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(54) SUPPORT DEVICE FOR A WASHING BASKET OF CLOTHES

(57) Support device (100) for a washing basket (2) of clothes to be hung up on a free-standing clothes horse (20), a balcony railing clothes stand or similar, comprising:

- a load-bearing frame structure (101), comprising at least two longitudinal members (4) resting, at one end, on a ground support plane by means of respective feet (5) and, when in use, inclined with respect to said ground support plane, and
- at least two support arms (3), each articulated to a respective longitudinal member (4) and oscillating around an essentially horizontal axis, with a rotation of around 90°, between a stable working position, substantially orthogonal to said longitudinal member (4) -- wherein said at least two arms (3) are co-planar with one another and extend from a same zone of said longitudinal members (4) -- and a non-working position resting against the respective longitudinal member (4),

so that said washing basket (2) is stably supported between said support arms (3), in the working position, and said at least two longitudinal members (4), are at a level higher than the level of the ground.

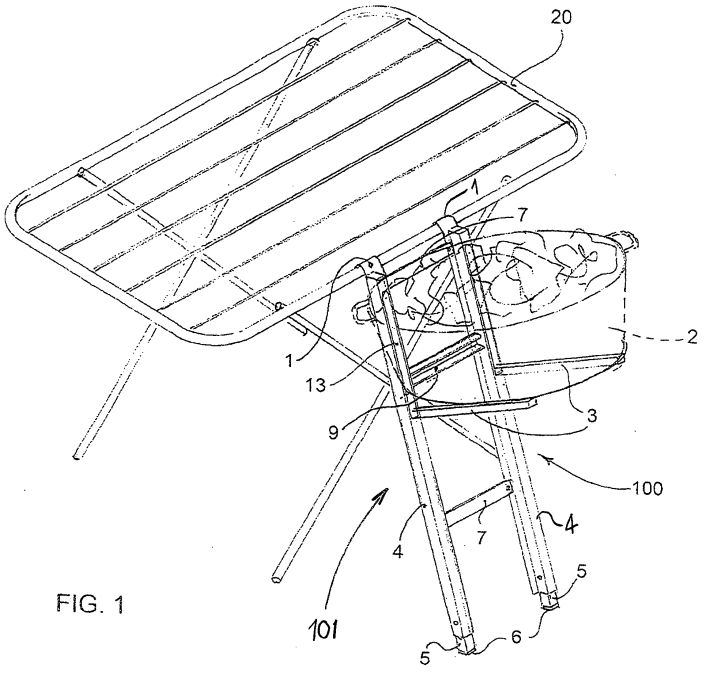

FIG. 1

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Description

[0001] The present invention relates to a support device for a washing basket of clothes, enabling a person to hang up washing without having to bend their back.

[0002] In detail, the present invention relates to a structure, preferably in aluminum, that can close like an accordion, and which when open and in use has a vertical structure similar to a ladder resting on the ground, and which is free-standing or can be attached to a clothes horse, a balcony railing or similar, so as to support a basket of washing at a level higher than the level of the ground.

[0003] Hanging up washed clothes is an operation that can be a strain for housewives, especially when there is a large quantity of clothes to be hung up, since it involves repeated bending of the back to take the clothes from the baskets, tubs, trays or basins placed on the ground.

[0004] It is therefore highly desirable for the person to be able to avoid bending their back repeatedly when hanging up washing.

[0005] The aim of the present invention is to provide a support device for a washing basket of clothes that can help a person to hang up clothes without having to bend their back.

[0006] Another aim of the invention is to provide such a device that is easy and economical to manufacture.

[0007] A further aim of the invention is to provide such a device that is easy and comfortable to use and takes up as little room as possible when not in use.

[0008] These and other aims, which will become more apparent from the following description, are achieved by the invention with the characteristics listed in the accompanying independent claim 1.

[0009] Advantageous aspects of the invention are made apparent by the dependent claims.

[0010] Further characteristics and advantages of the invention will become more apparent from the following description of two embodiments thereof, illustrated by way of non-limiting example in the accompanying figures, in which:

- figure 1 shows a perspective overview illustrating the device according to a first embodiment of the invention, in the fully-open, in-use configuration;
- figure 2 shows a front view of the structure of the device shown in figure 1, where the washing basket support is in a closed position (support retracted);
- figure 3 shows a side view of the structure shown in figure 2 wherein the washing basket support is in an open, in-use position (support extracted and orthogonal to the structure, illustrated using dotted lines);
- figure 4 shows an enlarged view of the detail circled and indicated by the letter A in figure 3;
- figure 5 is an enlarged, exploded view of the end part of the structure shown in fig. 3, illustrating the feet (on the right) that can be retracted inside the end part of the structure (on the left);
- figure 6 is a front view illustrating the device shown in figure 2 in the closed configuration;
- figure 7 shows a side view of the device according to a second embodiment thereof, open and in use;
- Figure 8 shows a front view of the device shown in Figure 7, wherein the support for a washing basket or similar is in the closed position (support retracted);
- Figure 9 shows a front view of the device shown in Figure 7, in the closed position;
- Figure 10 shows a perspective view of the device shown in Figure 7, open and in use.

[0011] With reference to the drawings, a support device for a washing basket of clothes according to the present invention is shown, and is indicated as a whole by the reference number 100 (figure 1), and 100' (figure. 10).

[0012] Said device 100, 100' is used to support a washing basket 2 of clothes to be hung up using a free-standing clothes horse 20 and is essentially characterized in that it comprises:

- a load-bearing frame structure 101, 101', comprising two longitudinal members 4, 4', resting, at one end, on a ground support plane by means of respective feet 5 and, when in use, inclined with respect to said ground support plane, and
- two support arms 3, each articulated to a respective longitudinal member 4, 4' and oscillating around an essentially horizontal axis, with a rotation of around 90°, between a stable working position (Fig.1; Fig. 7), substantially orthogonal to said longitudinal members 4wherein said two arms 3 are co-planar with one another and extend from a same zone of said longitudinal members 4 -- and a non-working position (fig. 2, fig. 8) resting against the respective longitudinal member 4, 4'.

