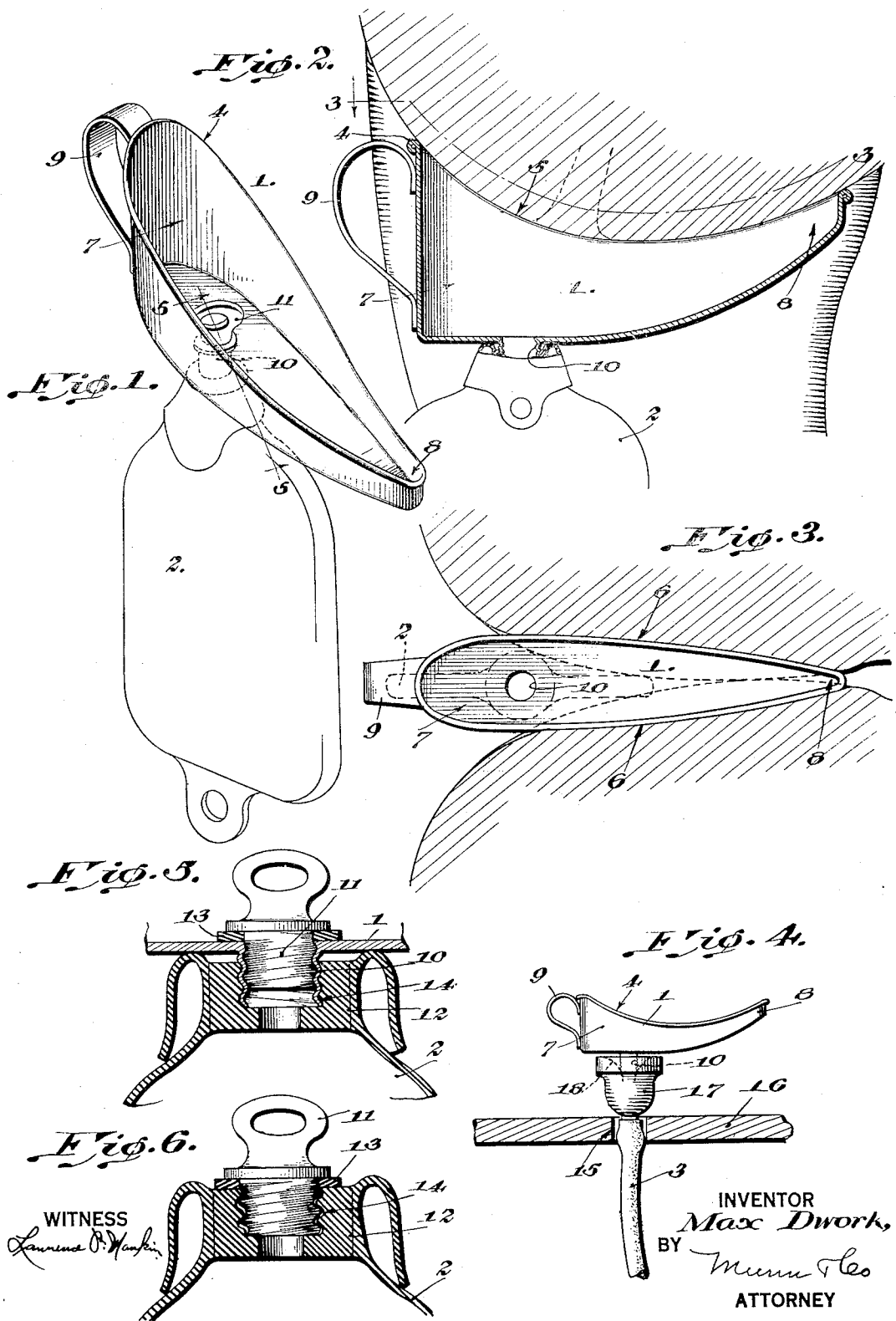
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URINAL

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2 Claims. (Cl. 4-110)

This invention relates to improvements in portable urinals especially of the type intended to be used as an accessory for vehicles, but not confined to such use, and the objects of the invention are as follows:—

First, to provide a liquid receiver which is particularly shaped to easily fit the crotch of a female person so that it may be pressed into contact with the crotch and make a liquid seal substantially throughout the extent of its rim.

Second, to shape the foregoing receiver on a very much elongated or ovate form so that the receiver may be pressed into position without causing discomfort.

Third, to provide the receiver with a screw plug or other closure which will serve the double purpose of closing the receptacle both when the latter is attached to the receiver and when the receptacle is detached from the receiver.

Other objects and advantages will appear in the following specification, reference being had to the accompanying drawing in which

Figure 1 is a perspective view illustrating the combination of the receiver with one form of receptacle which in this instance is a conventional type of water bottle.

Figure 2 is a vertical longitudinal section illustrating how the receiver is adaptable to the crotch of a female person.

