

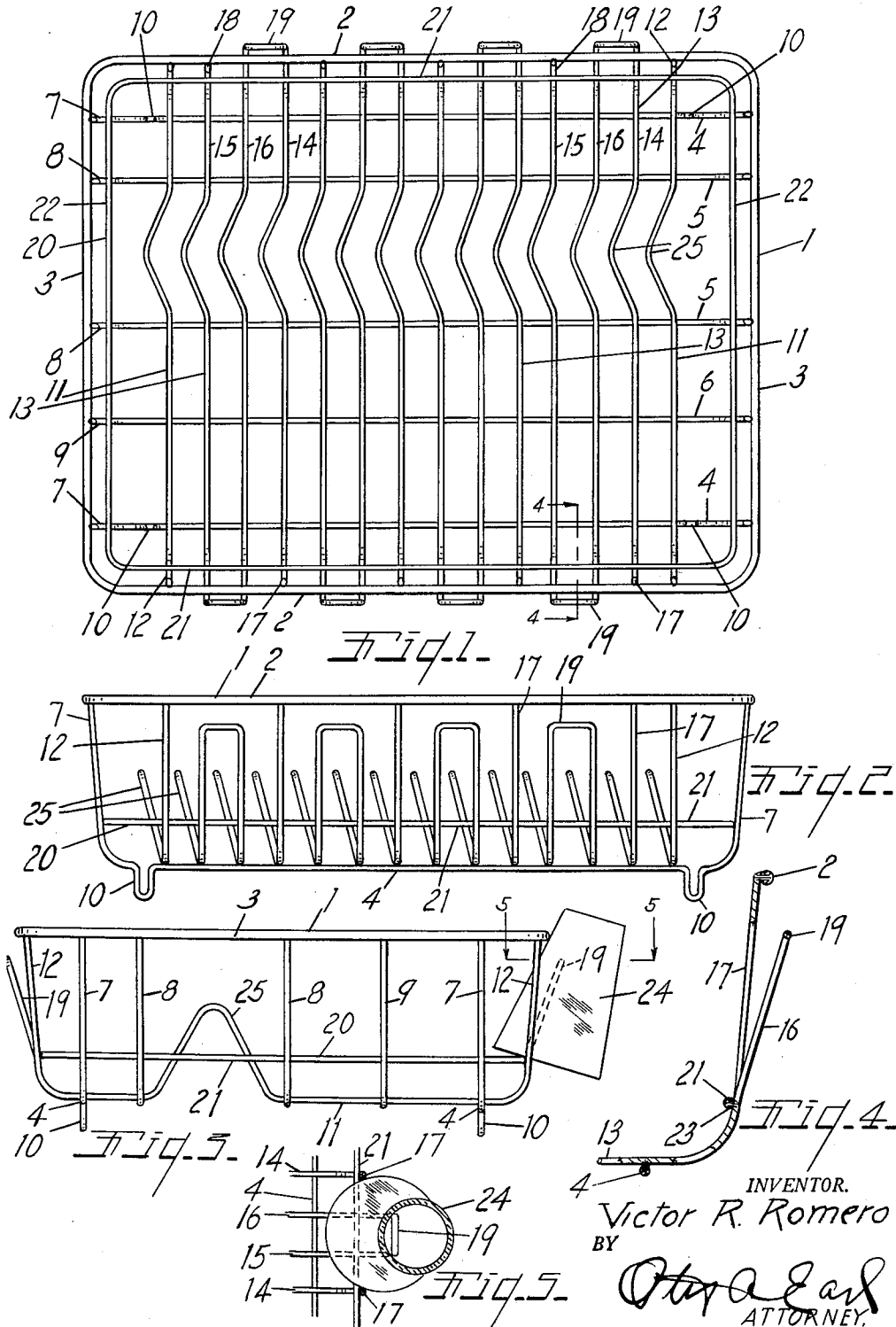
May 1, 1962

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RECEPTACLE DRAINERS

3,032,203

Filed Aug. 1, 1960

2 Sheets-Sheet 1



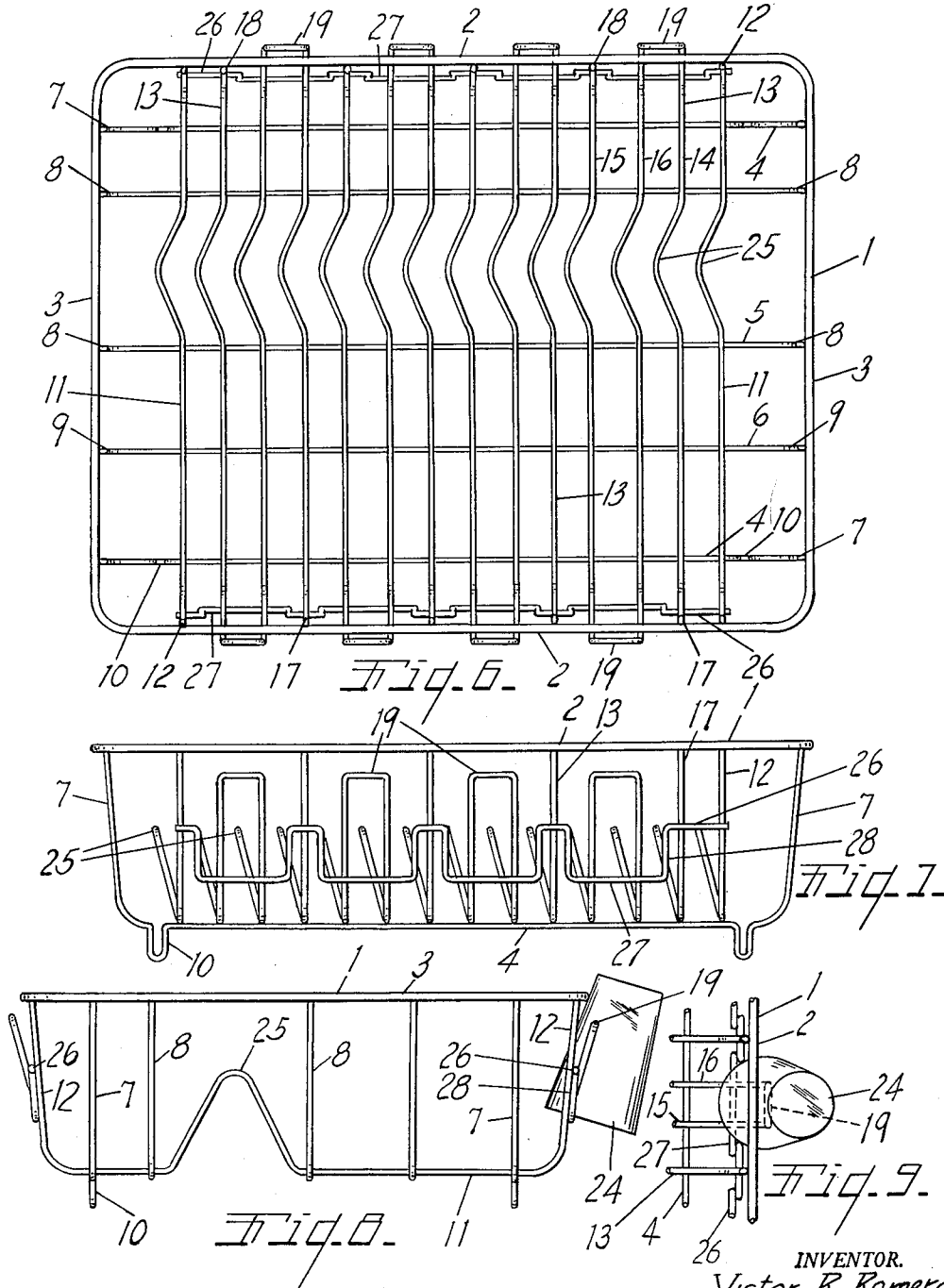
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1

3,032,203

RECEPTACLE DRAINERS

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This invention relates to improvements in receptacle drainers particularly adapted for home or household use.

The principal objects of this invention are:

First, to provide a receptacle drainer which is adapted for the draining of dishes and glassware and the like.

Second, to provide a receptacle drainer embodying these advantages which is simple and economical in structure and which may be made of relatively light stock, such as wire, and at the same time is very strong and rigid and capable of withstanding severe use or handling.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

FIG. 1 is a plan view of a receptacle drainer embodying my invention.

FIG. 2 is a side elevational view thereof.

FIG. 3 is an end elevational view with a tumbler mounted on one of the supports.

FIG. 4 is an enlarged fragmentary view partially in vertical section on a line corresponding to line 4-4 of FIG. 1, parts being broken away and shown in section to illustrate structural details thereof.

FIG. 5 is a fragmentary view in horizontal section on a line corresponding to line 5-5 of FIG. 3.

