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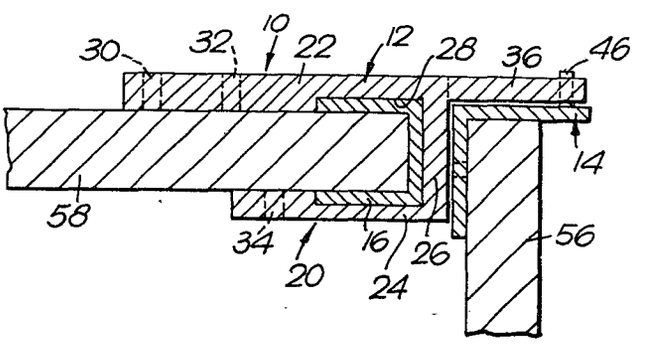
(54) Improvements in or relating to hinges.

(57) A hinge (10) for mounting a door (56) to a horizontally extending shelf member (58) comprises a first, shelf, bracket (12) and a second, door, bracket (14) adapted for pivotal engagement with one another about a vertical axis. The first bracket (12) comprises a retaining guide (16) typically in the form of a generally U-shaped or L-shaped member for fixing to the shelf (58) so as to abut at least two adjacent faces. A slide member (20) of the first bracket (12) is arranged to be a sliding fit with respect to the guide (16) to permit adjustment of the first bracket (12) laterally of the pivot axis (46, 38) in the direction of the length of the shelf (58). The lateral adjustment of the first bracket (12) permitted by provision of the co-operating retaining guide (16) and slide member (20) enables the lateral position of the hinge pivot axis (46, 38) to be readily adjusted thus greatly facilitating correct positioning of a hinge during hanging of a door. Also disclosed is a cupboard/storage system in which a door is hung from horizontal structural members, e.g. shelves, conveniently using hinges of the invention.



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Title: Improvements in or relating to hinges

DESCRIPTION

Field of invention

This invention relates to hinges and is concerned particularly, but not exclusively, with hinges suitable for use in supporting doors on cupboards/storage systems, such as kitchen units.

Background to the invention

Purpose built storage units such as kitchen units are generally expensive and available only in standard sizes when purchased ready made. Units designed specifically to a user's particular requirements are considerably more costly, and although such specific units can be built and erected by the competent "do-it-yourself" enthusiast , considerable problems arise in providing precise, robust and rigid supports which align the cupboard walls and shelves with the vertical and/or horizontal and in achieving mountings for the doors so that they fit properly to the cupboard frame when closed and freely open when necessary without strain on the hinges.

It is accordingly one object of this invention to provide an improved hinge of particular interest to the user wishing to erect cupboards on a "do-it-yourself" basis, but also having applicability to mass manufactured storage units,.

A further object of the invention is to provide an improved cupboard/storage system.

The invention

According to one aspect of the present invention there is provided a hinge for mounting a door to a horizontally extending member, which hinge comprises first and second brackets for mounting respectively to the horizontally extending member and door, the brackets being relatively pivotable (about a vertical axis), the first bracket for the horizontally extending member comprising a retaining guide adapted to be fixed to the horizontally extending member so as to abut at least two adjacent faces thereof, the first bracket further comprising a slide member co-operating with the second,door, bracket, moveable along the retaining guide to permit adjustment of the first bracket laterally of the pivot axis in the direction of the length of the horizontally extending member.

The lateral adjustment of the first bracket permitted by provision of the co-operating retaining guide and slide member enables the lateral position of the hinge pivot axis to be readily adusted, thus greatly facilitating correct positioning of a hinge during hanging of a door.

Typically a door will be hung by using a pair of hinges in accordance with the present invention, one at the top and one at the bottom of the door. The retaining guides of the hinges are located on the horizontally extending members, e.g. shelves, abutting at least two adjacent faces thereof in generally the correct lateral position and may be secured in this position. Here it is to be noted that the abutment of the guides with two adjacent faces, generally the front and upper and/or lower horizontal faces of the shelf, assists in positive location of the guidesin appropriate positions. The slide members (preferably with the door attached thereto via the door brackets) are then fitted over the guides and slid laterally to the correct position with the two pivot axes accurately aligned vertically and the door accurately

positioned with regard to surrounding components such as adjacent doors or side panels. The slide members may then be fixed in position if appropriate.

It is to be noted that with preferred embodiments at least the hinges act to hold the door on the horizontally extending members while adjustment is being effected, thus greatly simplifying the hanging operation. Further, such adjustment can be effected with the door closed.

The hinge components may be of any suitable material and typically are of metal, such as aluminium steel or zinc alloy, or plastics material, such as nylon.

The first bracket comprising the retaining guide and co-operating slide member may have a variety of different configurations. In a typicaly embodiment the guide is in the form of a generally U-shaped channel member adapted to be fitted over the front edge of a horizontally extending member, abutting the front and upper and lower faces thereof. The co-operating slide member is also of generally U-shaped channel configuration, being suitably recessed for sliding engagement with the guide. The slide member typically also includes an outwardly extending flange for co-operating with the second, door, bracket and including a pivot pin or hole.

The guide may alternatively be of L-shaped cross section with the slide member of co-operating L-shaped or U-shaped section. The ends of the L-shaped guide may be inwardly bevelled.

If desired, one or more faces of the guide may include an outwardly extending dovetail section portion, co-operating with a correspondingly shaped recess in the slide member.

The second bracket is typically in the form of an L-shaped section member with a depending rear limb and a generally horizontal limb. The hinge may also include

a third depending front limb or lip. The second bracket may conveniently include a user handgrip. This bracket also carries a pivot pin or hole in appropriate location for co-operation with the corresponding component of the first bracket.

Multiple hinge embodiments are possible, for example comprising a double first bracket for mounting two doors side by side or one above another. Alternatively, the first bracket may be adapted for stacking with similar co-operating brackets.

