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(54) The element constituting the back wall of a rack and the procedure of assembly of this element

(57) The invention solves the problem of an element constituting the back wall of a rack and a way of fixing the element. It is characteristic for the frame with two vertical pipe elements (1) and horizontal elements (2), while the frames of the element of the back wall are fixed into the openings of the wall (4) of the frame (3) having walls (4) with one edge (5) free. Fixing takes place by

means of catches (8).

The way of assembly of the element constituting the back wall of a rack characteristic for two frame elements having expanding elements connected by means of wires, and such connected elements of the back wall are fixed into the openings of the frame in such a way, where the free edge of one of the walls leans against the front surface of the connecting wire.

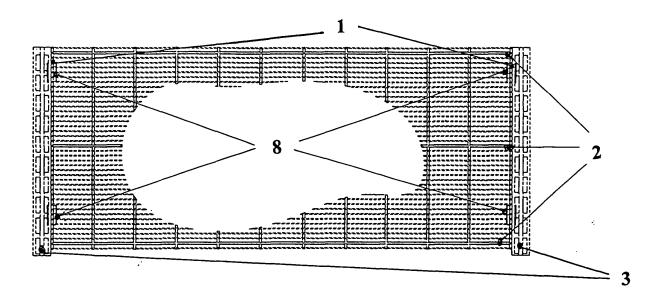


FIG.1

Description

[0001] The object of the invention comprises an element which constitutes the back wall of the rack and the procedure of assembly of this element.

[0002] The element constituting the back wall consisting of the rectangular plane is known from a German description of the utility model DE 97 297 18022, which is adapted to the rack consisting of a tetragonal pipe with openings in its wall. In the openings of the walls, supports are fixed with a catch element and a longitudinal crossbar for direct fixing of the back wall.

[0003] Another known element constitutes the back wall of the racks, which was adapted to the frame of a tetragonal pipe with rectangular openings in the walls comprising a rectangular plane (filled with a net or completely smooth), which has the row of hooks on its side edges. The distances between the hooks are adapted to the distance between the openings in the side wall of the support.

[0004] The idea of the invention comprises the element which constitutes the back wall of the rack filled with a rectangular frame characteristic for the vertical pipe sides connected by horizontal, longitudinal expanding elements, where the element constituting the back wall is fixed into the openings of the frame, where the frame has openings in the wall with one exterior edge free.

[0005] The element has catches to fix in the openings of the frame.

[0006] The catch has two vertical fixing walls apart from each other by a required α angle.

[0007] The α angle of 90 to 95 degrees.

[0008] The back wall consists of a double element of the back wall, the constituents of which are connected with each other with inner wire.

[0009] The inner wire has its frontal surface leaning against the free edge of the frame wall.

[0010] The catch leans with one wall against the filled frame of the back wall, while the other wall of the catch is placed in the opening of the frame.

[0011] The frame has four walls intersected with one another, where each wall has one edge free.

[0012] Two of the walls of the frame have double walls which closely adjoin each other.

[0013] The way of assembly of the element constituting the back wall of the rack is characteristic for the frame consisting of vertical pipe elements and horizontal expanding elements, where the element assembled in such a way is fixed in the openings of the frame by means of catches.

[0014] It is preferable when two frame elements, preferably filled with a net and having expanding elements, are connected by wire, where the elements of the back wall connected in such a way are fixed in the openings of the frame when the free edge of one of the walls of the frame leans against the front surface of the connecting wire.

[0015] Fixing of the connected elements of the back

wall of the rack into the openings of the frame wall is performed with catches which have two vertical walls apart from each other by the angle of 90 degrees.

- **[0016]** Construction of the element constituting the back wall of the rack and the way of assembly of this element, according to the invention, allows for easy assembly and transport of the element with interchangeable catches not protruding from side edges. Moreover, application of the catch with walls apart in connection with
- ¹⁰ construction of the frame, additionally eliminates clearances of the rack and reinforce the connected construction of the rack walls.

[0017] The object of the invention was included as an example in the enclosed drawing, in which fig. represents

¹⁵ the front view of the element constituting the back wall of the rack along with side frames, fig. 2 represents a perspective view on the center of connection of the element of the back wall with the frame, fig. 3 represents a top view of the frame and its connection with the element ²⁰ of the back wall.

[0018] The element constituting the back wall of the rack, according to the invention has the form of two rectangular frames connected with each other by wire, preferably filled with the net.

²⁵ [0019] Each frame has vertical pipe sides <u>1</u> connected with horizontal, longitudinal, expanding elements <u>2</u>.
 [0020] Such a constructed double element constituting the back wall is fixed in the frame <u>3</u>.

[0021] The frame <u>3</u> has four walls <u>4</u> intersected with ³⁰ one another, where each wall has one free edge <u>5</u>.

[0022] Two of the walls <u>4</u> of the frame <u>3</u> have the form of double walls <u>6</u> closely connected with each other.
[0023] In the walls, openings <u>7</u> are made, in which the elements which constitute the back wall of the rack are fixed by means of the catch 8.

[0024] The catch <u>8</u> has two vertical fixing walls <u>9</u> apart from each other by α angle equal to 93 degrees.

