FOLDABLE AND Suspendable Rack for Shoes or the Like

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1 Claim. (Cl. 211—34)

This invention relates to devices or racks for supporting shoes or other articles.

One of the objects of this invention is to provide a supporting device on which a large number or a variety of shoes or similar articles may be simultaneously stored in such positions that each article is exposed to a substantially full view, is easily and quickly accessible and can be conveniently placed in position and removed from the rack without disturbing the others. Another object is to provide a rack structure which can be easily and conveniently folded up into a comparatively thin package and accommodated in a carton or the like container for shipping or storing purposes and just as easily and conveniently unfolded and hung from any hanger, such as hook, rod or the like fixed to a wall or door.

A further object of this invention is to provide a rack structure whose manufacture will be extremely simple, requiring little material and tools for its production and which can be sold at low price.

With these and other objects in view my invention substantially consists of at least two pairs of longitudinally and parallelly extending flexible or foldable elements, a front and rear pair, which at one end are formed or provided with suitable suspension means and which are adapted to carry a plurality of shelves or supporting members of rigid material extending at a right angle across said elements in longitudinally spaced relationship to one another. These shelves or members are preferably each arranged in a forwardly and downwardly slanting position so that the shoes or the like supported on said shelves will be exposed to a substantially full view from the front. The longitudinally foldable elements of my device may be made of cords or chains, and the supporting members may be suitably attached to them so that they will retain their spaced relationship to one another.

In order to save material and decrease the weight of the rack, the shelves are preferably made in form of skeleton frames, whose front and rear members serve as supports proper, while their side members serve to hold the collapsible or foldable front and rear carrying elements spaced horizontally from one another when the rack is suspended.

My invention also consists in the novel construction, combination and arrangement of parts, as will be hereinafter more fully described and defined in the appended claim. To accomplish my objects my device may be constructed in various ways and in the following I shall describe several modifications, all based on one and the same principle.

In the accompanying drawing which constitutes part of this specification and in which similar reference characters denote corresponding parts:

Figure 1 is a perspective rear elevation of one form of construction of my novel rack shown unfolded and suspended from a stationary hanger projecting from a wall or the like and used as a rack for shoes;

Figure 2 is a sectional detail of the rack shown in Fig. 1.

Referring more in detail to the drawing and first to the construction shown in Figures 1 and 2 the rack is composed substantially of two pairs of longitudinal end elements 10, 10a, arranged parallel to one another and adapted in position of use to be spaced horizontally so as to extend in two opposite vertical parallel planes, one behind the other. These elements are made of flexible, foldable or collapsible material such as cord or chains, or the like. At one end, which, when the rack is unfolded and suspended for use, is to serve as the upper end, these longitudinal elements may be provided with hooks 11 or other suitable means for the suspension of the rack from suitable hanger such as a rod R, as shown, projecting from a wall, door or the like.

In the present example, the front and rear element 10, 10a of each pair are made each of one continuous piece of cord or other flexible means doubled upon itself and having a hook 11 or other suitable suspension means fastened at the knee portion of the fold, as at 11a, so that when the rack is in a vertically suspended position the front and rear pairs are held horizontally spaced, as will be hereinafter described, the upper folded portions of said elements will each assume the form of a triangular loop.

Mounted in a longitudinally spaced formation on said elements are a plurality of shelves or members, each serving to support several articles, such as pairs of shoes or the like. According to the form of construction shown in Figure 1 each shelf is formed as a skeleton frame composed of two pairs of rigid members, such as rods 13, 13a and 14, 14a, of which rods 13, 13a form respectively the front and rear parts of said shelves and 14, 14a their side or cross parts. At their ends each of said rods is provided with cross bores 15 for the passage of the cords 10, 10a, when mounting the shelves on said cords. The several shelves thus strung on the carrying cords
18, 18a are adapted to be held in spaced relationship to one another. This can be accomplished according to the form of construction shown in Figures 1 and 2 by driving through the front and rear members 13, 13a tacks or nails 15' to pass through the adjacent cords.

In order to facilitate the folding of the rack, the cross rods 14, 14a are left loose on the cords, so that they may slide up and down the latter during the folding and unfolding of the rack.

When the rack is unfolded and in suspended position, these side rods will loosely bear on the rods 13, 13a and hold the front and rear carrying elements spaced horizontally to extend in two parallel vertical planes steadying the rack in its position of use.

For the purpose of affording a full view of the articles deposited on the different shelves, the front rods of said frames are arranged to be at a lower level than the rear rods. As a result thereof the side or cross rods 14, 14a will extend in a forwardly and downwardly slanting position. To enable them to freely slide on the cords when the rack is folded or unfolded, the bores 18 thereof may be advantageously cut on a bias so as to be in alignment with and extend parallel to the cords.

It will be seen that the rack constructed as hereinbefore described can be easily and conveniently folded to make up a comparatively small or thin package which will fit in a carton or the like for shipment or storing.

I, therefore, do not wish to restrict myself to the details described and shown.

What I claim is:
A collapsible vertically suspendable rack for the support of shoes or the like, comprising a plurality of longitudinally foldable carrying elements arranged in pairs, adapted when said rack is in position of use to extend in two spaced vertical planes, a plurality of pairs of rigid supporting members fixedly mounted on said carrying elements in longitudinally spaced relationship thereto; the members of each pair being arranged at different levels on said carrying elements, and end members for each pair of said supporting members permanently engaging at each end and sliding on said carrying elements to extend transversely between the said supporting members and thereby space the latter horizontally when the rack is in suspended and unfolded position, each of said end members being provided at its ends with biased bores which in position of use will be in parallel alignment with said carrying elements to permit said end members to freely move thereon when said rack is being folded or unfolded.

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