This invention relates to garment packing and shipping cases and particularly to an improved garment rack support and case reinforcing member adapted for use with corrugated paper or cardboard garment shipping cases.

The invention may be briefly described as an inexpensive garment rack supporting assembly particularly adapted for use with disposable corrugated paper or cardboard shipping containers. The garment rack supporting member includes a reinforcing plate adapted for external disposition on a shipping case and having a pair of substantially perpendicular rack supporting ears adapted to pierce the sides of said case and to be disposed therein. The rack supporting ears are shaped to support a garment rack and include means to adjustably position said rack for firmly securing clothing hangers placed in operative engagement therewith during shipment and to permit shipment to facilitate the removal thereof from the shipping case.

An object of this invention is the provision of an improved garment rack assembly adapted for use with garment shipping cases.

Another object of this invention is the provision of an inexpensive and disposable garment rack assembly particularly adapted for use with corrugated paper and cardboard shipping cases.

Another object of this invention is the provision of an improved garment rack assembly which serves as a reinforcing unit for cardboard or corrugated paper shipping cases.

Another object of this invention is the provision of an improved garment rack assembly that is simple and inexpensive in construction and easily adapted to present day mass production techniques.

Other objects of this invention will be pointed out in the following disclosure and claims and illustrated in the accompanying drawings which disclose by way of example the principles of the invention and the presently preferred embodiment of the garment rack supporting assembly applying that principle.

Referring to the drawings:

Fig. 1 is an oblique view, partially cut away, of a garment packing case having the presently preferred embodiment of the garment rack supporting assembly operatively associated therewith;

Fig. 2 is a sectional view on the line 2—2 of Fig. 1 illustrating a garment packing case having the garment supporting rack operatively positioned therewith and illustrating the positioning of clothing hangers with the parts positioned for packing or unpacking operations;

Fig. 3 is an elevational, and partially in section, illustrating the positioning of the elements of the garment rack supporting assembly and clothing hangers during shipment;

Fig. 4 is a plan view of the embodiment illustrated in Fig. 2;

Fig. 5 is an enlarged oblique view of the garment rack supporting member and

Fig. 6 is an oblique view of a portion of the member illustrated in Fig. 5 with the parts positioned as for shipment.

Referring to the drawings and particularly to Figs. 5 and 6 the presently preferred embodiment of the garment supporting rack assembly, as therein illustrated, includes a rectangular flat metal base member 10 having a pair of ears 12 and 14, perpendicularly mounted thereon and positioned adjacent its extremities. The ears 12 and 14 may conveniently be punched out of the base member 10 and then bent to the substantially perpendicular position illustrated in the drawing.

The ear 14 is provided with an aperture 16, illustrated in the drawings as rectangular in shape, in the portion thereof adjacent the surface of the base plate 10 and having its lower edge 18 spaced therefrom a predetermined amount.

The ear 12 is provided with a rectangular aperture 20 sized to approximate the dimensions of the aperture 16 as illustrated in Fig. 6. The aperture 20 is also illustrated as rectangular in shape and has its lower edge 19 in alignment with the lower edge 18 of the ear 12. Thus the lower edges 18 and 19 of the apertures 16 and 20 are equidistant from the base plate 10. The aperture 20, however, may be readily enlarged by bending the locking member 22 outwardly to a position substantially parallel to the surface of the base 10 as illustrated in Fig. 5.

Referring now to Figs. 1 through 4, the invention is therein illustrated in association with a garment packing and shipping case, for example, a corrugated paper or cardboard case, having rectangular sides 23, 24, ends 25, 28 and a bottom 30. A removable cover 32 (see Fig. 3) is provided to complete the packing case. It should be clearly understood, however, that the invention is not limited to use with the particular shipping container illustrated in the drawings. For example, a corrugated shipping container having the cover members integral with the sides thereof and foldable in closure position may also be utilized.

The garment rack supporting unit, as described above and illustrated in Figs. 5 and 6, is adapted to be centrally mounted on each end of the above described packing case with the ears 12 and 14 passing through suitably located apertures in the ends thereof and being disposed within said container with the upper surface of the base member 10 positioned adjacent the exterior surface of said ends. When the garment rack supporting assembly is so positioned,
the base 10 provides a rigid external reinforcing element for the ends 26, 28, of the packing case, and the ears 12, 14 disposed therein provide a support for a garment rack on which clothing hangers are to be mounted.

