

Sept. 27, 1966

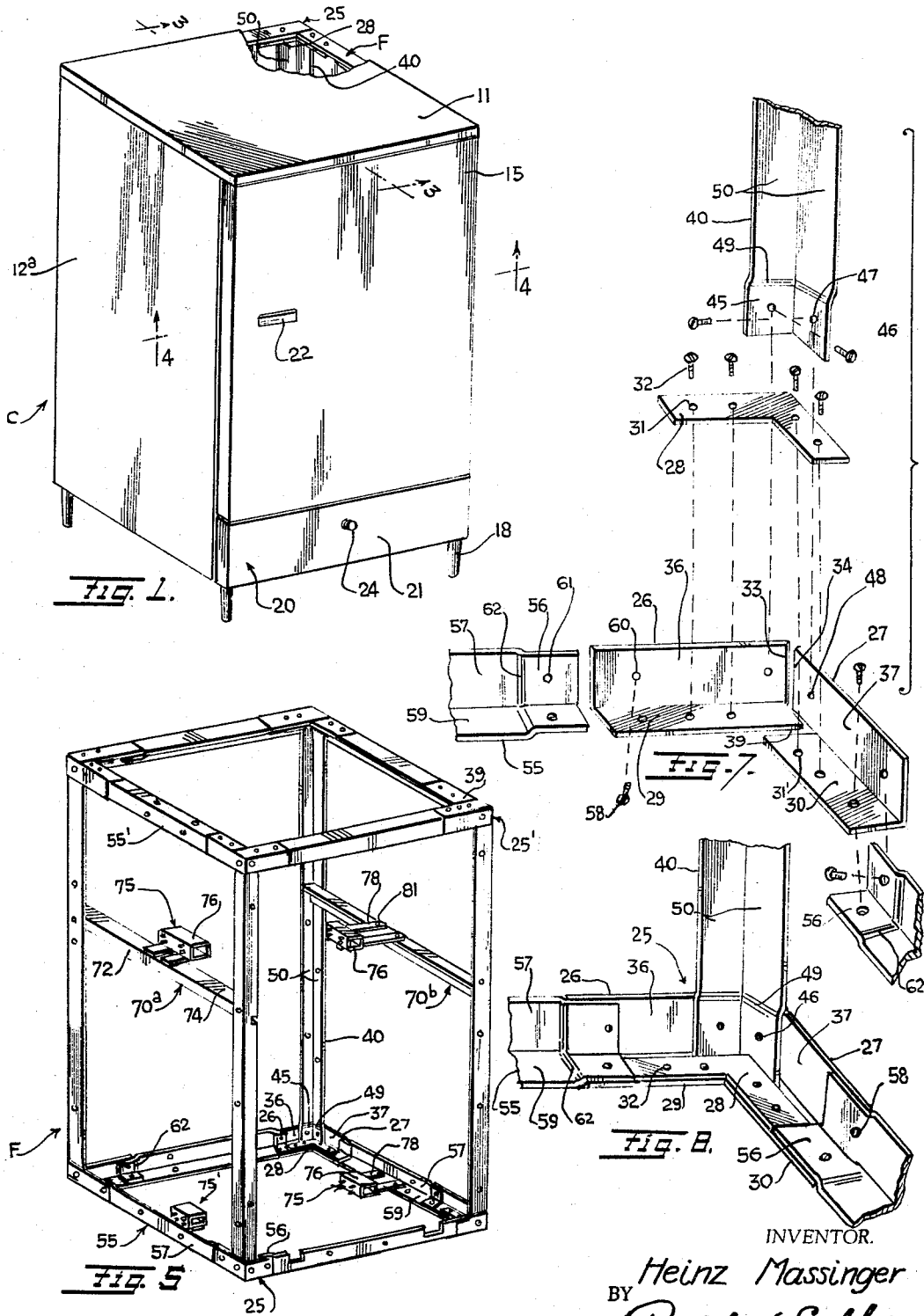
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3,275,394