The various hinge components may be fixed to the horizontally extending member and door, as appropriate, in a variety of different ways, suitable techniques depending on the construction and material of the components concerned. For example, the retaining guide may be fixed to the horizontally extending member by use of nails, screws, adhesive, serrations, wedges, bolts, by a gripping or clamping device or by friction fit. Screw holes are provided in some embodiments to facilitate fitting. The slide member may be fixed relative to the retaining guide by being secured to the guide and/or horizontally extending member by using similar techniques. Again screw holes are conveniently provided in some embodiments. These may be in the form of slots to permit subsequent fine adjustment of the position of the slide member. The door bracket may be secured to the door by using similar techniques. Again screw holes may be provided. A ratchet arrangement may alternatively be used.

It will be apparent that use of hinges in accordance with the present invention enable easy construction of cupboard/storage systems in which the door is hung from horizontally extending members, such as shelves.

Hence, in a further aspect the present invention provides a cupboard/storage system comprising a plurality

of upright strucutral members forming supports for a plurality of horizontal structural members at least two of which comprise the top and bottom members of a cupboard, and at least one door member for closing the front of the cupboard so formed being hingedly attached to the aforesaid at least two horizontal structural members for pivoting about a vertical axis.

This aspect of the invention thus resides in the erection of at least two horizontal "shelf" members and the mounting of at least one door to such shelves. In the simplest case, two shelf members for forming the top and bottom of a cupboard may be mounted horizontally across a recess and closed at the front by means of a single door hinged top and bottom to the shelf members at one side of the recess. More usually the two shelf members, possibly with an intermediate such member for constituting an internal cupboard shelf, will be mounted to spaced uprights, for example, free standing side or rear uprights, uprights fixed between floor and ceiling or rear uprights mounted in free space on a wall, the cupboard(s) being completed by end panels fixed across exposed ends of the shelf members to form cupboard side walls and one or more doors, eg at least one pair, hinged to the top and bottom shelf members at the front edges thereof. Vertical dividing walls may be provided within the cupboard(s) as necessary.

It is an essential feature of this aspect of the invention that the shelf members should be mounted to the upright structural members (which may be walls) and the remaining parts of the cupboard(s) mounted to said shelf members. Accordingly, it is desirable to ensure that the uprights are vertical and that the shelf members are horizontal; otherwise it is difficult if not impossible to hang the doors properly. It is visualised for example,

that in the case of rear uprights on a wall, these will take the form of slotted channel section receiving shelf-supports in the slots. Packing or other suitable means may then be used to ensure that the uprights are vertical; alternatively adjustable bracket devices may be employed. In addition, however, it is important to ensure that the shelves mounted to the shelf supports are horizontal. Clearly, rough horizontal adjustment is achieved by selection of matching slots in the respective supporting uprights; for fine horizontal adjustment end-to-end of the shelf, it may be convenient to provide adjustable bracket devices for adjusting a shelf member relative to its supports on the rear uprights. Alternatively, uprights with vertical slots for receiving the wall fixing screws can facilitate levelling of shelf members.

It will be clear that the hinge of the invention findsapplicability in the system of the invention.

The invention will be further described, by way of example, with reference to the accompanying drawings.

In the drawings

Fig.1 is a sectional view of one embodiment of a hinge in accordance with the present invention;

Fig.2 is a perspective of the first bracket of the hinge of Fig.1;

Fig.3 is a perspective view of the second bracket of the hinge of Fig.1;

Fig.4 is a perspective view of a modified second bracket similar to that shown in Fig.3;

Fig.5 is a diagrammatic side elevation of a cupboard mounted in accordance with the system of the invention;

Figs.6A and 6B respectively show a pair of brackets together constituting a further embodiment of hinge in accordance with the invention;

Fig.7 is a sectional view of the hinge constituted by the bracket shown in Fig.6A and 6B;

Fig.8 is a sectional view illustrating a further embodiment of hinge in accordance with the present invention, with two hinges being shown supporting a door;

Fig.9 is a view similar to Fig.8 illustrating yet another embodiment of hinge;

Fig.10 is a sectional view of yet a further embodiment of hinge in accordance with the invention; and

Fig.11 illustrates a detail of an alternative construction of the first bracket of a hinge in accordance with the present invention.

Detailed description of the drawings

Referring to the drawings, Figs. 1,2, and 3 illustrate an "upper" hinge 10 comprising a first, shelf, bracket 12 and a second, door, bracket 14 adapted for pivotal engagement with one another.

The bracket 12 comprises a retaining guide 16 in the form of a generally U-shaped channel member having parallel spaced apart upper and lower side walls linked by a base wall. The base wall includes two circular holes 18 for fixing purposes to be discussed below. The bracket 12 further comprises a slide member 20 again in the form of a generally U-shaped channel member having parallel spaced apart upper and lower side walls 22 and 24 linked by a base wall 26. The inner faces of the side walls 22 and 24 are recessed in their regions adjacent to the base wall 26 to define an enlarged channel portion 28 of appropriate configuration to receive the guide 16 as a sliding fit.

The slide member 20 is formed with fixing apertures comprising a circular hole 30 and an elongate slot 32 in the upper side wall 22, and an elongate slot 34 in the lower side wall 24.

The upper side wall 22 is extended forwardly in a flange 36 with a circular hole 38 passing therethrough adjacent to the outer edge thereof.

As shown in Fig.2 the base wall 26 and lower side wall 24 are cut away in their end regions adjacent to the flange 36: this is to enable a side wall or other vertical member (not shown) at the edged shelf 58 to be accommodated. In some embodiments the upper side wall 22 may also be cut away in a similar manner to accommodate a side wall or other vertical member extending above the upper surface of the shelf 58.

