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(54) **Clothes rack**

(57) A clothes rack (1), including ropes or rods (3) in a parallel arrangement between end supports (2), wherein each of said ropes or rods (3) is provided with an elastic filiform element (7), such as for example a rubber cord, which is wound in spiral fashion on said rope or rod (3), forming therewith a longitudinal alignment of elastically deformable loops (8), which are suitable for attaching the clothes to said ropes or rods (3).

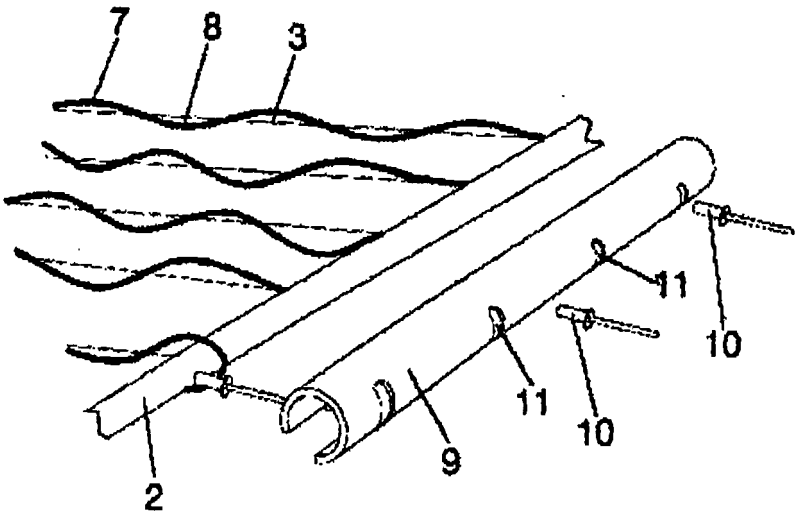


FIG. 2

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Description

Aim of the invention

[0001] This invention relates to a clothes rack, of the type used to dry clothes in the open air, a clothes rack that can be of the wall or tower type, indistinctively, with or without wings, or any other type, and either metallic or plastic.

[0002] The aim of the invention is to obtain a clothes rack that can fulfil its role of supporting clothing items, without the need for pegs.

Background to the invention

[0003] There are many structural solutions for clothes racks, ranging from using brackets attached to the wall, between which ropes are hung, which can be fixed or mobile, to foldable clothes racks, that are simply arranged on the floor and that have an articulated structure that can support a top frame, in which a series of parallel rods are arranged that can be used as a means for supporting the clothes, and with these clothes racks usually having foldable wings that extend said frame at the ends thereof. There are also rotary clothes racks that attach to a wall, freestanding clothes racks with legs arranged in scissor fashion or with collapsible legs, etc.

[0004] All these clothes racks have as a common denominator the fact that normally and in order to support the clothes, it is necessary that the commonly called "pegs" have to be used, in the form of a pair of arms that tend to close owing to the effect of a spring, clamping the clothes against the clothes rack ropes or rods.

[0005] The unavoidable use to date of these pegs involves a double problem situation, on the one hand, with wall clothes racks, the pegs often fall off and are consequently lost, and on the other hand, and at any event, the need to use one hand to hold the pegs, limits manoeuvrability when placing clothes on the rack.

Description of the invention

[0006] The clothes rack that the invention proposes solves the above-mentioned problem situation in a fully satisfactory manner, since, as already discussed, it enables clothes to be held without using conventional pegs.

[0007] To this end, and more particularly, said clothes rack, based on the structure of any of the above-mentioned conventional clothes racks, focuses its characteristics on the fact that each rope or rod is aided by an elastic filiform element, wound in spiral fashion all along said rope or rod, so that the clamping effect is obtained, at any point along said ropes or rods, by introducing the clothes between said rope or rod and the elastic element.

[0008] Based on this essential structure, it is possible for the clothes rack to have an independent filiform element for each rope or rod, or for an individual filiform element to cover all the rods on the rack.

