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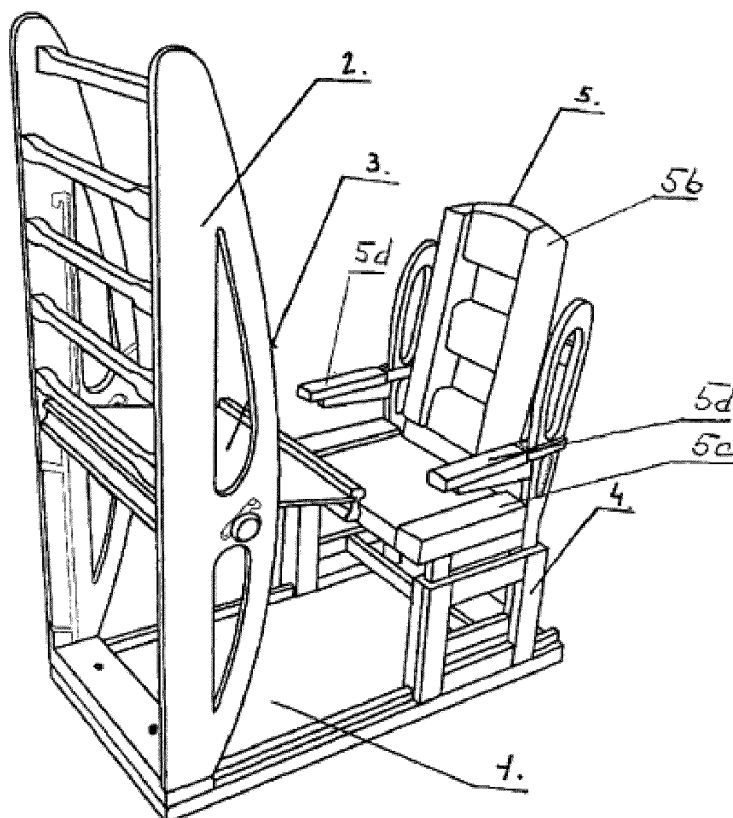
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(54) **Multifunctional table for children**

(57) The multifunctional table for children consists of the base (1), wall bars (2.1), slider (4), the chair frame embedded (5)

with the upholstered back of the chair (5b) and seat (5c) screwed on. The side swing rests (5d) have been fitted on the chair sidewalls (5a).

Figure 1



Description

Field of Technology

[0001] The engineering solution refers to the multifunctional table for children as the medical device, which provides children with a maximum of comfort while sitting at the table.

Current State of Technology

[0002] At present, there are a few kinds or types of sitting chairs and aids for children on the market. As a rule, they have been produced in the form of a special purpose facility for the child to, for instance, only eat or sit and play or write. They have been made of wood, plastic or their combination. The children's folding chair has been the most widely known, on which the child can sit at the high table, or when folded, the child sits at its own low table.

The principle of invention

[0003] The multifunctional table has been designed so as to meet the needs of either the handicapped or healthy child, to provide a maximum of comfort and, in particular, the safety, i.e. preventing the child from fall of the chair and make him feel safe. The side rests along with the strips are designed to fasten the child while sitting.

[0004] The chair allows the child to exercise the activities as follows:

- eat;
- implement hygiene (wash, wash his/her teeth, comb, or use the mirror as an accessory);
- write (hand write, using a notebook);
- draw (the pen and pencil stand);
- use the chalk when writing on a blackboard;
- exercise using the wall bars;
- exercise in a horizontal position (mattress).

[0005] The purpose of the multifunctional table development is to make a child exercise the activities by itself, thereby allowing their mothers to exercise their activities, knowing that their child has been safe while exercising its own activities.

[0006] The multifunctional table rectangular base has been equipped with the key on the longer sides. The base forms the multifunctional table bottom (900 x 465 x 65 mm), which prevents the chair from back and forward movement (horizontal traverse). The wall bars have been screwed on its front, whereby the base balances the wall bars and prevents the table from turnover.