[0013] In this way said washing basket 2 is stably supported between said support arms 3, in the working position, and said two longitudinal members 4, are at a level higher than the level of the ground.

[0014] In said support device 100, 100', according to the present invention, said longitudinal members 4, 4' are profiles with a cavity 13 (figure 4) and said support arms 3, in said non-working position, are at least partially housed in said cavity 13.

[0015] Furthermore, in said support device 100, 100' said two longitudinal members 4, 4' of said load-bearing structure 101, 101' are joined to one another by means of horizontal cross members 7, 9, hinged to said longitudinal members 4 so as to allow an accordion-like closure of said load-bearing structure substantially until said longitudinal members 4, 4' are side by side (fig. 6, fig. 9).

[0016] In particular, said load-bearing structure 101, 101' comprises three cross members 7, 9 articulated between said two longitudinal members 4 and of which at least one, indicated by the number 9, consists of a U-shape profile placed between the other two cross members 7, said cross members 7, 9 being hinged to said two longitudinal members 4, 4' by means of hinges allowing the accordion-like closure and opening of said load-bearing structure 101, 101'.

[0017] Advantageously, said load-bearing structure 101 comprises a pair of hooks 1, each provided at the upper end of a respective longitudinal member 4 and adapted for the dismountable connection of said device 100 to a substantially horizontal part of a free-standing clothes horse 20, a balcony railing clothes stand, a balcony railing or similar, in an arrangement substantially similar to that of a simple step ladder.

[0018] Advantageously, said hooks 1 are at least in part lined with a plastic or elastomeric material.

[0019] Advantageously, said two longitudinal members 4, 4' comprise respective feet 5, which are telescopically extractable and retractable and are dismountably connected to the lower end of the respective longitudinal member 4, 4' by means of respective pins cooperating with one of a plurality of through-holes 8, with a horizontal axis, provided in said feet 5, and a corresponding through-hole 12, with a horizontal axis, provided at the lower end of each longitudinal member 4, 4'.

[0020] Appropriately, non-slip caps 6 are provided at the lower ends of said feet 5.

[0021] As can be noted from the above-described first embodiment, said device 100 comprises a load-bearing structure 101 with a simple step-ladder configuration, comprising two vertical profiles or uprights 4, made of box-type aluminum that is easy to procure and to process. This does not alter the fact that any other type of construction material may be used, such as stiff plastic or similar, and a profile with a cross-section of any other shape, such as circular for example.

[0022] The two uprights or vertical profiles 4 are joined to one another by two strips 7 placed at the top and at the bottom, and are fixed to the uprights 4 by means of self-tapping bolts.

[0023] Said strips 7 have rounded corners only at the left-hand bottom corner and right-hand top corner to facilitate the accordion-like closure, which is achieved by pulling the two opposing ends of the uprights 4 in opposite directions. A U-shape box-section 9 is also placed substantially in the middle between the two strips 7 in order to stiffen the entire structure of the device 100.

[0024] The strips 7 and the box-section 9 are fixed to the uprights 4 by means of bolts adapted to allow the closure (fig. 6) and opening (fig. 2) of the structure.

[0025] Said device 100 also has two cavities 13, each made in the upper part of the respective upright 4, so as to be able to house inside them the respective extractable arms 3 that are each formed from a square box-section advantageously made of aluminum.

[0026] Each of the two arms 3 is hinged to a respective upright 4 of the structure, by means of self-locking bolts placed at the lower part of the housing 13, so that said arms 3 housed in the housings 13 can be extracted from them and/or inserted in them depending on whether one wishes to use the device 100 (open position) or stow it (closed position).

[0027] The width of these housings 13 is such as to permit the support arms 3 to slot into said housings 13.

[0028] The two arms 3, when extracted from their respective housing 13, provide a support or supporting plane for a basin, basket, tray or tub 2, of varying size, containing the washing to be hung up.

[0029] Once extracted, the support plane provided by the two arms 3 is to the front and substantially orthogonal to said uprights 4.

[0030] The end of said arms 3, at the point where they are hinged to the structure, have a slanted form (fig. 4) so that said arms 3 can be perfectly closed inside the housing 13 on each upright 4.

[0031] Thanks to the above-described construction, the arms 3 can be extracted from the structure when in use, and can be retracted into the structure when not in use.

[0032] The structure formed by the two uprights 4, the two strips 7 and the intermediate box-section 9 therefore acts as a load-bearing structure for the support plane provided by the two arms 3 when they are extracted from said structure.

[0033] The length of these cavities or housings 13 is greater than the length of the arms 3 and the upper end of each cavity or housing 13 has rounded edges in order to permit the easy manual extraction of the arms 3.

[0034] Said device 100 also has, on the upper end of each upright 4, a respective hook 1 so that it can be fixed to a clothes horse 20, known to the art, even if the present device 100 can also be fixed to balconies, railings or walls without however departing from the scope of the present invention.

[0035] The hooks 1 are advantageously lined with non-slip caps to protect the structure they rest on.

[0036] Said hook 1 may be an integral part of the respective upright 3 when formed by folding a flat section obtained beforehand by cutting the upper end of the box-section forming the upright 4 in the appropriate manner.

[0037] Alternatively, said hook 1 may be preformed as required and then fixed to the upper end of the upright 4 by means of bolts or screws.

[0038] Once placed on the ground and hooked onto the clothes horse 20, said device 100 stands at a slant with respect to the ground surface on which the device structure stands.

