Dec. 8, 1964 W. K. HARE ETAL 3,160,308

NESTING AND STACKING RECEPTACLE

Filed June 18, 1963

FIG. 1

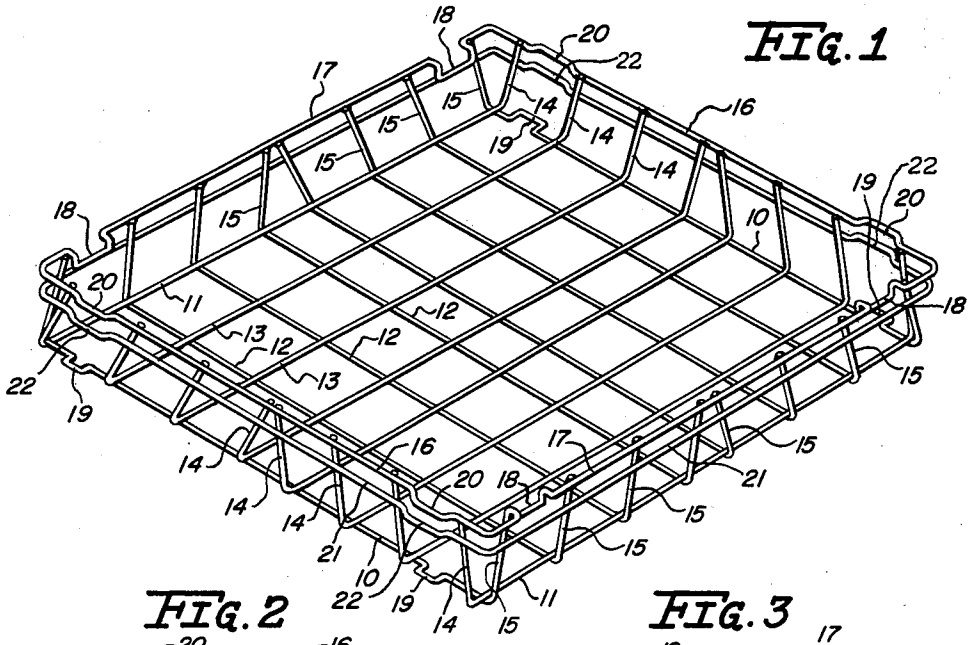


FIG. 2

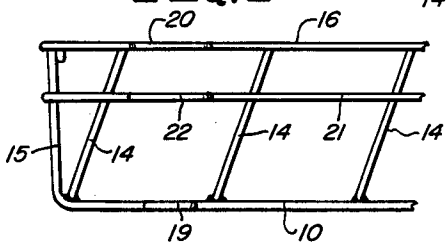


FIG. 3

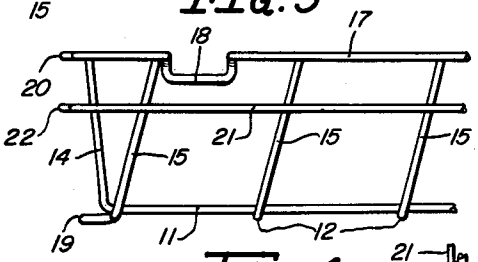


FIG. 4

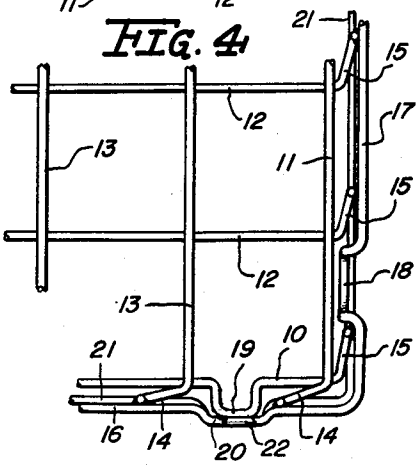


FIG. 5

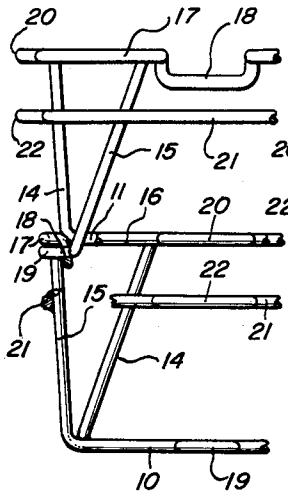
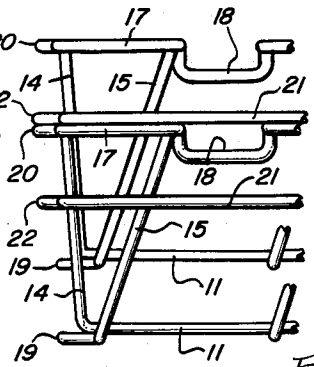


FIG. 6



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NESTING AND STACKING RECEPTACLE

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1 Claim. (Cl. 220—19)

This invention relates generally to receptacles and more particularly to a receptacle having a bottom wall bordered by a first pair of opposed side walls and a second pair of opposed side walls, said walls being of equal dimension measured lengthwise of the distance said bottom wall is bordered by said side walls and forming four 90 degree corners along the upper and lower limits of said side walls at adjoining areas of said side walls.

It is an object of this invention to provide a receptacle as indicated which permits it to be nested within a like receptacle when the corresponding side walls of said receptacle are in matching relation and which allows each receptacle to be stacked on the other receptacle when said side walls of one of said receptacles are in relative angular disposition to the corresponding side walls of the other receptacle about a central upright axis at a variance of 90 degrees from that of said side walls in the nesting position of said receptacles.

It is a further object of this invention to provide a strong, durable, light weight receptacle that is simple and inexpensive to produce.

These and other objects and advantages of the invention will be apparent from the following description, especially when taken in conjunction with the following drawings, wherein:

FIG. 1 is a top perspective view of a receptacle incorporating features of this invention.

FIG. 2 is an enlarged fragmentary side elevation along one side wall of the receptacle shown in FIG. 1.

FIG. 3 is a similar view taken along a second side wall of the receptacle shown in FIG. 1.

FIG. 4 is an enlarged fragmentray top plan view of the receptacle along a corner defined by a pair of adjoining side walls thereof.

FIG. 5 is an enlarged fragmentary side elevation showing a pair of receptacles in stacked relation.

FIG. 6 is a similar view showing a pair of receptacles in nested position.

