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(54) Support stand for displaying objects

(57) Support stand (1) comprising two upright members (3, 4) basically vertical, spaced apart and facing each other, provided with overhanging members (3a, 4a) to hold removable shelves (5) and connected to each other by a pair of diagonal stays (6, 7) each of which is connected to both upright members (3, 4). Each diagonal stay (6, 7) has a first end (6a, 7a) attached by a hinge (8, 9) to the top part (3b, 4b)/bottom part (3c, 4c) of one of the uprights (3, 4) and a second end (6b, 7b), opposite the first, slidingly anchored to the bottom part (3c, 4c)/top part (3b, 4b) of the opposite upright member (4, 3).

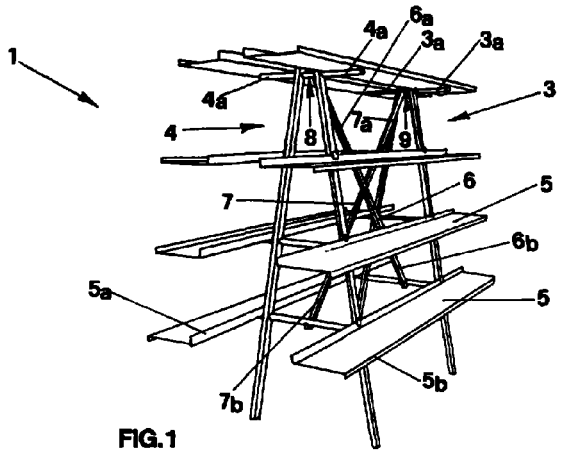

FIG.1

EP 1 088 501 A2

Description

[0001] This finding concerns a support stand for displaying objects, especially suited to being used for displaying cages in ornithological shows.

[0002] As is known support stands currently used for displaying cages in ornithological shows, consist of a frame that comprises two upright members that are preferably triangular in shape and provided with overhanging members to hold the shelves for the cages, assembled into a rigid structure by removable cross stays.

[0003] The frame is assembled by placing the two uprights in front of each other and connecting them together with the stays.

[0004] The shelves are then added.

[0005] These known support stands have the inconvenience of requiring two persons to both assemble and dismantle them, one to hold the two uprights and the other to apply the stays.

[0006] What's more it has been noted that if the support stands only have a single cross stay, where the application of the shelves contributes to the stand's stability, two persons are needed right up until assembly is completed and in other words until the shelves have been applied to the frame.

[0007] What's more another inconvenience of known support stands is that their components can be separated from each other and when they are dismantled the upright members and stays can be stored in different places. This means that time has to be uselessly wasted in looking for them when they have to be reassembled.

[0008] This finding intends to overcome the aforementioned inconveniences.

[0009] In particular a first scope of the finding is to produce a support stand that is easy to assemble and dismantle even by a single person.

[0010] Another scope is that the stand, without its shelves, is made up of several members articulated together but firmly connected so they cannot be separated.

[0011] The aforesaid scopes are achieved by producing a support stand that in accordance with the main claim comprises at least two upright members basically vertical, spaced apart and facing each other, provided with overhanging members to hold the removable shelves and connected to each other by at least one pair of stays, each of which is connected to both of said upright members, characterised in that each of said stays has a first end attached by a hinge to the top/bottom part of one of said uprights and a second end, opposite the first, slidingly anchored to the bottom/top part of the opposite upright member by means of guiding.

[0012] According to a preferred form of execution each of said means of guiding is a loop fixed to the upright member where the end of a respective stay is inserted.

[0013] The end of the stay inserted in the loop has a tab suited to prevent it from sliding out.

[0014] In the aforesaid execution, where the stays intersect, they are connected together by a pin that allows them to rotate around each other.

[0015] An advantage of the support stand finding is that it is easy to assemble and dismantle in a much shorter time than required for similar, known stands.

[0016] Another advantage is the reduction in number of loose components making up the stand, which in this case are limited to the shelves alone, in addition to making the overall assembly of the stand quicker, this also reduces storage problems and avoids the chance of components accidentally going lost.

[0017] Said advantages will be better explained during the description of a preferred form of execution of the finding that is given as a guideline but not a limitation and refers to the attached diagrams where:

- fig. 1 shows an isometric illustration of the support stand finding;
- fig.'s 2 to 6 show details of the support stand finding illustrated in fig. 1;
- figures 7 to 9 show the stand finding during three different stages of its dismantling.

[0018] As can be seen in fig. 1 and fig. 2 the support stand finding, generally indicated by 1, comprises two upright members 3, 4 basically vertical, spaded apart and facing each other, provided with overhanging members 3a, 4a to hold the removable shelves 5 and connected together by a pair of diagonal stays 6, 7 each connected to both members.

