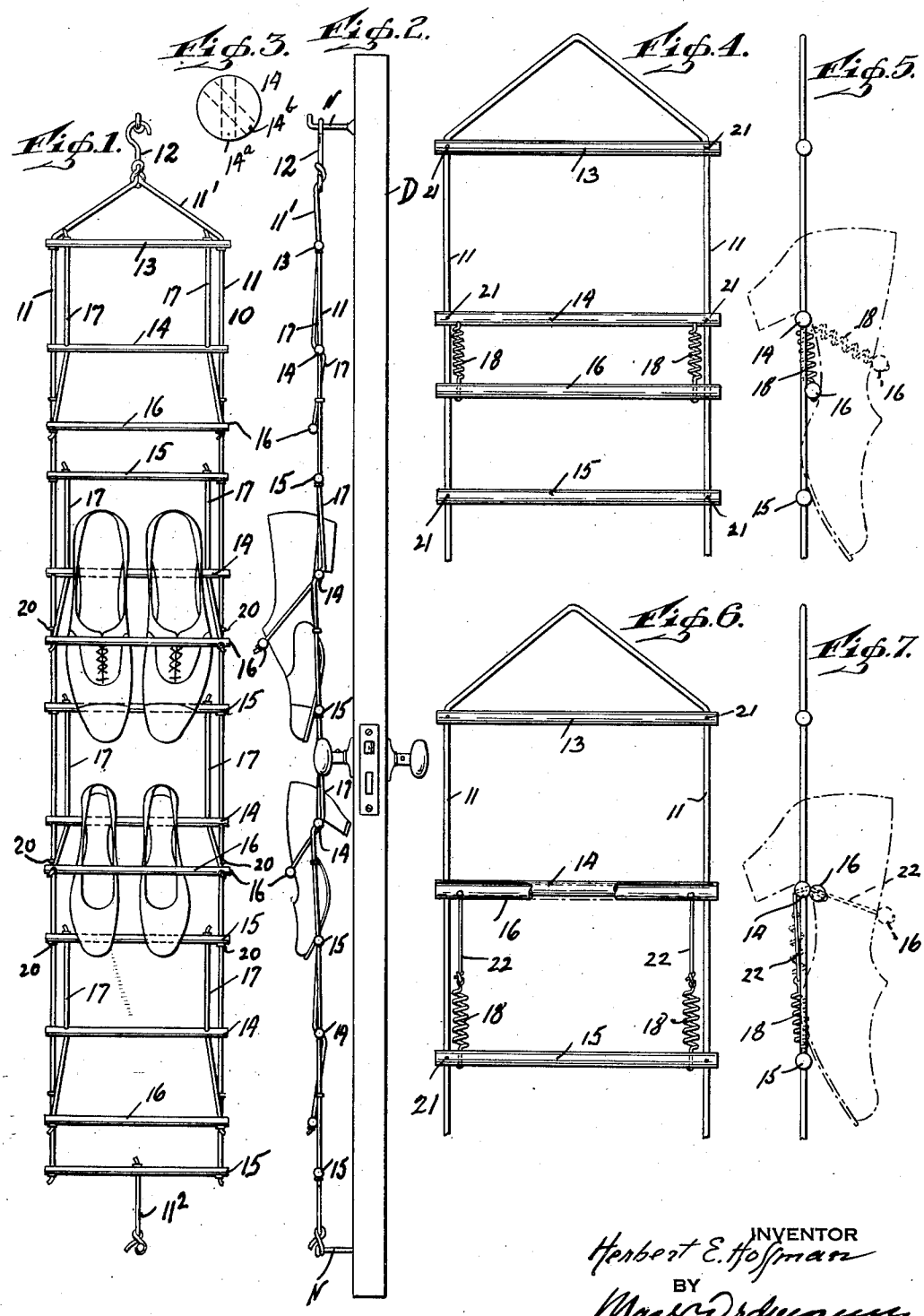
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FOLDABLE AND SUSPENDABLE RACK FOR SHOES OR LIKE ARTICLES

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FOLDABLE AND SUSPENDIBLE RACK FOR SHOES OR LIKE ARTICLES

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This invention relates to devices or racks for supporting shoes or like articles. One of the objects of this invention is to provide a rack on which shoes or like articles can be supported in such position that each article is exposed to full view and is easily and quickly accessible and can be conveniently placed in position thereon or removed therefrom.

Another object is to provide a rack structure which can be easily and conveniently folded up into a relatively small package and accommodated in a carton or like container for shipment or storing purposes and can be quickly and conveniently unfolded and suspended from a wall or door.

A still further object is to provide suitable means whereby the articles supported on the rack will be securely held in position and prevented from accidentally dropping off.

A still other object is to provide a rack structure whose manufacture will be extremely simple and cheap, requiring but little material and tools for its production.

With these and other objects in view, my invention substantially, consists of a pair of longitudinally extending flexible elements, such as cords, held in spaced parallel relationship with one another, and a plurality of runglike cross members mounted on said elements or cords in a vertically superposed and spaced relationship to one another. Of these cross members each adjacent two members serve to support one or several pairs of shoes or like articles, in a vertically disposed position, so that the upper one of the two members engages the heels of the shoes and acts as a suspension member and the lower one acts as an abutment member. To securely hold the shoes or other articles in position on or against said supporting members, I provide suitable clamping means which in cooperation with said members, will be caused to automatically clamp the shoe in suspended position.

