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(11) **EP 1 334 677 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:

13.08.2003 Bulletin 2003/33

(51) Int Cl.7: **A47G 25/06, A47F 7/24**

(21) Application number: **02425062.3**

(22) Date of filing: **08.02.2002**

(84) Designated Contracting States:

**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**

Designated Extension States:

AL LT LV MK RO SI

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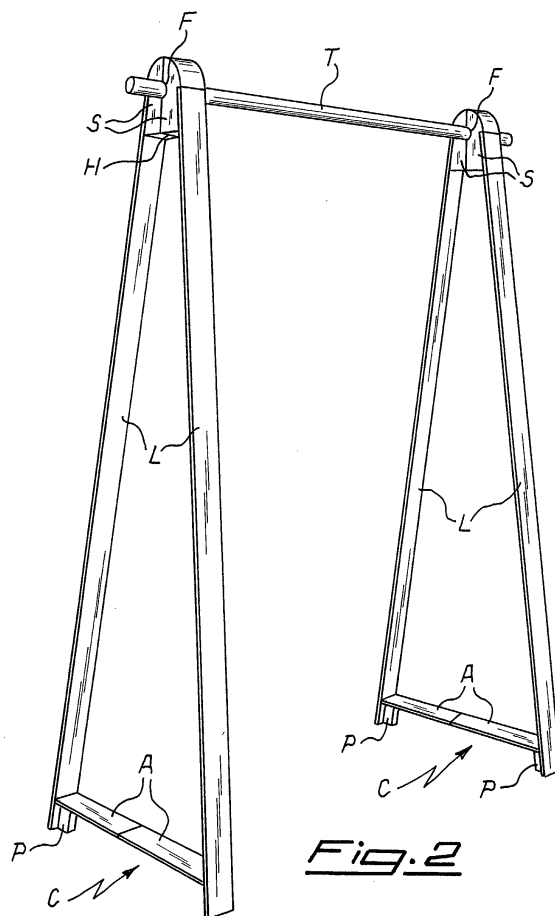
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(54) **Collapsible clothes rack**

(57) A collapsible clothes rack consists of a pair of stands (C) that in the closed position grip at their top a tube (T) received in suitable horizontal holes. Each stand (C) is made up of two uprights (L) provided at the top with heads (S) in which there are formed horizontal semicylindrical cavities (F) suitable to receive the tube (T), said heads (S) being mutually pivoted through a hinge (H) located on their bottom side. There is also preferably provided a bottom brace made up of two rods (A) mutually pivoted and pivoted to the uprights (L) on the internal side of the latter. In order to open the clothes rack it is sufficient to place the tube (T) by the cavities (F) and open the two stands (C), so that the joined cavities (F) form the horizontal holes in which the tube (T) is retained, and on the contrary to close it it is sufficient to close the stands (C) and take out the tube (T) thus obtaining a clothes rack divided into three long and narrow members which can be easily stored.



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Description

[0001] The present invention relates to collapsible clothes racks, and in particular to a clothes rack having a structure which is extremely simple to manufacture and to use.

[0002] It is known that on several occasions it may be necessary to have a clothes rack available for a short time, after which the space taken by the clothes rack must be made free again. For example, in the domestic use the clothes rack may be required in case of a party to properly arrange the coats of the guests rather than placing them on the bed as usually occurs. Another possible use, in the commercial field, is for displaying discounted clothes during the sales period or for new models at the beginning of the season, in both cases for a limited time.

[0003] However, prior art collapsible clothes racks are generally quite complicated and therefore expensive to manufacture. Moreover, the opening and closing of these clothes racks implies tightening screws or the like, fitting pins, releasing springs and so on. As a consequence, specific tools have to be available and the operation is not very simple neither quick.

[0004] Examples of collapsible clothes racks having a conventional structure with two parallel stands with rollers, two uprights supporting a top tube, and a bottom connecting rod between the two stands are disclosed in patents US 3.918.591 and US 5.617.962. Both these documents show collapsible clothes racks made up of several mutually pivoted members, with locking screws and pins and portions of rods and tubes to be fitted one into the other.

[0005] Therefore the object of the present invention is to provide a collapsible clothes rack which is free from said drawbacks. This object is achieved by means of a clothes rack having the characteristics disclosed in claim 1. Other advantageous features of the present clothes rack are disclosed in the subsequent claims.