[0039] At the base of the structure of the device 100, there are feet 5 that can be extended and extracted from the lower end of each upright 4 (fig. 5) so that it is possible to adjust the height of the device based on the element onto which it has to be "hooked".

[0040] Said feet 5 are each formed of a square box-section, and have a plurality of through-holes 8: a temporary screw can be used to fix the height, by acting as a locking pin, to be inserted simultaneously into one of the holes 8 on the feet 5 and into the through-hole 12 provided at the lower end of each upright 4.

[0041] At the lower ends of the feet 5 there are advantageously present rubber caps to improve stability.

[0042] The size of the structure when not in use, once it has been closed on itself, is minimal and sufficient to be able to have the two support arms 3 parallel to one another.

[0043] The device 100 described above can be made in any size, for example it may have the following dimensions:

- uprights 4	110 cm
- arms 3	32 cm
- cavities 13	34 cm starting from a height of around 60 cm
- feet 5	17 cm, so as to provide a maximum extension of 12 cm
- strips 7	23 cm

[0044] According to a second example of an embodiment (figures 7 to 10), said device 100' comprises a load-bearing structure 101' with a foldable step-ladder configuration. In figures 7 to 10 the parts of the device 100' similar to those of the device 100 described above, are indicated using the same reference numbers and are not described further.

[0045] In particular, in this embodiment, said two longitudinal members 4' each have a structure with two legs 4.1, 4.2 articulated in compass fashion with one another, at the top, around a respective horizontal axis, so that said load-bearing structure 101' configured substantially like a foldable step-ladder, in the open position (fig. 7) is free-standing and can support a container of washing (not shown), stably supported between said support arms 3, in the working position, and said two longitudinal members 4, at a level higher than the level of the ground on which the device structure stands.

[0046] Figure 9 shows the smallest dimensions of said device 100' when closed and not in use.

Claims

1. Support device (100, 100') for a washing basket (2) of clothes to be hung up on a free-standing clothes horse (20), a balcony railing clothes stand or similar, **characterized in that** it comprises:

   - a load-bearing frame structure (101, 101'), comprising at least two longitudinal members (4, 4') resting, at one end, on a ground support plane by means of respective feet (5) and, when in use, inclined with respect to said ground support plane, and
   - at least two support arms (3), each articulated to a respective longitudinal member (4, 4') and oscillating around an essentially horizontal axis, with a rotation of around 90', between a stable working position, substantially orthogonal to said longitudinal member (4, 4') -- wherein said at least two arms (3) are coplanar with one another and extend from a same zone of said longitudinal members (4) -- and a non-working position resting against the respective longitudinal member (4, 4'),

   so that said washing basket (2) is stably supported between said support arms (3), in the working position, and said at least two longitudinal members (4, 4'), are at a level higher than the level of the ground.

2. Support device (100, 100') according to claim 1, **characterized in that** said longitudinal members (4, 4') are profiles with a cavity (13) and said support arms (3), in said non-working position, are at least partially housed in said cavity (13).

3. Support device (100, 100') according to claim 1 and/or 2, **characterized in that** said at least two longitudinal members (4, 4') of said load-bearing structure (101, 101') are joined to one another by means of a horizontal cross member (7, 9), hinged to said longitudinal members (4) so as to allow an accordion-like closure of said load-bearing structure substantially until said longitudinal members (4, 4') are side by side.

4. Support device (100, 100') according to claim 3, **characterized in that** said load-bearing structure (101, 101')

comprises at least three cross members (7, 9) articulated between said at least two longitudinal members (4, 4') and of which at least one (9) consists of a U-shape profile placed between the other two cross members (7), said cross members (7, 9) being hinged to said at least two longitudinal members (4) by means of hinges allowing the accordion-like closure and opening of said load-bearing structure (101, 101').

5. Support device (100) according to any of the previous claims, **characterized in that** said load-bearing structure (101) comprises at least a pair of hooks (1), each provided at the upper end of a respective longitudinal member (4) and adapted for the dismountable connection of said device (100) to a substantially horizontal part of a free-standing clothes horse (20), a balcony railing clothes stand, a balcony railing or similar, in an arrangement substantially similar to that of a simple step ladder.

6. Support device (100) according to claim 5, wherein said hooks (1) are at least in part lined with a plastic or elastomeric material.

7. Support device (100, 100') according to any of the previous claims, **characterized in that** said at least two longitudinal members (4, 4') comprise respective feet (5), which are telescopically extractable and retractable and are dismountably connected to the lower end of the respective longitudinal member by means of respective pins cooperating with one of a plurality of holes (8), with a horizontal axis, provided in said feet (5) and a corresponding hole (12), with a horizontal axis, provided at the lower end of each longitudinal member (4, 4').

8. Support device (100) according to claim 7, wherein non-slip caps (6) are provided at the lower ends of said feet (5).

9. Support device (100') according to any of the previous claims, **characterized in that** said at least two longitudinal members (4') each have a structure with two legs (4,1, 4.2) articulated in compass fashion with one another around a respective horizontal axis, so that said load-bearing structure (101') is configured substantially like a foldable step-ladder, which in the open position is free-standing and can support said container of washing (2) stably supported between said support arms (3), in the working position, and said at least two longitudinal members (4'), at a level higher than the level of the ground.

