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(54) **The support joint for furniture constructions, especially racks**

(57) The invention solves the issue of the joint for furniture constructions, especially racks and is characteristic for the rack (1) with an outstanding longitudinal ledge (5) dividing the vertical rows of openings (2). The crossbeam (3) cooperating with the rack (1) has hooks (4) which are hooked into the openings (2) of the rack (1). Since the crossbeam (3) has two vertical walls (6), the ledge (5) gets between them.
The rack (1) has two identical profiles connected with each other un such a way that the openings (2) of each profile are congruent to each other.

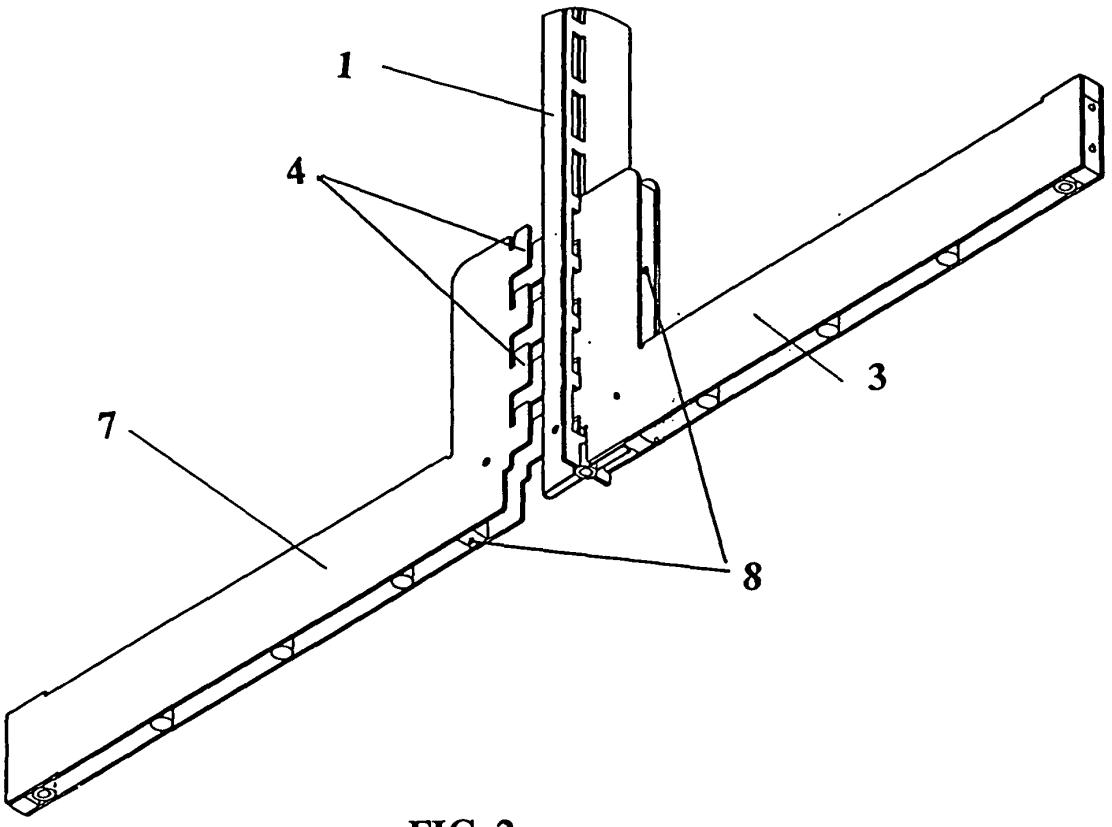

FIG. 2

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Description

[0001] The object of the invention comprises a support joint for furniture constructions, especially racks.

[0002] A support joint known from a description of the utility model DE 9729718022 consists of a pipe rack with a series of openings in its face wall, where a horizontal crossbeam is hooked into the openings in its lower part. The bottom part of the rack and the end of the crossbeam are equipped with treadles.

[0003] The core of the invention is that the support joint of furniture constructions, especially racks, having the rack with openings and a crossbeam with a hook, is characteristic for its double crossbeam with hooks on the side of the rack, while the cooperating rack has an outstanding ledge in its wall.

The ledge in the rack wall divides the vertical rows of openings.

The openings are pairs symmetrical in relation to the axis of the rack.

The crossbeam is shaped as a double angle bar with a vertical and a horizontal wall.

The crossbeam has a stabilizing inset between the vertical walls.

The crossbeam hooks are symmetrical in pairs.