FURNITURE FRAME CONSTRUCTION

Filed Aug. 3, 1964

6 Sheets-Sheet 1



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6 Sheets-Sheet 2

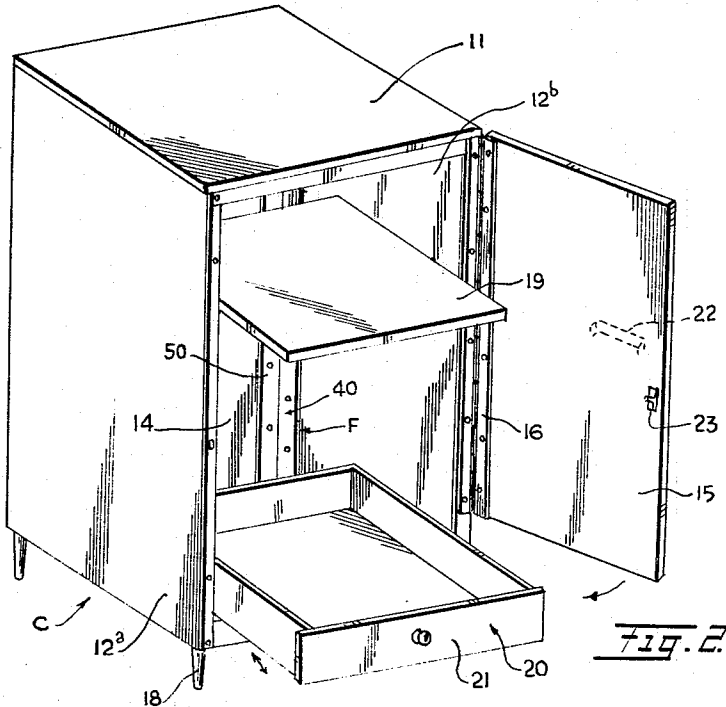


Fig. 2.

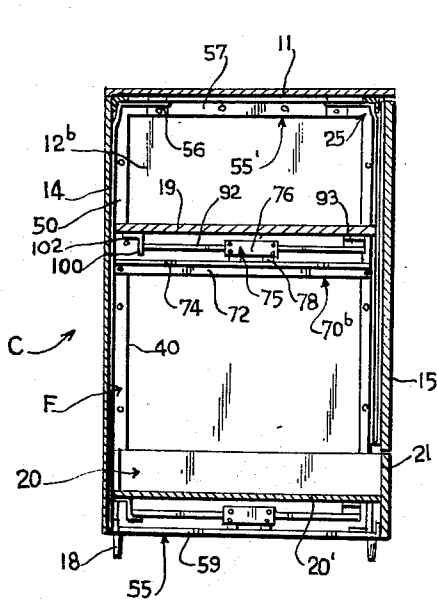


Fig. 3.

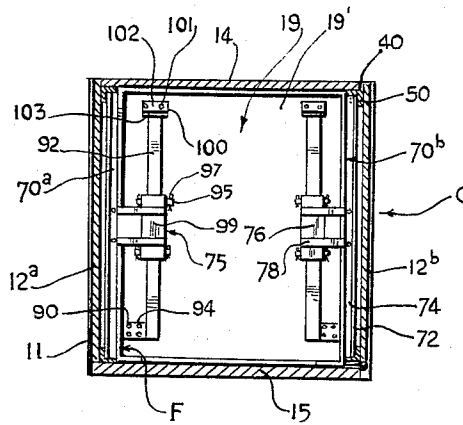


Fig. 4.