[0007] The wall bars (1210 x 465 x 200 mm) form the table front and include the two sidewalls, five partition walls and the bottom plate. The screws and $\varnothing$ 8 mm pins fix the wall bars to the sidewalls and bottom plate. The wall bars fix and set the board horizontally and vertically.

The longitudinal groove has been milled out in the sidewalls to move the board. The short F-shape groove has also been milled out in the sidewalls for the rest to move. The rest supports the board and serves as a desk (worktop) when pushed out to the horizontal position. The short F-shape groove allows the table to set to three positions (worktop). Number five of the partition walls connected with the sidewalls form the small wall bars used for body exercise. The bottom plate of the wall bars serves as the fastener, using the screws to adapt to the base. The 420 x 382 mm table forms the moving part in the wall bars. It consists of the two profiled components and the worktop. The profiled components have been pasted to the worktop, thereby form a unit. The $\varnothing$ 10 mm pins have been mortised in the profiled components. The pins guide the wall bars in the longitudinal groove. The worktop serves as a table from one side and the board from the other side in the vertical position.

[0008] The 265 x 285 x 48 mm slider forms the auxiliary element which allows the chair to move forwards and backwards in the groove (horizontal traverse) while the side grooves allow the chair to lift (vertical traverse). The slider has been equipped with the lower groove with the side grooves perpendicular to it.

[0009] The 680 x 300 x 430 mm chair frame consists of the two sidewalls connected with the partition walls, upholstered chair back and seat and the two swing side rests.

[0010] The chair sidewalls have been connected to the partition walls using the attachment screws and $\varnothing$ 8 mm pins, thus making a single unit. The upholstered back and seat of the chair have been screwed to the chair frame, which make comfortable sitting. The side swing rests (5d) have been fitted on the chair sidewalls, which prevent the child from fall of the chair. The rests can also be lifted to make climbing on the chair easier. The chair slides in the side grooves from the top allowing the chair to move or lift, as necessary.

Description of Drawings

[0011]

Figure 1 shows the multifunctional table general view. Figure 1.1: The base - with the wall bars screwed on the front forms the board bottom, which allows the chair to move horizontally. Figure 1.2: The wall bars - form the board front and allow both the horizontal and vertical travel of the board. Figure 1.3: The board - form the moving part of the wall bars and serves as a board from one side and the worktop from the other side. Figure 1.4: The auxiliary element which allows the chair to move both in the horizontal and vertical direction. Figure 1.5: The char. Figure 2 shows the side wall bars and the longitudinal groove marked with black colour, which allow the table to move both in vertical and horizontal direction. The short F-shape groove allows the table to set to the

pre-defined positions.

Examples

[0012] The base (1) forms the multifunctional table bottom (900 x 465 x 65 mm) allowing the chair to set both forwards and backwards (horizontal traverse). The wall bars (2.1) have been screwed to the base (1), whereby the base (1) balances the wall bars (2.1) and prevents the multifunctional table from turnover. The multifunctional table rectangular base (1) has been equipped with the key (1a) on the longer sides.

[0013] The wall bars (2.1) (1210 x 465 x 200 mm) form the table front and include the two sidewalls (2), five partition walls (2c) and the bottom plate (2d). The screws and $\varnothing$ 8 mm pins fix the sidewalls (2) to the partition walls (2c) and bottom plate (2d). The wall bars (2.1) fix and set the board (3) horizontally and vertically. The longitudinal groove (2a) has been milled out in the sidewalls to move the board. The short F-shape groove (2a) has also been milled out in the sidewalls to allow the movement. The rest supports the board (3) when pushed out to the horizontal position, which moves in the short F-shaped groove (2b) milled out in the sidewalls (2) and it also serves as the table (worktop).