The rack has two profiles connected with each other in such a way that the openings in particular walls are congruent, while the ledges outstanding from the walls between the openings are perpendicular to the walls with openings.

[0004] The ledges constitute two additional walls.

It is advantageous, when the ledges are of double thickness resulting from longitudinal bending of the shaped rack material.

[0005] The joint has legs in the rack axis and at the end of the crossbeam.

[0006] The construction of the support joint according to the invention has a stable and rigid construction. With application of such a construction during the rack assembly, it is possible to fix shelves bearing even heavy loads.

[0007] The object of the invention is represented in the enclosed drawing, where fig.1 represents a joint consisting of the rack with two profiles and one crossbeam; fig. 2 represents a rack with two profiles with one fixed crossbeam and the other one prepared for fixing; fig.3 represents a top view of the rack with two profiles and one crossbeam fixed.

[0008] The support joint of furniture constructions, especially racks, according to the invention comprises a rack 1 with openings 2 and a crossbeam 3 with hooks 4 , fixed into openings 2 of the rack 1. The crossbeam 3 is double in thickness and has hooks 4 on the side of the rack 1, while the cooperating rack 1 has a ledge 5 outstanding from the wall.

The crossbeam 3 is shaped into a double angle bar with vertical walls 6 and horizontal walls 7.

[0009] Between the vertical walls 6, the crossbeam 3 has a stabilizing inset 8 which consists of a rectangular block.

The hooks 4 of the crossbeam 3 are symmetrical pairs, so they can be easily stuck into the openings 2 , symmetrically to the rack 3.

The rack 1 is made up of two profiles 9 which are connected with each other in such a way, that the openings 2 in particular walls are congruent to each other, while the ledges 5 outstanding from the walls between openings 2 are perpendicular to the walls with the openings 2.

In this way the ledges 5 constitute two additional walls of the rack 1.

The ledges 5 are of double thickness resulting from longitudinal bending of a shaped material of the rack 1.

[0010] The joint has legs in the axis of the rack 1 and at the and of the crossbeam 3 fixed into assembly openings 10.

[0011] The support joint, following the invention, enables stable fixing of the crossbeams 3 from both sides of the rack 1. The ledges 5, being its additional walls get between the vertical walls 6 of the crossbeams 3.

Claims

1. The support joint of furniture construction, especially the racks with the rack with openings and a crossbeam with a hook, characteristic for a double crossbeam (3) with hooks (4) on the side of the rack (1), while the cooperating rack (1) has an outstanding ledge (5) in its wall.

2. The joint according to claim 1, characteristic for the ledge (5) on the wall of the rack (1) which divides vertical rows of openings (2).

3. The joint, according to claim 2, characteristic for the openings (2) which are symmetrical in pairs to the axis of the rack (1).

4. The joint, according to claim 1, characteristic for the crossbeam (3) which has a shape of a double bar with the vertical wall (6) and the horizontal wall (7).

5. The joint, according to claim 4, characteristic for the fact, that between vertical walls (6) the crossbeam (3) has a stabilizing inset (8).

6. The joint according to claim 1, characteristic for the hooks (4) of the crossbeam (3) symmetrical in pairs.

7. The joint according to claim 1 characteristic for the rack (1) with two profiles connected in such a way that the openings (2) at particular walls are congruent to each other, while ledges (5) outstanding from the walls between the openings (2) are perpendicular to the walls with openings (2).

8. The joint, according to claim 7 characteristic for the

ledges (5) which constitute two additional walls of the rack.

9. The joint, according to claim 1, or 7 or 8, characteristic for the double thick ledges (5) resulting from longitudinal bending of the profiled material of the rack (1).

10. The joint, according to the claim 1, characteristic for the legs at the axis of the rack (1) and at the end of the crossbeam (3).

