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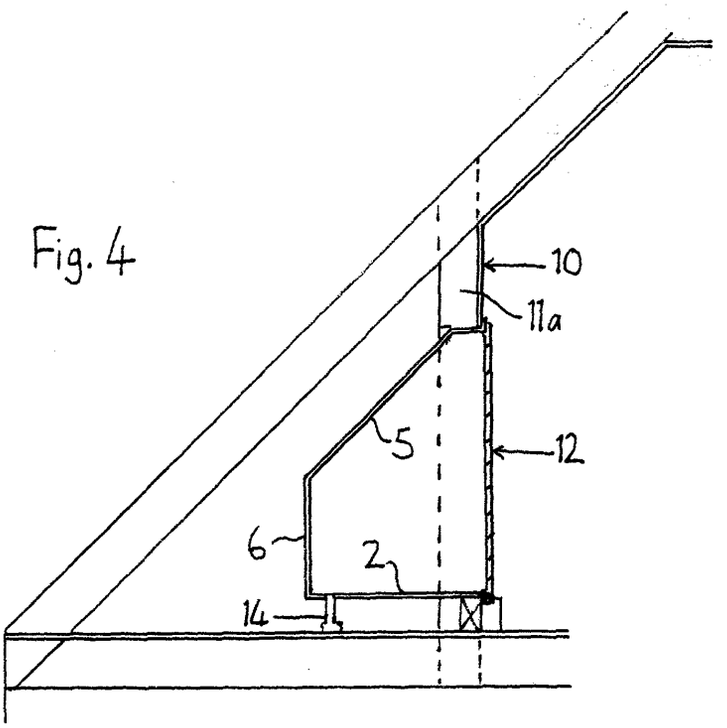
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(54) Item of furniture

(57) An item of furniture integrally moulded from plastics material has two parallel vertical sidewalls (1) defining two sides of a substantially rectangular front aperture (4), flanges (7) extending outwardly from the free edges of said sidewalls (1) for attaching the item to vertical studs (11), and an upper wall (5) joining said parallel sidewalls. The upper wall (5) lies at an angle of between 35° and 55° to the plane of the aperture (4) to facilitate fitting of the item of furniture into a loft conversion.

Fig. 4



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Description

[0001] This invention relates to an item of furniture.

[0002] In order to convert the loft of a house with a pitched roof into one or more usable rooms, it is common practice to erect vertical walls in the loft. Such a wall comprises a plurality of vertical studs, each attached to a rafter, and plasterboard supported by the studs. The space (generally a triangular prism) behind the wall is lost, which is particularly undesirable since in most cases the finished room is small.

[0003] WO 84/03822 is one of a number of documents describing cabinets that fit into rooms with a sloping wall. Such known cabinets are formed from plate sections that fit together. They are generally only suitable for installation in a loft in which vertical walls have not been installed to any significant height, and their construction is so complicated that they generally require fitting by an expert.

[0004] It is an aim of the invention to recover the lost space in a loft or similar room in a simple and inexpensive manner.

[0005] Accordingly, the invention provides an item of furniture integrally moulded from plastics material, having two parallel vertical sidewalls defining two sides of a substantially rectangular front aperture, flanges extending outwardly from the free edges of said sidewalls for attaching the item to vertical studs, and an upper wall joining said parallel sidewalls, the upper wall lying at an angle of less than 75° to the plane of the aperture.

[0006] We prefer the upper wall to be approximately parallel to the sloping wall of the room. Accordingly, said angle is preferably between 35° and 55° and more preferably approximately equal to a standard pitched roof angle of 45°.

[0007] In a preferred embodiment, the flanges comprise sections of a peripheral flange running around the aperture. The flanges may have holes for inserting connectors.

[0008] Preferably, the insides of the parallel sidewalls have elongated protrusions running at right angles to the plane of the aperture. These strengthen the item and allow shelves, drawers or baskets to be supported. Means for supporting a clothes rail may also be provided.

[0009] Preferably, the item includes a back wall and a base. The latter may be formed with means for attaching at least one adjustable support at a distance from the aperture.

[0010] Embodiments of the item are provided with at least one door hinged to one of the flanges or to one of the parallel sidewalls.

[0011] If *s* is a standard spacing between identical parts of two adjacent rafters and *t* is a standard thickness of a stud attached to a rafter, then the external width of the item, not including the flanges, is preferably approximately *ns* - *t*, where *n* is an integer from 1 to 4. To allow for variations in stud thickness, the width of the item not including flanges may be somewhat smaller than *ns* - *t* and the flanges may be as wide as 2*t*.