Referring now in detail to the drawings, which illustrate one form of a receptacle embodying the features of this invention, numeral 10 designates a pair of horizontally extending bottom wire members joined in fixed spaced apart parallel relation by a second pair of similar wire members 11 in equally spaced apart parallel relation at right angles to the bottom wire members 10. The members 10 and 11 together with intermediate bottom wire members 12 connecting members 11 along spaced parallel lines extending lengthwise of and between wire members 10 and intermediate bottom wire members 13 connecting members 10 along spaced parallel lines extending lengthwise of and between wire members 11, form the bottom wall of the receptacle. A first pair of side walls flanking the bottom wall along lines parallel to the members 10 include side members 14 defined by upturned symmetrical opposite end portions of the bottom wire members 11 and 13, and a second pair of side walls flanking the bottom wall along lines parallel to the members 11 include side members 15 defined by upturned symmetrical opposite end portions of the bottom wire members 10 and 12. The corners formed at the junction of said side members 14 and 15 with the bottom wire members to which said side members are integrally joined occupy aligned positions along lines located outwardly of and in equally spaced apart relation lengthwise

of said members 10 and 11 to define the lower peripheral contour of the receptacle at said corners. The side members 14 and 15 occupy uniformly outwardly slanted positions in the direction of an upper rim member to which the upper ends of said side members are securely joined to define the upper peripheral limits of the receptacle. The arms 16 of the rim member, to which the side members 14 are connected, and the arms 17 of the rim member to which the side members 14 are connectesd thereby provide a first pair of side walls and a second pair of side walls of equal dimension measured lengthwise of the distance that the bottom wall of the receptacle is bordered by said side walls and forming 90 degree corners along said upper and lower peripheral limits of said receptacle at adjoining portions of said walls. The peripheral limits thus defined by said walls are also so dimensioned as to allow the lower limits of the receptacle to have entry to the area within the confines of the side walls of a like subjacent receptacle via said upper peripheral limits of the latter to accommodate nesting of said receptacles when the arms 16 and 17 of the receptacles are in matching vertical relation. The arms 14 and 15 also occupy inclined positions in directions extending lengthwise of the arms of the upper rims to which said arms are attached so as to allow an overlapping condition of the arms 14 and 15, as shown in FIG. 6, when the receptacles are in nested position.

