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(54) MOVEMENT RESISTANT ANGLED CLOTHES HANGER ROD STRUCTURE

STANGENKONSTRUKTION FÜR UNBEWEGLICHE, SCHRÄGE KLEIDERBÜGEL

STRUCTURE DE BARRE SERVANT A MAINTENIR DES CINTRES EN BIAIS SANS QU'ILS
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Description

[0001] The present invention relates to a space-saving clothes hanger rod structure which holds clothes hangers, and clothes hanging thereon, in an optimal angled position within a closet.

[0002] Various attempts have been made to minimize use of space in a clothes hanger environment, such as a closet. Relevant disclosures are to be found in US-A-1613447 (Ellberg) dated January 4 1927; US-A-3991884 (DeMaagd et al.) dated November 16 1976; US-A-4361241 (Stoddard) dated November 30 1982; US-A-4548328 (Brauning) dated October 22 1985 and US-A-3302800 (Zdanowski) dated 7 February 1967.

[0003] A number of these prior art patents disclose garment hanger racks wherein slots are provided in the rack configured to accommodate the hook on a typical garment hanger and support the garment in an angular relationship with respect to the longitudinal axis of the rack. Such an arrangement provides for improved display of the garments arranged on the rack and, in addition, requires a lesser depth if the rack is positioned in a closet.

[0004] US-A-3991884 represents a showing of this concept, wherein a clothes hanger rod 10 has angled notches 20 to accommodate clothes hanger hooks 26.

[0005] US-A-4361241 describes a carpet sample display rod 21 wherein rounded projections 32 project up from the rod 21 to define parallel recesses 34 for the hanger hooks 26.

[0006] US-A-1613447 describes a suspension device for clothes wherein descending hooks 10 may be rotated at an angle.

[0007] A further prior art arrangement is shown in US-A-3302800 which may be described as disclosing in general a movement resistant, space saving clothes hanger rod structure which holds clothes hangers, and clothes hanging thereon, in an optimal angled position within a closet, the structure comprising a V-shaped longitudinally extending rod comprising a pair of upwardly extending members extending upwardly at a predetermined angle from a common longitudinally extending base joint, each of the upwardly extending members being provided with a respective series of transversely extending parallel longitudinally spaced slot-like channels in a respective uppermost edge thereof, each channel in one respective series being associated with a respective associated channel in the other and arranged to receive and support a respective portion of an arcuate surface of a clothes hanger hook.

[0008] According to the present invention associated slot-like channels in each upwardly extending member are spaced with respect to one another in the longitudinal direction of the rod structure in staggered relationship so as to hold the hanger hook at a predetermined inclined angle relative to the longitudinal axis of the rod structure as determined by the staggered relationship of associated slot-like channels, the slot-like

channels comprising spaced side surfaces which are inclined relative to the longitudinal axis of the rod structure to match the predetermined inclined angle determined by the staggered relationship of associated slot-like channels.

[0009] The curved slots within the prior art rods of US-A-3991884, US-A-4361241 and US-A-4548328 cause the hanger hooks to rotate loosely and move away from the desired angle. Furthermore, the documents referred to do not provide a device which holds a clothes hanger hook in two places to limit movement of the hook off the predetermined inclined angle. In contrast the associated slot-like channels of the present invention provide two spaced apart slots to keep the hanger hooks (and the clothes hanging therefrom) resting in place in the desired angle.

[0010] The matching of the angle of the spaced side surfaces of the slot-like channels with the angle determined by the staggered relationship of associated slot-like channels aids in limiting the movement of the hanger off the preferred inclined storage angle.

[0011] It is an object of the present invention to provide a space-saving clothes hanger rod structure which holds clothes hangers, and clothes hanging thereon, in an optimal angled position within a closet.

[0012] It is a further object of the present invention to provide a generally V-shaped rod in cross-section, including two upwardly extending members extending at an angle up from a common base point.

[0013] It is yet another object to provide a space saving clothes hanger rod structure with upwardly extending members containing a plurality of respective longitudinally spaced slot-like channels, wherein each channel is adapted to receive a portion of the arcuate surface of a hanger hook.

[0014] It is a further object to provide a clothes hanger holder wherein the hook is held in place at two spaced part points along the arcuate surface of the hook.

