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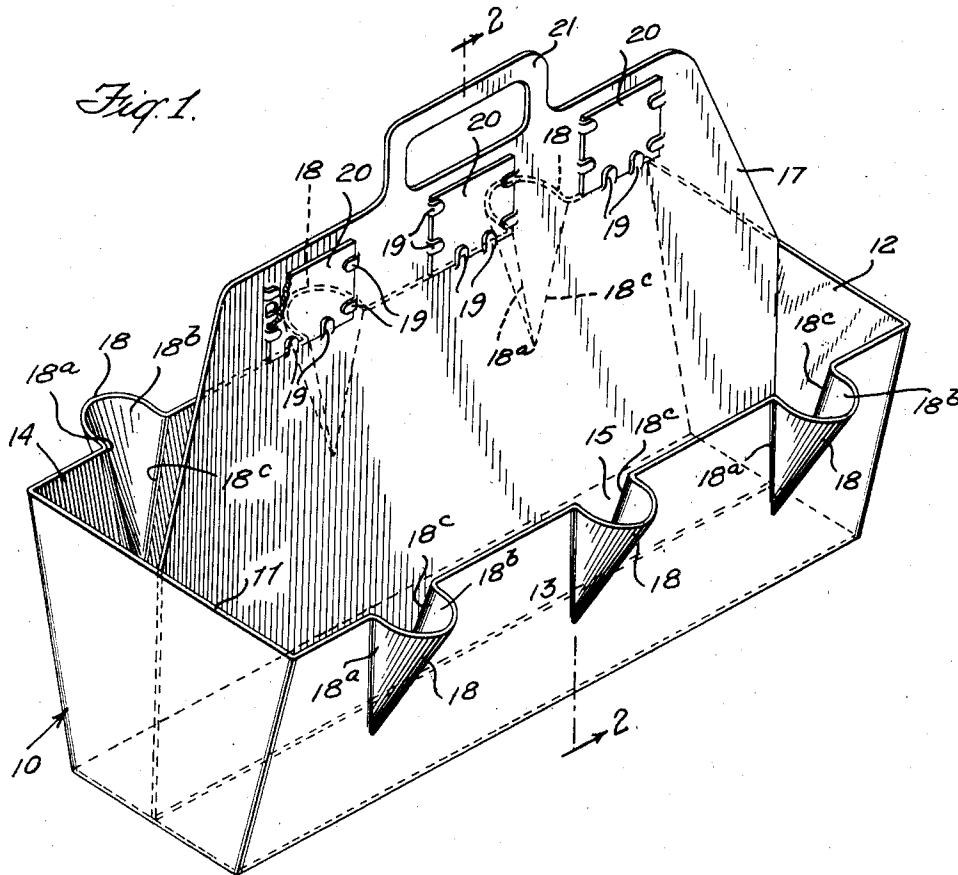
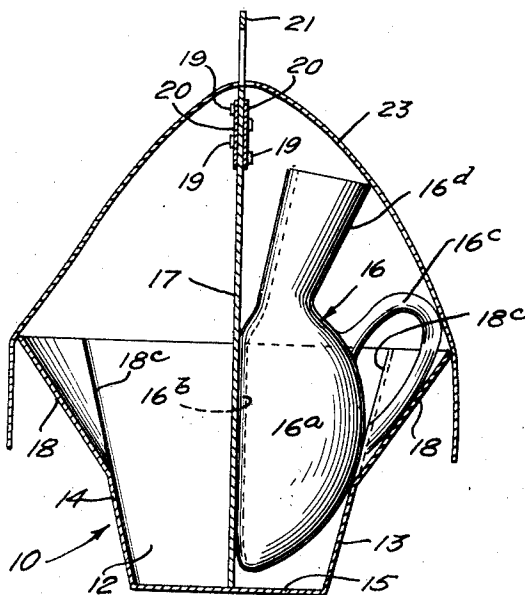
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2,292,055