[0012] In order that the present invention may be more readily understood, reference will now be made, by way of example only, to the accompanying drawings, in which:

Figure 1 is a vertical section through of an item of furniture according to an embodiment of the invention;

Figure 2 is a front view of the item of furniture shown in Figure 1;

Figure 3 is a schematic transverse section of the item, installed in a loft with a door attached;

Figure 4 is a schematic vertical section of an item of furniture according to an alternative embodiment, installed in a loft; and

Figure 5 is a front view of the installed item of furniture shown in Figure 4.

[0013] Figures 1 to 3 show an integrally moulded item of furniture comprising two vertical sidewalls 1, a horizontal base 2 and a shallow horizontal top wall 3. The walls 1, 2, 3 define a rectangular front aperture 4. An upper wall 5, lying at an angle of approximately 45°, joins the top wall 3 to a back wall 6 of the item.

[0014] The item is provided with a flange 7 running around the entire perimeter of the aperture 4. Holes 8 are provided in the flange for fixing the item in place and attaching hinges.

[0015] The internal surface of each sidewall 1 includes elongated protrusions in the form of ribs 9. The ribs strengthen the item and serve to support shelves and/or drawers.

[0016] If *s* is a standard spacing, centre-to-centre, between two adjacent rafters and *t* is a standard thickness of a stud attached to a rafter, then the external width of the item, not including the flanges, is approximately *ns* - *t*, where *n* is an integer from 1 to 4. In the embodiment of Figures 1 to 3, *n* = 1 so that the item fits snugly between two adjacent studs.

[0017] The value of *s* is generally 400 mm or 600 mm, whilst *t* is generally approximately 25 mm. Thus, for *n* = 1, the width of the item, not including the flanges 7, is about 375 or 575 mm, whilst for *n* = 2, the width is about 775 or 1175 mm.

[0018] The item can be installed during the conversion of a loft space into a usable room, but its design also facilitates installation after a vertical lath-and-plaster wall has been erected. In this latter case, a rectangular opening is cut in the plasterboard 10 between two adjacent vertical studs 11 shown in Figure 3. The aperture has a width equal to the spacing between the studs, and a height equal to the height of the item of furniture,

not including the flange 7.

[0019] The item is inserted into the opening so that the flange 7 abuts the plasterboard 10. In order to fix the item in place connectors (not shown), preferably screws, are inserted through the holes 8 and the plasterboard 10 into the studs 11.

[0020] Figure 3 also shows a door 12 hinged at 13 to one vertical section of the flange 7. The door could be attached before or after installation of the item of furniture.

[0021] Figures 4 and 5 show an embodiment of the item in which $n = 2$, i.e. the width is approximately doubled. In order to install this item, one of the studs 11 a is cut at the top and bottom of the rectangular opening formed in the plasterboard. Once inserted into the opening, the item is then attached by inserting connectors through the vertical flange sections into the studs on either side of the cut stud 11a.

[0022] Figure 4 shows a foot 14 at the rear of the base 2. This foot could be screwable into a threaded orifice provided on the base in order to adjust the height of the item. As shown in Figure 5, this embodiment comprises two doors 12, one hinged to each vertical flange section, each door having a handle 15.

[0023] Modifications which do not depart from the scope of the appended claims will readily suggest themselves to the skilled reader. For example, the shallow top wall 3 could be omitted, the upper wall 5 extending as far as the aperture 4.

Claims

1. An item of furniture integrally moulded from plastics material, having two parallel vertical sidewalls (1) defining two sides of a substantially rectangular front aperture (4), flanges (7) extending outwardly from the free edges of said sidewalls (1) for attaching the item to vertical studs (11), and an upper wall (5) joining said parallel sidewalls, the upper wall lying at an angle of less than 75° to the plane of the aperture (4).

2. An item of furniture according to claim 1, wherein said angle is between 35° and 55°.

3. An item of furniture according to claim 1 or 2, wherein said angle is approximately 45°.

4. An item of furniture according to any preceding claim, wherein the flanges comprise sections of a peripheral flange (7) running around the aperture (4).

5. An item of furniture according to any preceding claim, wherein the flanges (7) have holes (8) for inserting connectors.

6. An item of furniture according to any preceding claim, wherein the insides of the parallel sidewalls (1) have elongated protrusions (9) running at right angles to the plane of the aperture (4).

7. An item of furniture according to any preceding claim, including a back wall (6) and a base (2).

8. An item of furniture according to claim 7, wherein the base (6) is formed with means for attaching at least one adjustable support (14) at a distance from the aperture (4).

9. An item of furniture according to any preceding claim, including at least one door (12) hinged to one of the flanges (7) or to one of the parallel sidewalls (1).