[0025] The wire $\underline{9}$ which connects two elements constituting the back wall of the rack leans with its front sur-

40 face against the free edge <u>5</u> of the wall <u>4</u> of the frame <u>3</u>. [0026] The way of assembly of the elements constituting the back wall of the rack, according to the invention, comprises two frame elements filled with the net and having expanding elements <u>2</u> connected by the wire <u>9</u>, where

⁴⁵ such connected elements of the back wall are fixed it the openings <u>7</u> of the frame <u>3</u>, so the free edge <u>5</u> of the wall <u>4</u> leans against the front surface of the connecting wire <u>9</u>.
[0027] Fixing of the connected elements of the back wall of the rack in the openings <u>7</u> of the wall <u>4</u> of the frame <u>50</u> <u>3</u> is done by means of the catches <u>8</u> with two vertical little

walls. **[0028]** The catch $\underline{8}$ leans with one wall against the filled frame of the back wall, while the other wall of the catch is placed in the opening 7 of the frame 3.

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Claims

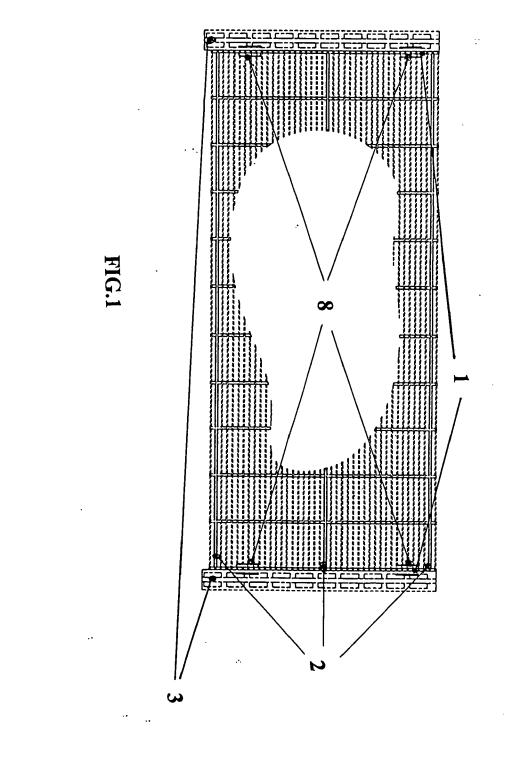
- The elements constituting the back wall of the rack comprising a rectangular, filled frame characteristic for the vertical pipe sides (<u>1</u>) connected with horizontal, longitudinal expanding elements (<u>2</u>), where the element constituting the back wall is fixed in the openings (<u>7</u>) of the frame (<u>3</u>), where the frame (<u>3</u>) has the openings (<u>7</u>) in the wall (<u>4</u>) having one free exterior edge (<u>5</u>).
- The element, according to claim 1, characteristic for the catches (8) to be fixed in the openings (7) of the frame (3).
- 3. The element of the back wall, according to claim 2, characteristic for the catch ($\underline{8}$) with two vertical fixing walls apart from each other by a required angle α .
- 4. The element of the back wall, according to claim 3, 20 characteristic for the angle α of 90 to 95 grades.
- The element of the back wall, according to claim 1, characteristic for the back wall consisting of a double element of the back wall, the parts of which are connected with each other by means of interior wire (9).
- The element, according to claim 5, characteristic for the interior wire (<u>9</u>) with the front surface leaning against the free edge (<u>5</u>) of the wall (4) of the frame ³⁰ (<u>3</u>).
- The element of the back wall, according to claim 3, characteristic for the catch (8) leaning with one wall against the filled frame of the back wall, and the other ³⁵ wall of the catch is placed in the opening (7) of the frame (3).
- The element of the back wall, according to claim 1, characteristic for the frame (<u>3</u>) with four walls (<u>4</u>) intersected with one other, where each wall (<u>4</u>) has one edge (<u>5</u>) free.
- The element of the back wall, according to claim 8, characteristic for two of the walls (<u>4</u>) of the frame (<u>3</u>) ⁴⁵ with double walls (<u>6</u>) which are very close to each other.
- 10. The way of assembly of the element constituting the back wall of the rack characteristic for the mounted frame consisting of vertical pipe elements and horizontal expanding elements, where such a set element is fixed into the opening of the frame by means of the catches.
- 11. The way of assembly of the element constituting the back wall of the rack, according to the claim 10, characteristic for the two frame elements having expand-

ing elements connected with wire, where such connected elements of the back wall are fixed into the openings of the frame in such a way, that the free edge of one wall leans against the front surface of the connecting wire.

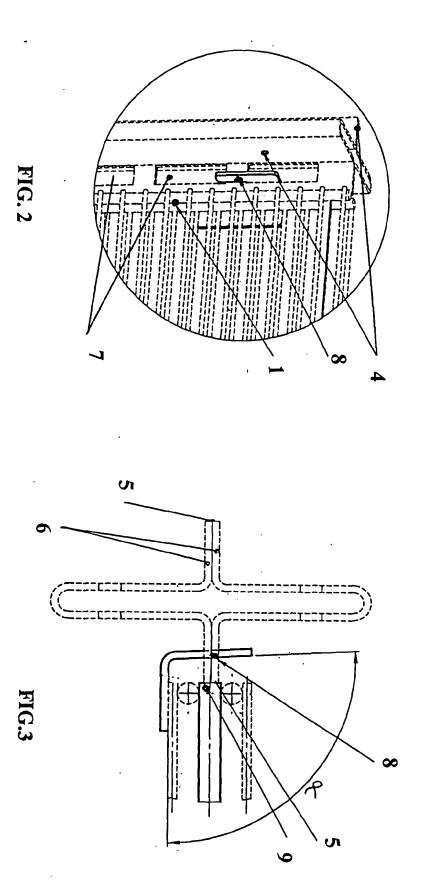
12. The procedure, according to claim 10, characteristic for fixing of the connected elements of the back wall into the openings of the frame wall done by means of catches with two vertical walls apart from each other - approximately 90 degrees.

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REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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