[0015] It is yet another object to provide a movement resistant clothes hanger rod structure wherein the hangers are prevented from moving and rotating off of the angle of the channel, preferably about 50°.

[0016] It is yet a further object of the present invention to provide a movement resistant clothes hanger rod structure which improves over the disadvantages of the prior art.

[0017] The present invention is a structure which minimizes use of space in a clothes hanger environment, such as a closet.

[0018] The present invention provides for improved display of the garments arranged on a hanger rack and, in addition, requires a lesser depth if the rack is positioned in a closet by conventional support brackets.

[0019] As a result, there is provided a suspension device for clothes wherein the clothes hangers may be prevented from rotating away from a desired angle within the closet.

[0020] The present invention therefore prevents the hanger hooks from rotating loosely and from moving away from the desired angle, because the two slots of the present invention retain the hooks at the two separate points of the arcuate inside surfaces of the hooks, thereby keeping the hanger hooks (and the clothes hanging therefrom) resting in place in the desired angle.

[0021] The aforesaid objects and advantages of the present invention may be ascertained from the description of the invention in the following drawings.

[0022] The invention will now be further described in a specific embodiment, by way of example only, and with reference to the accompanying drawings, in which:

Figure 1 is a top plan view of the present invention;

Figure 2 is a closeup top plan view of the rod portion of the present invention;

Figure 3 is a closeup side elevational view of the rod portion of the present invention; and

Figure 4 is an end view in section showing a clothes hanger resting upon the notched rod of the present invention.

Figure 5 is a perspective view of the present invention.

Detailed Description of the Preferred Embodiment of the Invention

[0023] As shown in Figures 1-5, there is shown a movement resistant, space-saving clothes hanger rod structure 10, which holds a plurality of conventional clothes hangers 11, and clothes hanging thereon, at an optimal angled position within a closet 12 at an angle designated as reference numeral 13.

[0024] More particularly, the longitudinally extending rod structure 10 includes a generally V-shaped rod 14, which rod 14 is V-shaped when viewed in cross-section, including two upwardly extending members 15 and 16 extending at an angle up from a longitudinally extending common base line joint 17 at the bottom edges 15a and 16a of extending members 15 and 16.

[0025] The upwardly extending members extend in a V-shaped configuration, with a V-shaped gap 20 presented therebetween.

[0026] Each of the upwardly extending members 15, 16 contains a plurality of respective longitudinally spaced slot-like channels 18a, 18b, 18c, etc. and 19a, 19b, 19c etc., wherein slot-like channels 18a, 18b, 18c, etc. each descend in an indented manner within outer top edge 15b of extending member 15, providing respective recesses therein, and further wherein slot-like channels 19a, 19b, 19c, etc. descend in an indented manner within a corresponding outer top edge 16b of extending member 16, providing further respective

recesses therein.

[0027] Each recess of slot-like channels 18a, 18b, 18c etc. and 19a, 19b, 19c etc. is adapted to receive a portion of the arcuate surface 11a of a hanger hook 11b of hanger 11, so that the hook 11b is held in place at two spaced apart points 11c and 11d along the arcuate inside surface 11a of the hanger hook 11b of hanger 11.

[0028] As a result, the hook 11b of hanger 11 is prevented from moving and rotating off of the angle extending between respective channels 18a, 19a of the rod 14 and the longitudinal axis of rod 14 preferably 50°.

[0029] The rod structure 10 includes the slots 18a, 18b, 18c, etc. and 19a, 19b, 19c, etc. in respective pairs, which each said pair of slots defines an imaginary axially extending line therebetween, and are so configured so that each of the imaginary axially extending lines extending between slot-like channels 18a, 19a is parallel to each other imaginary axially extending line between other pairs of channel-like slots 18b, 19b, etc., to accommodate the clothes hanger hook 11b on a typical garment hanger 11, for supporting a garment in an angular relationship with respect to the longitudinal axis of the V-shaped rod 14.

[0030] Such an arrangement provides for improved display of the garments arranged on the V-shaped rod 14 and, in addition, requires a lesser depth if the V-shaped rod 14 is positioned in the closet 12.

[0031] The present invention is therefore a structure which minimizes use of space in a clothes hanger environment, such as in closet 12.