The arms 17 of the upper rim member of the receptacle have downwardly offset inwardly extending areas defining upwardly facing seats 18. Outwardly offset areas formed in the bottom wire members 10 define stacking lugs 19 in such positions as to have downward engagement with the seats 18 along the upper rim of a like subjacent receptacle to establish a stacked relationship of said receptacles when the arms 16 and 17 of each receptacle are in relative angular disposition to the corresponding arms of the subjacent receptacle about a central upright axis at a variance of 90 degrees from that of said arms in the nesting position of said receptacles. The lugs 19 and seats 18 accordingly cooperate to establish a stacked relationship of said receptacles. Outwardly offset portions 20 provided in the arms 16 of each receptacle in upward alignment with said stacking lugs 19 define clearance areas through which the lugs 19 of a like receptacle may be lowered and raised during movement of a receptacle toward and away from a nesting position relative to a subjacent receptacle.

A wire border member 21 rigidly secured to the side members 14 and 15 along a line in downwardly spaced parallel relation to the arms 16 and 17 of the upper rim member defines a nesting ledge adapted to have downward engagement with the upper rim member of a like subjacent receptacle to establish the nesting level of the upper receptacle while in nested relation to said subjacent receptacle. Portions of the border member 21 in downwardly aligned relation with the offset portions 20 provided in arms 16 of the upper rim are likewise offset to define clearance areas 22 to accommodate passage of lugs 19 of a like receptacle when the latter is undergoing movement toward and away from a nested position within a receptacle subjacent thereto.

What is claimed is:

A receptacle having a bottom wall and means defining first and second pairs of side walls in bordering relation to said bottom, said walls being of equal dimension measured lengthwise of the distance said bottom wall is bordered by said side walls and forming four 90° corners along upper and lower limits of said side walls at adjoining portions of said side walls, and said lower limits being so dimensioned as to have entry to the area within side walls of a like subjacent receptacle via said upper limits of the latter to accommodate nesting of said recep-

tacles when the first and second pairs of said side walls of said receptacles are in matching vertical relation, said bottom wall including a first pair of horizontally extending border wire members along the lower limits of said first pair of side walls, a second pair of horizontally extending border wire members along the lower limits of said second pair of side walls, intermediate bottom wire members connecting said first pair of border wire members along spaced parallel lines extending lengthwise of and between said second pair of wire members and intermediate bottom wire members connecting said second pair of border wire members along spaced parallel lines extending lengthwise of and between said first pair of border wire members, said side walls including an upper wire frame defining the upper limits of said side walls and upwardly extending side members having upper ends thereof secured to said wire frame, said side members comprising opposite end portions of said first and second pairs of border wire members and said intermediate bottom wire members, said upper wire frame member having downwardly offset areas along said first pair of side walls, stacking lugs defined by outwardly bent extensions of said border wire members along said second pair of side walls, said stacking lugs having downward engagement with the downwardly offset areas in the upper wire frame member along said first pair of side walls of a like subjacent receptacle to establish a stacked relationship of said receptacles when said side walls of one of said receptacles are in relative angular disposition to the side walls of the other receptacle about a central upright axis at a variance of 90% from that of said side walls in the nesting position of said receptacles, a second wire frame member secured to the side walls of said receptacle along a line in downwardly spaced parallel relation to the upper wire frame member, said second wire frame member having downward engagement with the upper limits of the side walls of a like subjacent receptacle to establish the nesting level of said receptacles while in nested relation to said subjacent receptacle, and outwardly offset clearance areas provided in said upper wire frame member and said second upper frame member in upward alignment with said stacking lugs through which the stacking lugs of a like receptacle may be lowered and raised during movement of said latter receptacle toward and away from a nesting position relative to a subjacentlike receptacle.

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