The second, door, bracket 14 comprises a generally L-shaped member having a depending limb 40 and a substantially

horizontal limb 42. The depending limb 40 is formed with one or more fixing holes 44. At one end adjacent its outer corner the horizontal limb 42 carries a pivot pin 46 adapted for engagement with the hole 38 in the first bracket flange 36. The brackets may be permanently connected, eg. by rivetting.

The second bracket 14 also comprises two additional, separate components both of generally L-shaped cross-section; an intermediate elongate member 48 and an end member 50 formed with a lip 52 to constitute a user handgrip. Both

of these components include fixing holes 54 in their downwardly depending rear limbs.

In use, two similar brackets consisting of an upper bracket 10 as illustrated and a lower bracket, which is a mirror image thereof, are used to hang a door 56 on two horizontally extending shelf members, only the upper one 58 of which is illustrated.

Each retaining guide 16 is fitting to the front edge of the relevant shelf with the base wall thereof abutting and engaging the front edge of the shelf and with the upper and lower side walls abutting and engaging edge regions of the shelf upper and lower faces. The guide is located in generally the appropriate lateral position on the shelf, being slid with respect to the shelf if necessary. If appropriate, the guide may then be secured in position, for example by passing screws or nails through the holes 18. Alternatively, the guide may be secured by means of adhesive, serrations, bolts, wedges, or by a gripping or clamping device etc., or by friction fit. Further, in embodiments in which the guide is of plastics material, for example, nylon, the holes 18 may be eliminated and the guide simply nailed in position by one or more nails puncturing and passing through the guide material and the shelf.

The slide members 20 may then be slid onto and along the respective guides 16. Conveniently the slide members 20 are initially attached to the door 56 via the brackets 14. This is effected by securing two brackets 14 (an upper bracket and lower bracket) to the door 56 adjacent its upper and lower edges. The brackets are convenient held in position by use of screws or nails passing through the holes 44. The brackets 14 may alternatively or additionally be glued or fixed by adhesive strips or wedged to the door 56, or other alternative fixing techniques such as those mentioned above may be used. The slide members 20

are attached to the brackets 14 by means of the pivot pins 46 and holes 38.

The door 56 with the attached bracket components may be fixed in one piece to the shelves by sliding the slide members 20 over the associated guides 16. Although not shown, the guides 16 may be conveniently formed with bevelled edges to facilitate such fitting. When the door is fitted in this way the position of the two slide members 20 may then be adjusted to their correct lateral positions, with the two hinges (constituted by components 46 and 38) accurately aligned vertically and the door in an appropriate position having regard to its surroundings to match these and to close properly. It is to be noted that such adjustments of the door with respect to the shelves may be effected with the door attached and closed, which is a substantially improvement on conventional hinging arrangements.

When the door is in the correct position the slides 20 are then fixed in position with respect to the guides 16, generally by securing each slide to the associated shelf or guide. In the illustrated embodiments this is conveniently effected by passing screws through holes 30 and slots 32 and 34. Use of the slots permits subsequent fine adjustment of the lateral position of the slide member 20, for example, following minor settlement or shifting during use.

It is to be further noted that with this embodiment securing of the slide members with respect to the guides can be effected from the outside of the resulting unit, using holes or slots 30 or 32. This means that the door 56 can be kept closed and so reduces the risk of upsetting the alignment of the door prior to final fixing in position.

Alternative fixing techniques for the brackets can also be used. For example, it is possible to provide a spring acting between the guide 16 and the slide 20, or a

form of frictional grip, so as the door is adjusted it can be left without tightening.

Fig.4 illustrates a modified form of door bracket 14'. In this version the three separate components as illustrated in Fig.3 are effectively combined into a single piece. It is further to be noted that the depending limb is cut-away adjacent to the pivot pin for flush fitting. The handle may be absent.

In both types of door bracket, as illustrated in Figs. 3 and 4, the horizontal limb serves as an edging strip for the upper edge of the door 56 and functions to conceal the top edge of the door and possibly to hide any blemishes or irregularities.

The Fig.3 embodiment is more versatile; it can be cut to length so as to fit any width of door, and one or more parts can be omitted as appropriate. For intance, probably only one handle portion (including lip 52) will be required for one door.

Various further modifications to the above described hinge are also possible. For example, it will be apparent that the first bracket member 12 may have two flangesto co-operate with a pair of second bracket members 14, one on the lower edge of the door of an upper cupboard and one on the upper edge of a door of a lower cupboard. Also, between a pair of doors to be hinged on adjacent sides an elongated first bracket member 12 may have flange(s) at its centre for respective co-operation with a pair of second bracket members 14 generally side by side at the top or bottom adjacent corners of the two doors and alternatively may co-operate with the doors above to form a nest of four.

Additionally, for example, the pivot apertures in the bracket members 12, which receive the pivot pins on the bracket members 14, may be adjustable in position to cater for differing door thicknesses,

or may be defined by the bottom of slots closed by sprung shields or closeable slides, thereby to permit the pivot pins to be inserted from the front. Again, the slide member 20 may co-operate with the guide 16 in various ways, e.g. by means of a rack or worm mechanism or through a connecting spring. The guide may, if desired, extend the full length of the shelf or only part thereof.

Side walls may be fixed to a cupboard, either before or after fitting of a door, and this may conveniently be effected by fixing end panels to the shelf ends by conventional means. Further, door handles, magnetic door catches and the like may be fitted in conventional manner.

Referring now to Fig.5, this figure illustrates a cupboard storage system conveniently constructed using hinges such as hinge 10, described above. In Fig.5 the reference numeral 100 denotes one of a number of spaced uprights fixed to a wall 102. The uprights 100 each comprise a slotted channel section member of the kind commonly employed to mount shelves for books or the like.