10. An item of furniture according to any preceding claim, having an external width, not including the flanges (7), of approximately $ns - t$, where n is an integer from 1 to 4, s is a standard spacing centre-to-centre between two adjacent rafters and t is a standard thickness of a stud (11) attached to a rafter.

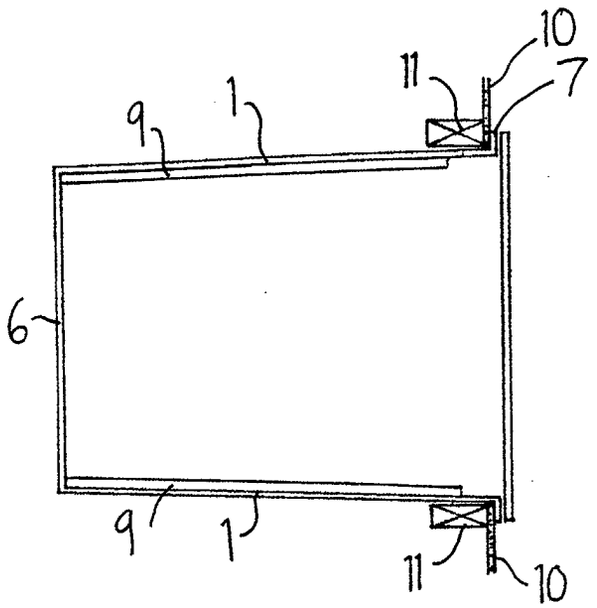


Fig. 3

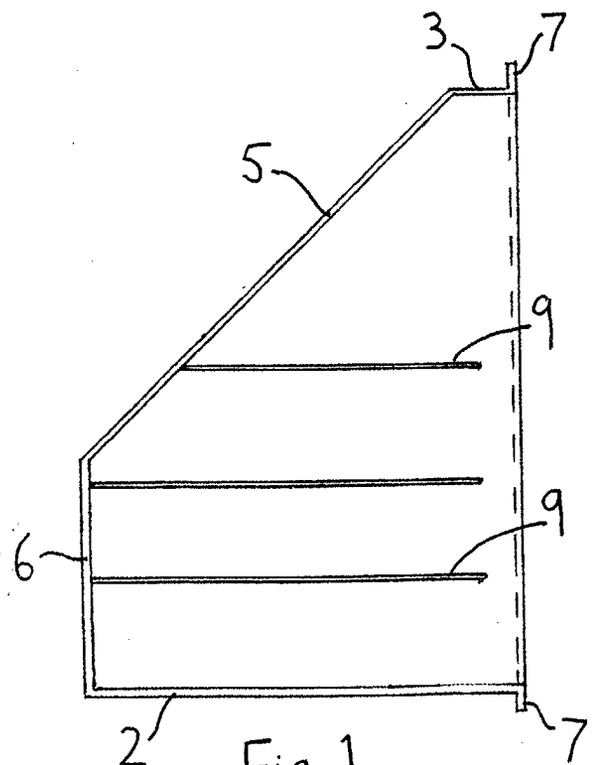