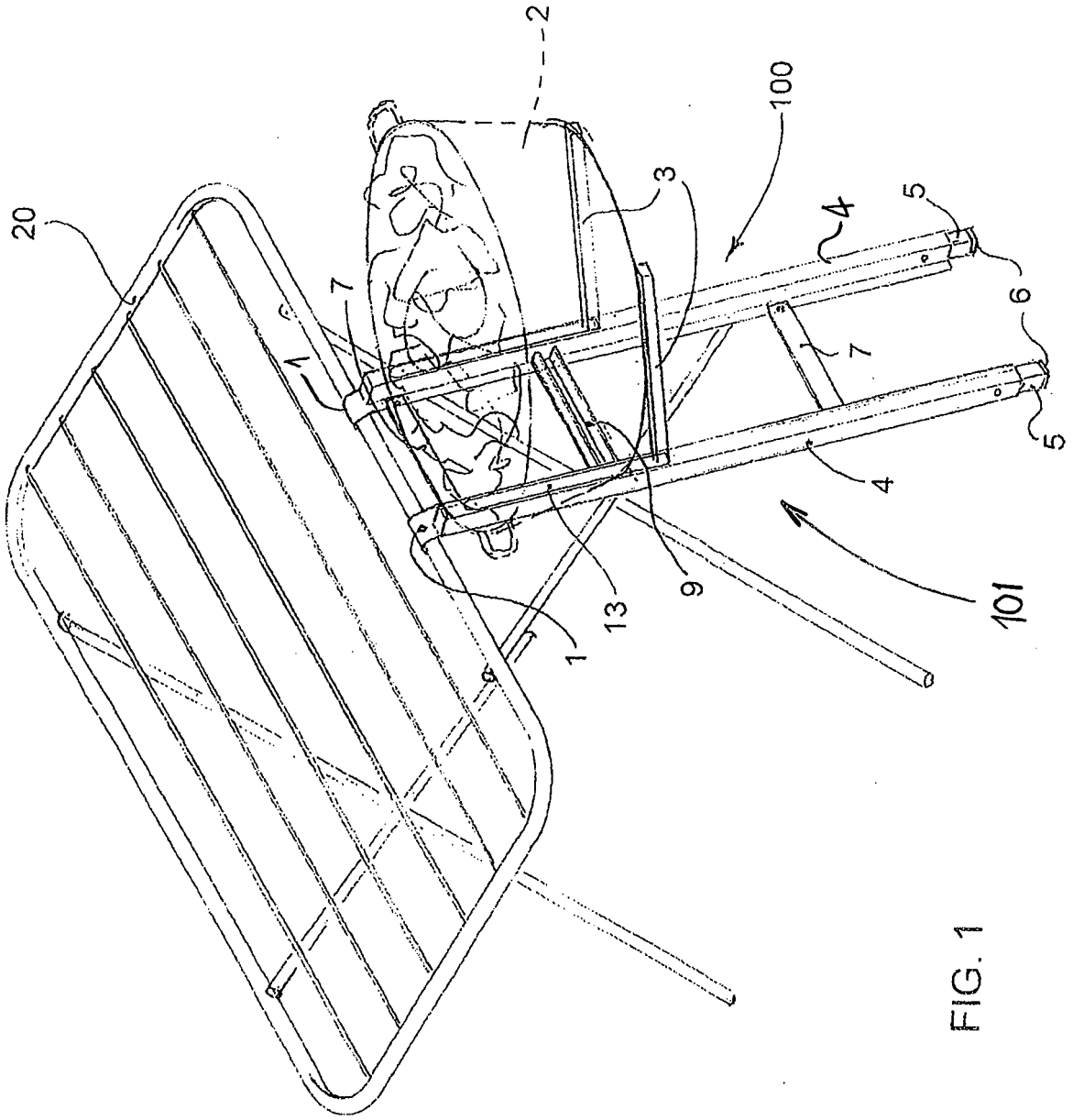


FIG. 1

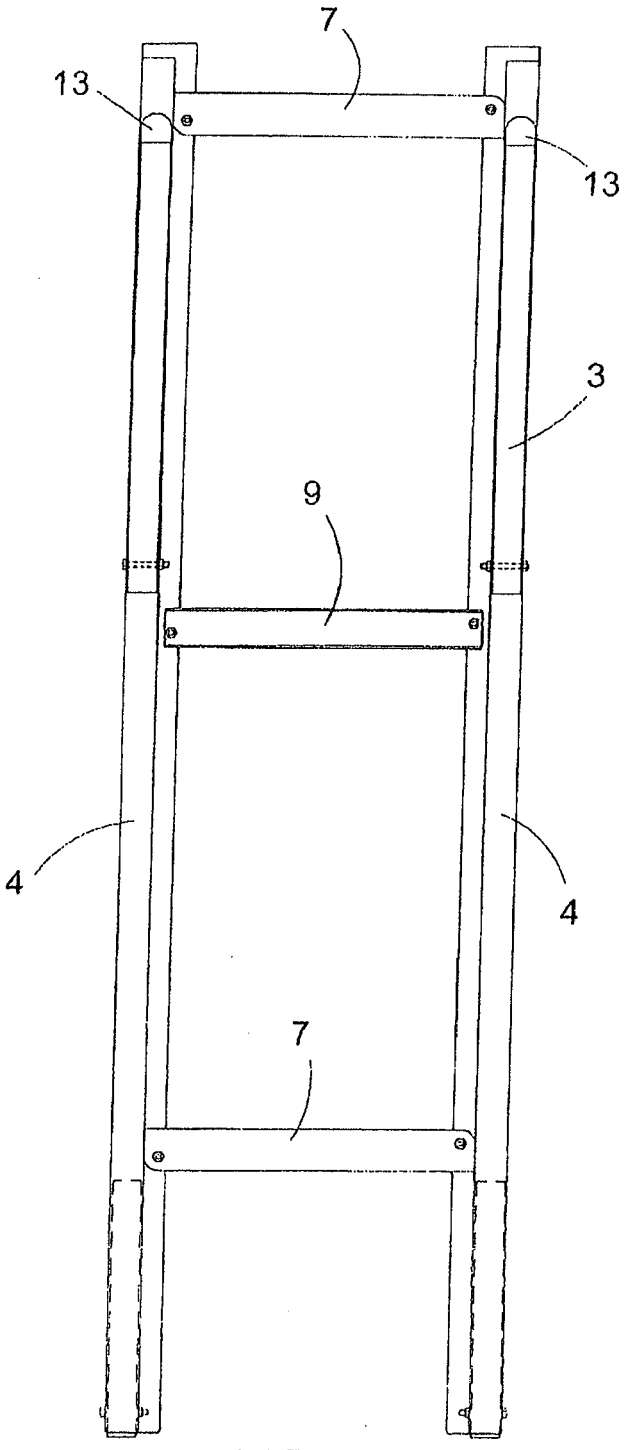


FIG. 2