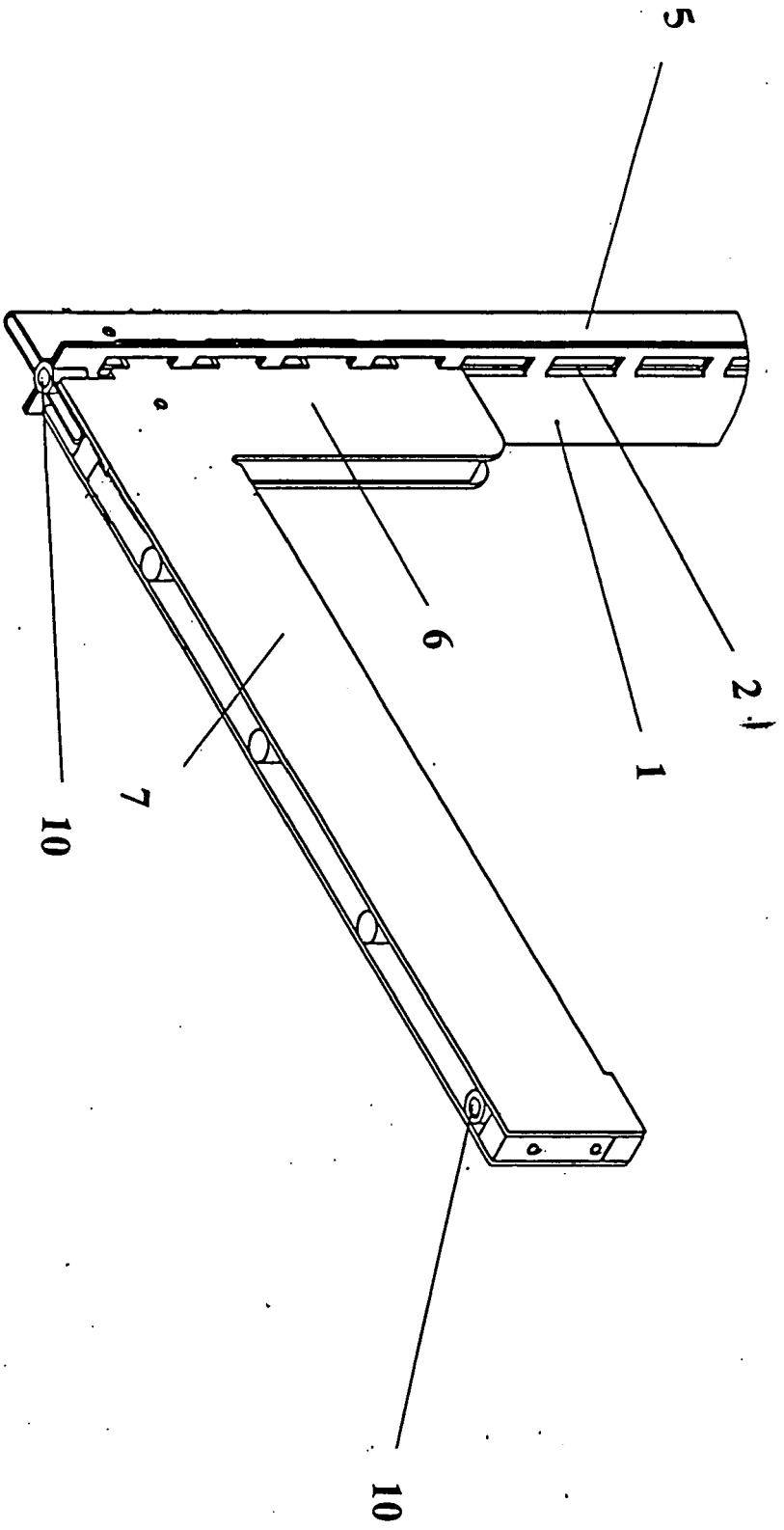

FIG.1

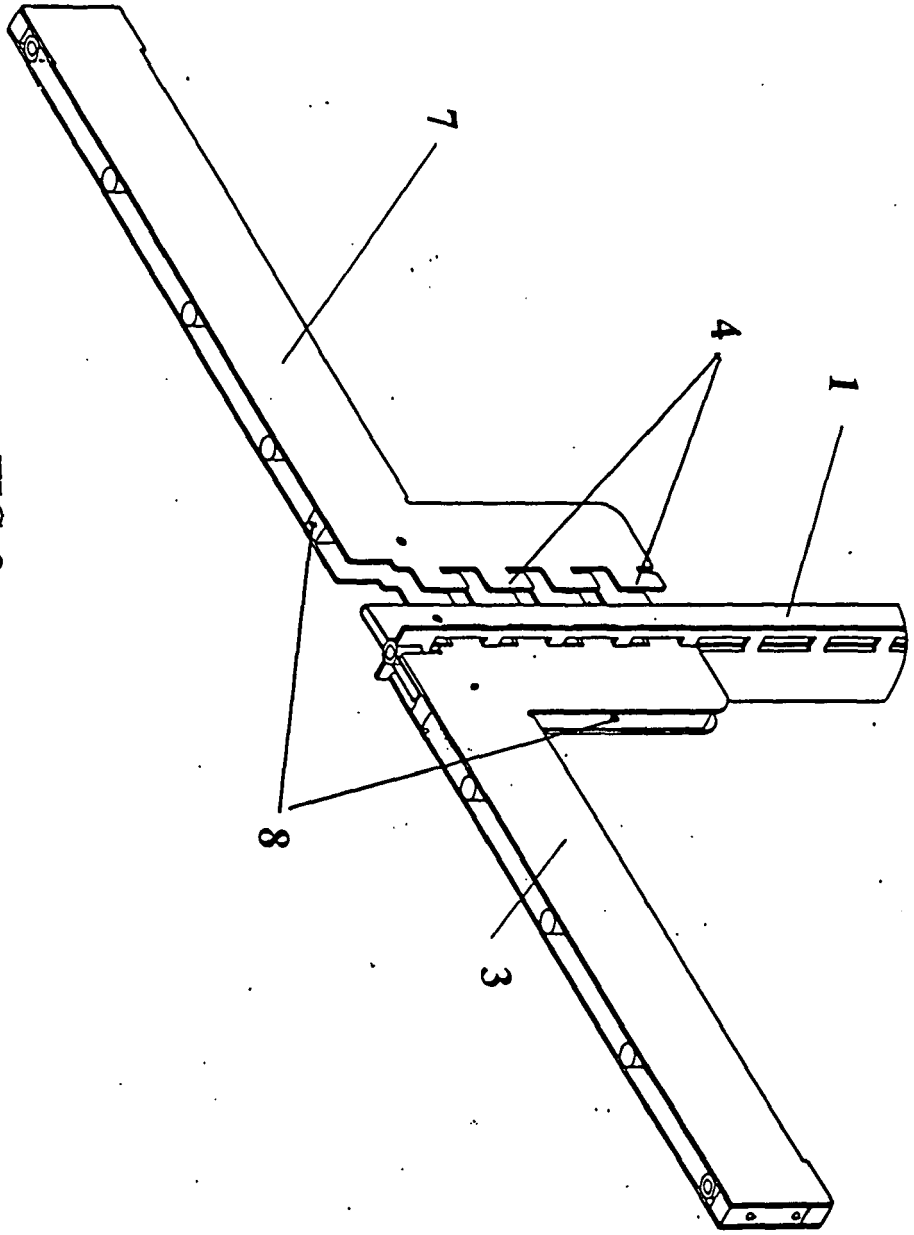

FIG. 2