[0032] Consequently, the garment hanger rod 14 having upward extending members 15 and 16 wherein slot-like channels are provided in the rod 14, accommodates the hook 11b on a typical garment hanger 11 and supports the garment in an optimal angular relationship with respect to the longitudinal axis of the rod 14.

[0033] The structure 10 of the present invention therefore provides for improved display of the garments arranged on the rod 14 and, in addition, requires a lesser depth if the rod 14 is positioned in the closet 12.

[0034] The clothes hanger rod 14 of the present invention with the plurality of pairs of angled notched slot-like channels 18a, 18b, 18c, etc., 19a, 19b, 19c, etc., prevents and limits the movement of hangers upon the V-shaped rod 14.

[0035] As a result, there is provided a suspension device for clothes wherein the clothes hangers 11 may be prevented from rotating away from the desired angle 13 within the closet 12. This occurs because, unlike the prior art devices which provide one recess for each hanger, in the rod structure 10 of the present invention each hanger hook 11b is held in place at two places along its inside arcuate surface, namely at points 11c and 11d, which points 11c and 11d are located spaced apart from each other along the inside surface 11a of hanger hook 11b of hanger 11.

[0036] For example, the device of the present invention holds a typical clothes hanger hook 11 in two

places 11c and 11d of hanger 11, at each of the pairs of notched hook-like channels 18a, 19a, etc., to limit movement of the hanger 11 off of the preferred storage angle 12 as aforesaid.

[0037] The supporting upwardly extending members 15 and 16 for the clothes hangers 12 extend upward off a common longitudinal axis joint 17 at lower edges 15a and 16a to provide the aforementioned in-shaped channel 20 between two upwardly extending members 15 and 16.

[0038] The angled slot-like channels 18a, 19a, etc., which are presented in a pair for each clothes hanger hook 11b, stabilize the coat hanger hook 11b in place. The present invention therefore prevents the clothes hangers 11 from rotating loosely and from moving away from the desired angle 13, because each of the pairs of slot-like channels 18a, 19a of the hanger structure 10 of the present invention retain the clothes hanger hooks 11b positioned in place at the desired angle 13, preferably about 50 degrees.

[0039] It is anticipated that other modifications may be made to the details of the device of the present invention, without departing from the scope of the present invention, as noted in the appended claims.

Claims

1. A movement resistant, space-saving clothes hanger rod structure (10) which holds clothes hangers (11), and clothes hanging thereon, in an optimal angled position within a closet, the structure comprising a V-shaped longitudinally extending rod (14) comprising a pair of upwardly extending members (15, 16) extending upwardly at a predetermined angle from a common longitudinally extending base joint (17), each of the upwardly extending members being provided with a respective series of transversely extending parallel longitudinally spaced slot-like channels (18a, 18b, 18c, 19a, 19b, 19c) in a respective uppermost edge (15b, 16b) thereof, each channel in one respective series being associated with a respective associated channel in the other and arranged to receive and support a respective portion of an arcuate surface (11a) of a clothes hanger hook (11b); characterized in that associated slot-like channels (18a, 19a; 18b, 19b; 18c, 19c) in each upwardly extending member (15, 16) are spaced with respect to one another in the longitudinal direction of the rod structure in staggered relationship so as to hold the hanger hook (11b) at a predetermined inclined angle (13) relative to the longitudinal axis of the rod structure as determined by the staggered relationship of associated slot-like channels, the slot-like channels comprising spaced side surfaces which are inclined relative to the longitudinal axis of the rod structure to match the predetermined inclined angle (13) determined by the staggered relation-

ship of associated slot-like channels.

2. A clothes hanger rod structure according to claim 1, wherein the transversely extending slot-like channels (18, 19) in the respective uppermost edges (15b, 16b) of the upwardly extending members (15, 16) are shaped so as to widen from a narrowest portion at the base of the channel to a widest portion at the uppermost edge of the respective upwardly extending member.
3. A clothes hanger rod structure according to claim 1 or claim 2, wherein the transversely extending slot-like channels (18, 19) in the respective uppermost edges (15b, 16b) of the upwardly extending members (15, 16) are defined by surfaces which are continuously smoothly curved.