URINAL CARRIER

Filed June 1, 1939

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

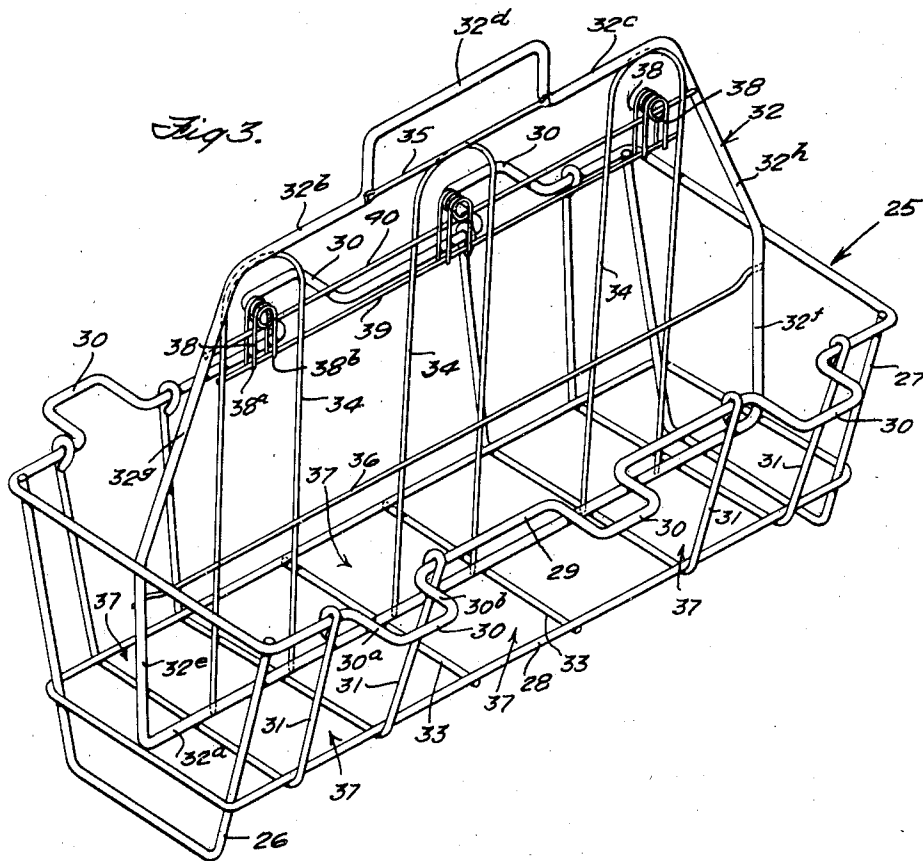
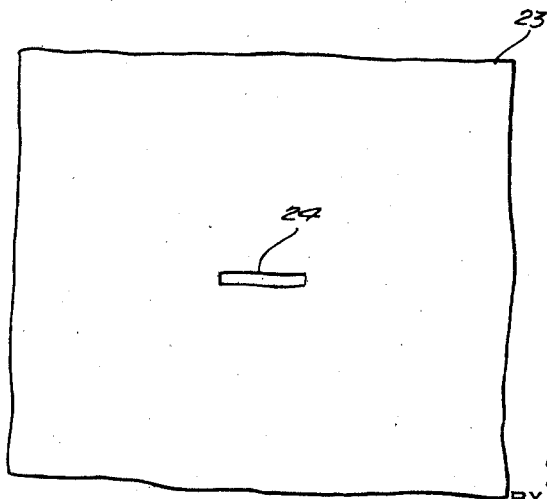


Fig. 4.

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URINAL CARRIER

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8 Claims. (Cl. 224—48)

This invention is in a carrier for urinal vessels.

Urinals are usually made of a material like glass and in that form are usually used in hospitals; in the course of such use, according to past and current practice, numerous disadvantages and trouble are incurred, particularly in the handling of them, such as in collection, distribution and identification thereof. Breakage also occurs in large measure. It is an object of this invention to overcome such disadvantages of prior practice as those noted above and to provide for safe, convenient and efficient handling of urinals.