Shelf supports 104 hook into the slots in the uprights 100 and adjustable bracket devices may be mounted to the shelf supports 104 to hold shelves 108, with such devices being adjust to ensure that the shelves 108 are horizontal. The shelves 108 are used to support the remaining parts of a cupboard or cupboards, possibly including end panels (not shown) fixed across the ends of the shelves to form the side walls of the cupboard(s) and one or more doors 110 fixed to the front edges of the shelves to close the cupboard front(s).

Each door is mounted in position (either before or after side panels are fixed in position) by top and bottom corner hinges 112 (possibly similar in construction to hinge 10) each in the form of a pair of relatively adustable brackets which enable the top and bottom pivots to be vertically aligned and adjacent doors to be relatively positioned along the length of the shelf members 108.

A plinth 114 is fixed below the bottom shelf 108 generally to conceal the shelf supporting members 104.

It is to be noted that cupboard side walls may not be required when the shelf ends abut a fixed wall structure. Further, a number of intermediate level shelves, not used for mounting the door or doors, may be provided as required, and likewise vertical partitions separating adjacent cupboards or sub-dividing individual cupboards may be provided, as may buttresses.

Figs.6A,6B and 7 illustrate a further hinge 120 which is broadly similar in construction to the hinge of Figs. 1 to 3. The main area of difference concerns the configuration of guide 122, and hence of the co-operating part of slide member 124.

The guide 122 comprises a major horizontal limb 126 having a depending lip 128 such that,in use, the guide abuts the front edge face and an adjacent face (the upper face in the illustrations) of shelf 130 - this assists in positive location of the guide during fitting. The major limb 126 is formed with a dovetail section protrusion 132.

The guide 122 may be fitted in position adjacent the edge of a shelf by any convenient technique, such as those discussed above.

The slide member 124 includes in its upper limb a correspondingly shaped recess 134 running along its length so that the slide member 124 and guide 122 may be fitted to one another in sliding relationship. In the illustrated embodiment the recess 134 extends the full width of the slide member although this is not, of course, essential. The recess 134 may be of shorter width than the slide member provided, of course, that it opens at one edge of the member to enable insertion of the guide 122. The recess may also be of longer width.

As before the upper wall of the slide member 124 includes an outwardly extending flange which is arranged to overlie door 136, but need not be level with the top of the shelf 130. The positioning of pivot pin 138 and hole 140 locates the pivot access of the door sufficiently far from the shelf 130 to allow the door to be opened throught up to substantially 270°.

Door bracket 142 is generally similar to bracket 14- of Fig.4. However, it additionally includes a depending lip 144 on its outer edge which serves both to protect the adjacent edge 146 of the door front from damage and also to hide any chips or cuts in this edge. This is particularly advantageous if the door is covered with a decorative laminate.

In a modification (not illustrated) the lip 144 of the bracket 142 may be enlarged and its inner surface roughened or provided with ribs with the separation of the depending rear limb and the lip 144 being such as to provide a press fit of the bracket 142 on the door 136. The position of the hinge pin may also be adjustable laterally of the bracket 142 to aid vertical alignment of the door 136 and take account of varying door thicknesses. The former may also be accomplished by allowing for the sliding member 122, or the flange thereof, to be adjustable towards and away from the door 136.

Further, although the bracket 142 is described as serving as an edging for the door 136 in its simplest form it merely serves as the hinge part.

A pair of hinges 120 may be used in similar manner to the hinge 10 as described above.

In one form of hinge not illustrated in the drawings the guide may be in the form of an expandable continuous track which is secured to the supporting shelf member, e.g. 130, and along which the slide member is normally free to slide. Once the slide member is located in position it is secured in an appropriate manner. This continuous

track may additionally be used to permit location of accessories at any point along its length.

In a further modification (not illustrated) a thin strip in the form of a rearwardly projecting lip or flange, which is either fixed or separate, can be incorporated into the rear face of the rear limb of the door bracket. The function of the strip is to stop entry of dust and grease to the interior of the cupboard; it therefore runs between the door and adjacent shelf and completely fills up the gap. Alternatively, there may be a projection or a groove may accommodate a strip of plastics material.

Fig.8 illustrates a modified embodiment of hinge, with two hinges, mirror images of each other, being shown mounting a door to two spaced apart vertically extending shelf members. Each hinge is generally similar to that shown in Figs. 1, 2, and 3. The main difference in this embodiment is the configuration of guide 150: this is in the form of a generally 'L' shaped member which abuts to adjacent sides of the shelf - the front face and the upper or lower face as appropriate. The guide 150 includes inwardly bevelled edges, and the slide member 152 includes a correspondingly shaped recess 154 to provide for the required sliding engagement.

Further, in this embodiment the upper wall of the slide 152 is truncated and the flange 156 is arranged so as to be generally flush with the surface of the shelf.

It will be clear that this general configuration of hinge may be modified in certain minor ways. For instance, the arrangement may be inverted with the lower hinge guide engagement the edge and lower face of the associated shelf etc.. In addition, the flange 156 need not be flush with the associated surface of the shelf.

Fig.9 illustrates an arrangement generally similar to that of Fig.8 but incorporating a further modified shelf bracket. In this bracket the guide 158 is in the form of

a generally 'L' shaped member having a major horizontal limb 160 with a minor vertical lip or limb 162 for engaging the edge face of the associated shelf to assit in positive location of the guide during positioning. The guide 160 is outwardly tapered to form a generally dovetail section, and the associated slide 164 includes a correspondingly shaped recess 166 for sliding engagement It will be noted that in this embodiment the slide 164 is not flush with the associated shelf.

