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54 **Hung elements structure for supporting and storing goods in rooms such as garages, cellars and similar.**

57 A hung elements structure for supporting and storing objects in rooms such as garages, cellars and similar consists of a stirrup (30) screwed to a wall of the room which holds a substantially parallelepiped shaped box-like body equipped with holes (13) obtained at least in one of its side walls; tubes

(10) are inserted through said holes extending from said box-like body to a wall adjacent to the one supporting the stirrup, where they are screwed; the tubes are arranged in pairs on different horizontal planes and hold shelves (33) and/or drawers (45) rigidly connected to said pair of tubes.

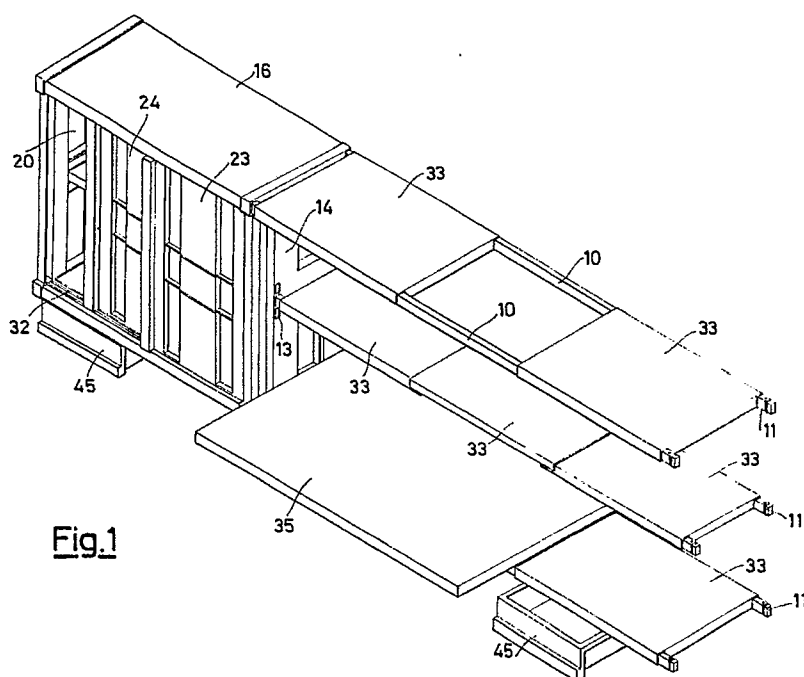


Fig.1

The invention refers to a hung elements structure to hold and store goods in rooms such as garages, cellars and similar.

The necessity of placing structures able to store goods of different type, weight and dimensions often arises in rooms such as garages, cellars, motorcar boxes, attics and similar. Workshops, for instance, are typical places where it is necessary to store objects, tools and other parts and arrange them tidily in proper boxes or shelves so as to keep goods handy.

Modular structures consisting of vertical rods of various lengths among which are inserted brackets for goods holding and for the stiffening of said structure are found on the market nowadays. In some cases, however, the room may not have sufficient space to contain such a structure which, extending from the floor to a wanted height, occupies a remarkably long space along at least one side of the room. Such an impediment happens above all in motorcar boxes where the space available is rather limited and it is impossible to assemble a structure owing to the dimensions of the motorcar. Therefore, in such type of rooms, it is necessary to place structures hung at a certain height from the ground not to encumber the lower part where a lane must be obtained.

Hung structures usually consist of separate elements that can be matched to each other according to the dimensions of the space where they have to be assembled; said structures are often handicraft type, unpractical and sometimes unreliable.

Purpose of the invention is to propose a modular hung elements structure that can be fitted on a side of a room of any length and able to bear various types of supporting elements and goods storage depending on the employment of said structure.

For these and other purposes which will be better appreciated as the description follows, the invention proposes a hung elements structure for supporting and storing objects in rooms such as garages, cellars and similar wherein it consists of a stirrup, screwed to a wall of the room, which holds a substantially parallelepiped shaped box-like body equipped with holes obtained at least in one of its side walls through which are inserted tubes extending from said box-like body to a wall adjacent to the one supporting the stirrup, where they are screwed; the tubes are arranged in pairs on different horizontal planes and hold shelves and/or drawers rigidly connected to said pair of tubes.