Another object is to provide a carrier that will be of simple and inexpensive construction and well adapted for the safe and dependable carriage of the peculiarly shaped and proportioned urinal vessels. Another object is to provide a carrier which will be strong and durable, easy to carry and handle and which will dependably protect and safeguard the urinal vessels which as above noted are usually made of a breakable material like glass. Another object is to provide a carrier in which a number of urinal vessels may be compactly accommodated for carriage and yet dependably protected against collision with each other. Another object is to provide for dependable and simple identification of or distinguishing between the various urinal vessels to be handled.

Another object is to provide a urinal carrier that will not be unsightly in appearance or awkward to handle and that will be easy to keep clean and sanitary. Another object is to provide a covered carrier for urinal vessels that will be of dependable and simple construction and, though covered, will not detrimentally interfere with facility and efficiency of handling of the vessels. Other objects will be in part obvious or in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts as will be exemplified in the structure to be hereinafter described and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings, in which are shown several of the various possible embodiments of our invention,

Figure 1 is a perspective view of the carrier without the cover;

Figure 2 is a central vertical sectional view, as seen along the line 2—2 of Figure 1 but showing the carrier with the cover in place and with one urinal vessel related thereto;

Figure 3 is a perspective view like that of Figure 1 showing another illustrative embodiment of our invention, and

Figure 4 is a plan view on a smaller scale of the cover.

Similar reference characters refer to similar parts throughout the several views in the drawings.

Referring first to Figures 1 and 2, we have there shown a urinal carrier, generally indicated by the reference character 10, made up of a sheet material like sheet metal. It preferably comprises opposed end walls 11, 12, joined to opposed side walls 13, 14, suitably joined to a bottom member 15. For illustrative purposes let it be assumed that the carrier is to accommodate six urinals, an illustrative form of which is indicated at 16 in Figure 2; and accordingly the above-mentioned carrier parts are preferably proportioned to take the urinals in two rows, one to each side of the longitudinal axis, of three urinals each, and we hence preferably provide an upstanding central partition 17, fitted within and secured to the end walls 11, 12 and bottom 15 in any suitable way. Thus, we provide two compartments one to each side of the partition 17.

Referring now to Figure 2, urinal 16 comprises a main body or container portion 16^a with a flat bottom 16^b, opposed to which, and hence somewhat on the top side of the container portion 16^a, is a handle 16^c, a neck-like part 16^d extending from the container portion 16^a in the usual way. As is current or prior practice, the attendant usually tries to carry two or more such vessels by the fingers of one hand, interlocking the fingers with the handles, the bulbous container portions 16^a contact each other or are banged together with resultant breakage or danger of breakage, and additionally there is the risk of confusion of identification of the vessels with the patients being served. According to our invention, such disadvantages and dangers we dependably eliminate.

Preferably, we give each compartment a length materially greater than the aggregate width of the number of vessels to be accommodated therein so that, in the preferred arrangement, the sides of the urinal vessel (if the compartment is to receive only one) do not engage the end walls or so that, where more than one vessel is to be received in each compartment, there is ample space for clearance between adjacent urinals and between the end walls and the adjacent sides of the end urinals.

As for the transverse dimension of each compartment, a preferred relationship is like that shown in Figure 2. With the member 17 extending upright and hence at right angles to the plane of the bottom 15, the side walls 13, 14, opposed to the member 17, are preferably inclined upwardly and away from the member 17 and the spacing is preferably such that, as is better shown in Figure 2, an inserted urinal 16, when put in

position with its flat bottom 16^b resting flat against one face of the wall member 17, falls short of bottoming in the compartment, thus to keep its lowermost end, when in the position of Figure 2, out of contact with the bottom 15 of the carrier. In this relationship, with the container portion 16^a of the urinal substantially wedge-shaped throughout its lower half portion, there may take place a wedge-like seating of the vessel into the angle between the walls 13 and 17 and a suspension of the vessel by the latter.