Fig.10 illustrates a further embodiment of hinge 168 which is generally similar to the hinge illustrated in Figs. 1,2 and 3 but which is adapted to co-operate with a further hinge 170 so that two doors 172 and 174 may be "stacked" one above another. To this end, the upper face of the first, shelf, bracket of the first, lower, hinge 168 includes recesses 176 into which pegs 178 on a first hinge part of the second, upper, hinge 170 may be fitted. Interfitting in this way results in two closely spaced stacked doors which may be independently opened.

In the first bracket illustrated in Fig.11 retaining guide 200 is of generally U-shaped configuration and is provided with ratchet teeth 202 on its upper side wall. Its lower side wall is plane. A fixing slot or hole 204 is provided in its base wall.

Slide member 206 is also of generally U-shaped configuration with the side walls being recessed adjacent to the base wall to define an enlarged channel portion of appropriate configuration to receive the guide 200 as a sliding fit. The side walls of the recesses are provided with ratchet teeth (not shown) for co-operation with those of the guide 200.

In use, the retaining guide 200 with the ratchet teeth 202 upper most is pushed over the edge of a horizontally extending member 208 and fixed in position by passing a screw through the fixing hole 204. The slide member 206 is slide over the retaining guide - sliding

movement is possible when the guide is lifted relative to the slide to free adjacent sets of ratchet teeth, but when the slide is lowered the ratchet teeth 202 on the guide engage with those of the upper side wall of slide member 206 and prevent movement.

When slide member 206 is in the correct position it is fixed in position with respect to guide 200, e.g. by sliding a shim 210 between the lower walls of the retaining guide 200 and slide member 206, in the direction of arrow 'A' in Fig.11, between the plane face of the retaining guide and the ratchet teeth of the slide member to take up all the available space so that the upper ratchet teeth cannot disengage.

Part of the enlarged channel portion of the slide member may be recessed and the shim 210 may have a co-operating point so that it can be easily removed for further adjustment to take place.

It is to be noted that the first bracket may include no further fixing holes other than hole 204 in the retaining guide 200.

In all of the above described embodiments the hinge components may be made of any suitable material, conveniently metal, for example aluminium, steel or zinc alloy, or plastics material, for example nylon. Different components of a particular hinge may be of different materials.

Claims

1. A hinge (10) for mounting a door (56) to a horizontally extending member (58) characterised in that the hinge comprises first and second brackets (12, 14) for mounting respectively to the horizontally extending member and door, the bracket being relatively pivotable (about a vertical axis), the first bracket (12) for the horizontal extending member comprising a retaining guide (16) adapted to be fixed to the horizontally extending member (58) so as to abut at least two adjacent faces thereof, the first bracket further comprising a slide member (20), cooperating with the second, door, bracket (14), movable along the retaining guide (16) to permit adjustment of the first bracket (12) laterally of the pivot axis (46, 38) in the direction of the length of the horizontally extending member (58).

2. A hinge according to claim 1 characterised in that the retaining guide (16) comprises a generally U-shaped channel member, the slide member (20) also being of generally U-shaped channel configuration and being suitably recessed for sliding engagement with the retaining guide.

3. A hinge according to claim 1 characterised in that the retaining guide (122, 150, 158) comrpises a generally L-shaped cross section member, the slide member being of co-operating L-shaped or U-shaped section.

4. A hinge according to claim 1, 2 or 3, characterised in that the slide member includes an outwardly extending flange (36) for cooperating with the second bracket.

5. A hinge according to any one of the preceding claims, characterised in that one or more faces of the guide (122) include an outwardly extending dovetail section portion (132) cooperating with a correspondingly shaped recess (134) in the slide member (124).

6. A hinge according to any one of the preceding claims, characterised in that the hinge components include fixing holes (30, 32, 34, 54).

7. A hinge according to any one of the preceding claims, characterised in that the second bracket (14) comprises an L-shaped section member with a depending rear limb (40) and a generally horizontal limb (42).

8. A hinge according to claim 7, characterised in that the second bracket additionally includes a third depending front limb or lip (144).

9. A hinge according to any one of the preceding claims, characterised in that the first bracket is adapted for co-operation with two or more second brackets.

10. A cupboard/storage system characterised by a plurality of upright structural members (100) forming supports for a plurality of horizontal structural members (108) at least two of which comprise the top and bottom members of a cupboard, and at least one door member (110) for closing the front of the cupboard so formed being hingedly attached to the aforesaid at least to horizontal structural members (108) for pivoting about a vertical axis.

Fig. 1.

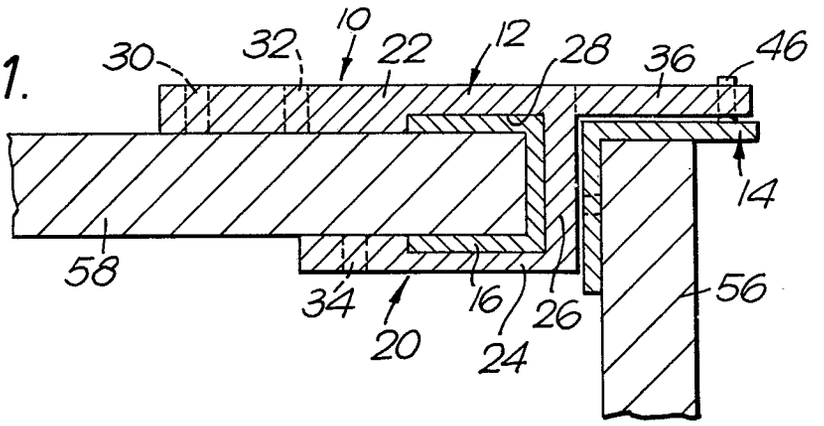

Fig. 2.

