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COLLAPSIBLE GARMENT RACKS

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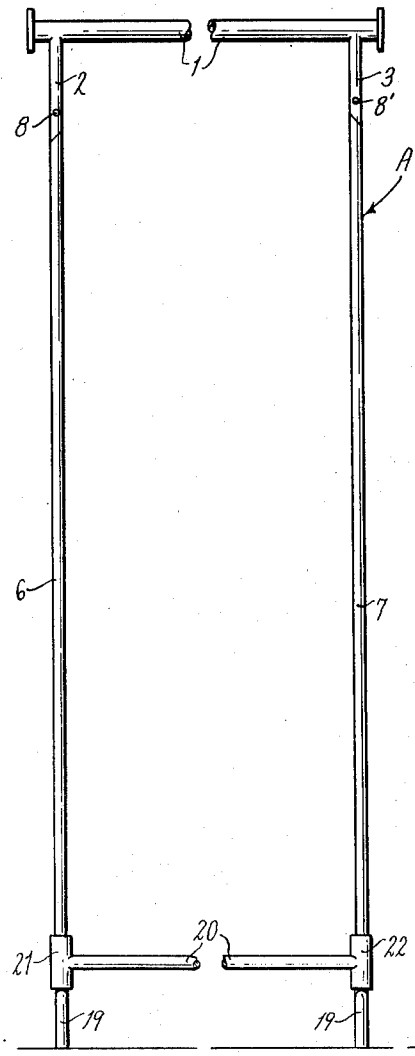


FIG. 1.

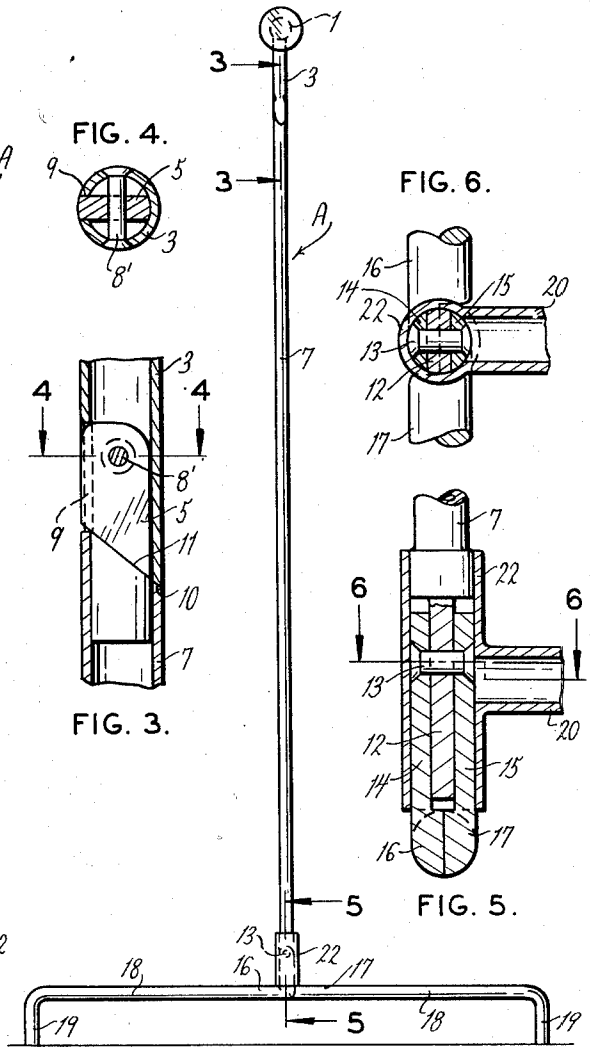


FIG. 2.

FIG. 3.

FIG. 4.

FIG. 6.

FIG. 5.

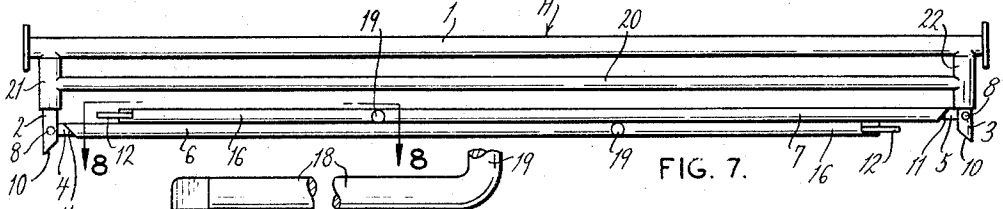


FIG. 7.

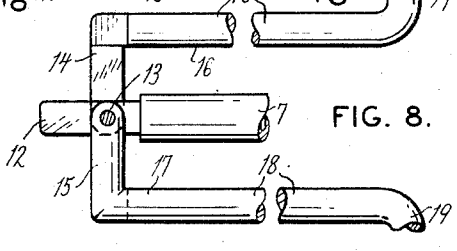


FIG. 8.

