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(54) **Folding clotheshorse**

(57) Of the type that has a rectangular frame (1-2) wherein a plurality of "cords" (3) are established of any appropriate type, a frame (1-2) that rests on legs (5) and that optionally has complementary extensions (8), focusing its characteristics on the fact that the side lengths (1) and cross lengths (2) of the frame are independent and are joined to each other through articulations (4) that con-

vert said frame in a deformable parallelogram, capable of adopting a linear configuration. The legs (5) are also joined in an articulated manner to the frame (1-2) and are collapsible over the letter, and the same occurs with the arms (B) corresponding to its complementary extensions, thus achieving that in the clotheshorse's inoperative position it adopts the most reduced possible dimensions, facilitating its storage and transport.

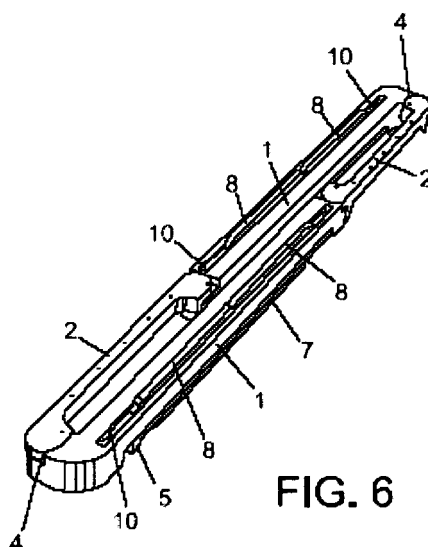


FIG. 6

Description

OBJECT OF THE INVENTION

[0001] The present invention relates to a clotheshorse, of the type that constitutes an independent element, based on a frame with "cords" that is conveniently elevated in relation to the floor by complementary legs.

[0002] The object of the invention is to achieve a clotheshorse, which in parallel with a good operative capacity, is able to reduce its dimensions to a minimum, in its inoperative situation, becoming a practically linear element, so that the volume it occupies is minimum allowing for its easy storage and/or transport.

BACKGROUND OF THE INVENTION

[0003] Within the broad range of clotheshorses existing on the market, one of the usual solutions is the one in which the clotheshorse is in the form of a rectangular frame, sometimes made of plastic and others of metal, in all cases rigid, wherein a plurality of "cords" are incorporated that constitute the elements used to hang the clothes on, leaving the frame supported on folding or collapsing legs, sometimes with a "scissor" type structure, with the frame in question capable of extending by two end half-frames that increase the clotheshorse's load capacity.

[0004] In any case, the collapsible nature of the clotheshorse is determined by said rectangular frame wherein the legs and, where applicable, the complementary extensions, fold in such a way that the maximum achieved is a "flattening" of the clotheshorse in its inoperative situation but with perimeter dimensions that remain considerable.

BRIEF DESCRIPTION OF THE INVENTION

[0005] The clotheshorse proposed by the invention constitutes a notable technological advance in this field of collapsibility, in such a way that the clotheshorse in question is able to convert, in its inoperative position, into a practically mono-dimensional element, in other words into an elongated element, with a reduced section, with no empty spaces and that consequently can be very easily stored or transported, with minimum occupation in terms of volume, which can be reduced practically no further.

[0006] To this end and in a more specific manner, the contemplated clotheshorse incorporates, as the above-mentioned conventional clotheshorses, a rectangular frame or structure, on the cross lengths of which the clotheshorse's "cords" are established, which can materialize in cords as such or in filaments of metal wire or another type, with the main particularity being that said frame is fragmented into four profiles, corresponding to its four sides, joined articulated to each other, constituting a deformable parallelogram, which can adopt a rectan-

gular configuration, in its situation of use, or a linear configuration, in which its two opposite angles, make 0 while the other two make 80°, without the cords interfering in this transformability.

[0007] The frame incorporates, in correspondence with each vertex, an articulated joint for a leg, in such a way that in the clotheshorse's inoperative position said legs are collapsible on the side lengths and cross lengths of the frame, adapting to the latter and maintaining said linear structure.

[0008] In the event of the clotheshorse additionally incorporating complementary extensions, such as conventional clotheshorses, the arms of these extensions will be likewise articulated to the frame, and collapsible on the latter.

DESCRIPTION OF THE DRAWINGS

[0009] To complement this description and with a view to contributing to a better understanding of the invention's characteristics, according to a preferred practical embodiment thereof, a set of drawings is enclosed as an integral part of said description which, by way of illustration but not limitation, represent the following:

Figure 1.- Shows, according to a perspective view, a folding clotheshorse with complementary extensions realised according to the object of the present invention, appearing in its situation of use.

Figures 2 to 6.- Show the same clotheshorse of the preceding drawing, in its successive folding phases.