[0009] According to another of the invention's characteristics, and in order to attach said elastic elements to the rack structure, it has been envisaged to use a plastic grip that is channel shaped, with its profile and length suited to the element or part of the clothes rack to which it has to be attached, which at the same time clamps said elastic and filiform element(s), with said clamping action being guaranteed by the grip's rivets and the co-operation of its internal ribs that cross over with respect to the actual filiform element.

[0010] Said plastic parts or grips can be secured to the rack in correspondence with the smaller ends of its rectangular frame, in the case of a free-standing rack, on the opposite sides of the rack wings, if the rack has wings, on the brackets of a rack attached to the wall, and in general on all those elements to which in turn the ropes or rods of the clothes rack are fixed.

[0011] Finally, and according to another of the invention's characteristics, in the specific case of free-standing clothes racks, in the middle of the spurs that form the frame and which are parallel to the rack's ropes or rods, respective plastic parts are provided that have a double function: on the one hand to attach two ropes in a V-shaped arrangement, so as to attach the clothes on the clothes rack and in turn prevent the wind from loosening any garment, and on the other hand to secure the wings of the rack when the latter is not in use, preventing them from opening when said rack is folded.

Description of the drawings

[0012] In order to complement the description provided and to help improve the understanding of the invention's characteristics, according to a preferable embodiment thereof, a set of drawings is provided as an integral part of said description, in which the following has been represented, as an illustrative, non-limiting example;

Figure 1.- Shows, according to a general perspective view, a freestanding, foldable clothes rack, made according to the aim of the invention.

Figure 2.- Shows a partial detail, in perspective view, of the clothes rack in the preceding figure, corresponding to the area where a grip is attached to the clothes rack structure, which grip appears unattached from said structure.

Figure 3.- Shows, finally, a perspective view of one of the grips, on the opposite face to that shown in Figure 2.

Preferable embodiment of the invention

[0013] In the embodiment shown in the figures, a clothes rack (1) has been chosen of the type made up of a rectangular frame (2) in the centre of which a series of support rods (3) are arranged in a parallel, longitudinal direction, with frame (2) resting on an articulated, scissor-type structure (4), and to which a pair of collapsible wings

(5) are linked in an articulated fashion at the ends thereof, which make it possible to increase the operational surface of the clothes rack and which also have support rods (6), in this case perpendicular to the former, but the invention is applicable, as already mentioned, to any other type of clothes rack.

[0014] Therefore, according to the invention and as can be particularly appreciated in Figure 2, each of the clothes rack rods (3-6) comprises, wound in spiral fashion around them, an elastic filiform element (7) that can be rubber or any other material either natural or synthetic that provides the necessary elasticity, so that between said filiform element (7) and the corresponding rod (3) a series of loops (8) are defined, aligned longitudinally and which are elastically deformable and behave like "pegs" to attach the clothes.

[0015] These filiform elements (7) will affect all the clothes rack ropes or rods and could be fragmented, in other words there could be a filiform element for each rod, or, as in the embodiment example shown in Figure 2, it could be an individual element with toggles along its length, corresponding to the areas of inflection needed to move from one rod to the adjacent one.

[0016] At any event, elastic elements (7) attach to the clothes rack structure with the co-operation of grips (9), in the form of channel-shaped parts with a profile adapted to that of structure (2-5) of the clothes rack, forming clamps that pinch filiform elements (7) against the spurs or cross members (2-5) of said structure, and which are attached thereto with the help of rivets (10). In order to improve the aesthetical appearance, grips (9) have cups in correspondence with holes (11) for the rivets to pass through, and on the inner face they have longitudinal ribs (12) that "fasten" onto filiform element (7) reinforcing the attachment.

[0017] As can be observed in Figure 1, grips (9) are placed on the ends of rectangular and central frame (2), as well as on the sides of each wing (5).

[0018] Finally, it only remains to mention that on the middle of the spurs of central frame (2) respective plastic parts (13) can be placed as a removable means for attaching two V-shaped ropes (14) which, as mentioned above, have, on the one hand, the function of retaining the clothes if they are blown by the wind, and on the other hand, and changing the position shown in Figure 1, of acting as attachment means for wings (5) when the clothes rack is not in use, in other words when it is duly folded.