[0014] Each of the short F-shaped grooves (2b) allows the table to set to three positions (worktop). Number five of the partition walls (2c) connected with the sidewalls (2) form small wall bars (2.1) used for body exercise. The bottom plate (2d) of the wall bars (2.1) serves as the fastener, using the screws to adapt to the base (1).

[0015] The 420 x 382 mm table (3) forms the moving part in the wall bars (2.1). It consists of the two profiled components (3a) and the worktop (3.1). The profiled components (3a) have been pasted to the worktop (3.1), thereby form a unit. The $\varnothing$ 10 mm pins (3b) have been mortised in the profiled components (3a). The pins (3b) guide the wall bars in the longitudinal groove (2a) of the sidewalls (2). The worktop (3.1) serves as a table from one side and the board (3) from the other side.

[0016] The 265 x 285 x 48 mm slider (4) forms the auxiliary element which allows the chair to move forwards and backwards in the lower groove (4a) (horizontal traverse) while the side grooves (4b) allow the chair to lift (vertical traverse). The slider (4) has been equipped with the lower groove (4a) with the side grooves (4b) perpendicular to it.

[0017] The 680 x 300 x 430 mm chair frame (5) consists of the two sidewalls (5a) connected with the partition walls (5c), upholstered chair back (5b) and seat (5c), including the two swing side rests (5d).

[0018] The chair sidewalls (5a) have been connected to the partition walls (5e) using the attachment screws and $\varnothing$ 8 mm pins, thus making a single unit. The upholstered back (5b) and seat (5c) of the chair have been screwed to the chair frame (5), which makes comfortable sitting. The side swing rests (5d) have been fitted on the chair sidewalls (5a), which prevent the child from fall of

the chair. The rests (5d) can also be lifted to make climbing on the chair easier. The chair frame (5) slides in the side grooves (4b) of the slider (4a) from the top allowing the chair to move or lift, as necessary.

Industrial Applicability

[0019] The multifunctional table for children consists of the base, wall bars allowing the board to move, which also serves as the table (worktop). The slider allows the chair to move both horizontally and vertically. The chair featuring the upholstered back and seat make comfortable sitting for the child. The sidewalls prevent the child from fall of the chair. The multifunctional table has been tailor made for either handicapped or healthy child and meets all the child's needs. The multifunctional table can be used for 3 - 12 years old children.

Claims

1. The multifunctional table for children is **characterized by** that the base (1), which forms its bottom with the wall bars (2.1) fixed to the base (1); the rectangular base (1) has been equipped with the longitudinal key (1a) on the longer sides; the wall bars (2.1) consist of the two sidewalls (2), partition walls (2c) and the bottom plate (2d), where the screws and $\varnothing$ 8 mm pins connect the sidewalls (2) together with the partition walls (2c) and the bottom plate (2d). The longitudinal grooves (2a) have been milled out in the sidewalls (2) and the wall bars (2.1) to fix and move the board (3) horizontally and vertically. The short F-shape groove (2b) has also been milled out in the sidewalls (2), which support the movable board (3) in the wall bars (2.1). The board consists of the profiled components (3a) and the worktop (3.1). The profiled components (3a) have been pasted to the worktop, thereby form a unit. The pins (3b) fix the profiled components (3a). The slider (4) forms the auxiliary element which allows the chair to move forwards and backwards in the groove (4a) (horizontal traverse) while the side grooves (4b) allow the chair to lift (vertical traverse). The slider (4) has been equipped with the lower groove (4a) and the side grooves (4b) perpendicular to it. The chair frame (5) consists of the two sidewalls (5a) connected using the partition walls (5e), upholstered chair back (5b) and seat (5c), including the two swing side rests (5d). The chair sidewalls (5a) have been connected with the partition walls (5e) using the attachment screws and pins, thus making a single unit. The upholstered chair back (5b) and seat (5c) have been screwed to the chair frame (5). The swing side rests (5d) have been fixed to the chair sidewalls (5a) using the attachment screws to prevent the child from fall of the chair.

