This invention relates in general to display racks, and more specifically to a readily portable, knock down display rack.

An object of this invention is to provide a display rack comprising a knock down stand and readily foldable container supported by the stand that is relatively simple in construction, relatively inexpensive to fabricate, and positive in operation.

Another object is to provide a knock down display rack that is light in weight, yet sturdy, stable, and capable of supporting merchandise weighing many times more than the combined weight of the rack components.

Still another object is to provide a portable, light weight rack that is readily collapsible whereby it may be folded flat for shipment by post if so desired.

A feature of this invention resides in the provision that the container portion of the rack comprises a readily foldable bag having a rigid, collapsible support ring by which the bag is detachably connected to the stand in the assembled position.

Other features and advantages will become more readily apparent when considered in view of the drawings and description, in which:

FIG. 1 is a perspective view of the rack of this invention.
FIG. 2 is a sectional plan view taken along line 2--2 of FIG. 1;
FIG. 3 is a sectional view taken along line 3--3 of FIG. 2;
FIG. 4 is an exploded perspective view of the rack; and
FIG. 5 is a detail view of the collapsible support ring, the solid lines indicating the collapsed position of the ring.

Referring to the drawings, there is shown in FIG. 1 the portable, knock down display rack 10 of this invention. It comprises essentially a readily knock down stand 11 and a foldable container 12 supported thereon.

Positioned between the stand 11 comprises a pair of leg members 13 and 14 which may be formed from either wire, rod, or tubular stock material. Each leg member 13, 14 comprises an inverted U-shaped portion having a horizontally disposed bight portion 13A, 14A and integrally connected opposed depending leg portions 13B, 14B which terminate in a respectively bight portion 13C, 14C. Detachably connected to each upright portion 13C, 14C is a leg extension piece 15. As shown, the leg extensions 15 may be detachably connected to its respective upright leg portion by a swedging or other suitable slip type or coupled joint connection. Each leg extension 15 adjacent its upper edge portion is provided with a hole 16.

In the assembled position of the stand 11, the bight portions 13A, 14A of the respective leg members 13, 14 are crossed and detachably connected at their mid point by a suitable fastening means e.g. a threaded stud 17A and cooperating wing nut 17B or the like. With the single fastener connection, as shown, it will be apparent that the respective leg members 13, 14 can be pivoted between operative and knocked position so that in the latter position the plane of the respective leg members 13, 14 are disposed closely adjacent one another, or else the

leg members 13, 14 can be completely disassembled with a minimum of ease by simply removing the stud 17A.

The container 12 which is adapted to be detachably connected to the upper ends of the respective leg extension 15 in the assembled position of the rack, includes a supporting ring 18 and a foldable bag 19. The bag 19 is preferably formed of a suitable faceted, transparent material such as polyethylene, propylene or the like.

In accordance with this invention the supporting ring 18 is constructed of two semi-circular segments 18A, 18B which are pivoted together at their adjacent ends for movement between operative unfolded position as shown by the broken line in FIG. 5, or inoperative folded position as indicated by the solid lines in FIG. 5. Connected to and extending radially outwardly of each ring segment 18A, 18B are a pair of circumferentially spaced snap type fasteners may be used also to secure the hem.

It will be observed that the hem 21 is provided with holes through which the ring studs 20 project, and if desired suitable grommets 22 may be heat sealed in hem within the hole.

A reinforcing member 23 is fitted to the bottom of the container 12 to provide a stiffener for the same. Accordingly, the stiffener 23 may be provided with a diameter fold line 21 to facilitate the folding of the same in a collapsed position of the bag 19. In the instant case the stiffener 23 may comprise a sheet of cardboard, paper material, plastic or any other light weight relatively rigid material.

Completing the rack structure there is provided a skirt or rim 24 which comprises a folded sheet of material, e.g. a material similar to that from which the stiffener is formed. As shown the skirt 24 has a cylindrical inner portion 24A and an outer inclined or conically shaped surface 24B. The inner cylindrical surface 24A of the skirt is provided with holes 25 which are aligned with the ring studs 20. Therefore, in the assembled position of the rack, the skirt 24 is maintained in place by the ring studs 20 and nut 20A threaded thereto.