Patentansprüche

1. Unbewegliche, platzsparende Kleiderbügel-Stangenkonstruktion (10), die Kleiderbügel (11) und daran aufgehängte Kleidungsstücke in einer optimalen Winkelposition in einem Schrank hält, wobei die Struktur eine V-förmige, sich in Längsrichtung erstreckende Stange (14) umfaßt, die ein Paar aufwärts ragende Glieder (15, 16) besitzt, die sich in einem vorbestimmten Winkel von einer gemeinsamen in Längsrichtung erstreckenden Basis-Verbindungsstelle (17) aus nach oben erstrecken, wobei jedes der aufwärts gerichteten Glieder mit einer jeweiligen Serie von quer verlaufenden, parallel in Längsrichtung beabstandeten, schlituartigen, in einem entsprechenden oberen Rand (15b, 16b) angeordneten Kanälen (18a, 18b, 18c, 19a, 19b, 19c) versehen ist, wobei jeder Kanal einer entsprechenden Serie mit einem jeweils zugeordneten Kanal der anderen Serie assoziiert und so angeordnet ist, daß er einen entsprechenden Teil von einer gebogenen Fläche (11a) eines Kleiderbügel-Hakens (11b) aufnimmt und stützt, dadurch gekennzeichnet, daß die assoziierten, schlituartigen Kanäle (18a, 19a; 18b, 19b; 18c, 19c) in jedem aufwärts gerichteten Glied (15, 16) in Längsrichtung zueinander versetzt angeordnet sind, um den Bügelhaken (11b) in einem vorbestimmten geneigten Winkel (13) relativ zur Längsachse der Stangenstruktur zu halten, wie dies durch die versetzte Anordnung der assoziierten, schlituartigen Kanäle bestimmt ist, wobei die schlituartigen Kanäle voneinander beabstandete Seitenflächen aufweisen, die relativ zur Längsachse der Stangenstruktur in Anpassung an den vorbestimmten geneigten Winkel (13) ebenfalls geneigt sind, der durch die versetzte Anordnung der assoziierten, schlituartigen Kanäle bestimmt wird.
2. Kleiderbügel-Stangenstruktur nach Anspruch 1,

wobei die schräg verlaufenden schlitzartigen Kanäle (18, 19) in den jeweiligen oberen Rändern (15b, 16b) der aufwärts ragenden Glieder (15, 16) so geformt sind, daß sie sich von einem engsten Teil an der Basis des Kanals bis zu einem weitesten Teil an der oberen Ecke des jeweils nach oben gerichteten Glieds erweitern.

3. Kleiderbügel-Stangenstruktur nach Anspruch 1 oder 2, wobei die quer verlaufenden schlitzartigen Kanäle (18, 19) in den entsprechenden oberen Rändern (16b, 16b) der aufwärts ragenden Glieder (15, 16) durch Flächen definiert sind, die kontinuierlich gleichmäßig gebogen sind.

Revendications

1. Structure de tringle porte-vêtements (10), résistant au déplacement et à gain de place, qui maintient des cintres (11), et les vêtements suspendus à ceux-ci, dans une position oblique optimale dans une penderie, la structure comprenant une tringle (14), s'étendant longitudinalement et en forme de V, comprenant deux parties s'étendant vers le haut (15, 16) qui sont orientées vers le haut suivant un angle préfixé à partir d'une jonction de base (17) commune s'étendant longitudinalement, chacune des parties s'étendant vers le haut étant pourvue d'une série respective de passages en forme de fente (18a, 18b, 18c, 19a, 19b, 19c) orientés transversalement, parallèles et espacés longitudinalement, qui sont ménagés dans un bord supérieur (15b, 16b) respectif de cette partie, chaque passage d'une série respective étant associé à un passage associé respectif de l'autre série et étant agencé de façon à recevoir et soutenir une partie respective d'une surface courbe (11a) d'un crochet de cintre (11b), caractérisée en ce que les passages en forme de fente (18a, 19a ; 18b, 19b ; 18c, 19c) associés, ménagés dans chaque partie s'étendant vers le haut (15, 16), sont espacés l'un par rapport à l'autre suivant la direction longitudinale de la structure de tringle suivant une disposition relative décalée, de manière à maintenir le crochet de cintre (11b) sous un angle incliné (13) préfixé, par rapport à l'axe longitudinal de la structure de tringle, tel que déterminé par la-disposition relative décalée des passages en forme de fente associés, les passages en forme de fente comportant des surfaces latérales espacées qui sont inclinées par rapport à l'axe longitudinal de la structure de tringle de façon à respecter l'angle incliné préfixé (13) déterminé par la disposition relative décalée des passages en forme de fente associés.
2. Structure de tringle porte-vêtements suivant la revendication 1, dans laquelle les passages en