The handle 16^c (Figure 2) of the vessel forms, in a general way, an upward extension of the wedge-like shape of the lower end half of the container portion 16^a and preferably the handle 16^c takes part in the above-described wedge-like support of the vessel between the opposed walls of the compartment, and for this purpose a portion of each side wall, one portion for each urinal vessel to be accommodated, is bent, pressed or otherwise deformed or shaped to extend outwardly, somewhat in the form of a spout, as indicated at 18. The outermost portion of the formation 18 is preferably at such an angle that the usually slight curvature of the handle 16^c is tangent thereto, somewhat in the same manner in which the plane of the side wall 13 is inclined and tangent to the curvature of the container portion 16^a, all as seen in Figure 2.

Thus, the handle 16^c, accommodated in the formation 18, may act with the flat bottom 16^b as the opposed sides or faces of the wedge-shaped entity to be received in the angle between the wall 17 and the outermost portion of the formation 18. Preferably, it is these parts and their coactions that we utilize to sustain the weight of the vessel 16.

In dimension lengthwise of the carrier each formation 18 is just about sufficient to freely receive in the space between the wall portions 13^a and 18^b (Figure 1) of the formation 18 the handle 16^c but preferably with only such play so that the coaction between the handle 16^c and the spaced parts 18^a and 18^b holds the vessel 16 against tilting out of its intended upright position, as in Figure 2.

As above indicated, the formations may be made integrally with the respective opposed side walls 13, 14, or they may be separately formed and, after cutting out substantially U-shaped slots along the upper edges of the side walls, they may be secured in any suitable way to the latter along the edges of the U-shaped slots. In either case, whether separately or integrally formed, the upper edges of the side walls 13, 14 will be seen to be provided with what are in effect U-shaped recesses or slots 18^c, but as above indicated, we prefer to provide members 18 for laterally extending these slots. If only slots 18^c are employed, good results are still achievable, each slot receiving a handle and coacting to hold the vessel against displacement or tilting. The employment of members 18, however, has certain advantages already indicated above, including also better protection against breakage of the handles themselves. These parts also act to locate and hold each vessel in its allocated portion of each compartment, preventing movement of one vessel toward the other or tilting or movement of one vessel into engagement with a neighboring one or into engagement with an end wall, such as wall 11 or wall 12. Also, rotary movement of the vessel about a vertical axis, as viewed in Figure 2, is dependably prevented, the backing

for the bottom thereof provided by the partition member 17 also aiding in this action.

The height of the side walls 13, 14 or of the upper edges of the handle-receiving formations 18, is such that a substantial portion of the handle 16^c projects upwardly therefrom, thus permitting ease of insertion or removal of the vessels.

The wall member 17, however, is preferably extended upwardly preferably beyond the height of the urinal vessels and preferably above the height of the latter is provided with suitable means for receiving and holding an identification card or like indicia, one for each of the compartment spaces allocated to the urinal vessels. These means may take any suitable form, for example, a plurality of tongues 19 cut or pressed out of the sheet metal of the wall 17 to form bottom and side supports for cards indicated in Figures 1 and 2 at 20. Similar tongues are cut and stamped outwardly of the other face of the wall 17 so that cards 20 may be received and held thereby, and again one for each of the spaces allocated to the vessels on that side of the central partition member 17.

The member 17 preferably is provided with a handle, as at 21 (Figures 1 and 2), preferably midway along its length, and handle 21 may be formed out of the sheet metal of the part 17 itself. Handle 21 thus permits the carrier to be manually carried and preferably it serves also to position and hold a cover. In Figure 4 we have shown the cover at 23 on a smaller scale and it may be made of any suitable flexible sheet material, such as cloth, rubberized material, or the like, and along its central longitudinal axis it is provided with a slit 24 of the same length as the length of handle 21. Cover 23 may thus be draped over the top edge of the partition 17 with the handle 21 projecting through the slit 24 which thus holds it against displacement while the upper and lower halves of the cover 23, as viewed in Figure 4, are of sufficient expanse to cover over the respective compartments and to drape over the upper edges of the end and side walls of the carrier, as is better indicated in Figure 2.