After a garment rack supporting assembly has been placed into operative relationship with each end, i.e., the end 26 and the end 28, of a packing case and the ears 12 and 14 are disposed within the case, the member 22 on the ear 12 is manually bent to a position substantially parallel to the plane of the base 10 as illustrated in Fig. 5. The displacement of the member 22 greatly increases the size of the aperture 20 in the ear 12. The increase in size of the aperture 20 readily permits the insertion of a garment rack 34, which may be, for example, a rectangular block of wood in said aperture 20 and the aperture 16 in the ear 12. The length of the rack 34, of course, is dependent upon the size of the shipping case and its shape preferably is similar to the shape of the apertures 16 and 20 in the ears 16 and 12, respectively.

With the member 22 positioned substantially parallel to the base 10, the rack 34 is positioned as illustrated in Figs. 2 and 4, and is angularly disposed with respect to the ends of the container. The angular disposition of the rack 34, resulting from the now enlarged aperture 20, readily permits the placing of the hooks 36 of garment hangers 38 thereon. As illustrated in the drawings both ends of the shipping container are utilized and the clothing 46 therein packed is preferably disposed in alternately directed layers.

After the desired amount of clothing has been packed in the manner described above, the members 22 are bent and returned to the plane of the ears 12 as illustrated in Figs. 3 and 6. The positioning of the members 22 as shown in Figs. 3 and 6 firmly engages and secures the garment racks 34 within the apertures 16 and 20 and positions said racks substantially parallel to but spaced a predetermined distance from the ends of the shipping container. When so positioned, as clearly illustrated in Fig. 3, the hooks 36 of the hangers 38 are compressively maintained and positioned between the rack 34 and the adjacent deformable inner surface of the ends of the container or cardboard shipping case. The externally disposed base member 10 prevents undue deformation of the ends of the shipping case and assures the maintenance of the compressive engagement of the hooks 36.

The engagement of the surface of the rack 34 by the member 22 when positioned in the plane of the ear 12 prevents the movement of said rack 34 within the apertures 16 and 20.

The above described locking of the rack 34 within the apertures 16 and 20 which compressively positions the hooks 36 prevents movement or displacement of said hooks and consequently prevents, together with the slats 23, 24 of the case, displacement of the packed garments during shipment.

Unpacking of the garments is readily accomplished by rebending the member 22 to the position substantially parallel to the surface of the base 10, as illustrated in Fig. 5, which enlarges the aperture 20 and releases the compressive engagement of the rack 34. The rack 34 is then easily lifted and removed from the apertures 16 and 20 which readily facilitates the removal of the clothing from the shipping case.

Having thus described my invention, I claim:

1. A garment rack supporting assembly comprising an open-ended corrugated paper garment shipping case having at least one wall perforated at predetermined locations thereon, a base plate positioned against the outer surface of said perforated wall and disposed substantially perpendicular to the open end of said case, a pair of spaced garment rack supporting ears perpendicularly mounted adjacent the inner wall of said case to compressively engage said hooks intermediate said rack and the inner surface of said case, a first garment rack receiving aperture disposed in the supporting ear positioned remote from the open end of said case and sized to position a garment rack inserted therein a predetermined distance from the wall of said case, a second and larger garment rack receiving aperture disposed in the supporting ear positioned adjacent the open end of said case sized to permit the positioning of a garment rack at said predetermined distance from the wall of said case, a garment rack longitudinally disposed within said apertures for mounting clothing hanger hooks thereon, and means associated with said second aperture for removably securing said rack therein in position at said predetermined distance from the inner wall of said case to compressively engage said hooks intermediate said rack and the inner surface of the wall of the shipping case disposed between said rack and said base plate.

2. A garment rack supporting assembly comprising an open-ended corrugated paper shipping case having a wall with perforations at predetermined locations, therein, a reinforcing rack support member including an elongated flat base plate positioned against the outer surface of said perforated wall substantially perpendicular to the open end of said case, a pair of spaced garment rack supporting ears perpendicularly mounted adjacent the extremities of said base plate and sized, to extend into the interior of said case through the perforations in said wall, a first garment rack receiving aperture sized to contain a garment rack of predetermined dimensions disposed in the supporting ear positioned remote from the open end of said case and in the portion thereof contained within said case, a second and larger garment rack receiving aperture disposed in the supporting ear, positioned adjacent the open end of said case and in the portion thereof contained within said case, a garment rack of predetermined dimensions longitudinally disposed within said apertures for mounting clothing hanger hooks thereon, and means associated with said second aperture for decreasing the effective dimensions thereof to removably secure said rack in a position substantially parallel to the inner wall of said case.

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