The modular structure of the invention is now being described and reference is made to the attached drawings:

Fig. 1 is a perspective view of one of the embodiments of the structure of the invention;

Fig. 2 is the exploded view of the elements of the structure of Fig. 1.

The embodiment illustrated in the drawings has a plurality of rectangular section metal tubes 10 which hold at one end a small plate 11 equipped with a hole to fasten tubes 10 to the wall by means of blocks. The tubes 10 are inserted in holes 12 and 13 of a plate 14 and, over the plate, are inserted in holes 15 of shelves 16, 17 and 18; over the shelves the tubes 10 are inserted in splines 19 of a further plate 20.

The plates 14 and 20 with shelves 16, 17 and 18 mark out a box-like element closed at the back by panels 21 and 22 and in front by doors 23 and 24. Panels 21 and 22 are coupled to each other and restrained in the respective overturned edges 25 and 26; panel 21 has another overturned edge 27 to couple with overturned edge 28 of a profile 29 equipped with holes 30 for the screwing to the wall by means of blocks.

Doors 23 and 24 are equipped with rails 31 sliding into suitable guides 32 obtained in shelves 16 and 18.

Plates 33 are laying between two parallel tubes 10 and are equipped with notches 34 for the insertion on tubes 10; further plates 35, greater than plates 33, are rigidly connected to tubes 10 by means of screws 36 screwed in holes 37 (in the plates) and in holes 38 of cross pieces 39 inserted from the bottom on tubes through suitable end splines 40.

Further plates 41 are assembled on parallel tubes by means of their bend edges 42; said plates hold guides 43 at the bottom along the overturned edges 44 of a drawer 45.

When connecting said hung structure, profile 29 must be connected first by means of blocks and the various elements of the structure are then assembled to it: the back panels 21 and 22, shelves 16, 17 and 18, side plates 14 and 20 and doors 23 and 24. Said structure is obtained inserting tubes 10 in the proper holes 12 and 13 of plate 14 and 15 of shelves 16, 17 and 18.

Tubes 10 will have to be connected to the side wall by their small plates 11 inserted telescopically in the inside of the tubes 10 so that the necessary part of them can be extracted from the tubes ends and laid against the side wall and connected to it by means of blocks. The structure will be completed by assembling plates 33 and 35 on the tubes where preferred, for instance as shown in Fig. 1, and setting in the same way one of more drawers 45 in addition to shelves 33.

The embodiment of the modular structure illustrated in the drawings is given as an example, as said structure may be assembled in many different ways utilizing a greater or smaller number of parts depending on the requirements.

It results clear that the box-like body closed between side panels 20 and 14 may be fitted as intermediate piece instead of end piece; in such a case the tubes 10 will be extended over the panel 20, which is herein described as end panel, so the tubes 10 will have to hold the small plates 11 also at their other ends for the connection to the wall. Any number of shelves 33 and 35 may be situated differently depending on the structure and on the requirements.

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Claims

1) Hung elements structure for supporting and storing objects in rooms such as garages, cellars and similar wherein it consists of a stirrup, screwed to a wall of the room, which holds a substantially parallelepiped shaped box-like body equipped with holes obtained at least in one of its side walls through which are inserted tubes extending from said box-like body to a wall adjacent to the one supporting the stirrup, where they are screwed; the tubes are arranged in pairs on different horizontal planes and hold shelves and/or drawers rigidly connected to said pair of tubes.

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2) Structure according to claim 1 wherein the ends of the tubes are telescopic to suit the different dimensions of the rooms.

3) Structure according to claim 1 wherein the back plate of the box-like body is hooked to the supporting stirrup of the wall, whilst the tubes are inserted into ducts placed in the lower and upper back panels.

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4) Structure according to claim 1 wherein the shelves are equipped with splines along the edges to restrain on each pair of abreast tubes.

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5) Structure according to claim 1 wherein the shelves are screwed to stirrups interposed between the tubes of each pair.

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6) Structure according to claim 1 wherein the drawers are inserted into guides of shelves laid between the tubes of each pair.