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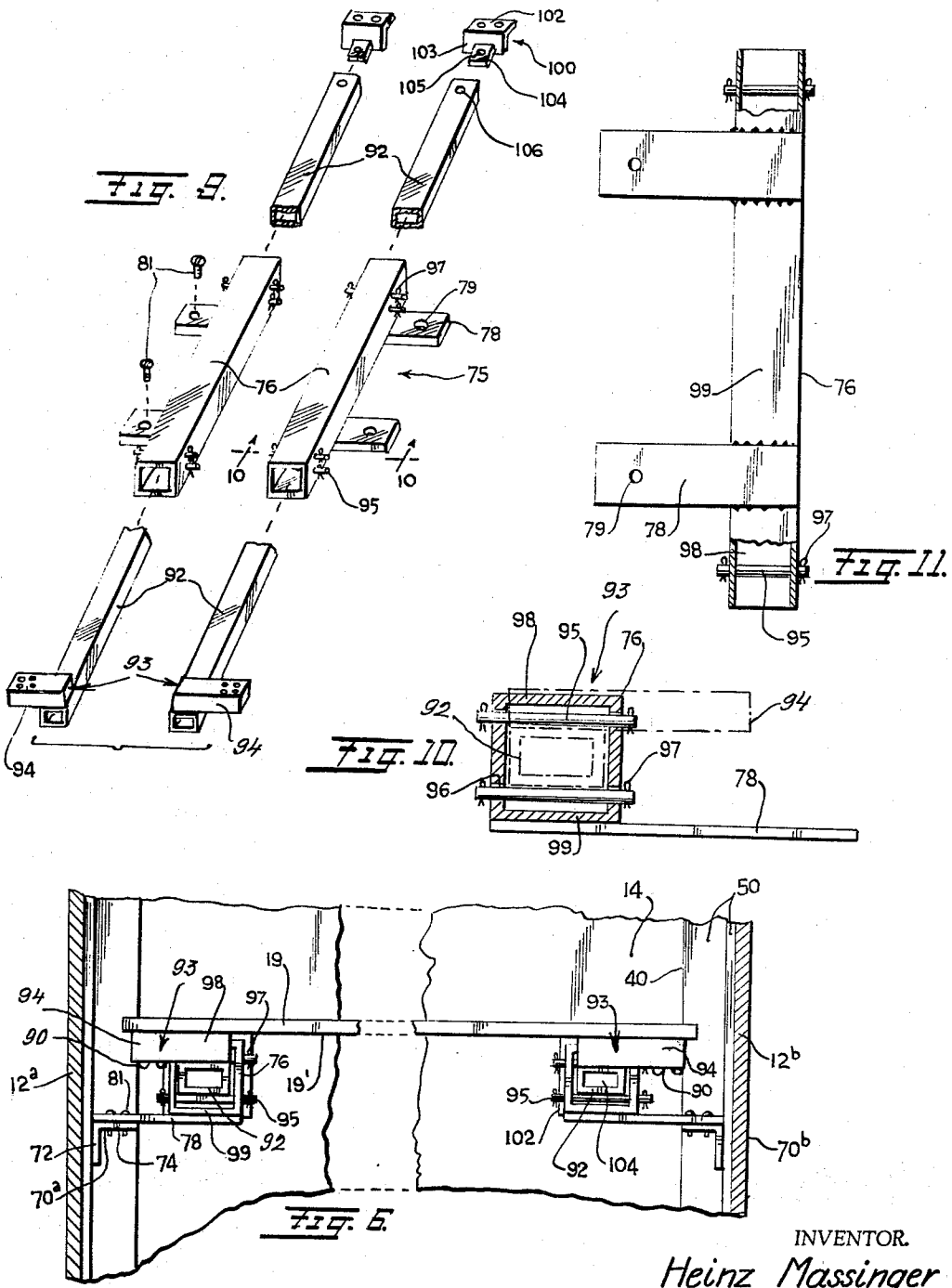
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FURNITURE FRAME CONSTRUCTION

Filed Aug. 3, 1964

6 Sheets-Sheet 3



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FURNITURE FRAME CONSTRUCTION

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6 Sheets-Sheet 4

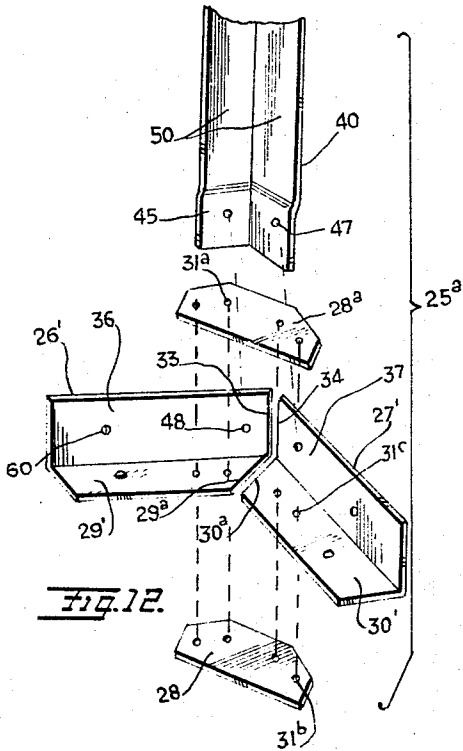


Fig. 12.

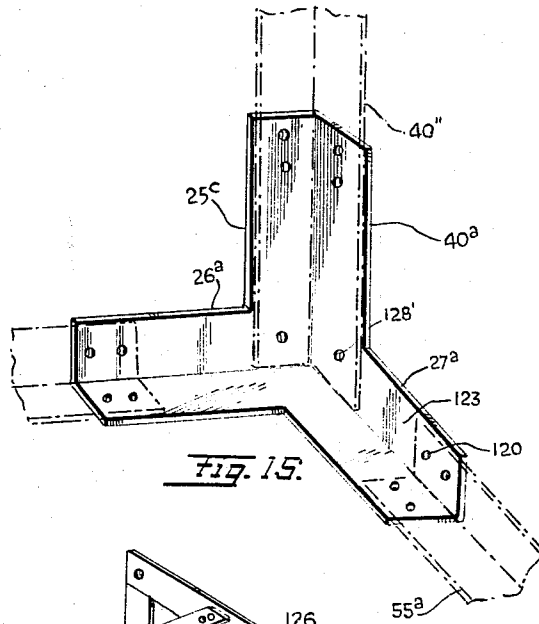


Fig. 15.