DETAILED DESCRIPTION OF THE INVENTION

[0010] In view of the figures referred to above, it is possible to observe how the contemplated clotheshorse is constituted, like any other conventional clotheshorse, on the basis of a rectangular frame wherein two side lengths (1) and two cross lengths (2) collaborate, establishing between the cross lengths (2) a plurality of "cords" (3), that may materialize in genuine fabric cords, plastic bars, steel bars or any other material deemed appropriate.

[0011] According to the invention, the side lengths (1) are joined to the cross lengths (2) by articulations (4) that convert said frame (1-2) in a deformable quadrilateral, as shown in figures 5 and 6, capable of transforming, from its initial rectangular configuration into an elongated configuration wherein a side length and a cross length become aligned and adapt intimately and laterally to the other side length and other cross length.

[0012] The legs (5) are in turn joined in an articulated manner to the vertices of the frame (1-2), specifically by articulations (6) that allow it to collapse over the side lengths (1), with said legs (5) capable of being interrelated

at the level of their lower end by a crossbar (7) parallel to the cross lengths (2) of the frame, joined in an articulated manner to one of the legs (5) and which can be removably coupled to the other leg of the same pair, to facilitate the folding of the structure as shown in figure 3.

[0013] The end arms (8) form the complementary extensions of the clotheshorse, arms (8) whereon transversal cords are established (9) and that in turn are collapsible on the side lengths (1) through articulations (10), as shown in figure (2).

[0014] In another possible embodiment the clotheshorse has no cross lengths (7) or end arms (8) obviously becoming a more simple structure than the one shown in figures 1 to 6.

[0015] Whether the clotheshorse has complementary end extensions (figures 1 to 6), or not, it offers perfect stability in its working situation, the one shown in figure 1, and is capable of converting into an element that could be called "filiform" since all of its components are grouped in a linear fashion, in the absence of dead spaces between them, as shown in turn in figure 6, making it easy and convenient to store as well as transport.

ent parallel arms related to each other through a set of transversal cords, with said arms (8) joined in an articulated manner to the vertices of the frame (1-2), for collapsing on the side lengths of (1) said frame.

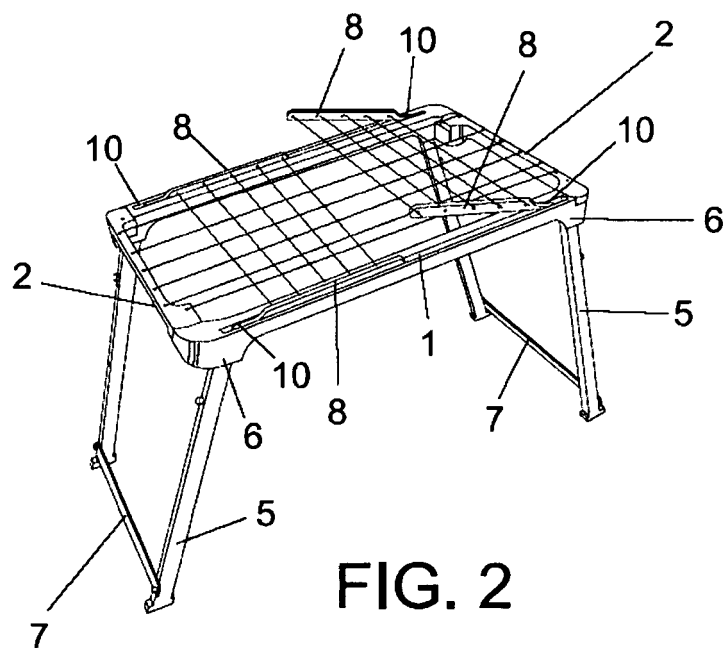
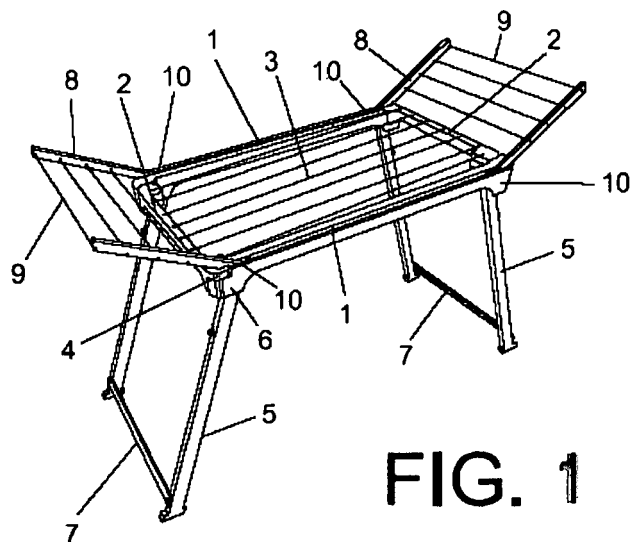
Claims

1. Folding clotheshorse, of the type that incorporates a rectangular frame on the cross lengths whereof a plurality of "cords" are established for hanging, a frame that is elevated in relation to the floor by lower legs and that optionally has end extensions in turn fitted with "cords" that amplify its load capacity, **characterised in that** said rectangular frame is constituted by two side lengths (1) and two cross lengths (2) which, related to each other by articulations (4), determine a deformable parallelogram able to transform into a linear element in the clotheshorse's in-operative situation.

