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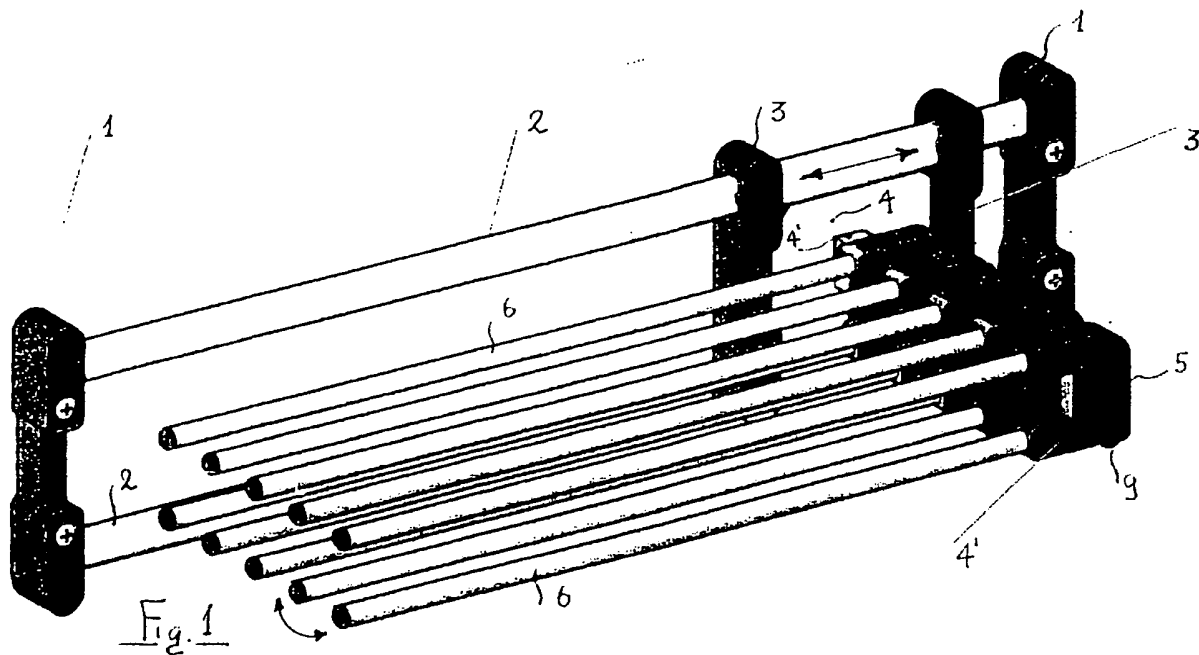
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(54) **Multiple extractible trousers rack for closets and wardrobes**

(57) The invention relates to a multiple trousers rack that may be pulled out from the wardrobe thanks to a sliding carriage fitted with rods, which may rotate in re-

lation to their cantilever support and thereby facilitate access to the selected garment without interfering with the others.



EP 1 444 921 A1

Description

[0001] The present patent relates to a trousers rack that can carry several pairs simultaneously and slides inside the wardrobe containing it, thereby facilitating access to the trousers themselves.

[0002] With regard in particular to similar clothes racks, we may affirm that the advantages of saving storage space are always defeated by the fact that in order to reach the trousers farthest away one is obliged to move the ones in front of or on top of them, which makes the task of extracting the garment from the wardrobe more complicated.

Various techniques have been devised for accessing trousers, all with mediocre results; among these, the technique proposed by the applicant of this patent is unquestionably one of the best.

In patent B096U 000029 (11/3/99), in fact, what is claimed is a trousers rack with arms that may be opened out, a spacer and connecting wire, which basically operates according to the same principle as the model described herein, but whose design has not been fully worked out from a functional mechanical viewpoint.

The primary aim of the present invention is to eliminate such drawbacks by introducing an elastic-acting device capable of replacing the former spacers of the previously patented version, whose function was to keep the arms parallel, an essential condition for ensuring that the trousers coming into contact while one pair was being extracted would not be left in disarray on their supports.

[0003] These and other aims are achieved by the device conceived according to this invention, consisting essentially of two parallel tracks, anchored to one of the side walls of the wardrobe, whose function is to support a carriage bearing cantilevered rods, which can be opened out in a "fanlike" fashion, while their original parallelism, except in the case of the rod selected, is maintained.