FIG. 6 is a plan view of a modified form or embodiment of my invention.

FIG. 7 is a side elevational view thereof.

FIG. 8 is an end elevational view with a tumbler positioned on one holder member.

FIG. 9 is a fragmentary plan view of the right hand side of FIG. 8.

The embodiment of my invention illustrated is especially designed for home or household use and it is illustrated in an embodiment adapted for that use and comprises a top border frame 1 formed of wire stock having parallel side members 2 and end members 3 desirably formed integrally, the joint not being illustrated. A plurality of longitudinal bottom members 4-4, 5-5 and 6 are provided in the embodiment illustrated and these have upturned end portions 7-7, 8-8 and 9, the upper ends of which are disposed on the inner sides of the end members 3 of the top border member and fixedly secured thereto. The longitudinal members 7 have downwardly offset loops 10 therein constituting legs. Separate numerals are used in connection with these longitudinal members and their uprights for convenience in description. They are all desirably formed of wire stock of the same gauge. Transverse members 11 are disposed in inwardly spaced relation to the end members of the top frame in transverse relation to the longitudinal members and are fixedly secured thereto. These have upwardly projecting end members 12 which are fixedly secured at their upper ends to the side members 2 of the top frame. Intermediate these members 11 are a plurality of dish support units designated generally by the numeral 13 and comprising three laterally spaced members 14, 15 and 16. The outer of these members 14 and 15 terminate at opposite ends thereof in upwardly projecting side members 17 and 18 respectively which are secured to the opposite side members 2 of the top border frame, see FIG. 1. The ends of the intermediate members of these units are connected to the corresponding end of the adjacent outer member by

2

the upwardly projecting receptacle holder loop 19. In the embodiment illustrated, there are four of these units 13 which provide eight upwardly projecting receptacle holder members 19. See FIG. 1. To support these receptacle holder loops 19 and reinforce the uprights 17 and 18 in the embodiment of my invention illustrated in FIGS. 1 to 5, I provide a continuous inner frame member 20 of generally rectangular form and of somewhat less dimension than the top border frame 1 and which has side and end members 21 and 22 secured to the receptacle receiving loops 19 at 23, see FIG. 4, reinforcing the same and serving as rests for receptacles inverted over the loops as 24, see FIGS. 3 and 4. These members 19 being in the form of loops are relatively stiff and are unlikely to be bent laterally or distorted as the result of coming in contact with some exterior object in handling the drainer or stresses other than use.

These transverse members 11, 14, 15 and 16 have upwardly aligned dish holders in the form of offsets or loops 25 therein between the longitudinal members 5, these being desirably inclined as is illustrated in FIGS. 1 and 2 of the drawing. They are adapted to receive dishes such as plates, saucers and the like and support them in spaced relation. The applicant is aware that this general arrangement of dish holders is old in the art and has been commercially used to a very large extent but in these commercial structures, the load placed upon dish supports 25 is entirely sustained by the welds to the longitudinal members.

In the structure of the applicant's invention, the torsional stress resulting from positioning the dishes in the holders is largely sustained by the loop-like receptacle holders 19 and these holders are in turn very securely supported so that they are not likely to be distorted even when placed under stress beyond normal use stresses as is very likely to occur. It will be appreciated that is practically impossible to distort them laterally but they may be bent inwardly or outwardly relative to the inner frame members 23 and the top frame as use conditions may render desirable. The support members 19 do not project above or laterally to a substantial degree relative to the top border frame and the side members 17. Another advantage is that the holder units 13 are very easily formed and they are assembled with the other parts as units and spot welded thereto as is indicated in FIG. 4 and greatly reinforce the associated parts.

In the embodiment of my invention shown in FIGS. 6, 7, 8 and 9 the top border frame 1, the longitudinal bottom members 4-4, 5-5 and 6 and the transverse members 11 and the dish support units 13 are the same, or essentially the same, as disclosed in the embodiment of FIGS. 1 to 5 inclusive, and therefore description of those elements or parts is not repeated.

The continuous inner frame member 20 is omitted from the embodiment shown in FIGS. 6, 7, 8 and 9. In that embodiment of my invention I provide inner side members designated generally by the numeral 26 and disposed in downwardly spaced relation to the top side members 2 and having downwardly offset upwardly facing loops 27 therein, the bights of which are disposed in crossing relation to the receptacle supports 19 and which constitute rests and lateral supports for glassware and the like, indicated at 24, see FIGS. 8 and 9.