[0019] In more detail it can be seen that each diagonal stay 6, 7 has a first end 6a, 7a attached by a hinge 8, 9 to the top part of its respective upright 4, 3, and a second end 6b, 7b, opposite the first, slidingly anchored to the bottom part of the opposite upright member 3, 4 by means of guiding each consisting of a loop 16, 17 fixed to the upright member.

[0020] In particular each stay 6, 7 has its second end 6b, 7b inserted in a respective loop 16, 17 where it can slide.

[0021] Preferably but not necessarily, as can be seen in fig. 3, each hinge 8, 9 comprising a fork 10, 11 fixed to the top part 3b, 4b of a respective upright member 3, 4, which holds a pin 12, 13 passed through the first end 6a, 7a of the stays 6, 7 and creating a horizontal rotation axis 14, 15 for each stay.

[0022] The aforesaid stays, as can be seen in fig. 4, are also provided with a tab 18, 19 on the second end 6b, 7b, which prevents the end from sliding out of the loop 16, 17.

[0023] With regards to the stays 6, 7, as can be seen in fig. 5, they are set diagonally in an X-shaped layout and lie so they are vertically parallel to each other.

[0024] What's more, where they intersect, they are connected by means of joining preferably consisting of a pin 20 creating a basically horizontal rotation axis 21 that allows them to rotate around each other.

[0025] It can be seen that the shelves 5 are made of sheet metal and their rear lengths are provided with a rim 5a being basically vertical and bent upwards.

[0026] Their front length also has a rim 5b bent downwards.

[0027] Both rims are obtained by bending the sheet metal of the shelf.

[0028] Said shelves 5 are placed on the overhanging members 3a, 4a of the upright members 3, 4 which, as can be seen in fig. 6, have means of coupling consisting of tongues 22.

[0029] These are fixed away from the upright member they belong to creating a slot 22a with its top closed, which hooks in the rim 5a along the rear length of the shelves 5.

[0030] In practise when the stand 1 is closed it is set-up, as shown in fig. 7, with the upright members 3, 4 against each other and with the stays 6, 7 substantially vertical.

[0031] One person can assemble the stand 1 by pulling apart the upright members 3, 4 until the stays are completely open, as can be seen in fig. 8, where the stand takes on the structure shown in fig. 9.

[0032] When the stand has been spread apart, the shelves are placed on the overhanging members 3a, 4a and hooked into the tongues 22.

[0033] To dismantle the stand, after having removed the shelves 5, the upright members 3, 4 are brought back together by folding them in exactly the reverse of the opening procedure.

[0034] It is therefore clear that the stand finding achieves the scopes it has been designed for.

[0035] This finding may be changed during actual production, for instance in its structure and the method of moving the uprights and layout of the stays.

[0036] All variants in execution that have not been illustrated shall nevertheless be considered as being covered by this finding, as specified in the following claims.

Claims

1. Support stand (1) comprising at least two upright members (3, 4) basically vertical, spaced apart and facing each other, provided with overhanging members (3a, 4a) to hold the removable shelves (5) and connected to each other by at least one pair of diagonal stays (6, 7) each of which is connected to both of said upright members (3, 4), characterised in that each of said diagonal stays (6, 7) has a first end (6a, 7a) attached by a hinge (8, 9) to the top part (3b, 4b)/bottom part (3c, 4c) of one of said uprights (3, 4) and a second end (6b, 7b), opposite the first, slidingly anchored to the bottom part (3c, 4c)/top part (3b, 4b) of the opposite upright member (4, 3) by means of guiding (16, 17).

2. Support stand (1) according to claim 1) characterised in that said means of guiding consist of a pair of loops (16, 17) each being fixed to a respective upright member and holding a corresponding end (6b, 7b) of a diagonal stay (6, 7).

3. Support stand (1) according to claim 1) characterised in that there are two of said diagonal stays (6, 7) set in an X-shaped layout and lying so they are vertically parallel to each other and, where they intersect, they are connected together by a pin (20) that allows them to rotate around each other on an axis (21) created by said pin (20).

4. Support stand (1) according to claim 1) characterised in that said diagonal stays (6, 7) have said second end (6b, 7b) provided with a protruding element (18, 19).

5. Support stand (1) according to claim 1) characterised in that each of said upright members (3,4) consists of a polygonal shaped trestle set basically vertical.

6. Support stand (1) according to claim 5) characterised in that said upright member (3, 4) has a triangular shape.

7. Support stand (1) according to claim 5) characterised in that said upright member (3, 4) has a triangular shape with the larger base set towards the floor.

8. Support stand according to claim 1) characterised in that said overhanging members (3a, 4a) of said upright members (3, 4) have means of coupling (22) said shelves (5).