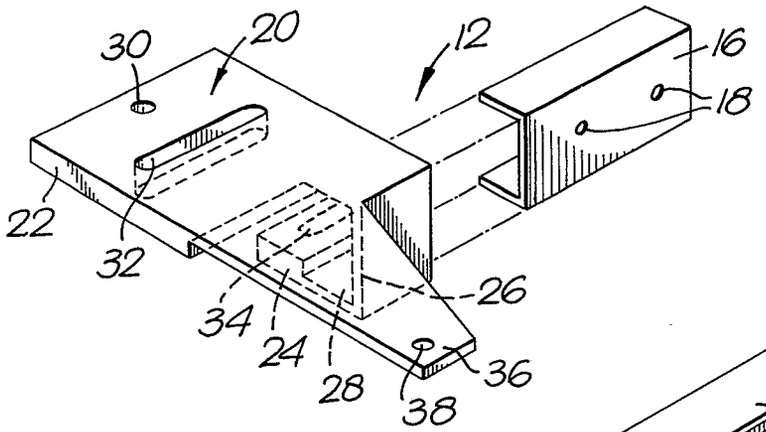

Fig. 3.

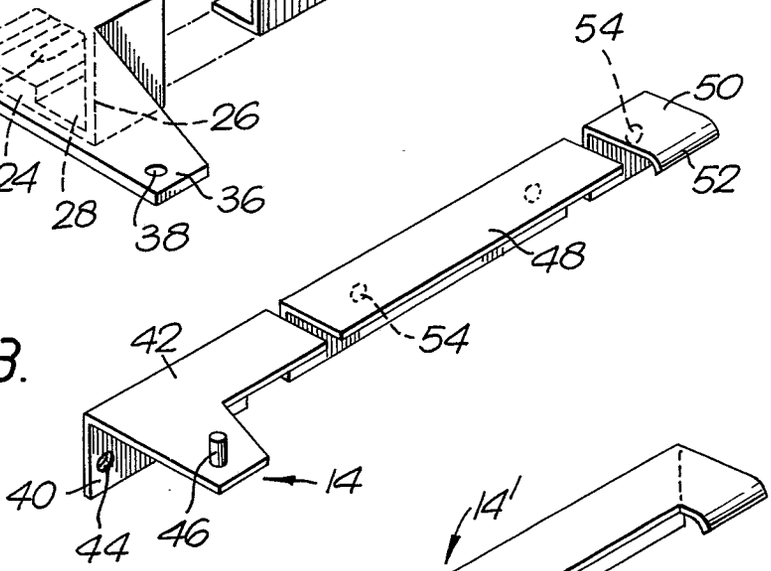

Fig. 4.

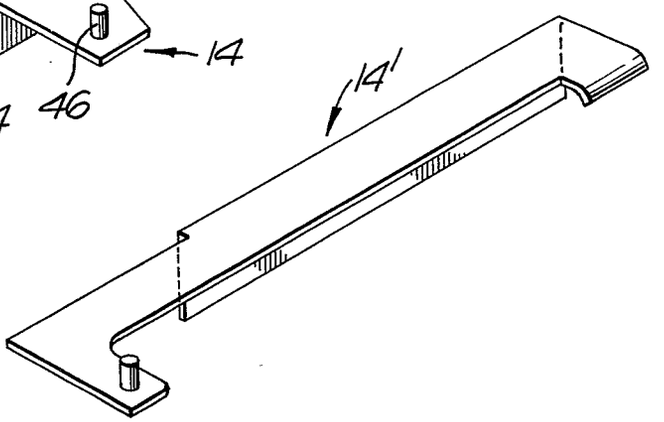

Fig. 5.