forme de fente (18, 19) orientés transversalement qui sont ménagés dans les bords supérieurs (15b, 16b) respectifs des parties s'étendant vers le haut (15, 16) sont conformés de façon à s'élargir d'une partie plus étroite, située à la base du passage, à une partie plus large située à l'endroit du bord supérieur de la partie s'étendant vers le haut respective.

3. Structure de tige porte-vêtements suivant la revendication 1 ou la revendication 2, dans laquelle les passages en forme de fente (18, 19) orientés transversalement qui sont ménagés dans les bords supérieurs (15b, 16b) respectifs des parties s'étendant vers le haut (15, 16) sont définis par des surfaces qui présentent une courbure progressive continue.

FIG. 1

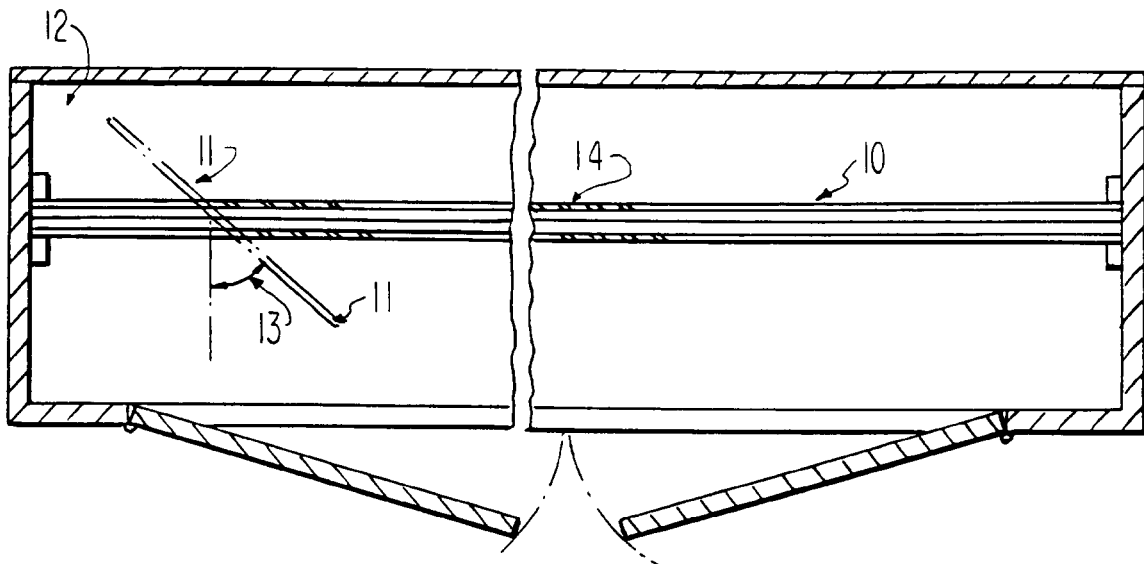


FIG. 2

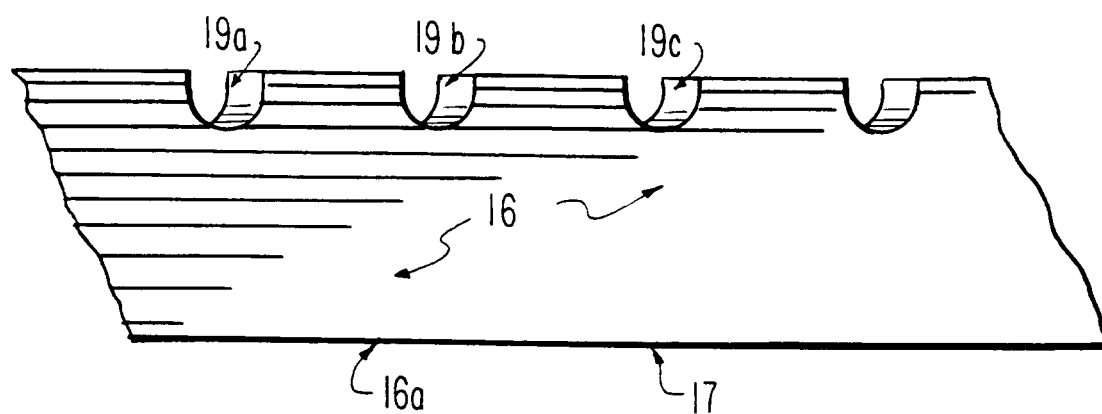
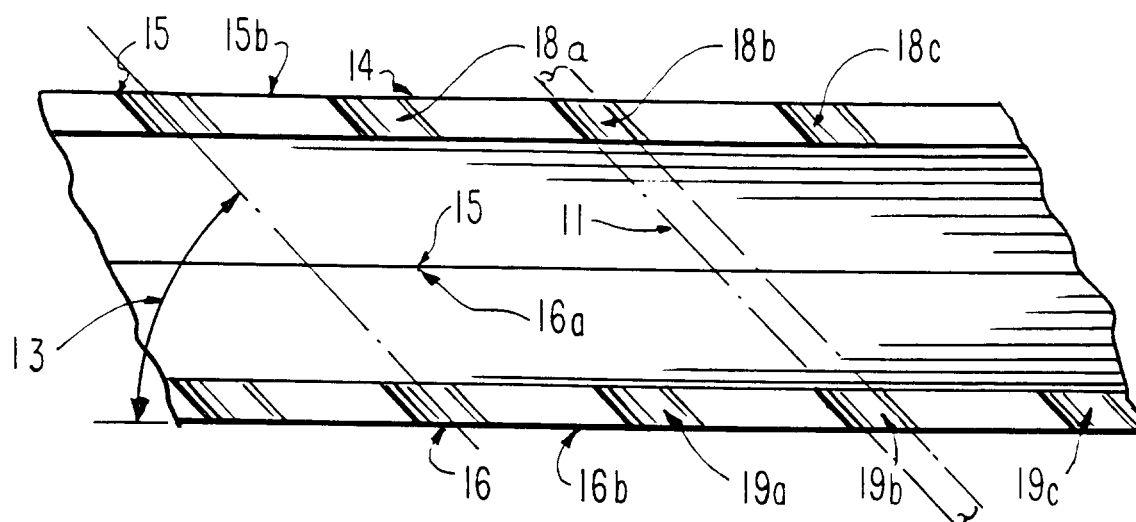


FIG. 3

FIG. 4

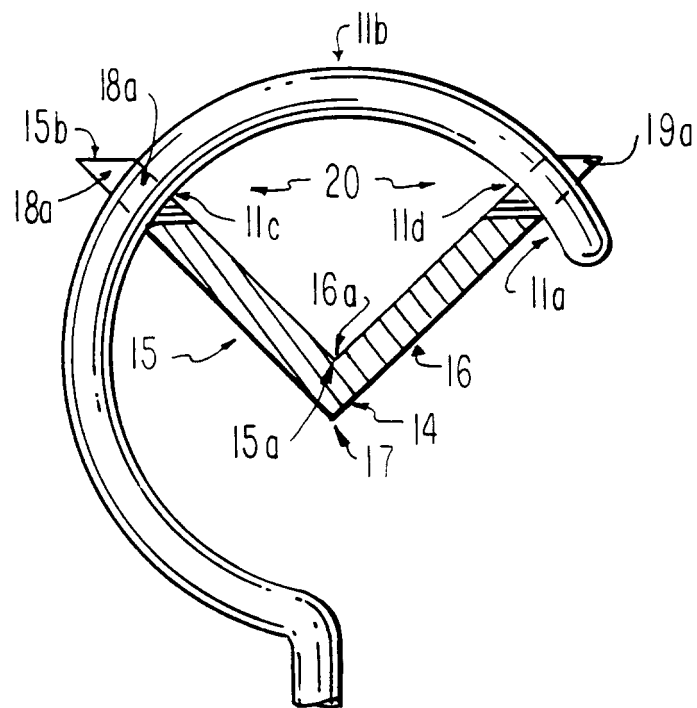


FIG. 5