Accordingly, the assemblage may be easily carried, makes a neat and unobtrusive appearance, and yet the cover may be easily handled for purposes of removal or insertion of a vessel. For example, if the carrier is held in one hand, it is a simple matter to flip a suitable portion of the cover 23 over one end of the top edge of the partition member 17, thus to expose a suitable portion of one compartment. Also, the cover 23 may be easily removed for replacement, laundering, or the like.

Turning now to Figure 3, we have there shown in perspective a carrier 25 embodying certain features of our invention but made up of wire or wire parts suitably secured together. Thus, the carrier may comprise two U-shaped end members 26, 27 having secured thereto adjacent their lower ends, as by welding, a rectangular wire member 28 and at the upper ends thereof a wire member 29. Member 28 may in outline approximate the outline of bottom 15 of Figures 1 and 2 while member 29 may approximate in outline the upper edge of the walls 11, 14, 12 and 13, having outwardly directed U-shaped bends 30, illustratively six in number and three on each of the longitudinal sides, corresponding generally to the sheet metal formations 18 earlier above described.

At suitably longitudinally spaced points U-shaped wire members 31, illustratively four, as shown in Figure 3, may be provided to join the longitudinal sides of the closed frame wires 28, 29.

A central partitioning and handle means are preferably provided, preferably in the form of a relatively heavy closed wire member 32 whose lower portion 32^a may be secured, as by welding, to the opposed ends of the frame wire 28 and also to the cross-portions of the U-shaped wire members 31, and also, where desired, to other cross-wires, such as the wires 33 which may be bridged across and welded to the opposed longitudinal side portions of the frame wire 28.

In line with each pair of opposed U-shaped conformations 30, we preferably build up the central partitioning member to provide suitable portions in the plane thereof and against which the flat bottom portions 16^b (see Figure 2) of the urinal vessels 16 may rest. Illustratively, where there are three pairs of opposed handle-receiving conformations 30, as in Figure 3, we provide three U-shaped wire members 34 whose lower ends are welded to the lower horizontal portion 32^a of the member 32 and whose upper portions are secured as by welding to the upper horizontal end portions 32^b and 32^c thereof, the intermediate member 34 having its upper end welded to a cross-wire 35 in line with the portions 32^b and 32^c where the member 32 is formed at its central upper portion into an upwardly directed handle portion 32^d. The vertical leg-like parts of the members 34 are preferably parallel and spaced apart by a distance less than the horizontal expanse of the bottom 16^b of the urinal vessel 16 (Figure 2), thus to insure that two opposed urinal vessels have their bottoms 16^b held out of contact with each other and held dependably separated by these two spaced portions of the member 34.

If desired, these vertical portions of the members 34 may be suitably reinforced or tied together, for example, as by the horizontally extending wire 35 which extends across the vertical arms of the members 34, being secured thereto and to the upright ends 32^e and 32^f of the member 32 in any suitable way, as by welding. Thus, these parts form a strong and dependable backing against which the bottom 16^b (see Figure 2) of the urinal vessel 16 may rest flatwise with its handle portion 16^c resting in the corresponding U-shaped conformation 30, the downward and inward inclination of the portion of the handle 16^c contacted by the outermost part of the portion 30 acting preferably, in coaction with the bottom 16^b to dependably hold the vessel in position with a wedge-like action. The portions 30^a and 30^b of the conformation 30 act as stops to coact with the side portions of the handle 16^c to hold the vessel against tilting toward one end or the other of the carrier; they also and preferably insure the positioning of the vessel within its allotted space in the carrier compartment and maintaining it thus against contacting an adjacent vessel. And like the parts 18 of Figures 1 and 2, these U-shaped conformations 30 are preferably of a height so that a substantial portion of the handle 16^c projects upwardly therefrom so as to facilitate insertion or removal and act also as guides to guide the vessel properly into the carrier and with its flat bottom portion 16^b thus neatly guided into flatwise relation against the intended wire parts of the central partition-forming wire frame.