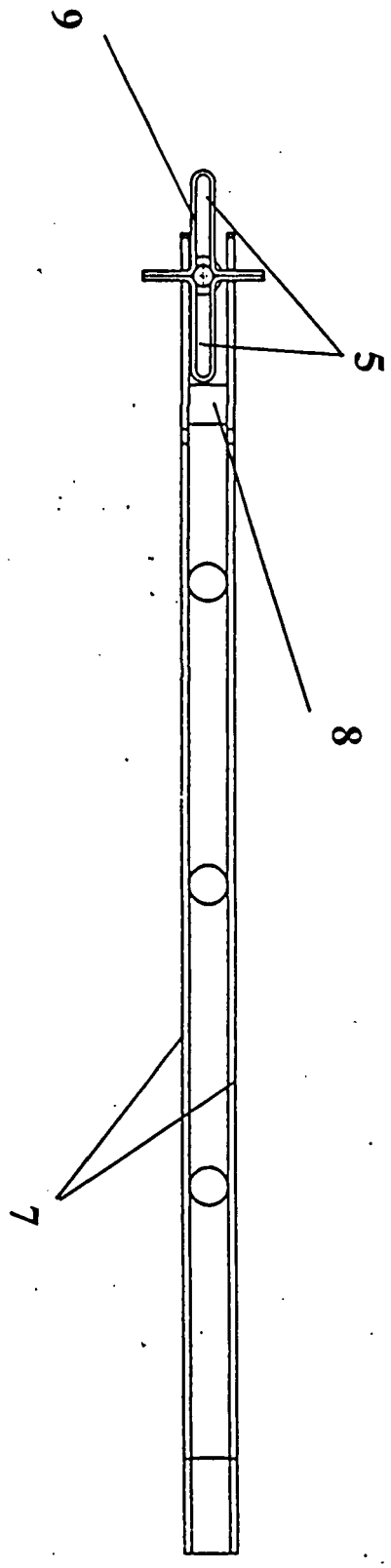

FIG.3

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- DE 9729718022 **[0002]**