Claims

1. Clothes rack, of the type having any support structure, either a wall or free-standing type, for a series of ropes or rods forming the actual means for holding the clothes, **characterised in that** in correspondence with each of said ropes or rods (3) it comprises an elastic filiform element (7), for example, made of rubber, wound in spiral fashion so that between the filiform element and the corresponding rope or rod, a longitudinal alignment of elastically deformable loops (8) is formed, which act as means for clamping the clothes, replacing the traditional pegs.

2. Clothes rack, according to claim 1, **characterised in that** it comprises an elastic filiform element (7) for each rope or rod (3).

3. Clothes rack, according to claim 1a, **characterised in that** it comprises an individual elastic filiform element (7), which through suitable toggles along its length covers all the ropes or rods of the clothes rack or each independent part thereof.

4. Clothes rack, according to preceding claims, **characterised in that** it comprises a series of grips (9), each having a channel-shaped body, preferably made from plastic, which has a suitable shape and size to snap attach to the clothes rack structure, corresponding to the areas of said rack on where the ropes and rods are arranged, with said grip being attached by means of rivets and having ribs on its inner face that press against the elastic filiform elements, reinforcing the attachment thereof.

5. Clothes rack, according to preceding claims, **characterised in that** in the case of a free-standing clothes rack, in the middle of the spurs corresponding to frame (2) where ropes and rods (3) are arranged, it comprises respective plastic parts (13) provided with attachment means for a pair of V-shaped ropes (14), which act as means for retaining the clothes to stop them from accidentally falling, and as means for attaching wings (5) of the clothes rack when it is not in use.