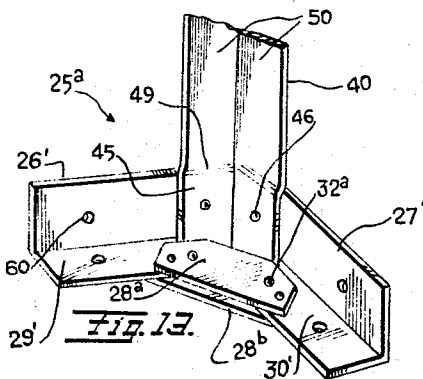


Fig. 13.

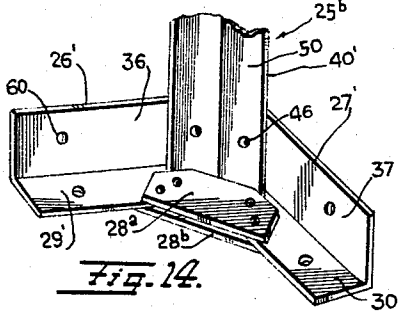


Fig. 14.

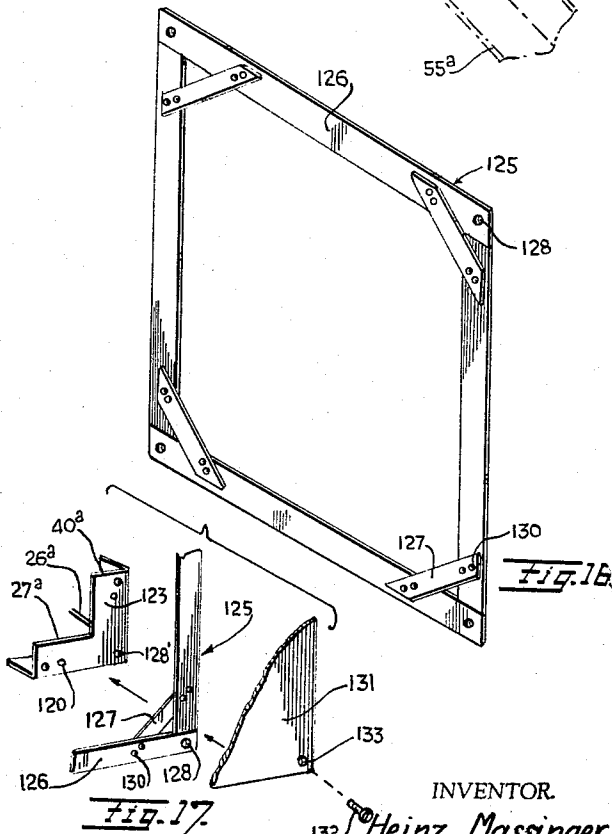


Fig. 17.

Fig. 16.