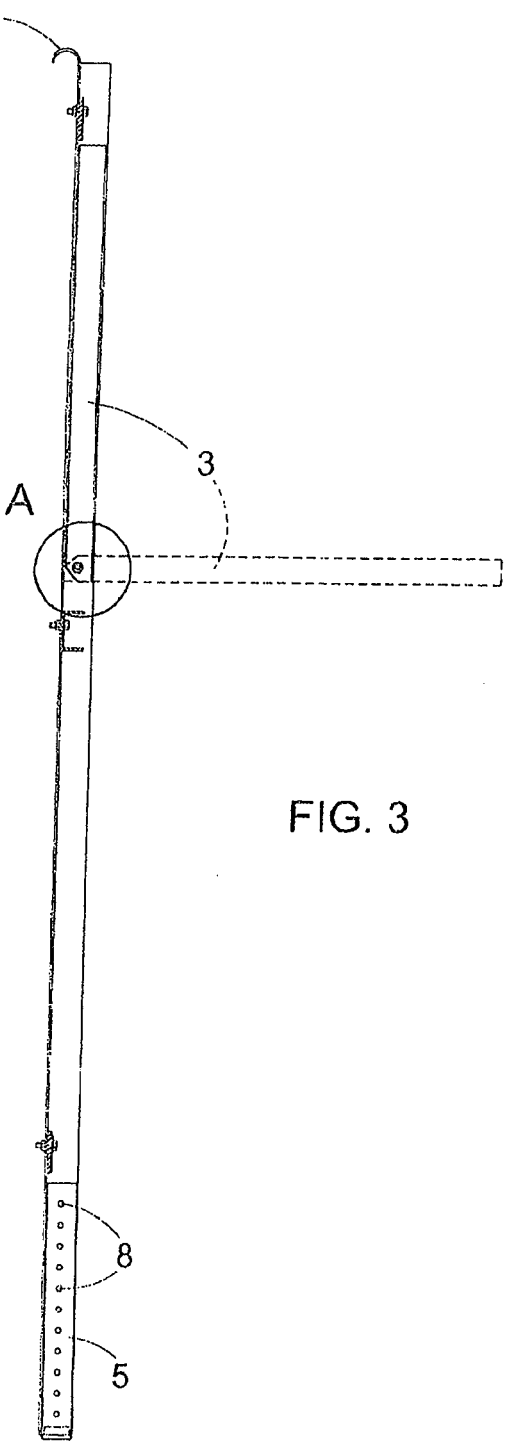


FIG. 3

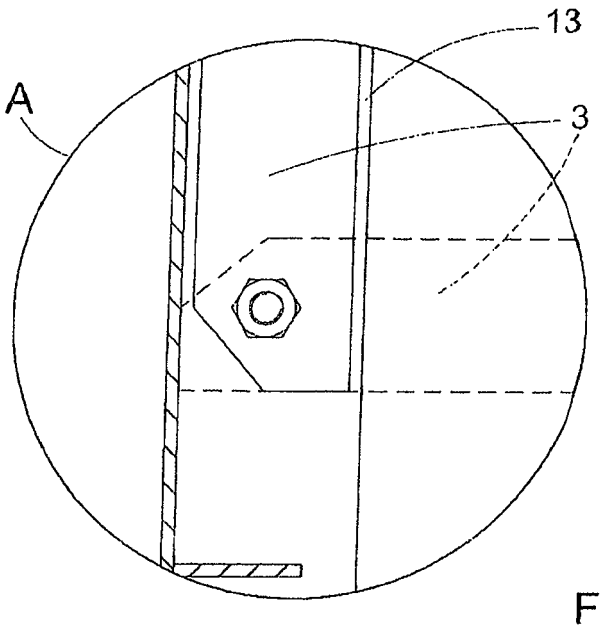
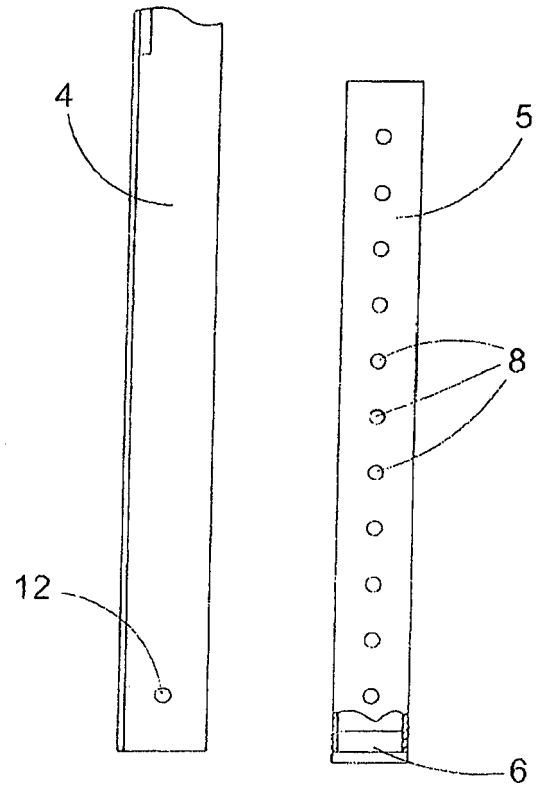