Thus, the vessel may be dependably supported again in a wedge-like space with the opposed portions of which the bottom 16^b and the outer upwardly inclined portion of the handle 16^c of the vessel coact. Preferably, also, the lowermost end of the vessel is free from engagement with any part of the carrier. This may be achieved by proportioning the parts, as was above described in connection with Figure 2, or, by way of further example, by arranging the wires that are bridged across opposed parts of the rectangular wire member 28 so that the space directly underneath the lower end portion of the vessel 16 is free; this latter arrangement is also shown in Figure 3 in which the wire parts underneath each urinal that is positionable in the carrier are arranged in an open square, as at 37. Thus, the tip-like lower end of the vessel falls, in projection, within the four sides of a square 37 and hence may, as in the preferred case, be kept out of contact therewith. Or, if desired, the parts may be so proportioned that the lower tip-like portion of the vessel may actually project downwardly through its underlying square 37 and, if desired, two or more of the sides of the square 37 may engage side portions of the vessel and thus coact with the other holding parts to support the vessel directly or to hold it against tilting.

We also prefer to provide the carrier with suitable standards so that when it is set down, as on a floor or table, the plane of the rectangular frame wire 28, through which the lower tapered ends of the vessels 16 may project, as above noted, each through its open square 37, is supported well above the plane of the floor or table, thus to protect the lower ends of the vessels. Such standards may be conveniently provided in the manner already above indicated, namely, by way of the lower portions of the U-shaped wire end members 26, 27 to which, as earlier above indicated, the wire member 28 is secured, as by welding, but at points spaced upwardly from the lower ends of the members 26, 27.

Again, we prefer to provide suitable means for supporting suitable identifying indicia, such as a card, one for each of the spaces allocated to the several vessels to be supported or carried. Thus, we may provide for each space and mount preferably in the plane of the central partition-forming means and preferably above the level of the upper ends of the inserted vessels a wire card holder, indicated at 38, and it may comprise a single wire bent to provide two upright leg portions 38^a and 38^b joined together by one and one-half turns of the wire, thus exposing upwardly two loop-like wire parts between which a card may be pressed and yieldingly gripped, the springiness of the wire employed contributing toward this action.

These members 33 may be mounted in position in any suitable way, as by welding them in pairs, one on each side, to two horizontally extending wires 39, 40, which in turn extend across the upper end portions of the vertical parts of the U-shaped wires 34. Wires 39, 40 may thus additionally brace the parts 34 and at ends thereof, such as the ends of wire 40, may be extended to be secured to the inclined portions 32^e and 32^f of the wire member 32, thus to reinforce the anchorage of the upper ends of the members 34 to the member 32. The above described illustrative shaping of the card supports 38 and mounting thereof also makes for attractiveness and neatness of appearance, it being noted that, as is better shown in Figure 3, the members 38 of

each pair are alined with each other or juxtaposed to each other and in turn are centered and symmetrically shaped with respect to the members 34.

Wires of different thicknesses, strengths, or weights may be employed, according to the relationship of any particular wire part to others and to the strains and stresses to which it might be subjected. In Figure 3 illustrative differences in wire thicknesses are indicated.

The cover 23 of Figure 4 may be related to the carrier of Figure 3 in the manner above described in connection with Figures 1 and 2. The upwardly projecting handle portion 32^d is received upwardly through the slit 24 of the cover 23, certain portions of which find support along the horizontal portions 32^b and 32^c and the remaining portions of which drape themselves over the four sides of the carrier, covering over such vessels as may be related to the carrier.