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COLLAPSIBLE GARMENT RACKS

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4 Claims. (Cl. 211—178)

This invention relates in general to racks and, more particularly, to collapsible garment racks.

One object of this invention is to provide a garment rack which is adapted, when not in use, to be folded into a compact, narrow unit for facile transportability and for space-saving storage, and which, when in open or operative position, provides a sturdy structure for supporting a substantial number of hangers with garments thereon.

Another object of this invention is to provide a collapsible rack which integrally incorporates locking means for maintaining the rack in operative position thereby obviating the necessity of separate, readily displaceable locking members.

A further object of this invention is to provide a garment rack which may be economically manufactured, preferably of tublar construction; which is reliable and durable in usage; and which is simple and efficient in operation.

With the above and other objects in view, my invention resides in the novel features of form, construction, arrangement, and combination of parts presently described and pointed out in the claims.

In the accompanying drawing—

Figure 1 is a front view of a garment rack in operative position, which rack is constructed in accordance with and embodies the present invention;

Figure 2 is an end view of the rack;

Figure 3 is a transverse section taken on the line 3—3 of Figure 2;

Figure 4 is a transverse section taken on the line 4—4 of Figure 3;

Figure 5 is a transverse section taken on the line 5—5 of Figure 2;

Figure 6 is a transverse section taken on the line 6—6 of Figure 5;

Figure 7 illustrates the rack in collapsed or inoperative position; and

Figure 8 is a transverse section taken on the line 8—8 of Figure 7.

Referring now to the drawing which illustrates the preferred embodiment of the present invention, A designates a garment rack of preferably tubular chrome construction, comprising an upper transverse bar 1 for supporting garment-carrying hangers.

Secured to bar 1 adjacent each of its ends are the upper ends of relatively short, vertical sections 2, 3, axially normal to bar 1; section 2 being slightly longer than section 3 for purposes presently appearing. At their lower ends, sections 2, 3, are each open for reception therein of a tongue member or flattened projection 4, 5, respectively, suitably provided at the upper ends of elongated uprights or posts 6, 7, respectively. Tongue members 4, 5, are swingably secured within sections 2, 3, by pins 8, 8', respectively, whereby uprights 6, 7, may be swung between operative position wherein they are in axial alignment with vertical sections 2, 3, respectively,

and inoperative position wherein the same are in inwardly swung relation, substantially parallel to bar 1. Each section 2, 3, is provided on its inwardly directed portion with a vertical opening 9 for movement of tongue members 4, 5, therethrough, when uprights 6, 7, are swung into and from inoperative, or collapsed, position. Abutment of one edge of tongue members 4, 5, against the upper edge of openings 9 determines the upper limit of inward swinging movement. As shown in Figures 1 and 7, the lower ends of vertical sections 2, 3, are inclined downwardly and outwardly as at 10 for abutment against complementarily formed shoulders 11 on either side of each tongue member 4, 5, when uprights 6, 7, are in extended or operative position whereby the same will be aligned with their associated sections 2, 3. The differential in length between sections 2, 3, permits upright 7 to be positioned inwardly of upright 6 and parallel thereto when rack A is collapsed.

At their lower ends, each upright 6, 7, is provided with a terminal flattened member 12 with the lateral faces thereof being presented inwardly and outwardly for pivotal mounting on each face, as by a pivot pin 13, of the upper ends 14, 15, of generally Z-shaped base or foot members 16, 17, for extension in opposite directions from the related uprights. The upper end portions 14, 15, of each base member 16, 17, are hemispherical in cross section and the over all thickness of said ends 14, 15, and the intermediate flattened portion 12 is greater than the diameter of the uprights 6, 7 (Figure 5). Bases 16, 17, each comprise a central portion 18 perpendicular to uprights 6, 7, when the rack is in open position, and short legs 19 extending from the outer ends of said central portions 18. Each base 16, 17, may be swung about their pivot pins 13 toward each other and their respective uprights 6, 7, into the position shown in Figure 8 wherein central portions 18 thereof are substantially parallel to each other and to said uprights 6, 7. By the swingable mounting of said bases 16, 17, the same may be folded into compact relation for facilitating the portability of rack A. Any suitable means may be provided, if desired, for preventing said bases 16, 17, from prematurely swinging into open position, such as straps or binding members, which could extend about the rack A when in collapsed position.

Provided for maintaining rack A in open, operative position, is a locking bar 20 for extension between uprights 6, 7, parallel to bar 1 and having suitably mounted, as by welding, at its opposite ends sleeves 21, 22, the inside diameter thereof being just slightly greater than the combined thickness or cross section of said base upper ends 14, 15, and the related terminal members 12, whereby said sleeves 21, 22, are freely slidable along uprights 6, 7, when the same are extended. Sleeves 21, 22, are thus designed for snug fitting around the base upper ends 14, 15, when rack A is in operative position (Figure 2) to hold said bases against inadvertent collapsing.