The side or upright portions 28 of these holder members 19 are laterally spaced relative to the support members 17 so that an opening is provided to receive the portions of the side walls of a tumbler or the like. As illustrated there is a fitting engagement of the tumbler but it will be understood that receptacles vary greatly in size and shape.

In both embodiments of my invention the holder mem-

bers are supported so that they are not distorted in normal use of the drainer.

The embodiments of my invention illustrated are especially designed for household or domestic use so that light weight in proportion to strength is of substantial importance from manufacturing and shipping costs and from use. It is quite common practice to coat the entire structure with some thermo plastic material but as that forms no part of my present invention, I do not illustrate such coating material. Also it is desired to state that parts may be formed entirely of thermoplastic material.

I have illustrated and described my invention in two highly practical embodiments thereof. I have not attempted to illustrate or describe other adaptations or embodiments of my invention as I believe this disclosure will enable those skilled in the art to embody or adapt my invention as may be desired for particular segments as to size and the like.

Having thus described the invention, what is claimed as new and desired to secure by Letters Patent is:

1. A dish drainer comprising vertically spaced parallel top and inner frame members, each including side and end members, a plurality of laterally spaced parallel bottom members having upturned ends fixedly secured to the end members of said top and inner frame members, end transverse members fixedly secured to said longitudinal bottom members and having upturned ends fixedly secured to the sides of said top and inner frame members, and a plurality of dish support units disposed transversely of said longitudinal bottom members, each comprising three laterally spaced members disposed transversely of and supportedly mounted on said longitudinal members, the outer of said unit members terminating at opposite ends thereof in an upwardly projecting side member secured to said top and inner frame members, said outer and intermediate members of said support units being connected at opposite ends thereof by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to said top and inner frame members and fixedly secured to said inner frame member, the inner frame member constituting a rest for receptacles disposed in inverted relation on said loops, said transverse bottom members having aligned upwardly offset loops therein constituting dish supports.

2. A dish drainer comprising vertically spaced parallel top and inner frame members, each including side and end members, a plurality of laterally spaced parallel bottom members having upturned ends fixedly secured to the end members of said top and inner frame members, and a plurality of dish support units disposed transversely of said longitudinal bottom members, each comprising three laterally spaced members disposed transversely of and supportedly mounted on said longitudinal members, the outer of said unit members terminating at opposite ends thereof in an upwardly projecting side member secured to said top and inner frame members, said outer and intermediate members of said support units being connected at opposite ends thereof by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to said top and inner frame members and fixedly secured to said inner frame member, the inner frame member constituting a rest for receptacles disposed in inverted relation on said loops, said transverse bottom members having aligned upwardly offset loops therein constituting dish supports.

3. A dish drainer comprising a top frame member including side and end members, a plurality of laterally spaced parallel bottom members having upturned ends fixedly secured to the end members of said top frame member, a plurality of dish support units disposed transversely of said longitudinal bottom members, and each comprising laterally spaced outer and intermediate members disposed transversely of and supportedly mounted on said longitudinal members and having upwardly project-

ing aligned dish supporting loops, the outer of said unit members terminating at opposite ends thereof in upwardly projecting side members secured to said top frame side members, said outer and intermediate members of said support units being connected by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to the side members of said top frame member, and inner side members disposed in downwardly spaced relation to the side members of the top frame and to which said side uprights and said loops of said dish support units are secured with said loops disposed in outwardly inclined relation thereto and to said top frame member to receive inverted receptacles.

4. A dish drainer comprising a top frame member including side and end members, a plurality of laterally spaced parallel bottom members having upwardly projecting aligned dish supporting loops therein and having upturned ends fixedly secured to the end members of said top frame member, end transverse members fixedly secured to said longitudinal bottom members and having upturned ends fixedly secured to the sides of said top frame member, and a plurality of receptacle support units disposed transversely of said longitudinal bottom members, said support units comprising laterally spaced outer and intermediate members disposed transversely of and supportedly mounted on said longitudinal members, the outer said members terminating at opposite ends thereof in upwardly projecting side members secured to said top frame side members, said outer and intermediate members of said support units being connected by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to said top frame side members to receive inverted receptacles.