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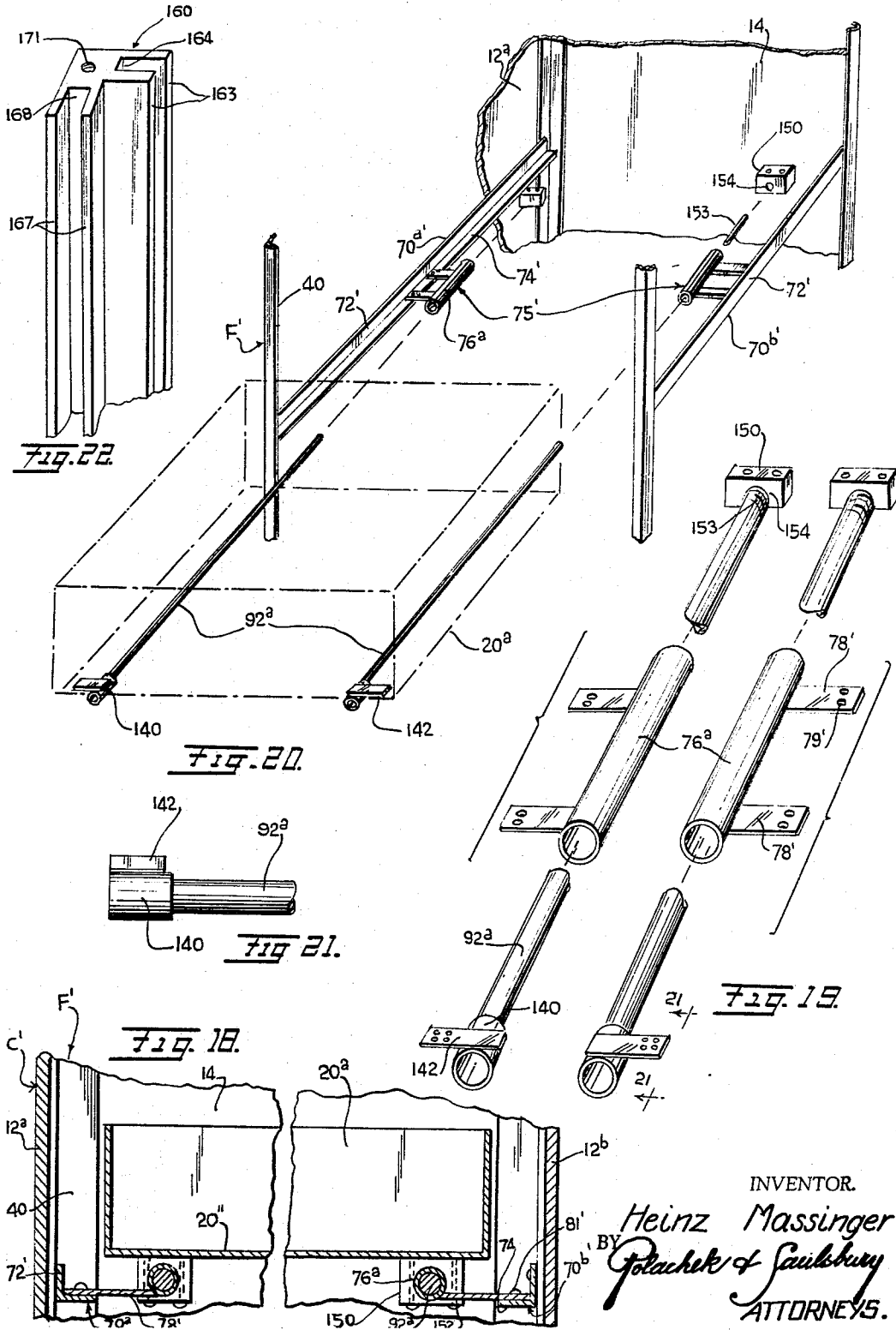
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3,275,394