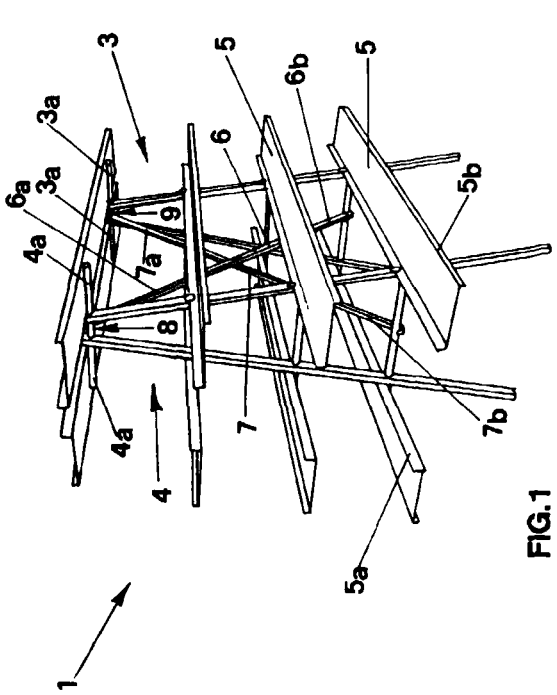

FIG.1

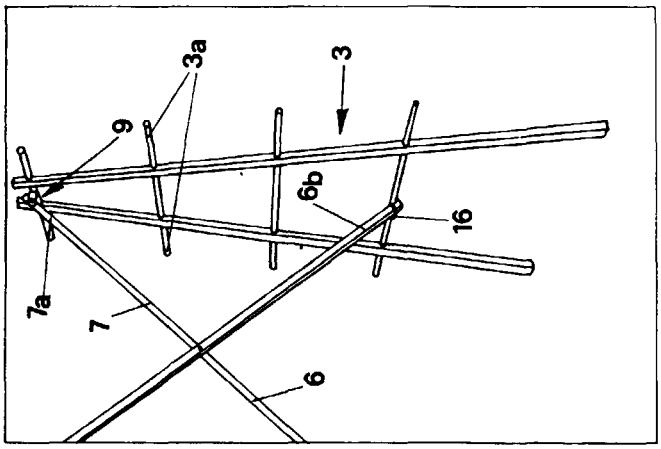

FIG.2

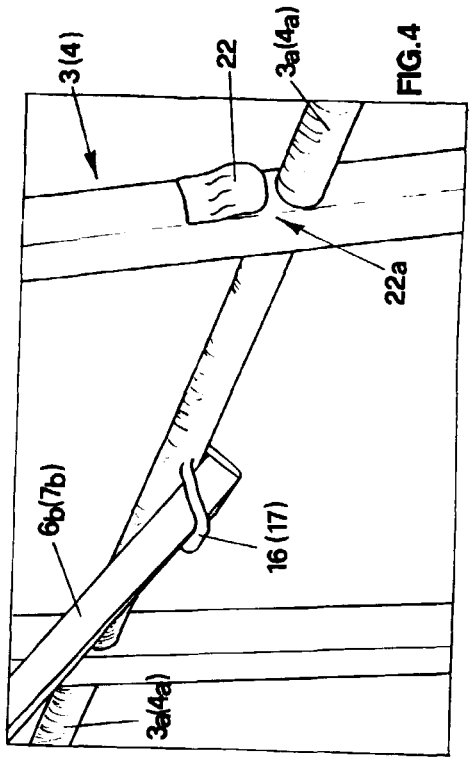

FIG.4

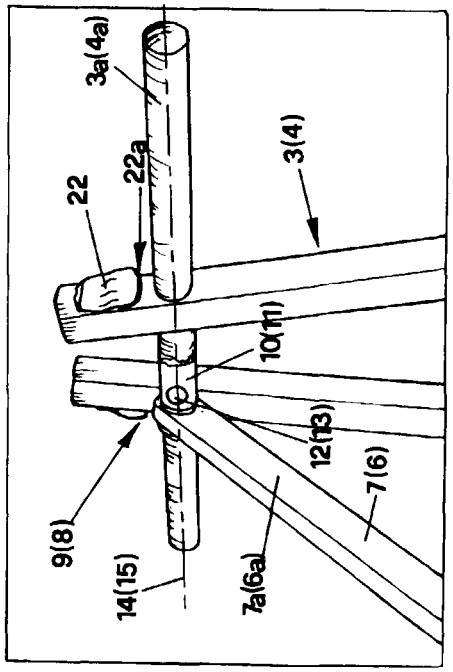

FIG.3

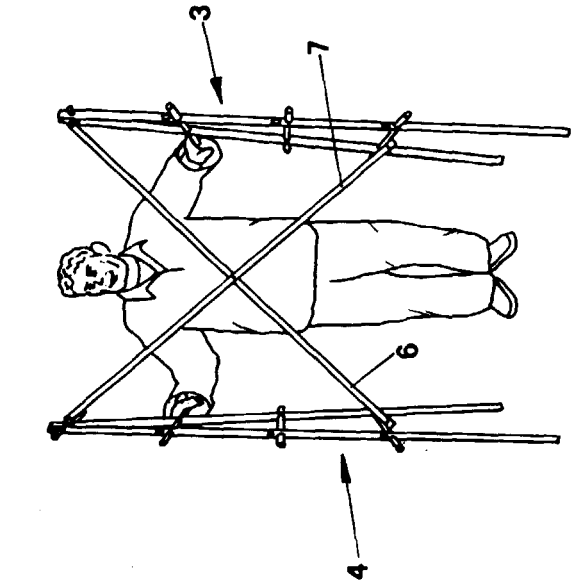