Fig. 1

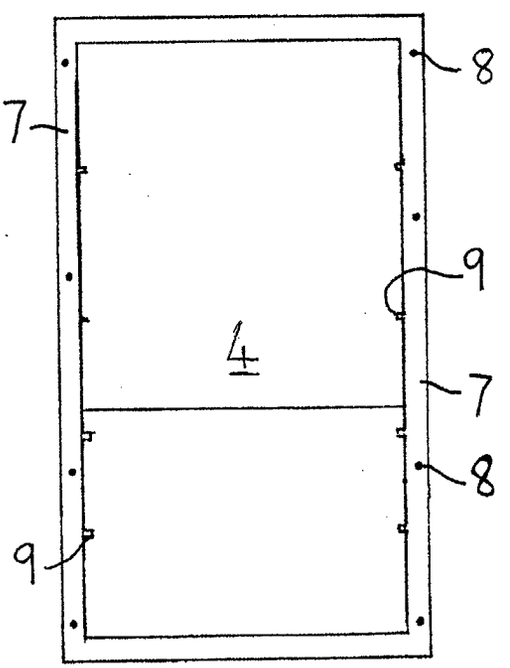


Fig. 2

Fig. 4

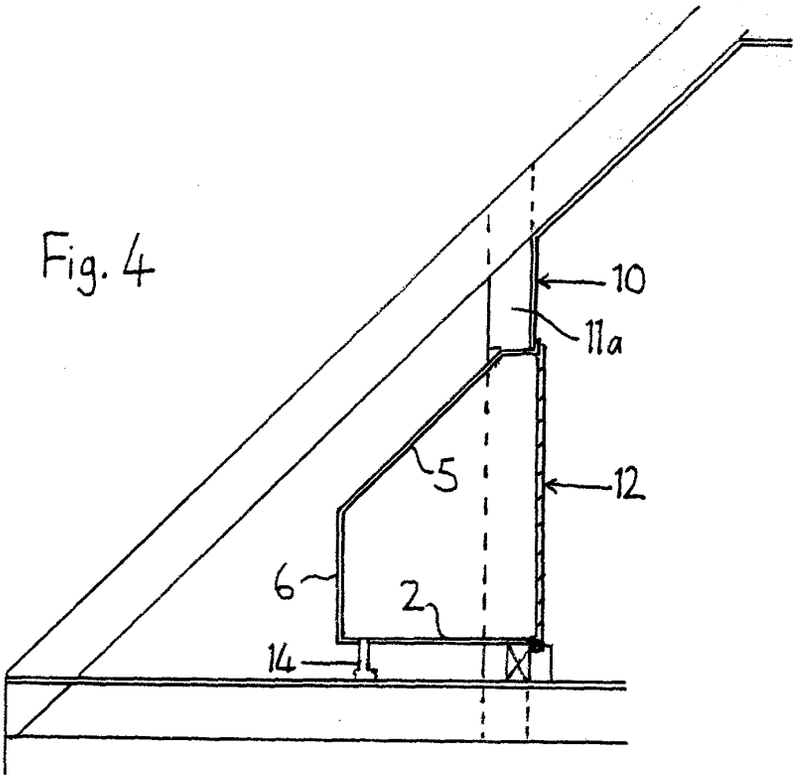
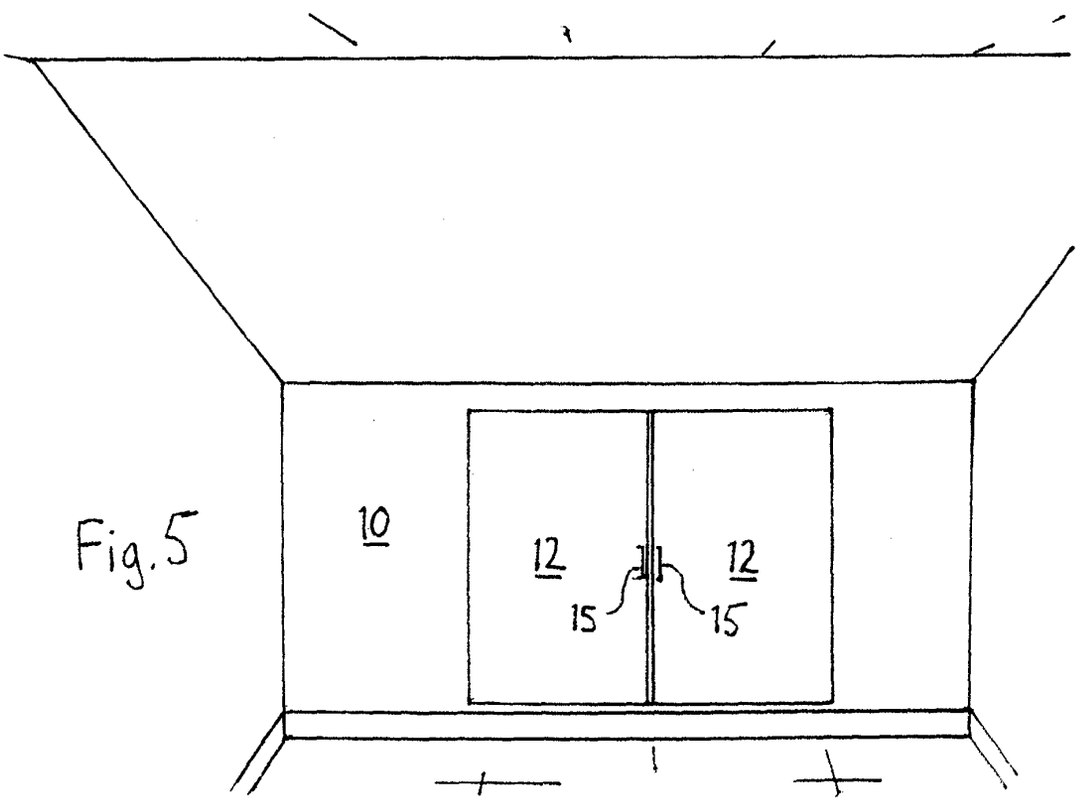


Fig. 5



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EUROPEAN SEARCH REPORT

Application Number
EP 02 25 8679

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	1 April 2003	Jones, C

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