When it is desired to collapse rack A, locking bar 20 is moved upwardly along uprights 6, 7, until sleeves 21, 22, surround vertical sections 2, 3, with the upper margins of said sleeves abutting against transverse bar 1 (Figure 7), in which position the lower ends of said sleeves 21, 22, will be spaced upwardly from openings 9 to permit inward and upward swinging of uprights 6, 7, into inoperative disposition. Since sleeves 21, 22, have been removed from the lower ends of uprights 6, 7, the base members 16, 17, may be readily swung inwardly for enhancing the compactness of the now collapsed rack. In folded condition, rack A takes a minimum of space and provides an integrated, relatively narrow parcel easily-handled for transportation. To open rack A for use, uprights 6, 7, are swung outwardly into axial alignment

with their respective vertical sections 2, 3, wherein shoulders 11 will be in abutment against the inclined lower margins of said sections 2, 3. Each base member 16, 17, may then be swung outwardly from their associated uprights 6, 7 into extended position. Locking bar 20 is then moved downwardly to its lowest limit wherein sleeves 21, 22, are disposed about upper ends 14, 15, of said bases 16, 17, with the lower edges of said sleeves abutting against the adjacent portion of sections 18 of said bases 16, 17. In this position locking bar 20 provides lateral rigidity to the structure, maintaining uprights 6, 7, spacedly apart in frame-forming relation to bars 1, 20. Sleeves 21, 22, thus prevent inadvertent swinging of bases 16, 17, so that rack A is firm and steady for supporting a substantial number of garments suspended by conventional hangers on transverse bar 1.

As set forth hereinabove, rack A provides a sturdy, durable device when in operative position for supporting garments and the like and may be collapsed into a compact readily portable unit for facile transfer to selected locations for use or for storage utilizing a minimum of space.

It should be understood that changes and modifications in the form, construction, arrangement, and combination of the several parts of collapsible garment rack may be made and substituted for those herein shown and described without departing from the nature and principle of the present invention.

What I claim and desire to secure by Letters Patent is:

1. A garment rack comprising a transverse bar, spaced uprights for supporting said bar, each upright being provided at its lower end with a flattened portion, and a pair of generally Z-shaped base members having their upper ends pivotally secured on opposite faces of the flattened portion at the lower end of each upright, the base members on each upright extending in opposite directions, with their central portions axially perpendicular, to the associated upright when in operative position, said base members being swingable about their pivot into collapsed or inoperative position wherein the central portions are parallel to the associated upright, and interconnected locking sleeves slidable along each upright for receiving the upper ends of the associated base member to prevent premature collapsing action thereof.

2. A collapsible garment rack comprising an upper transverse bar, a pair of spaced sections axially normal, and fixed, to said bar, an elongated upright hingedly engaged at its upper end to each section for swinging movement between extended or operative position in axial alignment with the related sections and collapsed or inwardly swung position in substantially parallel relation to said upper bar, a pair of generally Z-shaped base members having their upper ends pivotally secured to the lower end of each upright, the base members on each upright extending in opposite directions, with their central portions axially perpendicular, to the associated upright when in operative position, said base members being swingable about their pivot into collapsed or inoperative position wherein the central portions are parallel to the associated upright, and a lower transverse bar extending between said uprights in parallel relation to said upper bar, said lower bar having sleeve members at its opposite ends for

sliding movement along said uprights toward and away from said upper bar, whereby when said lower bar is at its lower limit the sleeves will fit about the upper ends of said base members for maintaining same in operative position and simultaneously maintain said uprights spacedly apart so that premature collapsing action of said rack will be prevented.

3. A collapsible garment rack as described in claim 2 wherein the combined cross section of the upper ends of the base members and the engaged portion of the upright is greater than the diameter of the upright and the sleeves are of a diameter slightly greater than said combined cross section so that said sleeves will be snugly engageable about said base upper ends and readily slidable along said uprights.

4. A collapsible garment rack comprising an upper transverse bar, a pair of spaced, short, rod-like sections axially normal, and fixed, to said bar, an elongated upright hingedly engaged at its upper end to each section for swinging movement between extended or operative position in axial alignment with the related sections and collapsed or inwardly swung position in substantially parallel relation to said upper bar, each upright being provided at its lower end with a flattened portion, a pair of generally Z-shaped base members having their upper ends pivotally secured on opposite faces of the flattened portion at the lower end of each upright, the base members on each upright extending in opposite directions, with their central portions axially perpendicular, to the associated upright when in operative position, said base members being swingable about their pivot into collapsed or inoperative position wherein the central portions are parallel to the associated upright, and a lower transverse bar extending between said uprights in parallel relation to said upper bar, said lower bar having an axially perpendicular sleeve member at each of its ends for extension therethrough of said uprights to permit sliding movement along said uprights toward and away from said upper bar, whereby when said lower bar is at its lower limit the sleeves will rest on their lower edge upon the central portion of the base members and fit about the upper ends of said base members for maintaining same in operative position, and simultaneously maintain said uprights spacedly apart so that premature collapsing action of said rack will be prevented.

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