FURNITURE FRAME CONSTRUCTION

Filed Aug. 3, 1964

6 Sheets-Sheet 5



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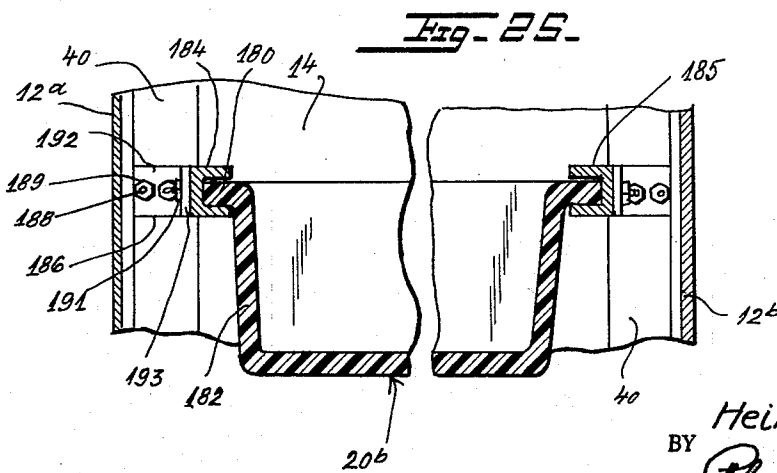
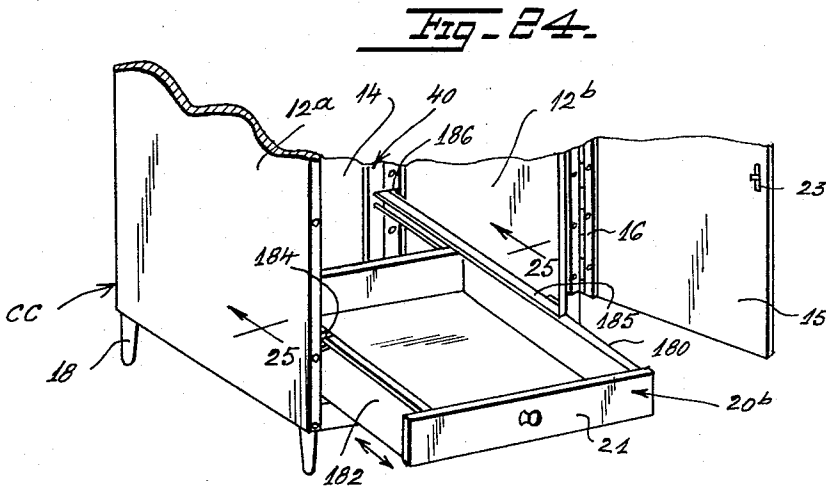
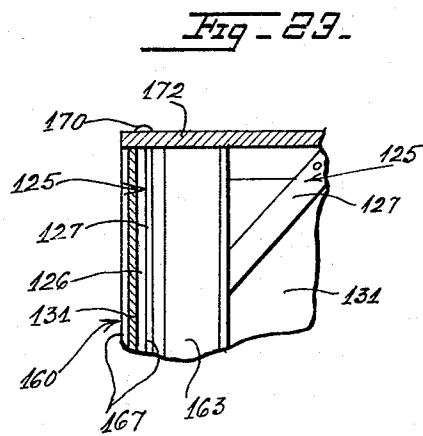
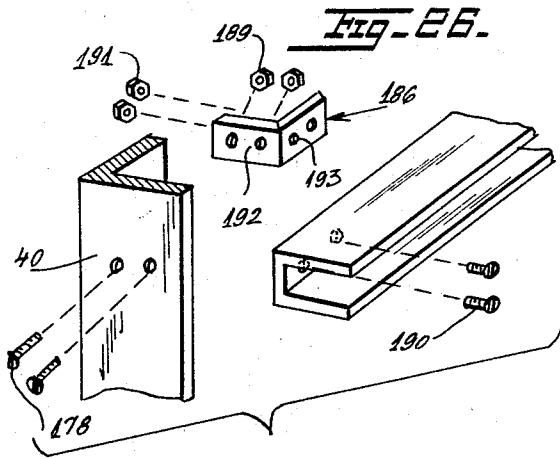
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FURNITURE FRAME CONSTRUCTION

Filed Aug. 3, 1964

6 Sheets-Sheet 6



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3,275,394

FURNITURE FRAME CONSTRUCTION
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 Filed Aug. 3, 1964, Ser. No. 386,974
 13 Claims. (Cl. 312—257)

This invention relates to the art of cabinet construction and more particularly concerns a novel frame structure for a cabinet.

The invention is directed at a frame structure which can be employed in a cabinet of general utility or in a decorative furniture cabinet.

It is one object of the invention to provide a simplified and improved cabinet frame structure which is easier and more economical to fabricate than frame structures employed heretofore.

Another object is to provide a frame for a cabinet, in which a novel prefabricated corner structure is used for the frame.

A further object is to provide a novel slide mounting for a drawer or shelf in a cabinet frame.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIG. 1 is a perspective view of a closed cabinet embodying the invention.

FIG. 2 is a perspective view of the cabinet in open position.

FIG. 3 is a vertical sectional view taken on line 3—3 of FIG. 1.

FIG. 4 is a horizontal sectional view taken on line 4—4 of FIG. 1.

FIG. 5 is a perspective view of a frame assembly employed in the cabinet of FIGS. 1—4.

FIG. 6 is an enlarged fragmentary sectional view taken on line 6—6 of FIG. 3.

FIG. 7 is an enlarged, exploded, perspective view of parts of a corner assembly of the frame of FIG. 6.

FIG. 8 is a perspective view of an assembled frame corner.

FIG. 9 is an enlarged perspective view of parts of a drawer or shelf mounting assembly.

FIG. 10 is a further enlarged sectional view taken on line 10—10 of FIG. 9.

FIG. 11 is a further enlarged bottom plan view of a part of the assembly of FIG. 9.

FIG. 12 is an exploded perspective view similar to a portion of FIG. 7, showing another corner assembly of a cabinet frame.

FIG. 13 is a perspective view similar to FIG. 8 showing a frame corner assembled from the parts of FIG. 12.