Thus, it will be seen that there has been provided in this invention a urinal carrier in which the various objects hereinbefore noted, together with many thoroughly practical advantages are successfully achieved. It will be seen that the construction is simple, inexpensive and lends itself readily to strong and durable fabrication. Dependable segregation and identification of vessels are achieved, sanitation improved, possibility of breakage greatly reduced, and greater efficiency of routine handling of urinal vessels in hospitals, and the like, made possible.

As many possible embodiments may be made of the above invention and as many changes might be made in the embodiment above set forth, it is to be understood that all matter hereinbefore set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

We claim:

1. A carrier for urinal vessels that have a substantially flat bottom with a handle extending away from the wall that is opposed to the bottom, said carrier comprising a receptacle having opposed end members and opposed side members with means forming a partition extending substantially centrally between said opposed side members, thereby to divide said receptacle into two compartments, said partition-forming means presenting substantially upright means having two sides respectively facing said opposed side members, said sides forming backings respectively for the reception thereagainst of the substantially flat bottoms of upended urinal vessels received in said two compartments with their respective handles extending respectively toward said opposed side members, the latter each having means forming a seat for the reception thereagainst of the handles of the urinal vessels received as aforesaid in said two compartments with their bottoms against the respective sides of said partition-forming means, the spacing between the latter and said seat-forming means in each of said side members being less than the dimension of said urinal vessels from the bottoms thereof to the place of contact of the handles with said seat-forming means, whereby said vessels are held suspended, said seat-forming means having spaced means between which the handle is received to coact with the partition-forming means in holding the vessel against tilting out of up-ended position and against the tilting of the bottom thereof out of backing engagement with said partition-forming means.

2. A urinal carrier as claimed in claim 1 in which said opposed side members are of sheet material and said seat-forming means are in the form of spout-like formations in said sheet material.

3. A urinal carrier as claimed in claim 1 in which said opposed side members are of a material like wire, said seat-forming means comprising substantially U-shaped conformations in said wire members.

4. A carrier for urinal vessels that have a substantially flat bottom with a handle extending away from the wall that is opposite the bottom, said carrier comprising compartment-forming means having two opposed substantially parallel means provided with members for holding them in relatively fixed spaced relation by a distance commensurate with the dimension from the handle to the bottom of a urinal vessel, one of which means provides alined backings for the bottom portions of a plurality of urinal vessels upended and alined along said means with said substantially flat bottom portions engaging substantially flatwise against said backings and with the handles of said urinal vessels extending in a direction away from said one means and toward the other of said means, and means for holding said urinal vessels against tilting of their substantially flat bottom portions out of flatwise engagement with their backings and in spaced relation from each other, said means comprising a plurality of means spaced along said other means, one for each urinal vessel, for respectively receiving the handles of the vessels inserted in said compartment.

5. A urinal carrier as claimed in claim 4 in which said other of said two means is of sheet material and the handle-receiving means comprise recesses in said sheet material.

6. A urinal carrier as claimed in claim 4 in which the other of said two opposed means is of sheet material and said handle-receiving means comprise a plurality of parts of sheet material each of substantially U-shaped cross-section.

7. A urinal carrier as claimed in claim 4 in which said other of said two opposed means comprises wire means and said handle-receiving means comprises substantially U-shaped conformations in said wire means.

8. A carrier for a urinal vessel that has a substantially flat bottom with a handle extending away from the wall that is opposite the bottom, the handle having an inclined portion that extends at an angle to the plane of the bottom with the apex of the angle directed toward that end of the vessel opposite its open end, said carrier comprising a receptacle having two opposed members, one of which extends substantially upright and is of an expanse sufficient to form a backing to receive thereagainst the substantially flat bottom of the upended vessel with the handle thereof extending in a direction away from said backing-forming member and toward the opposed member, the latter having substantially U-shaped means open toward said backing-forming member for receiving the handle of the vessel between the two arms of said U-shaped means and with said inclined portion of the handle engaging the bottom part of said U-shaped means, whereby, by a wedge-like action, the substantially flat bottom of said vessel is held flatwise against said backing-forming member.

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