FIG. 4

FIG. 5



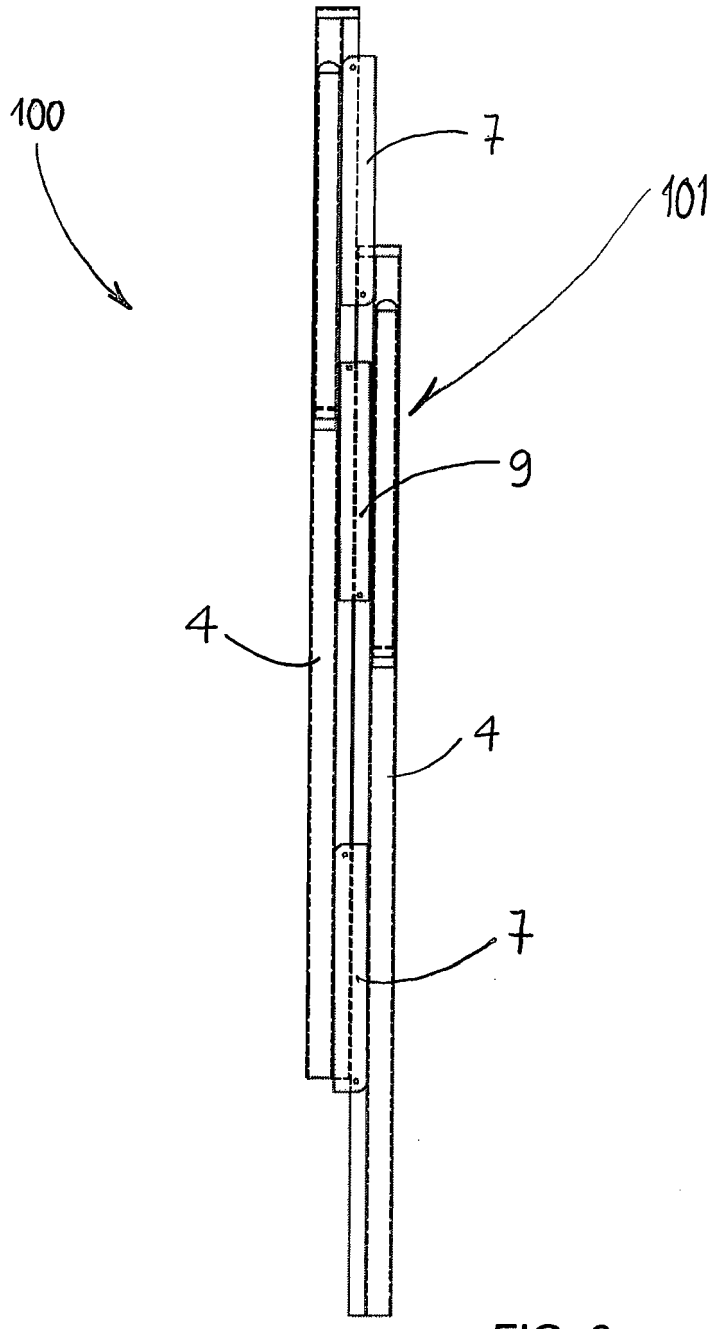


FIG. 6

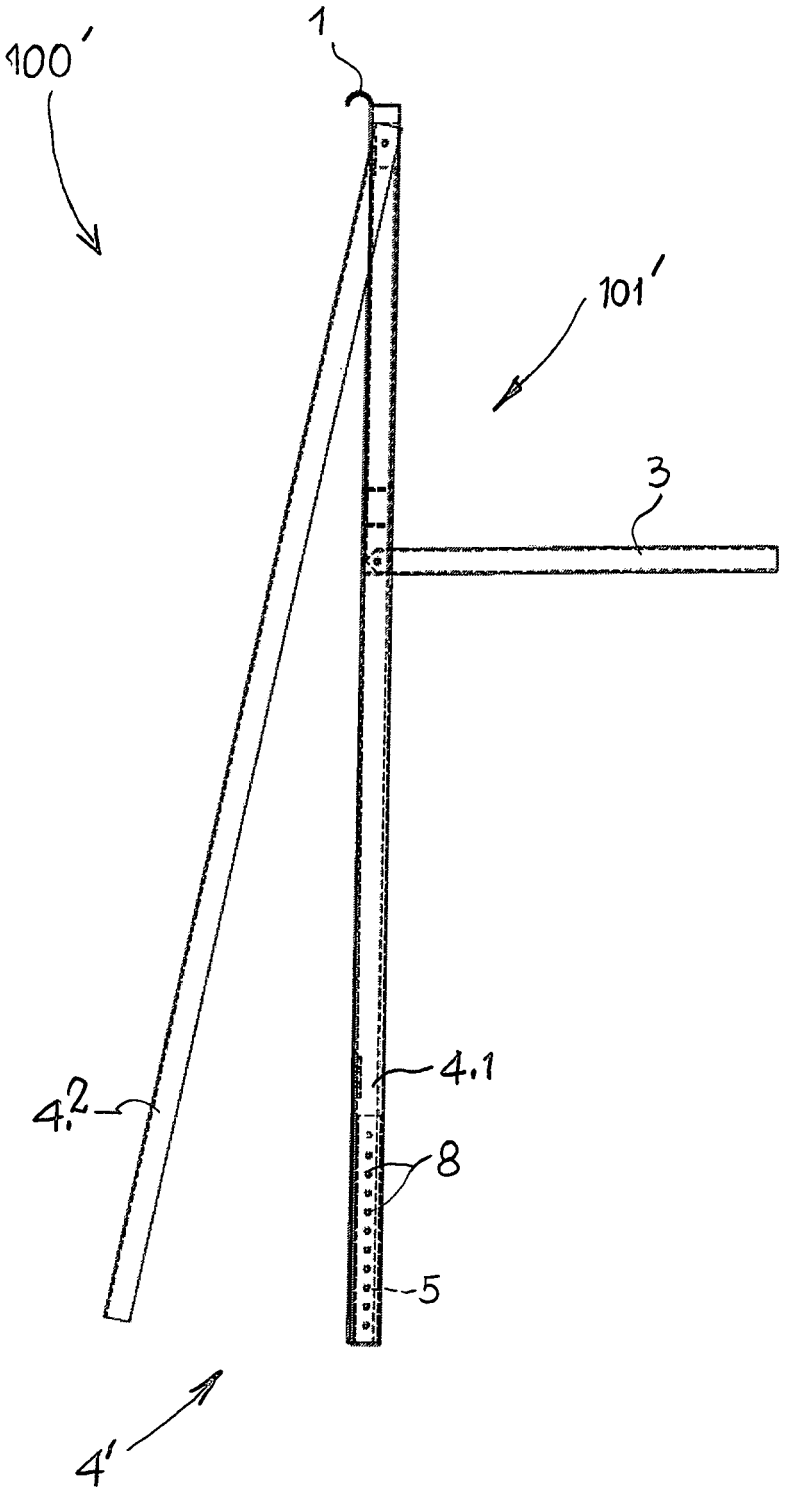


FIG. 7

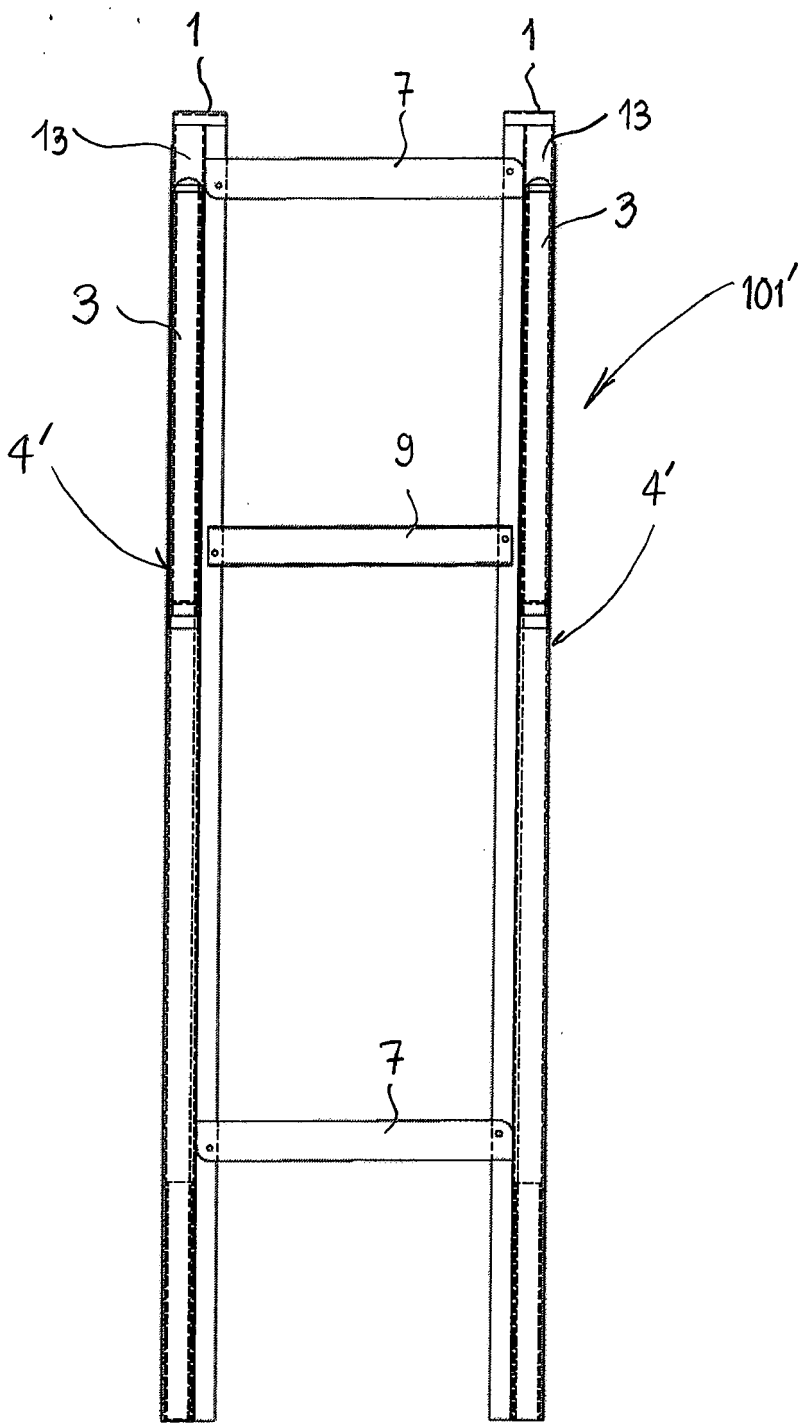


FIG. 8

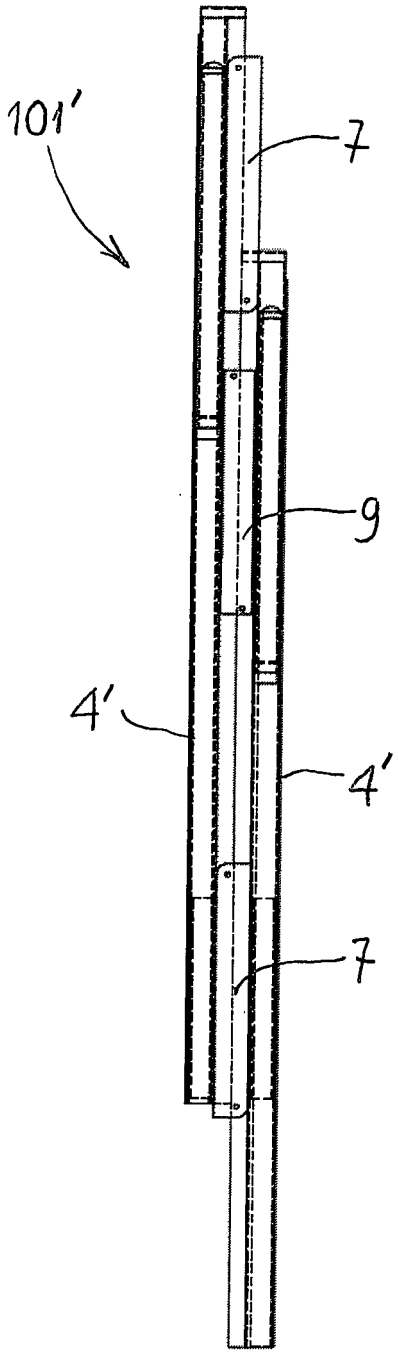


FIG. 9

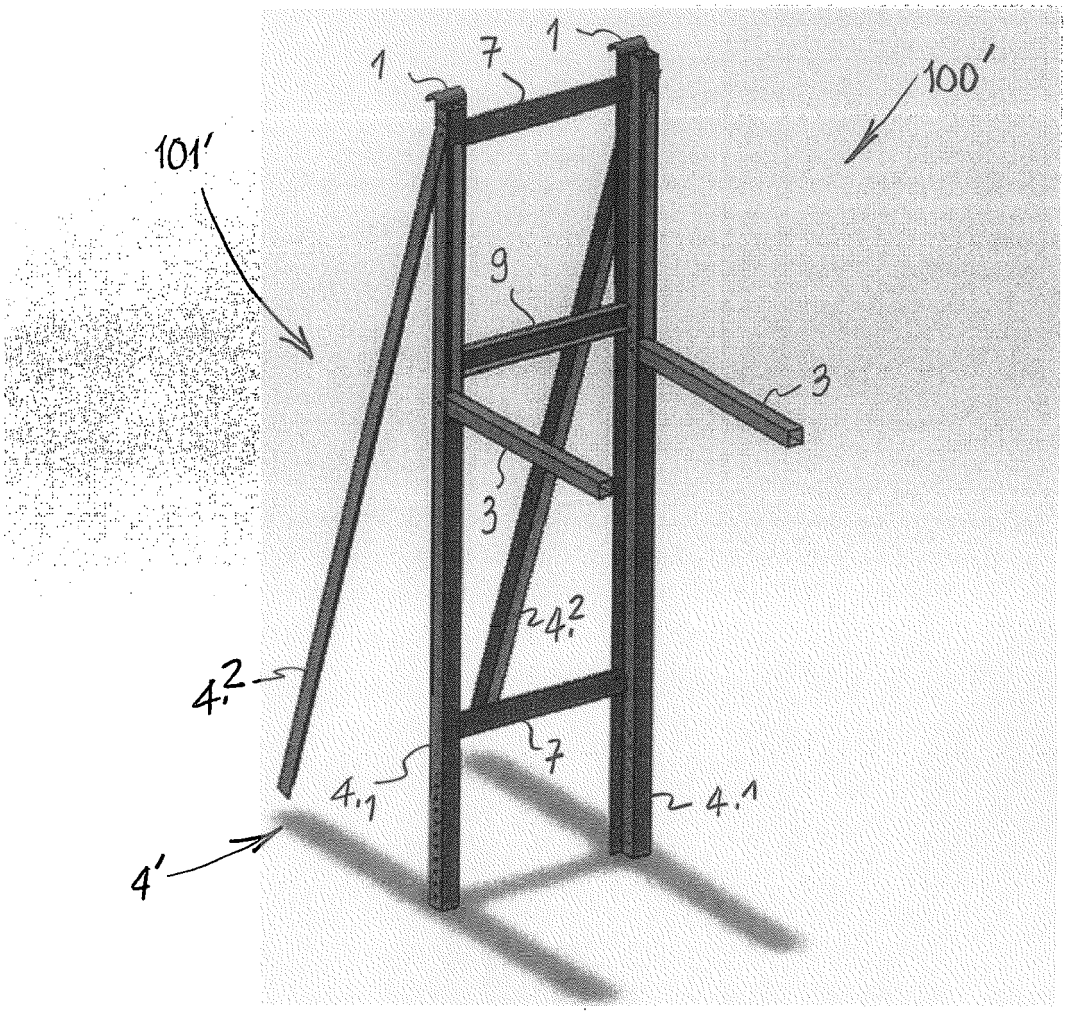


FIG. 10

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EUROPEAN SEARCH REPORT

Application Number
EP 16 00 0576

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	DE 200 20 154 U1 (HERWERTH KONRAD [DE]) 22 March 2001 (2001-03-22) * page 1 - page 3; figures 1-6 * -----	1-9	INV. D06F95/00
A	GB 2 325 402 A (KEMP STEPHEN PAUL [GB]) 25 November 1998 (1998-11-25) * figures 3-5 * -----	1-9	
A	AU 607 403 B2 (PAUL EDWARD RYAN) 7 March 1991 (1991-03-07) * page 1 - page 2; figures 1-5 * -----	1-9	
			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	28 July 2016	Jezierski, Krzysztof

CATEGORY OF CITED DOCUMENTS

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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