FIG. 14 is a perspective view similar to FIG. 13 of another frame corner assembly.

FIG. 15 is a perspective view of still another frame corner structure.

FIG. 16 is a perspective view of a rectangular frame construction.

FIG. 17 is an exploded perspective view of parts of a cabinet structure.

FIG. 18 is a sectional view similar to FIG. 6, showing another drawer mounting assembly.

FIG. 19 is an exploded perspective view of parts of the drawer mounting assembly of FIG. 18.

FIG. 20 is a perspective view on a reduced scale of parts of a cabinet and frame, employing the drawer mounting assembly of FIG. 19.

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FIG. 21 is a side view of part of a drawer mounting assembly, taken on line 21—21 of FIG. 19.

FIG. 22 is a fragmentary perspective view of an extruded post.

5 FIG. 23 is a fragmentary assembly including the post of FIG. 22.

FIG. 24 is a fragmentary perspective view similar to a portion of FIG. 2, illustrating a modification of the invention.

10 FIG. 25 is an enlarged sectional view taken on line 25—25 of FIG. 24, parts being broken away.

FIG. 26 is an exploded perspective view of parts of a drawer mounting assembly employed in the cabinet of FIGS. 24, 25.

15 Referring first to FIGS. 1—4, there is shown a cabinet C embodying the invention. This cabinet has a rectangular frame structure F best shown in FIGS. 3—8, to which reference will be made later. The cabinet has a horizontal rectangular top 11, lateral side walls 12a, 12b, and a vertical rear wall 14. A vertical front door 15 is carried on a long hinge 16. The cabinet stands on four legs 18 located at the corners of the cabinet. Inside the cabinet is a slidable shelf 19. A drawer 20 is also slidably mounted in the cabinet. The front end wall 21 of the drawer is exposed below door 15. The door has a handle 22 for opening and closing, and a catch 23 for holding it closed. The drawer has knob 24 on its front wall 21.

20 The frame structure F of the cabinet as shown in FIGS. 3—8, includes eight corner assemblies 25 each formed by two angle bars 26, 27. A flat right-angle bridge plate 28 is placed on the horizontal parallel walls 29, 30 of bars 26, 27. Screws 32 in holes 31 of the plate secure the bridge plate 28 to threaded holes 31' in walls 29, 30. Abutting edges 33, 34 of vertical walls 36, 37 of the angle bars are beveled; see FIG. 7. Four vertical posts 40 are connected to the respective corner assemblies. Each of the posts is in the form of an angle bar with ends of the angle bar displaced to form flat flanges 45 which abut inner adjacent ends of vertical walls 36, 37. Screws 46 are inserted through holes 47 in the flanges and are screwed into threaded holes 48 in the ends of walls 36, 37. Ledges 49 are formed at the inner ends of flanges 45 where they are bent inwardly of walls 50, 52 of the posts. These ledges seat on horizontal edges of walls 36, 37 of the angle bars 26, 27. A rectangular notch 39 in wall 30 receives the adjacent end of wall 29 in a flat coplanar arrangement at each corner assembly 25.

25 Four horizontal cross members 55 are provided at the bottom of the frame F as shown in FIGS. 3, 4 and 5. These cross members are angle bars with inwardly displaced flat flanges 56 at opposite ends of the walls 57, 59 of the angle bars. Flanges 56 are juxtaposed to ends of walls 36, 37 of the corner angle bars and are secured by screws 58 screwed into threaded holes 60 in outer ends of walls 36, 37. The screws 58 pass through holes 61 in flanges 56. Four horizontal cross members 55' are provided at the upper end of the frame to complete the rectangular frame structure. It will be noted that ledges 62 are formed at the inner ends of the flanges 56 to form seats which abut outer ends of walls 36, 37. The walls 50, 52 of posts 40 and the walls 57, 59 of cross members 55 and 55' are all flush with or coplanar with walls 36, 37 of the corner assemblies. The corner plates 28 reinforce and stiffen the corner structures.

30 In order to support sliding shelves or drawers in the cabinet C, there is provided a pair of horizontal cross members 70a, 70b; see FIGS. 3—6. These cross members are angle bars whose vertical walls 72 are secured by screws at their ends to vertical side walls of the posts 40.