My invention will be clearly and fully understood from the following detailed description and the accompanying drawing which forms part of this specification and in which similar reference characters denote corresponding parts. In the drawing:

Figure 1 is a front elevation of one embodiment of my invention;

Figure 2 is a side elevation thereof, showing the rack in use and as applied to a door;

Figure 3 is an end view of a detail of said rack;

Figures 4 and 5 are respectively the front and side elevations of a modification of the structure shown in Figures 1 to 3;

Figures 6 and 7 are respectively a front and side elevation of another modification of my device.

Referring to the embodiment shown in Figures 1 to 3, 10 denotes a rack composed of a pair of longitudinally extending flexible elements 11, such as cords, or the like, which are held in parallelly spaced relationship by a plurality of rung like cross members 13, 14 and 15. These members may be provided at the ends with transversal bores, such as 14^a, shown in Figure 3, for the free passage of the cords 11, The upper ends 11^1 of the cords, projecting through the bores 14^a of the member 13 are knotted together and have fastened to them a hook 12 or the like, whereby the rack may be suspended from a nail N or the like, projecting from a wall or door D (Figure 2). The lowermost rung 15 may have a cord 11^2 attached to it whereby it may be fastened to a nail N for preventing the rack from swaying. All these rungs or cross members are arranged in a vertically superposed and spaced relationship to one another, the same being held in that relationship by stops 20 fixed to the cords 11. The upper most rung 13 and the lowermost run 15 may serve merely as spacers for the cords 11 and instead of being movable, as shown, may be fixed to the cords 11 by pins (not shown). Of the intermediate rungs or members 14, 15 each adjacent two constitute a couple of supports for one or more pairs of shoes or like articles, the upper one of each couple being adapted to engage the heel of a shoe and thus act as suspension member, while the lower one merely serves to engage the sole of the shoe and acts as an abutment.

Suspended from the uppermost rung or cross member 13 as well as from each intermediate abutment member 15 are a pair of cords or other suitable flexible elements 17, one near each end, which with their opposite ends carry an auxiliary rigid cross member 16 that, as will be presently described, is adapted to act as a clamp. The cords 17 are threaded through bores 14^b provided in the suspension members 14 and which extend in a forwardly and downwardly inclined position relative to the vertical, advantageously at an angle of 45°. In length the cords 17 are so admeasured that in clamping position said auxiliary member 16 will engage the shoes suspended from the members 14, about or just above the middle part thereof, as shown in Figures 1 and 2.

In use, the shoes or similar articles are sus-

pended with their heels from the suspension members 14 to bear with their soles against the corresponding abutment members 15, as shown in Figure 2. To do this, the auxiliary members 16 must be first swung away from the rack. The swinging of the members 16 forwardly will cause the suspension members 14 to ride up the cords 11. After the positioning of the shoes, as described, and the release of said auxiliary members 16, the weight of the shoes suspended from the members 14, will pull said auxiliary members 16 tightly against the shoes and automatically clamp them in suspended position.

The intermediate abutment members 15 like the spacer 13 may be permanently fixed to the cords by pins or other suitable means (not shown).

In the modification shown in Figures 4 and 5, the suspension and abutment members 14, 15 are shown fixed to the cords 11 by pins 21 and the clamping member 16 is suspended from the suspension member 14 by a pair of tension springs 18. In use, the clamping member 16 is first pulled away from the rack and the shoes or other articles are positioned in the same manner as in the first modification, that is, with their heels engaging the suspension members 14 and their soles bearing against abutment members 15. On release the clamping members, 16 by the spring force will securely clamp the shoes in position, as indicated in Figure 5.

In the modification shown in Figures 6 and 7, the suspension and abutment members 14, 15 respectively are also permanently fixed to the cords by pins 21. The spring coils 18 are attached to the abutment member 15 and have their opposite ends attached to cords or other flexible elements 22. These cords 22 are threaded through bores in the suspension member 14 and their ends are attached to the clamping cross member 16. In use the clamping member 16 must be first pulled forwardly against the action of the springs 18 and, after the positioning of the shoes, released, so that it will automatically engage the shoes and clamp them in position, as indicated by dotted lines in Figure 7.

It will be obvious that shoes without heels or other articles, such as men's felt hats or the like may be securely supported on the rack in a similar manner. In such case the article is placed to bear against the two adjacent members 14, 15 and clamped in position by the clamping member 16.

It is also obvious that the longitudinal elements of the rack may be made of rigid, but foldable material, instead of cords or other flexible material, and that the intermediate cross members may be made of flexible material tautly stretched between the said foldable elements.

Various other modifications may be made in the construction of my device without departing from the spirit of my invention. I therefore do not wish to restrict myself to the details described and shown.

What I claim is:

1. A rack for shoes comprising a pair of flexible elements, capable of suspension from a stationary object, at least two cross members spaced longitudinally relative to said flexible elements, one of said members being slidable on said flexible elements and serving to engage the heel of a shoe as a suspension means, and the other serving as abutment against the sole of this shoe, an auxiliary cross member, flexible means carrying said auxiliary cross member and stationarily suspended above said slidable member, said flexible means extending through said slidable member and adapted to be tensioned by the downward pull of the latter and thereby to produce a clamping effect on the article.

2. A rack according to claim 1 in which said slidable member is provided with bores for the passage of said flexible means, said bores extending forwardly and downwardly at an angle to the vertical.

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