5. A dish drainer comprising a top frame member including side and end members, a plurality of laterally spaced parallel bottom members having upwardly projecting aligned dish supporting loops therein and having upturned ends fixedly secured to the end members of said top frame members, and a plurality of receptacle support units disposed transversely of said longitudinal bottom members, said receptacle support units comprising laterally spaced outer and intermediate members disposed transversely of and supportedly mounted on said longitudinal members, the outer support unit members terminating at opposite ends thereof in upwardly projecting side members secured to said top frame side members, said outer and intermediate members of said support units being connected by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to said top frame side members to receive inverted receptacles, said transverse members of said dish support units having aligned upwardly offset loops therein constituting receptacle holders.

6. A dish drainer comprising a top frame member including side and end members, a plurality of laterally spaced parallel bottom members having upwardly projecting aligned dish supporting loops therein and having upturned ends fixedly secured to the end members of said top frame member, end transverse members fixedly secured to said longitudinal bottom members and having upturned ends fixedly secured to the sides of said top frame member, and a plurality of receptacle support units disposed transversely of said longitudinal bottom members, each of said receptacle support units comprising laterally spaced outer and intermediate members disposed transversely of and supportedly mounted on said longitudinal members, the outer support unit members terminating at opposite ends thereof in upwardly projecting side members secured to said top frame side members, said outer and intermediate members of said support units being connected by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to said top frame side members to receive inverted receptacles.

7. A dish drainer comprising a top frame member including side and end members, a plurality of laterally spaced parallel bottom members having upwardly project-

5

ing aligned dish supporting loops therein and having upturned ends fixedly secured to the end members of said top frame member, and a plurality of receptacle support units disposed transversely of said longitudinal bottom members, each comprising laterally spaced outer and intermediate members disposed transversely of and supportedly mounted on said longitudinal members, the outer support unit members terminating at opposite ends thereof in upwardly projecting side members secured to said top frame side members, said outer and intermediate members of said support units being connected by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to said top frame side members to receive inverted receptacles.

8. A dish drainer comprising a top frame member including side and end members, laterally spaced parallel bottom members having upwardly projecting aligned dish supporting loops therein and having upturned ends fixedly secured to the end members of said top frame member, and a plurality of receptacle support units disposed transversely of said longitudinal bottom members, each of said receptacle support units comprising laterally spaced outer and intermediate members disposed transversely of and supportedly mounted on said longitudinal members, the outer of said support unit members terminating at opposite ends thereof in upwardly projecting side members secured to said top frame side members, said outer and intermediate members of said support units being connected by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to said top frame side members to constitute holder members for inverted receptacles, and inner side members spaced downwardly from the side members of said top frame member and having downwardly offset upwardly facing loops disposed between the side members of said receptacle support units, the bights of which are fixedly secured to said receptacle holders with the side members thereof spaced from said receptacle holder members to receive a receptacle inverted on a holder member.

9. A dish drainer comprising a top frame member including side and end members, laterally spaced parallel bottom members having upwardly projecting aligned dish supporting loops therein and having upturned ends fixedly secured to the end members of said top frame member, a plurality of receptacle support units disposed transversely of said longitudinal bottom members, each of said receptacle support units comprising laterally spaced outer and intermediate members disposed transversely of and supportedly mounted on said longitudinal members, the

6

outer of said support unit members terminating at opposite ends thereof in upwardly projecting side members secured to said top frame side members, said outer and intermediate members of said support units being connected by upwardly projecting downwardly facing loops disposed in outwardly inclined relation to said top frame side members to constitute holder members for inverted receptacles, and inner side members spaced downwardly from the side members of said top frame member and having downwardly offset upwardly facing loops disposed between the side members of said receptacle support units secured to said receptacle holders with the side members thereof spaced from said receptacle holders to receive receptacles invertedly positioned thereon.

10. A dish drainer comprising laterally spaced top side members, a plurality of laterally spaced bottom members having upwardly projecting aligned dish supporting loops therein and disposed in parallel relation to said side top members, a plurality of laterally spaced receptacle support members disposed transversely of said bottom members in supported relation thereto, and having laterally spaced upturned ends fixedly secured to said top side members, upwardly projecting downwardly facing loop like receptacle holders integral with certain of said transverse members disposed between and in outwardly inclined relation relative to said upturned ends of said transverse members and adapted to supportedly receive inverted receptacles, and combined support and receptacle rest members spaced downwardly from said top side members and fixedly secured to said upturned end sections of said transverse members and having downwardly projecting offsets therein disposed between said upturned ends of said receptacle support members with the bights thereof fixedly secured to said receptacle holders in downwardly spaced relation to the upper ends thereof, and with the side members thereof spaced from said receptacle holders to receive a receptacle invertedly positioned thereon.

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