[0006] The main advantage of the present clothes rack is that of having a structure extremely simple to manufacture, and therefore very cheap, which at the same time is aesthetically pleasing and elegant and can be easily made also of a more refined material, such as wood of some precious kind (e.g. walnut, mahogany, cherry, etc.).

[0007] A second great advantage of this clothes rack stems from the extreme simplicity of the opening and closing operation, in that the user does not need any tool and is not required to tighten any screws or the like.

[0008] Further advantages and characteristics of the clothes rack according to the present invention will be clear to those skilled in the art from the following detailed description of an embodiment thereof, with reference to the annexed drawings wherein:

Fig.2 is a perspective view of the open clothes rack ready for use.

[0009] With reference to said figures, there is seen that the collapsible clothes rack according to the present invention consists of a pair of stands C that in the closed position grip at their top a tube T received in suitable horizontal holes.

[0010] More specifically each stand C is made up of two pivoted halves, each of which includes an upright L which on the inside carries at the top a head S, in which there is formed a horizontal semicylindrical cavity F, and at the bottom a foot P, above which there is pivoted a rod A.

[0011] The two halves of stand C are connected by two hinges, a top hinge H located on the bottom side of heads S and a bottom hinge (not visible in the figures) on the bottom side of rods A.

[0012] In the open position of fig.2 rods A abut on feet P and are aligned to form a brace which restricts the opening of uprights L. It should be noted that the presence of rods A is preferable but not strictly necessary, in that the contact between the inner sides of the two heads S already prevents a further opening of stand C.

[0013] However the presence of the bottom brace limits the load on hinge H and at the connecting point between head S and upright L, as well as the bending of uprights L which could nevertheless be designed to withstand the load even in the absence of rods A.

[0014] Therefore it is clear that in order to open the clothes rack it is simply sufficient to place tube T by the cavities F and open the two stands C, so that the joined cavities F form the horizontal holes in which tube T is retained.

[0015] As much simple is the closing operation which simply consists of closing stands C and taking out tube T, thus obtaining a clothes rack divided into three long and narrow members which can be easily stored.

[0016] It is clear that the above-described and illustrated embodiment of the clothes rack according to the invention is just an example susceptible of various modifications. In particular, the precise shape of stands C can be somewhat changed not only for the above-mentioned absence of the brace, which can even be positioned higher, but also for the shape of heads S which can be mutually pivoted also through means different from hinge H (e.g. a horizontal pin engaged in eyelets formed in the two heads) as long as cavities F are properly positioned above the axis of rotation of the two halves of the stand.

[0017] It is also obvious that in order to obtain a larger clothes rack it is possible to provide more than two stands, possibly with an extensible tube (e.g. telescopic or with snap-in extension).

Fig.1 is a perspective exploded view of the clothes rack in the closed position; and