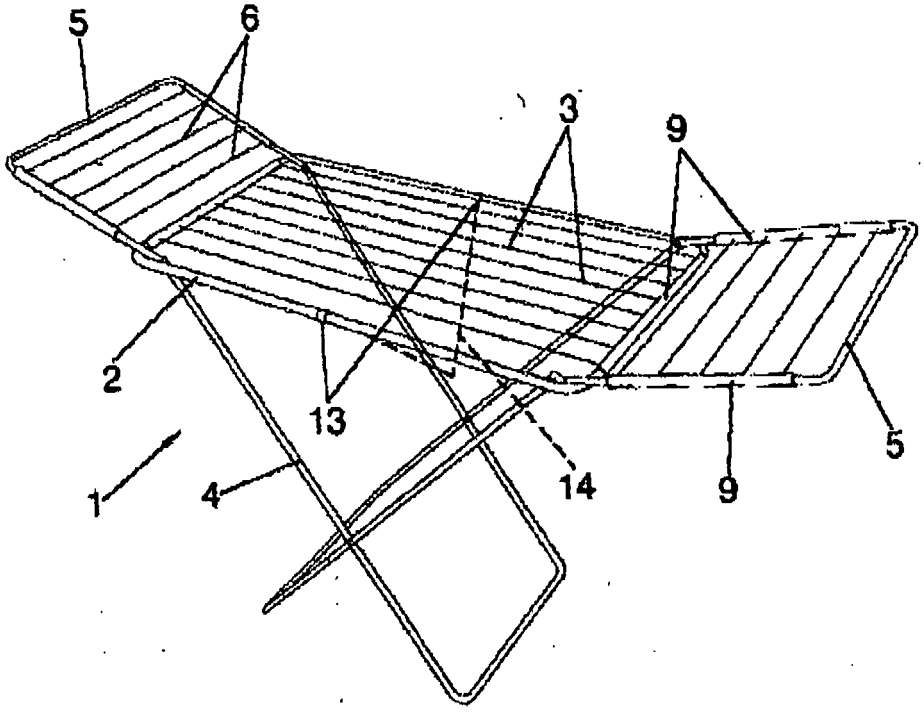


FIG. 1

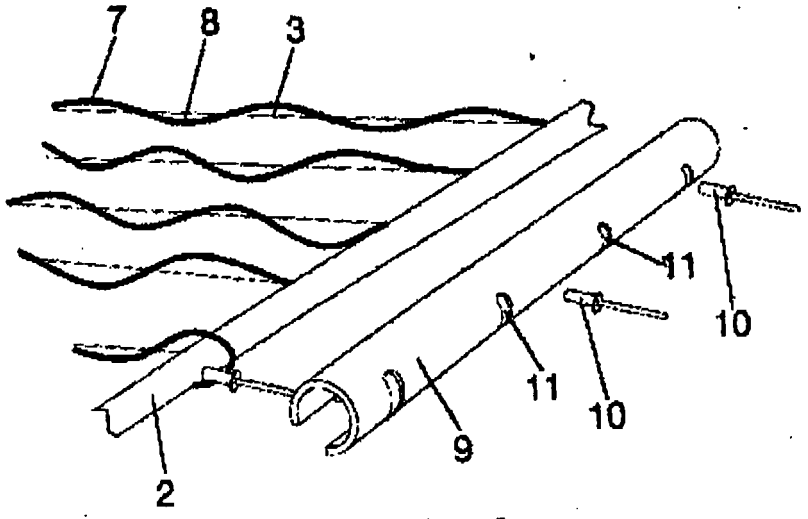


FIG. 2

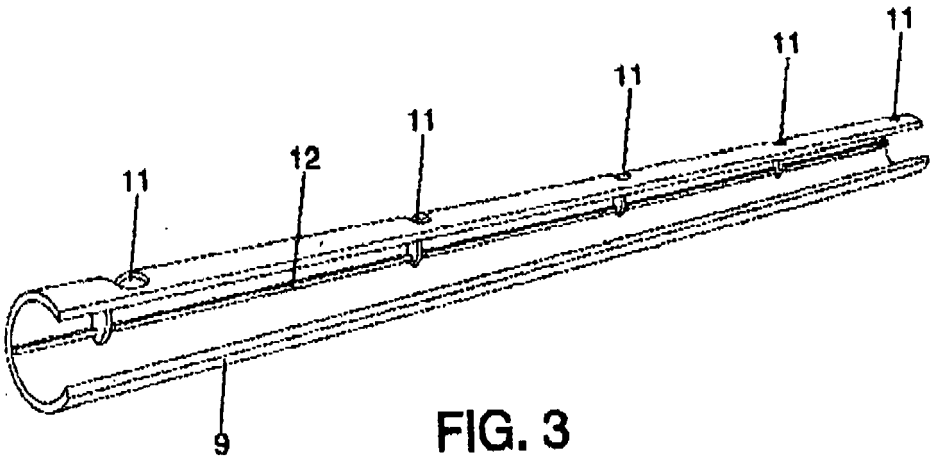


FIG. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 07 02 4231

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 299 02 669 U1 (MANDEL THOMAS [DE]) 29 June 2000 (2000-06-29)	1-3	INV. D06F53/02
A	* page 1, lines 1,2; claims; figures *	4,5	D06F55/00
Y	US 3 127 019 A (VON MEYER WALTER G.) 31 March 1964 (1964-03-31)	1-3	
A	* column 1, lines 8-29; claims; figures *	4,5	
Y	EP 0 769 583 A (LEIFHEIT AG [DE]) 23 April 1997 (1997-04-23)	1-3	
A	* abstract; claims; figures *	4,5	
A	DE 807 274 C (BAUR HANS) 28 June 1951 (1951-06-28) * the whole document *	1-5	
A	GB 1 033 746 A (DANIAN LTD) 22 June 1966 (1966-06-22) * the whole document *	1-5	
A	GB 2 293 405 A (ACCESS DATA [GB]) 27 March 1996 (1996-03-27) * the whole document *	1-5	TECHNICAL FIELDS SEARCHED (IPC) D06F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	7 April 2008	Clivio, Eugenio

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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07-04-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 29902669 U1	29-06-2000	NONE	
US 3127019 A	31-03-1964	NONE	
EP 0769583 A	23-04-1997	DE 19538713 A1	24-04-1997
DE 807274 C	28-06-1951	NONE	
GB 1033746 A	22-06-1966	NONE	
GB 2293405 A	27-03-1996	NONE	

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