Figure 3 is a horizontal section taken substantially on the line 3—3 of Figure 2 showing how the receiver is pressed into position and how a portion of the rim seal is made.

Figure 4 is a detail view showing the receiver connected with a section of tubing which is movable up and down in an opening in the floor boards of an automobile or other vehicle.

Figure 5 is a sectional view taken substantially on the line 5—5 of Figure 1, illustrating the use of the screw plug as a closure for the receptacle when the latter is attached to the receiver.

Figure 6 is a similar sectional view illustrating the use of the screw plug as a closure for the receptacle when detached from the receiver.

In the drawing the receiver, generally denoted 1, is shown attached both to a conventional water bottle 2 (Fig. 1) and to a section of tubing 3 (Fig. 4). In the respective instances the water bottle and tubing are herein regarded as a receiver, it being immaterial whether the liquid is locally retained, as provided for by the arrangement in Figure 1, or discharged as provided for by the arrangement in Figure 4.

The receiver 1 is particularly shaped for use by female persons and it is the specific shape of

the receiver which is regarded as one of the foremost features of the invention. As will be observed in Figure 3, the aspect of the receiver in plan is that of a very much elongated ovate form so that when the receiver is put in position it will not cause discomfort. The rim 4 is beaded throughout its extent so as not to cut the flesh.

Looking at the receiver in side elevation, the rim 4 is shaped with a decided curvature. This curvature is not necessarily made regular but will have that configuration which is best suited to the contour of the crotch 5 (Fig. 2). When the receiver is thrust into position the rim 4 will make a liquid seal both with the crotch 5 (Fig. 2) and with the flesh 6 at the sides which is parted from its original dotted line position (Fig. 3).

Again viewing the side elevational aspect of the receiver it is to be noted that the front 7 is relatively broad and deep so as to provide an adequate liquid space. From the foregoing front the receiver tapers rearwardly on long curves (Fig. 3) and the bottom slopes upwardly so that the inner terminal 8 comprises a shallow, blunt point.

A handle 9, attached to the front 7, facilitates the use of the receiver. The bottom has an integral nipple 10 which is provided with deeply pressed screw threads as shown in Figure 5. These screw threads are made deep so that the threads of the screw plug 11 will grip especially when it is used as a closure for the bottle receptacle 2.

In Figure 5 the threaded insert 12 is shown screwed on the outside of the nipple 10, and the screw plug 11 fitted on the inside of the nipple so as to close the bottle. A rubber or other washer 13, is fitted on the screw plug to be pressed against the bottom of the receiver. This arrangement is predicated on keeping the receiver 1 and bottle 2 connected. The screw plug 11 is removed when the device is to be used.

Having removed the receiver 1 from the bottle and desiring to close the bottle so that its contents will not spill, the screw plug 11 is screwed directly into the insert 12 (Fig. 6) and inasmuch as the threaded opening 14 of the insert 12 is necessarily made large enough to screw on the outside of the nipple 10 it follows that the threads must be made deep enough to maintain a threaded engagement between the plug 11 and the opening 14 when the plug is used in connection with the bottle 2 alone. This engagement will be sufficient to enable pressing the washer 13 into a sealing contact with the insert 12.

Figure 4 illustrates the use of the receiver 1

in connection with the section of tubing 3 which is let down through a hole 15 in the floor boards or other desired part 16 of an automobile or other vehicle. This tube has a coupling 17 of the type having a constricted rubber annulus 18 which will maintain a good grip on the nipple 10 when applied thereto with a screwing action. Upon desiring to use the receiver in Figure 1 it is only necessary to pull the tubing 3 through the hole 15 a sufficient distance.

In practice the receiver 1 may be made of a variety of materials. It is possible to construct it either of metal or rubber, and when constructed of rubber it may either be rigid or have a degree of flexibility so that it can be doubled up, but it must not be flexible to that extent where it will not retain the shape substantially depicted in Figures 1, 2 and 3.

I claim:—

1. A receiver having a rimmed opening shaped with a contour to substantially fit the female crotch and having a bottom sloping from the front to the inner terminal, said receiver having an elongated, ovate configuration in plan, taper-

ing from said front to said inner terminal to provide a relatively deep front and a shallow, blunt-pointed inner terminal, a threaded nipple attached at an opening in the bottom, a receiver having an insert with a threaded opening screwed on the outside of the nipple, and a screw plug screwed inside of the nipple to close the receptacle, said screw plug and opening in the insert having sufficiently deep threads to enable screwing the plug into the threaded opening when the receptacle is detached from the nipple.

2. A receiver having a bottom with an opening near one end and having an upward curvature toward the opposite end, said bottom being of elongated, ovate configuration, an upstanding wall around the bottom, said wall being high at said one end adjacent to the opening to provide a relatively deep front and being low at said other end to provide a blunt-pointed terminal, the rim of the wall having a downward curvature toward said terminal, and a nipple attached to the bottom at said opening.

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