Claims

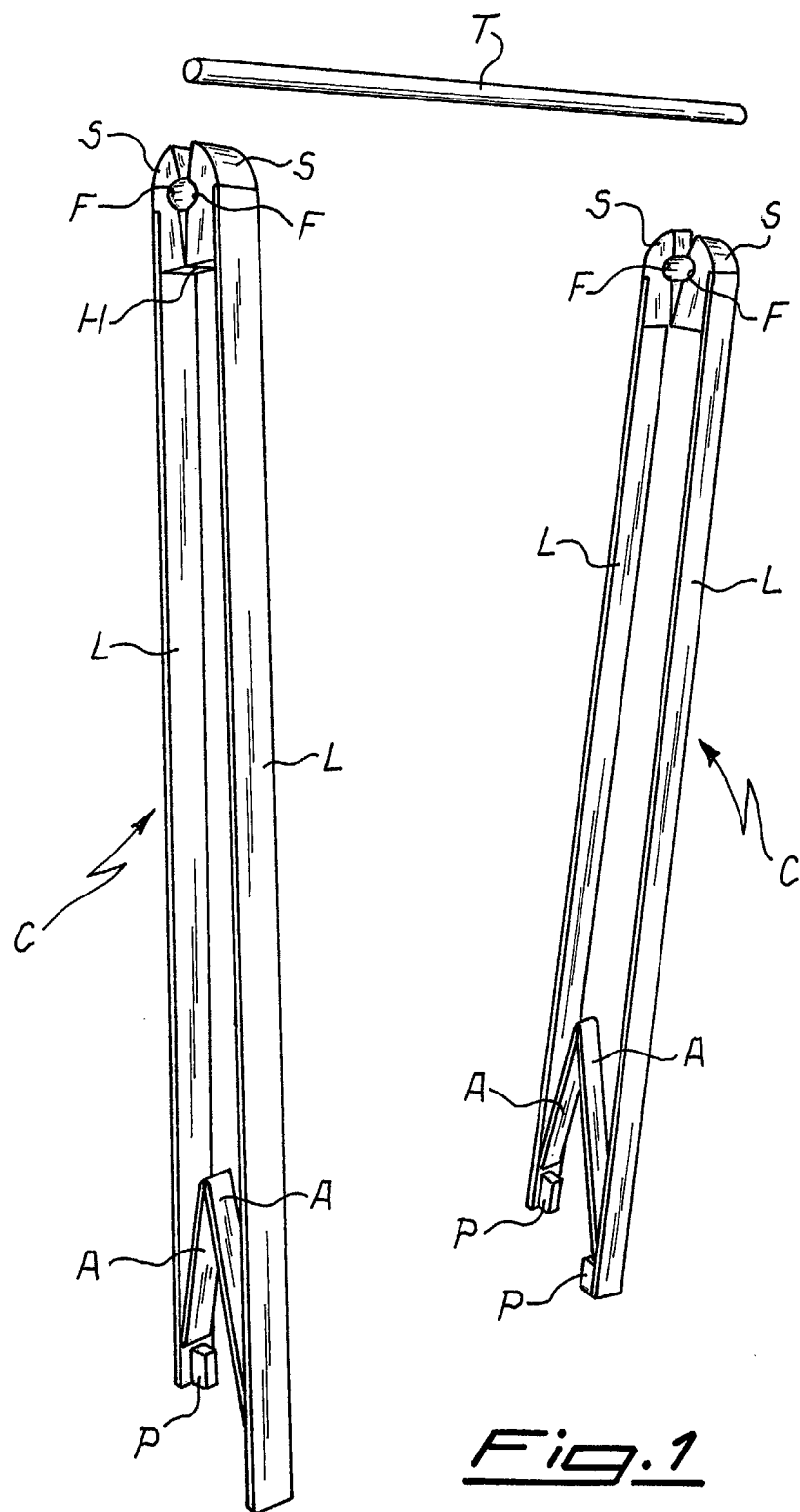
1. Collapsible clothes rack **characterized in that** it includes a tube (T) and at least two stands (C), each of which is made up of two uprights (L) provided at the top with heads (S) in which there are formed horizontal semicylindrical cavities (F) suitable to receive said tube (T), said heads (S) being mutually pivoted through hinge means with a horizontal axis of rotation located below said cavities (F). 5 10
2. Collapsible clothes rack according to claim 1, **characterized in that** it further includes a brace made up of two rods (A) mutually pivoted and pivoted to the uprights (L) on the internal side of the latter. 15
3. Collapsible clothes rack according to claim 2, **characterized in that** it further includes feet (P) arranged on the internal side of the uprights (L) to support the rods (A). 20
4. Collapsible clothes rack according to one or more of the preceding claims, **characterized in that** the hinge means connecting the heads (S) consist of a hinge (H) located on the bottom face of said heads (S). 25
5. Collapsible clothes rack according to one or more of claims 1 to 3, **characterized in that** the hinge means connecting the heads (S) consist of a horizontal pin engaged in eyelets formed in said heads (S). 30
6. Collapsible clothes rack according to one or more of the preceding claims, **characterized in that** the tube (T) is extensible. 35