FIG.9

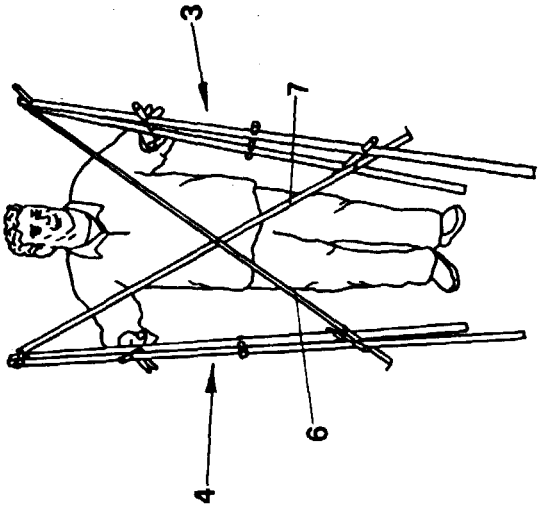

FIG.8

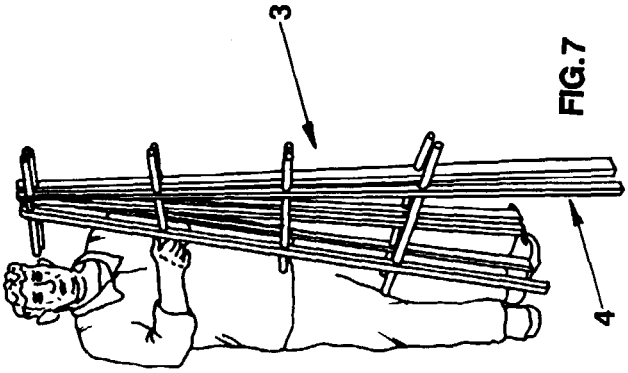

FIG.7

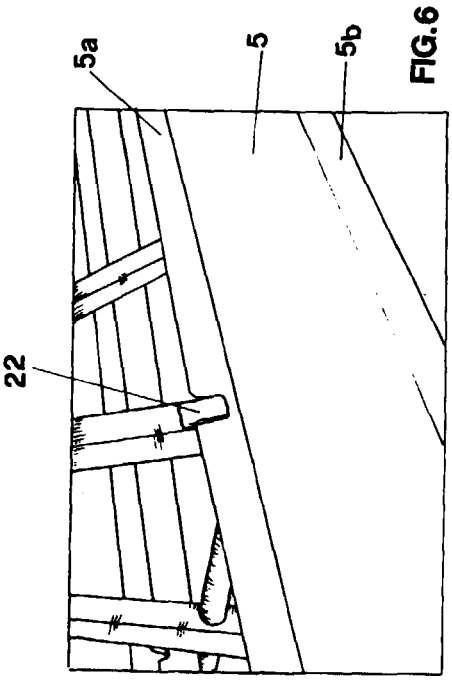

FIG.6

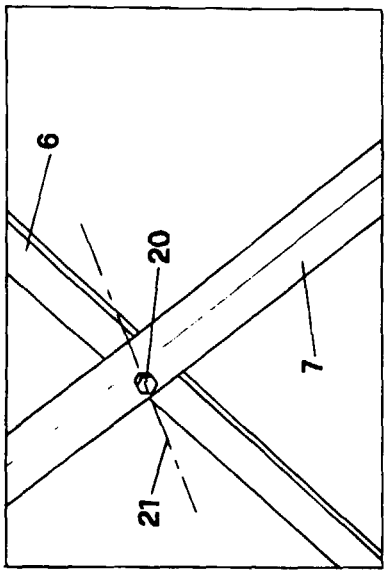

FIG.5