[0004] These and other features will now become more evident in relation to a simple design configuration of the invention, whose description serves purely illustrative purposes and in no way restricts the scope of this patent.

[0005] Referring to the annexed drawings:

Fig. 1

Shows a perspective view of the invention.

Figs. 2-3

Show an exploded view of the invention in the assembly stage.

Fig. 4

Shows an enlarged view of the elastic devices.

[0006] Again referring to the aforesaid figures, 1 indicates the nylon supports, which, together with the metal tubes 2, form the structure to be mounted on the side wall of the wardrobe. 3 indicates the sliding nylon car-

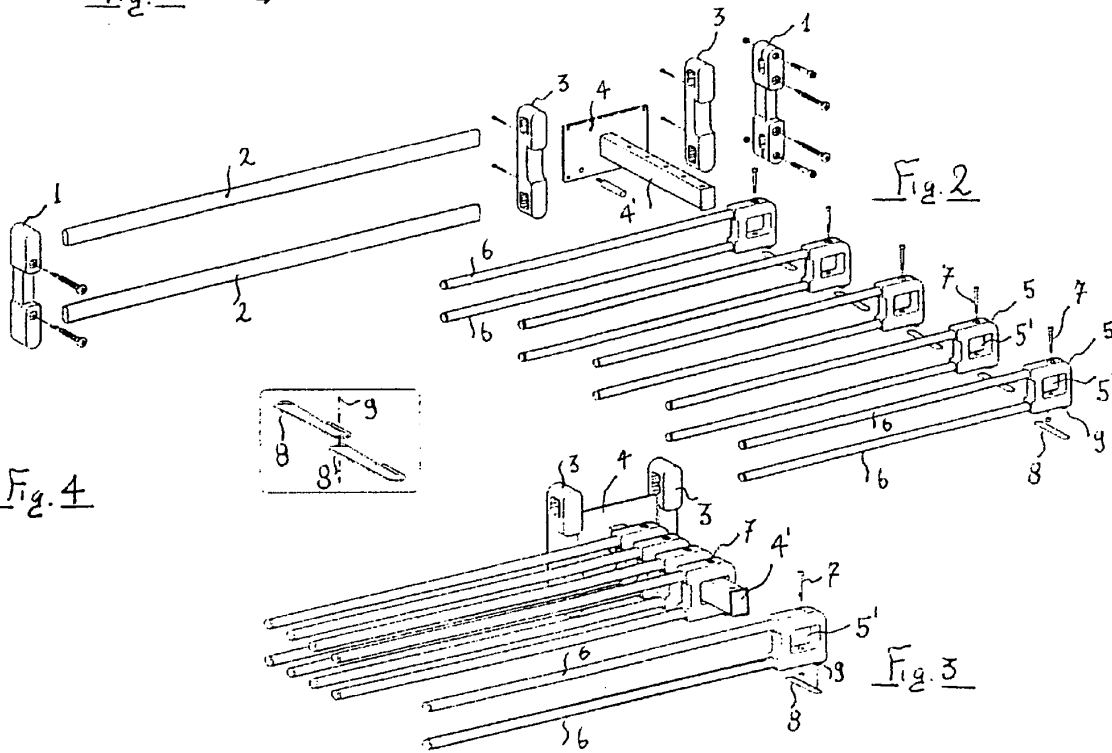
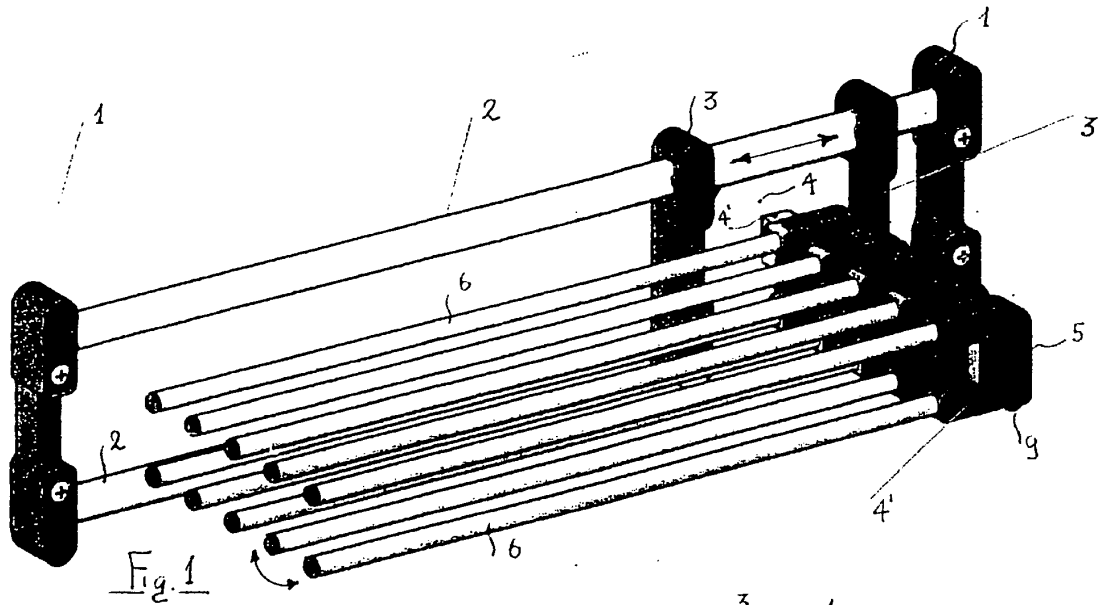
riage to which is fixed, by means of plate 4, the cantilever support 4', in turn fitted with double metal rods 6 that can be used to hang two pairs of trousers and are anchored to the nylon terminals 5, with a central opening 5'; the terminals are secured to the support (4') with Allen screws 7. 8 indicates the elastic clips that are anchored to pivots 9 fashioned on the bottom and connect the terminals (5) in such a manner as to allow, during the opening out of the double rods (6), only one terminal (5) to move nearer to the contiguous one. The remaining terminals remain at their original distance, thus keeping the rods (6) parallel, which is essential to ensure a correct positioning of the trousers. Said manoeuvre is made possible by the fact that the moved rod, whose terminal shifts nearer to the rod immediately on its left and further from the one on its right, is opposed in this latter movement by the clip (8) under tension, which otherwise allows the approaching motion as the pivot (9) slides inside it.