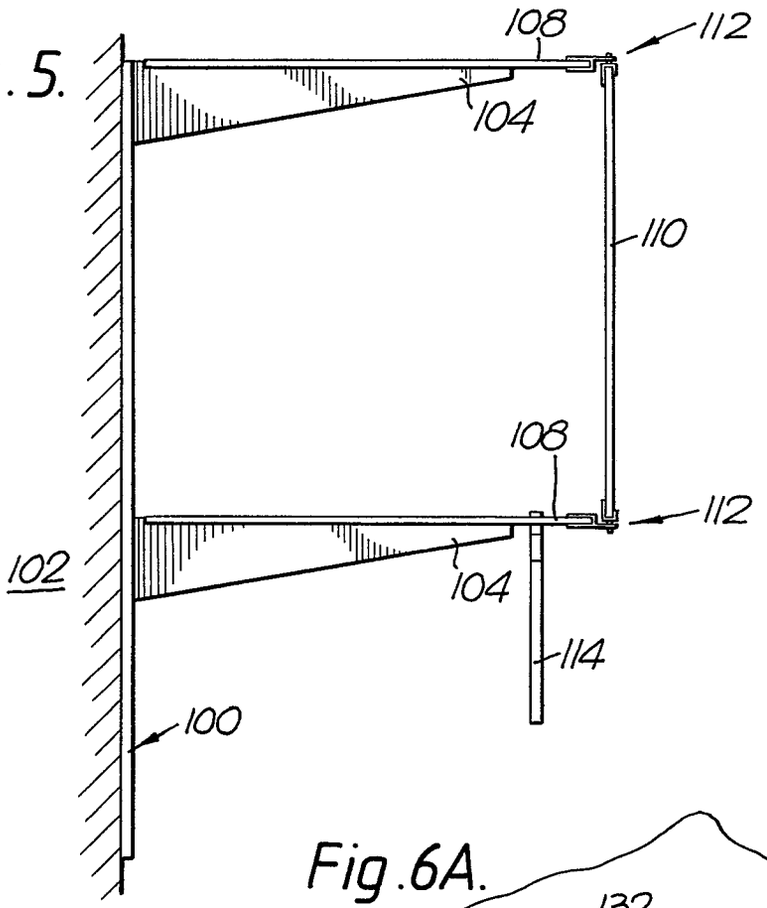
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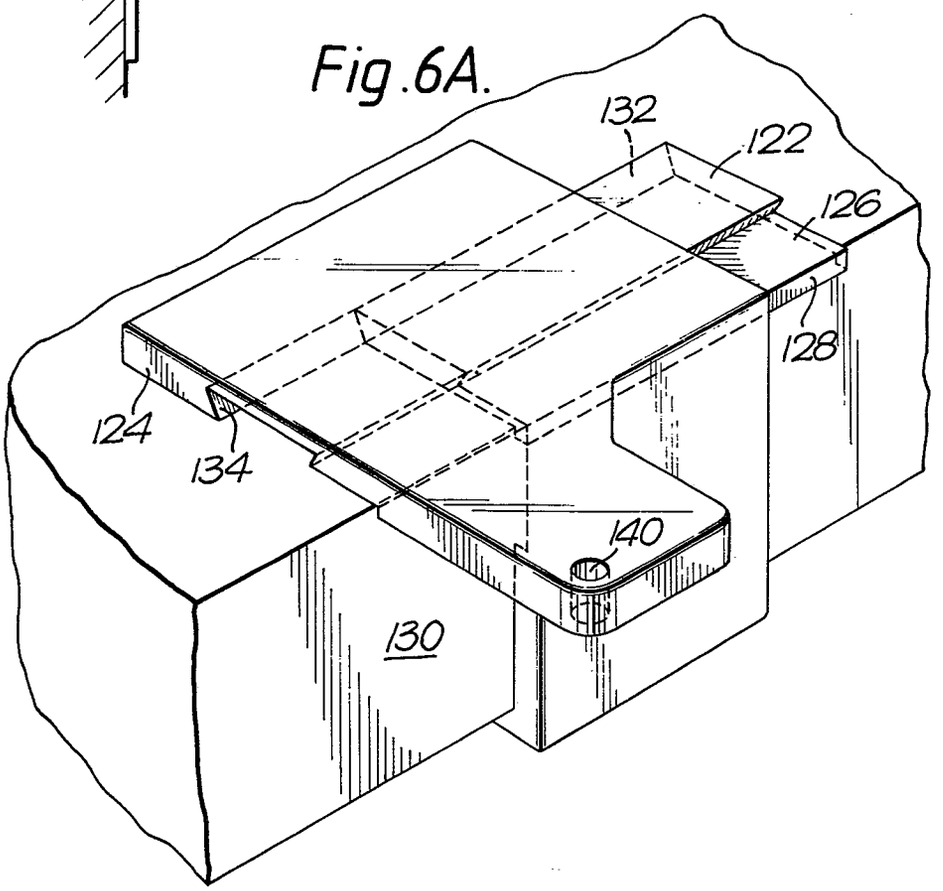
Fig. 6A.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130

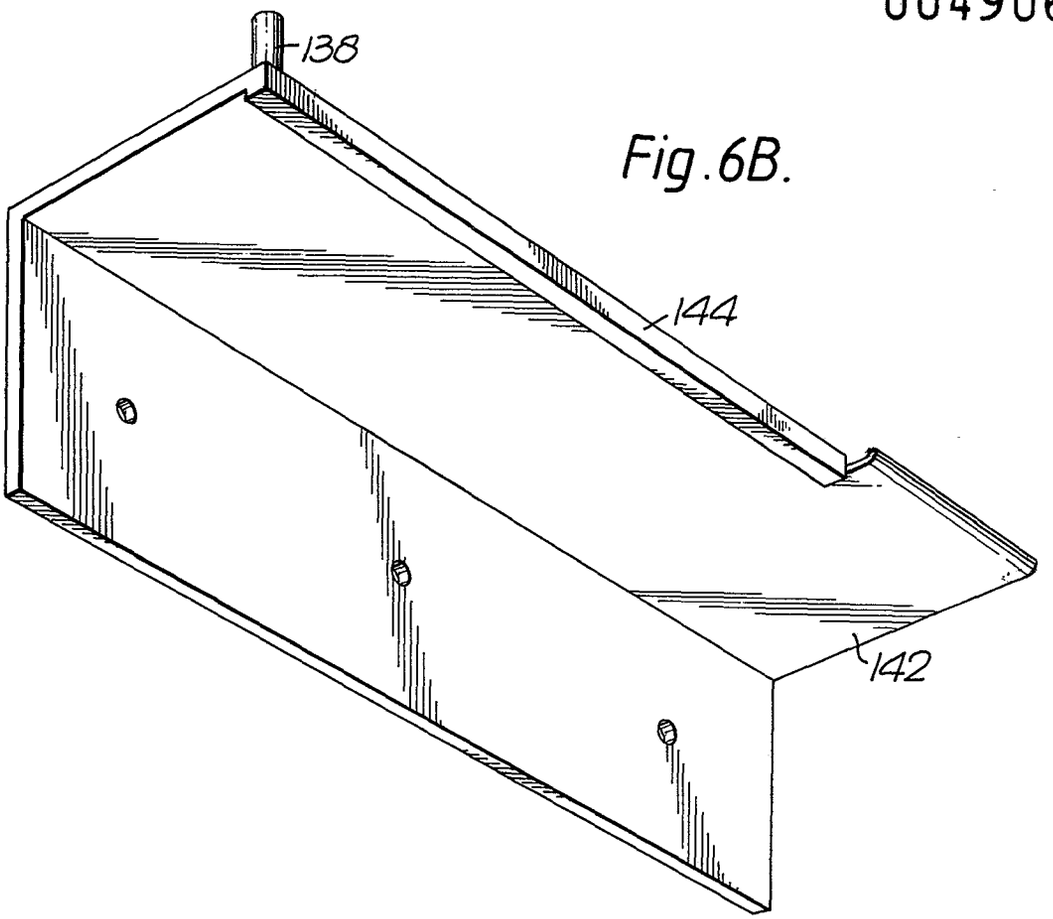
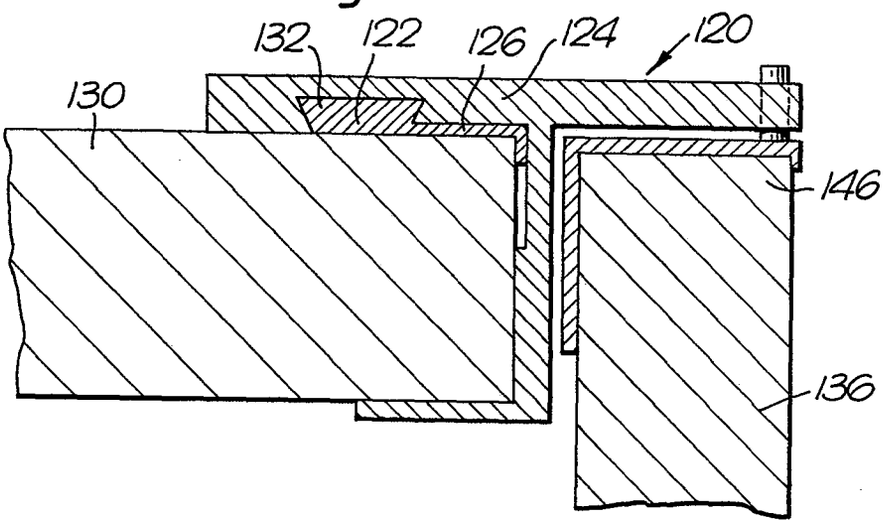