Figure 1

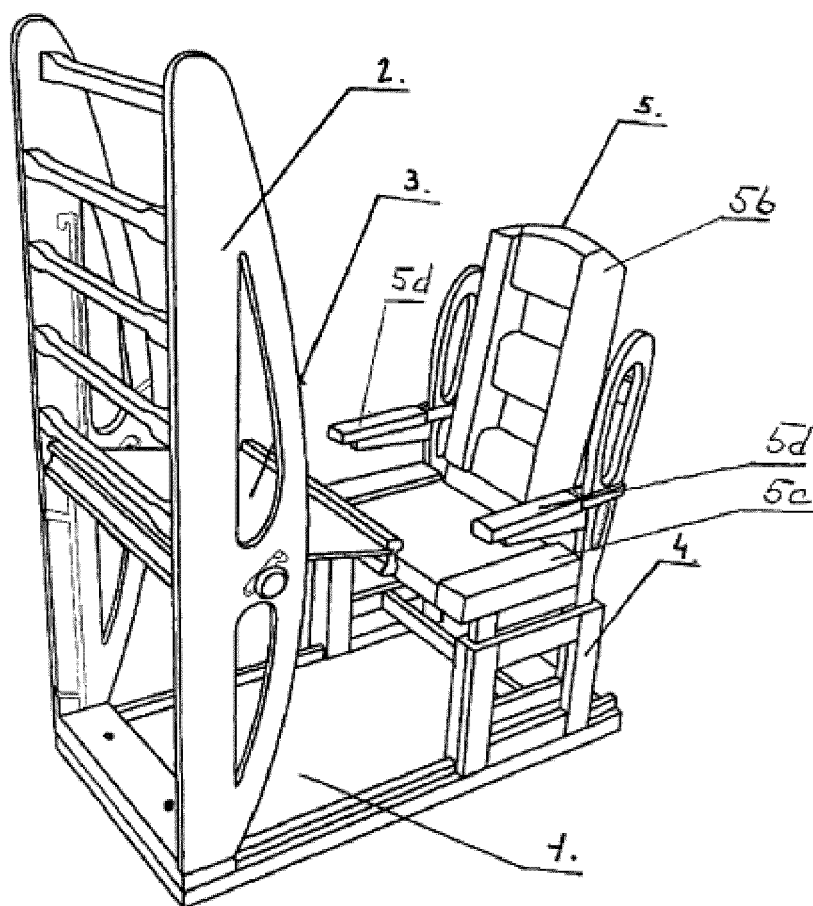


Figure 1-1

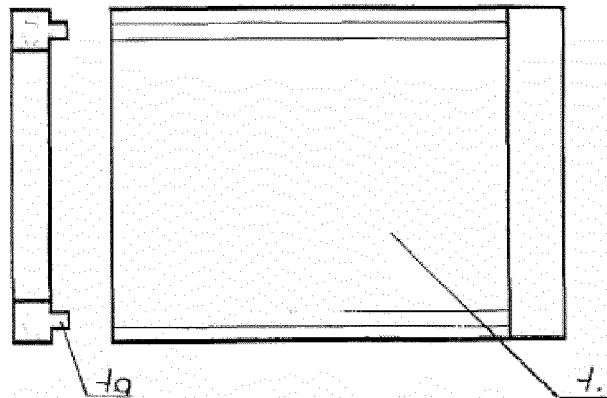


Figure 1-2

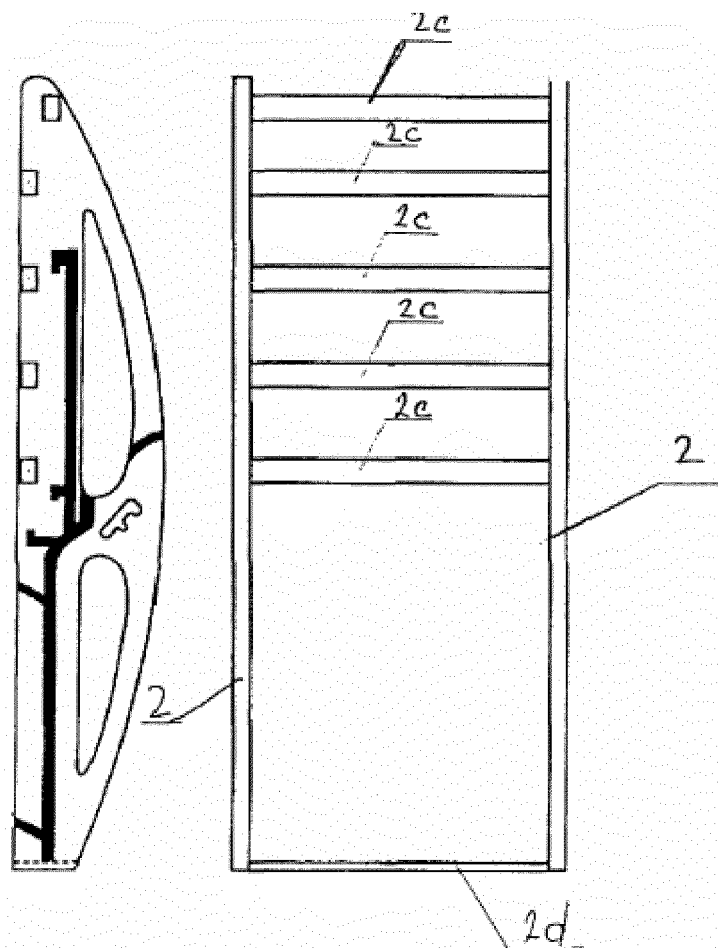


Figure 1-3

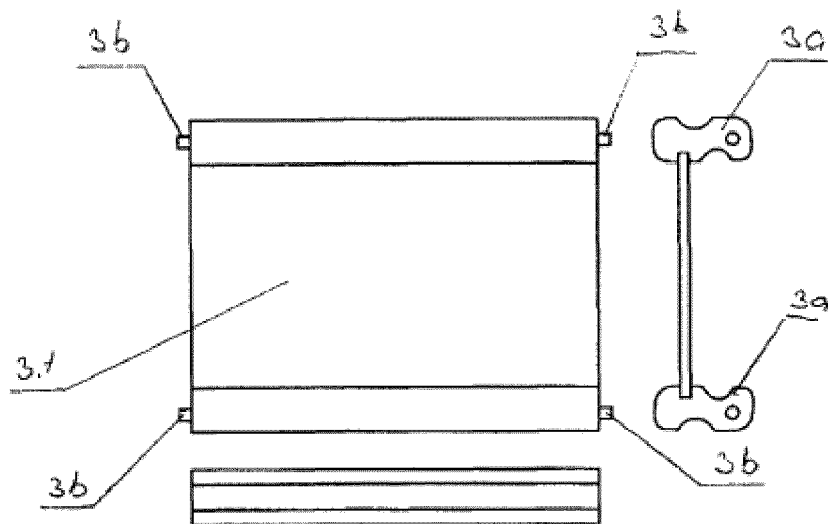


Figure 1-4

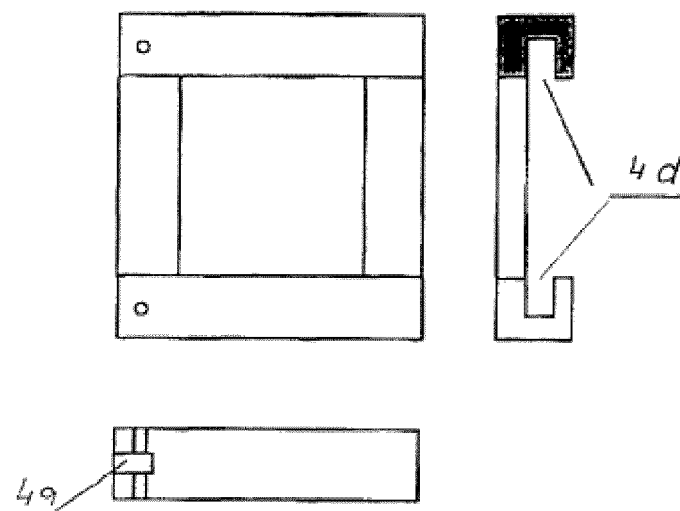
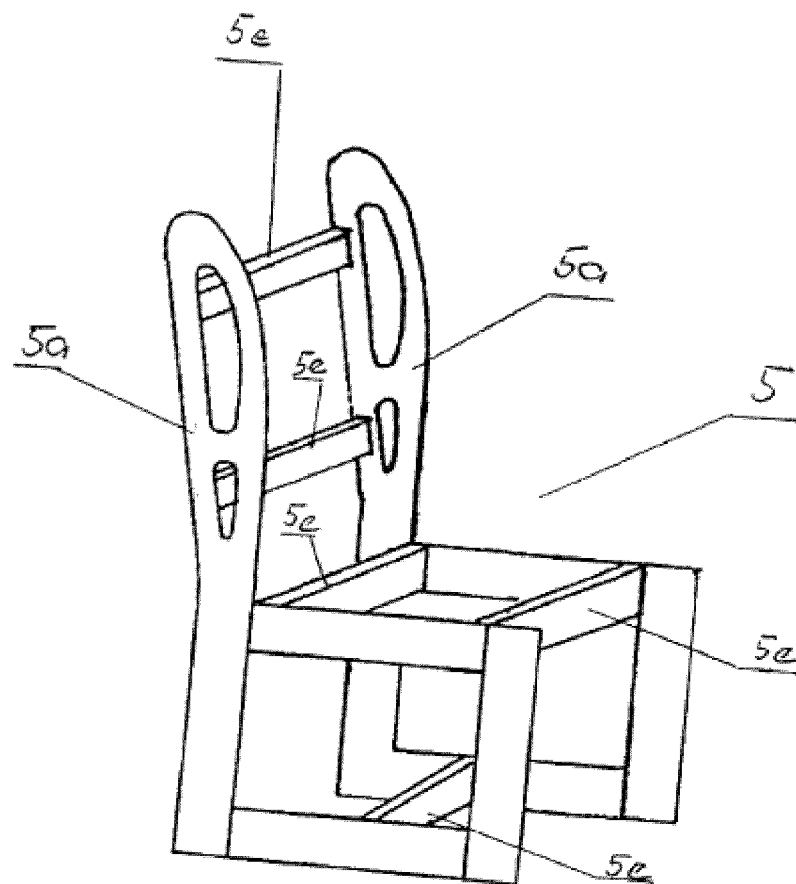


Figure 1-5





EUROPEAN SEARCH REPORT

Application Number
EP 11 47 5503

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	FR 625 553 A (ROY MARCEL) 13 August 1927 (1927-08-13) * figure 1 *	1	INV. A47D3/00
A	DE 10 977 C (BITHORN RICHARD) 28 September 1880 (1880-09-28) * figure 1 *	1	
A	DE 197 48 793 C1 (JELINEK WERNER) 12 August 1999 (1999-08-12) * figure 1 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			A47D A47B
1	Place of search Munich	Date of completion of the search 23 February 2012	Examiner Reichhardt, Otto
CATEGORY OF CITED DOCUMENTS 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 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			

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

EP 11 47 5503

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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23-02-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 625553	A	13-08-1927	NONE	
DE 10977	C	28-09-1880	NONE	
DE 19748793	C1	12-08-1999	NONE	