Also it is to be noted that the ends of the leg extension 15 are covered by the outer surface of the skirt 24 extending thereover.

As shown in FIGS. 1 and 3 the container is dimensioned so that in the assembled position of the rack, the bottom of the container 19 will rest on the cross bight portion 13A, 14A of the leg member 13, 14.

In use, the merchandise to be displayed is placed in the container 12. Thus the transparency of the container renders the articles displayed therein readily visible. Further, the skirt 24 and portions of the container 19 may be utilized for advertising copy to be used in conjunction with the display of the article contained therein.

The rack described occupies very little space, and is readily collapsible. Further, the rack is light in weight, yet sturdy and stable in construction. If desired, the rack can be completely disassembled without the use of any hand tools, and neatly packaged for either storage or shipment.

While in accordance with the provisions of the statutes there is illustrated and described herein a specific embodiment of the invention, those skilled in the art will
understand that changes may be made in the form of the invention covered by the claims, and that certain features of the invention may sometimes be used to advantage without a corresponding use of the other features.

What is claimed is:

1. A lightweight, portable, knock down rack comprising a stand including a pair of leg members, each leg member having opposite upright leg extensions, a collapsible container detachably connected to and between said leg extensions, said container including a pair of semi-circular ring segments pivoted to one another to define a collapsible circular support ring, means for detachably connecting said ring to said leg extensions in the assembled position of said rack, a readily foldable, transparent plastic bag connected to said ring, a bottom stiffening member fitted to the bottom of said bag, and a circular reversely folded skirt connected about the upper end of the rack, said skirt having an inner cylindrical portion adapted to circumscribe said bag so as to be disposed between the bag and said leg extension, said cylindrical portion having circumferentially spaced apertures through which said ring connecting means extend, and inclined outer portion circumscribing the upper end of the stand.

2. A lightweight, portable, knock down rack comprising a stand including a pair of inverted U-shaped leg members, each of said leg members having a horizontal bight portion and connected depending opposed leg portions, said leg portions terminating in a reversely bent upright portion, means detachably connecting said leg members together at a point intermediate the ends of their bight portion, upright leg extensions detachably connected to the respective upright portions of said leg members, and a collapsible container detachably connected to and between said leg extensions.

3. A lightweight, portable knock down rack comprising a stand including a pair of inverted U-shaped leg members, each of said leg members having a horizontal bight portion and connected depending opposed leg portions, said leg portions terminating in a reversely bent upright portion, means detachably connecting said leg members together at a point intermediate the ends of their bight portion, upright leg extensions detachably connected to the respective upright portions of said leg members, a collapsible container detachably connected to and between said leg extensions adapted to fit the bottom of said bag, and said bag being dimensioned so that in the assembled position of said rack the bottom of the bag may rest on the cross bight portions of said U-shaped leg members.

4. A lightweight, portable, knock down rack comprising a stand including a pair of inverted U-shaped leg members each having a horizontal bight portion and connected depending opposed leg portions, said leg portions terminating in a reversely bent upright portion, pivot means detachably connecting said leg members together at a point intermediate their bight portion, upright leg extensions detachably connected to the respective upright portions of said leg members, a collapsible container detachably connected to and between said leg extensions, said container including a pair of semi-circular ring segments pivoted to one another to define a circular support ring, a pair of circumferentially spaced studs connected to each ring segment, said studs extending radially outwardly therefrom and positioned so as to be received in the holes of said leg extensions in the assembled position of said rack, a readily foldable, transparent plastic bag having a hem formed about the upper peripheral portion thereof, said supporting ring being disposed within said hem, and said hem having protecting grommets through which said studs extend, a bottom stiffening member foldable along its diameter adapted to fit the bottom of said bag, and said bag being dimensioned so that in the assembled position of said rack the bottom of the bag may rest on the cross bight portions of said U-shaped leg members.

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