Fig. 6B.

Fig. 7.



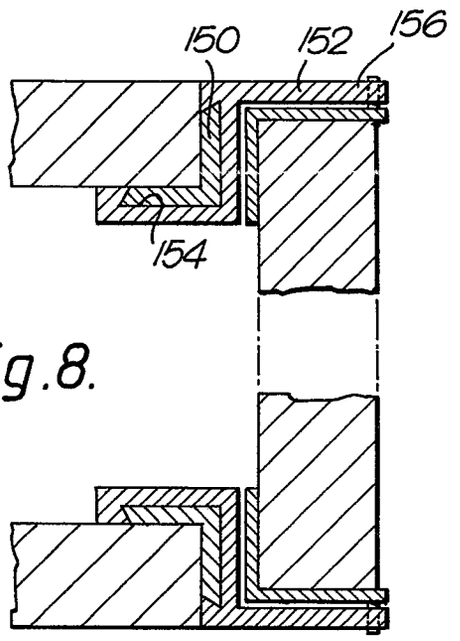


Fig.8.

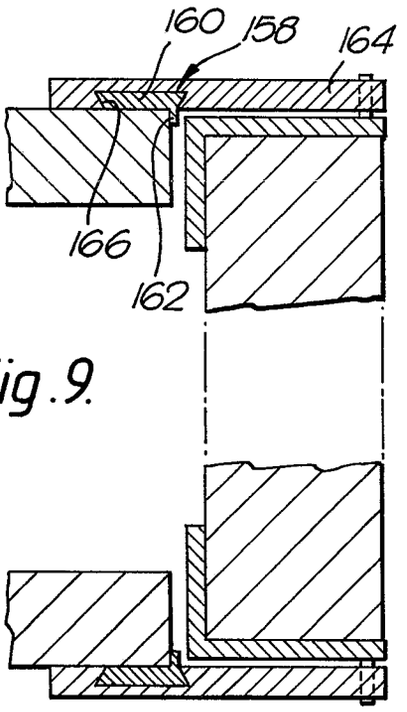
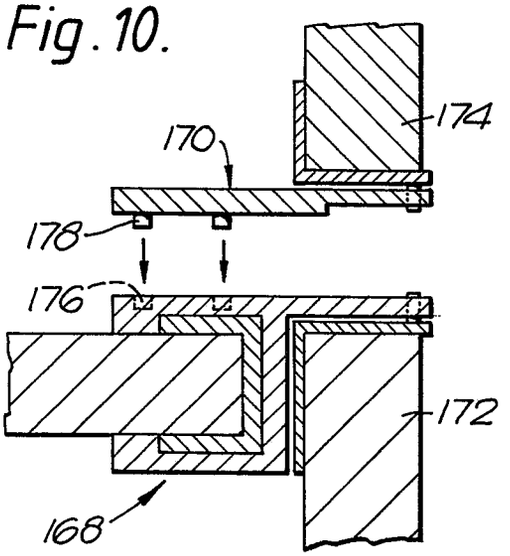


Fig.9.

Fig.10.



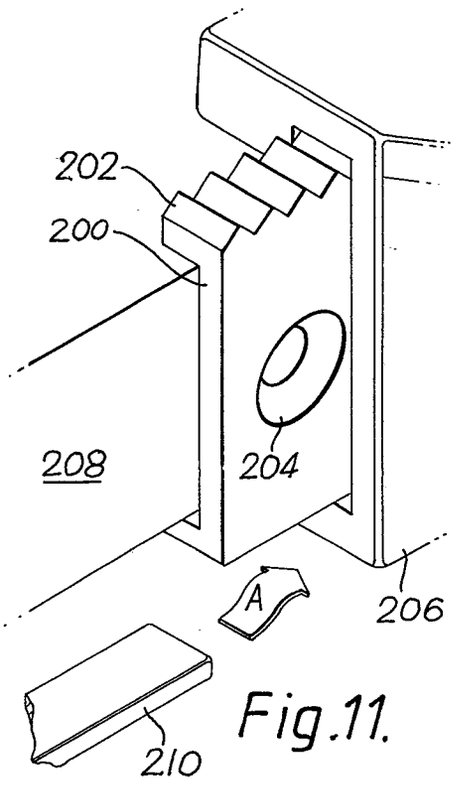


Fig.11.