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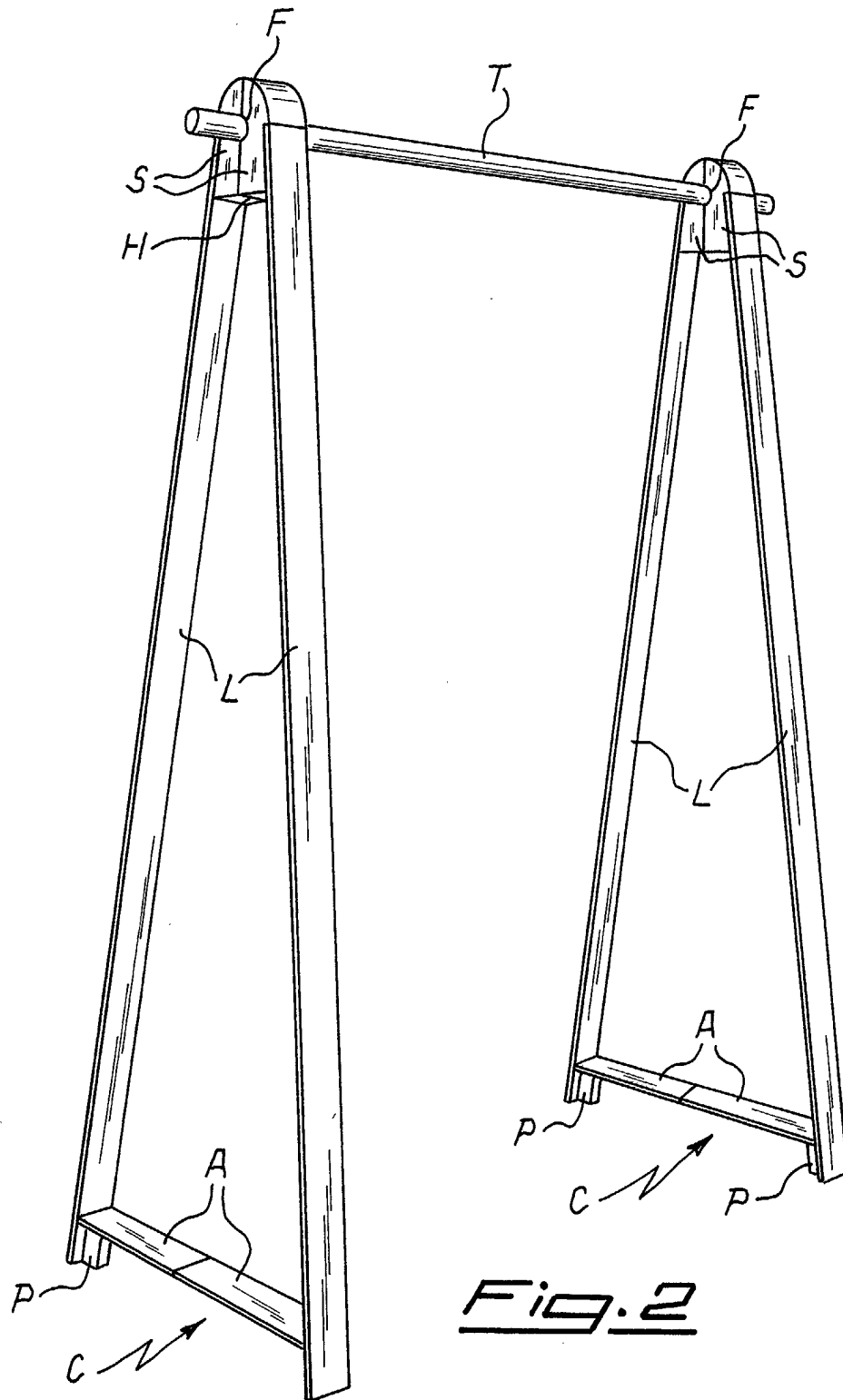


Fig. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 02 42 5062

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 1 556 624 A (ABRAHAM PAVENICK) 13 October 1925 (1925-10-13)	1,2,4,5	A47G25/06 A47F7/24
Y	* the whole document *	6	
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A	US 6 131 749 A (CROCKETT BETTY J ET AL) 17 October 2000 (2000-10-17)	1	
Y	* column 2, line 31 - column 4, line 11; figures 1,2,7 *	6	
A	US 3 527 434 A (MAURO FRANK M) 8 September 1970 (1970-09-08) * column 2, line 48 - column 3, line 74; figures 1,2 *	1-6	
A	US 3 298 537 A (DI MARCO SILVIO P) 17 January 1967 (1967-01-17) * column 1, line 8 - column 1, line 72; figure 1 *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	US 6 264 047 B1 (CRUMLEY CHARLES E) 24 July 2001 (2001-07-24) * column 3, line 58 - column 5, line 54; figures 1-8 *	1	A47G A47F
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 10 June 2002	Examiner Klintebäck, D
CATEGORY OF CITED DOCUMENTS		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	
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			

EPO FORM 1503 03 82 (P04001)

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

EP 02 42 5062

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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