2. Folding clotheshorse, according to claim 1, **characterised in that** the legs (5) are joined to the vertices of the frame (1-2) by articulations (6), that in turn allow said legs to collapse over the side lengths and cross lengths (1-2) of the frame.

3. Folding clotheshorse, according to preceding claims, **characterised in that** the legs (5) are able to be joined two by two at their free end with the collaboration of cross lengths (7), joined in an articulated manner to one of the legs (5) and fitted with removable locking means on the complementary leg, in such a way that each cross length (7) can collapse in the folding situation over one of the legs (5).

4. Folding clotheshorse, according to preceding claims, **characterised in that** in the event of having end extensions, these materialize in two independ-



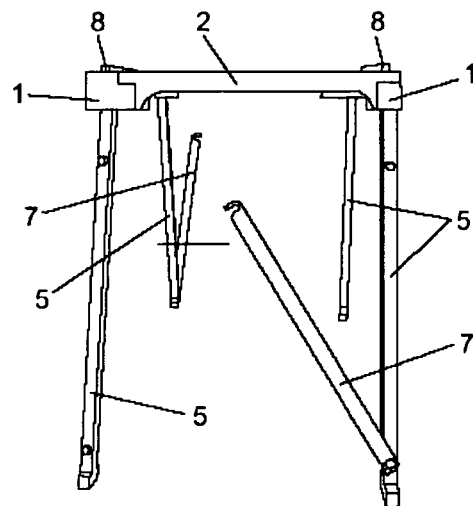


FIG. 3

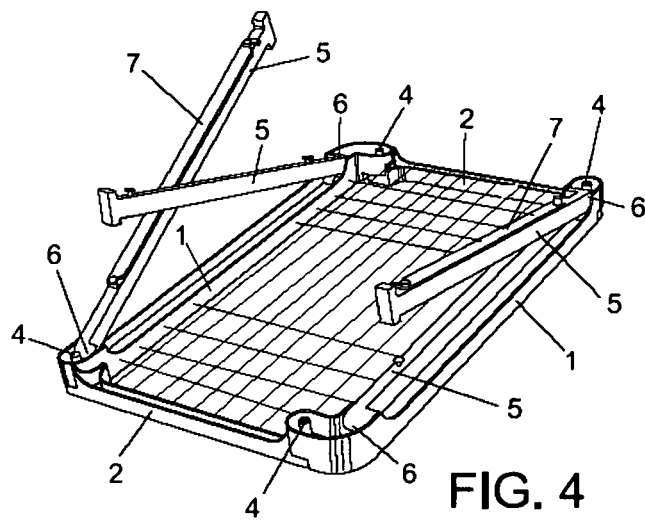


FIG. 4

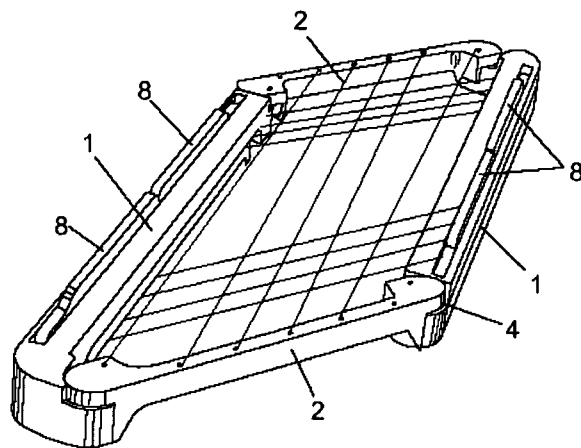


FIG. 5

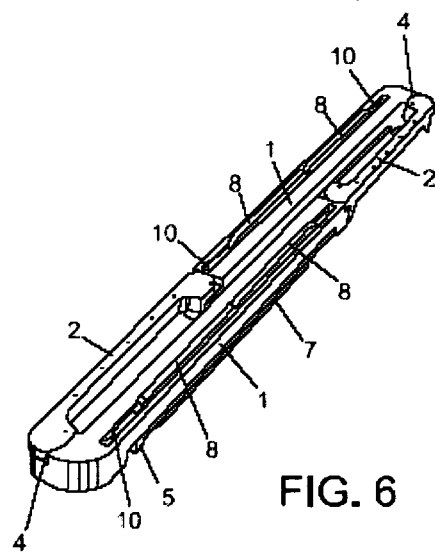


FIG. 6



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 00 5211

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			D06F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 18 June 2007	Examiner DIAZ, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 07 00 5211

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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18-06-2007

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