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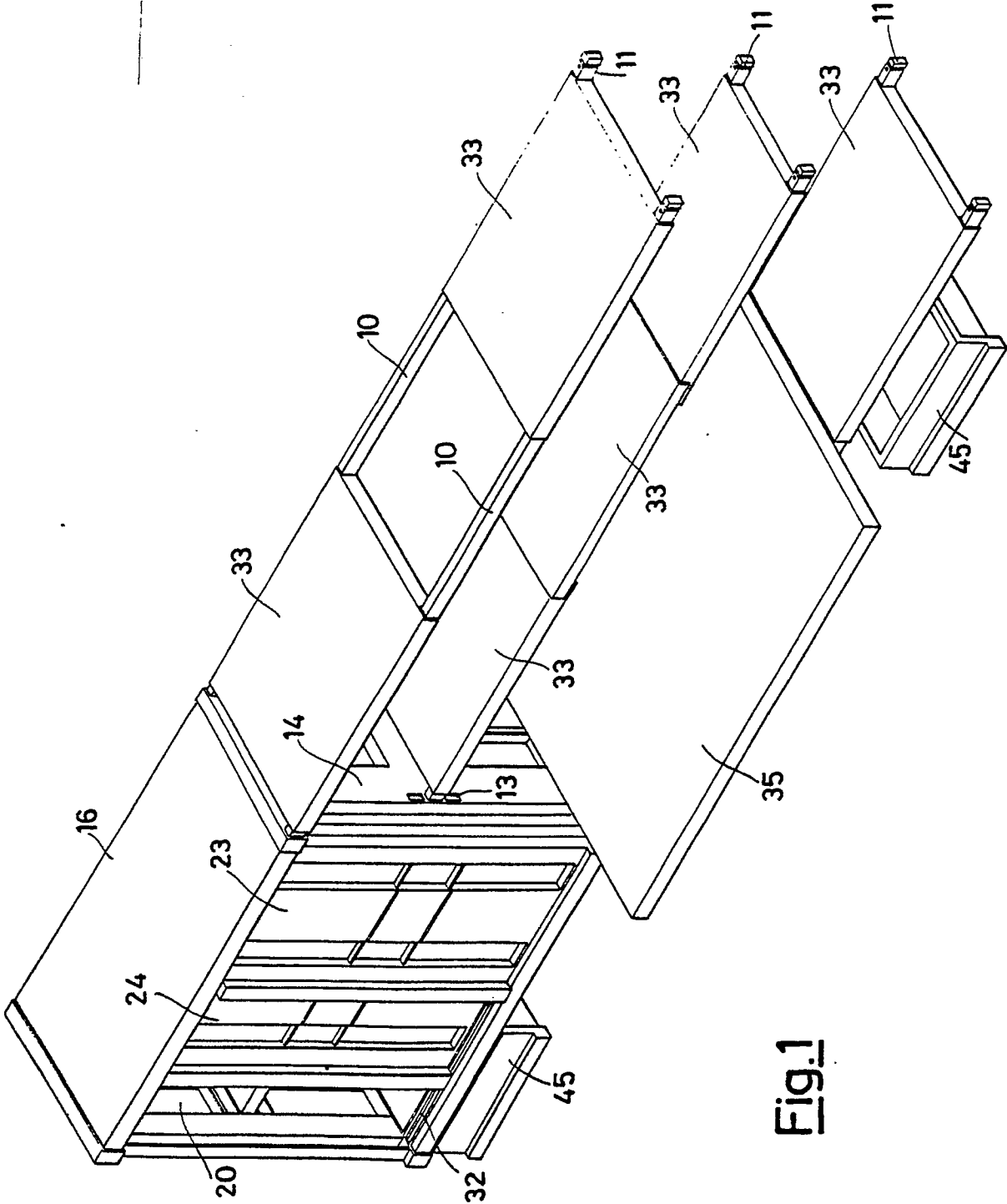
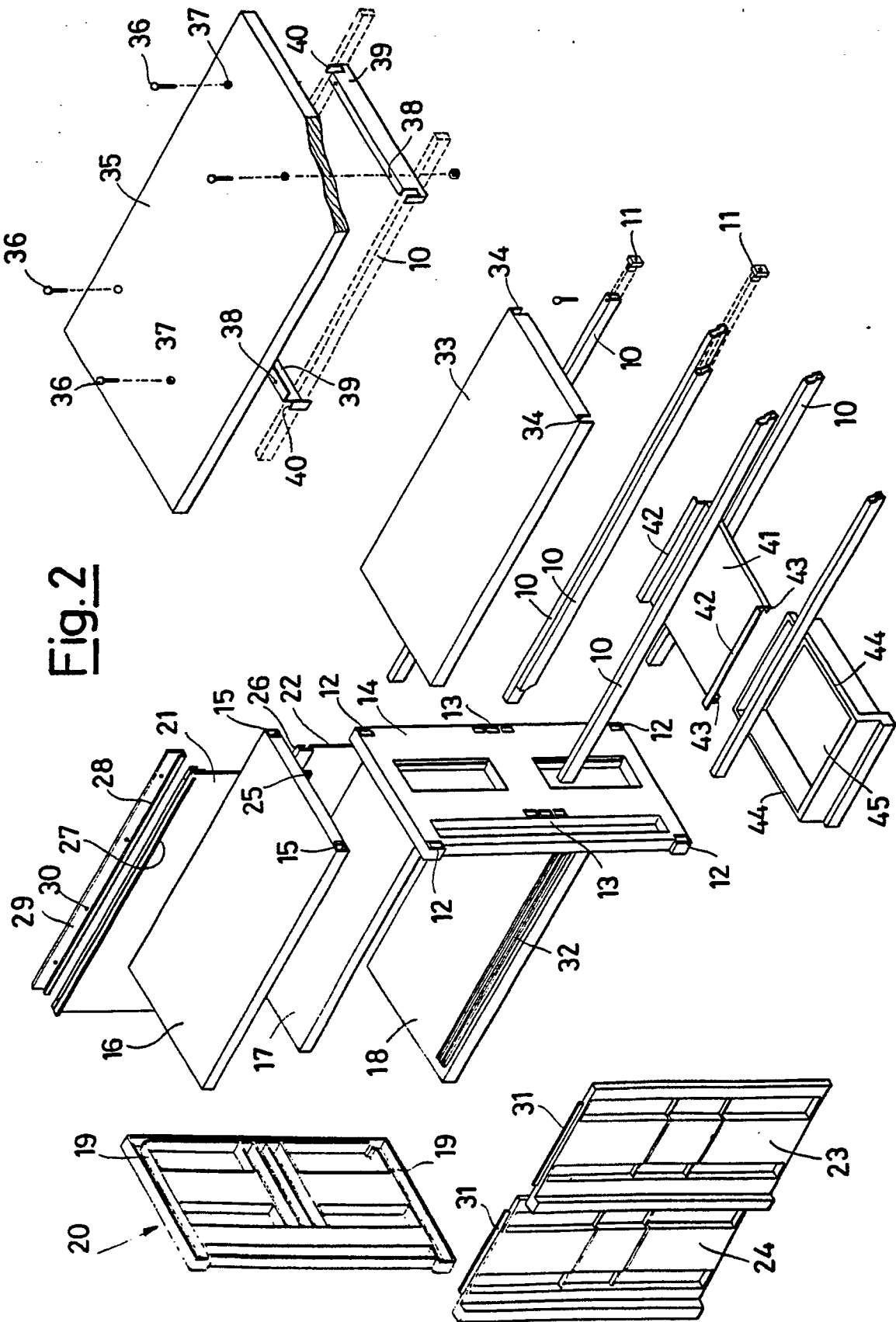


Fig.1





European Patent
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EUROPEAN SEARCH REPORT

Application Number

EP 90 10 6128

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.5)
A	US-A-4329003 (INTERFLOW SYSTEMS CORP.) * column 1, line 60 - column 2, line 41; figures 1, 3 *	1	A47B96/06 A47B45/00
A	GB-A-1051348 (PLASTOW) * page 1, line 58 - page 2, line 24 * * page 2, lines 49 - 70; figures 1-4 *	1	
A	FR-A-2315239 (GOVIN) * page 1; figure 1 *	1, 2	
A	FR-A-1582857 (ATELIERS LAMBERT) * page 1, lines 1 - 16; figure 1 *	1	
A	FR-A-2055816 (ESNAULT)		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A47B A47F F16B
Place of search THE HAGUE		Date of completion of the search 09 JULY 1990	Examiner DE GROOT R. K.
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