In practice the details of execution, dimensions, materials, shape and so forth of the invention may vary without departing from the scope of the present industrial patent. In fact, the invention thus conceived lends itself to numerous adaptations and variants, all of which falling within the framework of the inventive concept. In addition, all the elements may be replaced by other technically equivalent ones.

Claims

1. MULTIPLE EXTRACTIBLE TROUSERS RACK FOR CLOSETS AND WARDROBES

comprising a supporting structure to be fixed to the side wall of the wardrobe, **characterised by** nylon supports (1) and metal tubes (2), comprising a carriage that slides along the latter elements, further **characterised by** supports (3) made of anti-friction materials and a plate (4) serving as anchorage for a cantilever rod (4'), which in turn acts as a support for the trousers rack assembly composed, in the model illustrated, of five nylon terminals (5) with a square hole (5') for accommodating the rod (4'), on which double metal rods are fitted (6). Characterised, moreover, by the fact that the terminals (5) are secured stably to the rod (4') by means of Allen screws (7) that allow them only to rotate. **Characterised by** the fact that on the outer bottom part of the terminals (5) there is a pivot (9) which allows the various terminals to be linked together with elastic clips (8). Characterised, finally, by the fact that the clips (8) are made of harmonic steel wire fashioned into an elongated shape, their purpose being to oppose the pulling away of the pivots (9) and allow them to slide inside the clip, when subject to motion tending to bring them closer together.





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EUROPEAN SEARCH REPORT

Application Number
EP 04 42 5065

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A,D	IT B0960029 U (MOSCHINI PIETRO) 11 September 1997 (1997-09-11) * the whole document *	1	A47B61/02 A47G25/06
A	GB 321 509 A (TIMINGS SAMUEL) 14 November 1929 (1929-11-14) * figure 1 *	1	
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 22 April 2004	Examiner Reichhardt, O
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 04 42 5065

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22-04-2004

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82