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On the horizontal walls 74 of the cross members 70a, 70b are mounted drawer or shelf guide assemblies 75 best shown in FIGS. 6, 9-11. Each guide assembly 75 has a short rectangular tube 76 which is axially horizontal. Two laterally extending flat arms 78 are welded near opposite ends of the underside of the tube. Outer ends of the arms have holes 79 which receive screws 81. Holes 79 register with corresponding holes in the walls 74 of the cross members in which the screws 81 are screwed. The tubes 76 are thus supported laterally of the cross members 70a, 70b at opposite sides of the frame F. Two other guide assemblies 75' identical to guide assemblies 75 are secured to horizontal walls 59 of bottom cross members 55 at the sides of the frame F.

The upper guide assemblies 75 support horizontal shelf 19 and the lower guide assemblies 75' support drawer 20. The shelf and drawer can be interchanged in position. Alternatively, two shelves or two drawers can be provided in the frame. In order to mount the shelf and drawer on the tubes 76, there are provided long rectangular tubular sliders 92 forming parts of the guide assemblies. Each slider 92, as best shown in FIG. 9, has a bracket plate 93 at its front end. The bracket has an apertured plate or flange portion 94 offset from the slider 92. Flange 94 is secured by screws 90 to the underside 19' or 20' of the shelf 19 or drawer 20. The slider 92 extends axially through the tube 76. The tube has a pair of horizontal cylindrical rods or rollers 95 at each end thereof; see FIGS. 9-11. The rods extend through holes 96 in the side walls 97 of tube 76. Cotter pins or other locking means 97 at ends of the rods hold the rods in the tube. The rods in each pair are located near upper and lower horizontal walls 98, 99 of the tube 76 so that the slider 92 is supported only by the rods and is out of contact with the upper and lower walls 98, 99 of the tube. As the sliders 92 move axially in one direction or the other through tube 76, the rods 95 may rotate like rollers to facilitate sliding movement of the sliders. Thus the shelf 19 and drawer 20 are pulled out and pushed in easily without binding, as the sliders 92 move in tubes 76. The rear ends of the sliders 92 carry angle brackets 100 whose upper offset flanges 102 are apertured for receiving screws 101 to secure these flanges to the undersides of the shelf and drawer. From the vertical flanges 103 of the brackets extend anchor plates 104. These plates fit into the open ends of the tubular sliders and can be secured by screws passing through holes 105 in the upper walls of the sliders and through threaded holes 106 in the plates 104. Flanges 103 serve as stop members to prevent the sliders 92 from being pulled completely out of the tubes 76.

The upper surfaces of bracket plates 93 and flanges 102 need extend only slightly, about one sixteenth of an inch or so above the upper sides of tubes 76 so that the bottom of the drawer of shelf clears the tubes.

It will be apparent that the cabinet C can be quickly assembled without requiring any particular skill on the part of the assembler. The parts of the cabinet are all pre-cut and prefabricated in proper lengths. The cabinet can be shipped knocked-down for assembly at the place where it is to be used. The several walls and panels of the cabinet can be made of any desired materials such as wood, metal, plastic, laminated plastic on wood, etc. The corner assemblies made of prefabricated parts are quickly put together. The several parts of the frame F can be made of metal, wood or plastic.

In FIGS. 12 and 13 as shown a frame corner assembly 25a which is similar to the corner assembly 25 and corresponding parts are identically numbered. Horizontal walls 29' and 30' of the angle bars 26', 37' have beveled inner adjacent ends 29a, 30a to provide a flush corner structure. The inner adjacent ends 33, 34 of vertical walls 36, 37 are beveled as in corner assembly 25. The post 40 fits snugly on the corner assembly with offset end

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flanges 45 secured to inner adjacent ends of vertical walls 37. A pair of flat cross plates 28a, 28b are provided for strengthening the corner structure. These plates have holes 31a and 31b which are aligned with holes 31c in the horizontal walls 29', 30'. The aligned holes receive screws 32a. The holes 31a and 31c can be unthreaded and holes 31b may be threaded for engaging the threads of the screws. The two plates 28a, 28b are juxtaposed to opposite sides of walls 29', 30' to form a very rigid corner structure.

FIG. 14 shows another corner assembly 25b which is similar to the corner assembly 25 except that the end of post 40' fits inside the corner walls 36, 37 and is offset from the outer sides of walls 36, 37 by the thickness of these walls.

FIGS. 15 and 16 show a corner assembly 25c which is formed as a unitary structure with two horizontal angle arms 26a, 27a and a vertical angle arm 40a. This corner assembly can be made of metal or plastic. Holes 120 are provided at ends of the walls 123 of the arms for receiving screws to mount cross members 55a and vertical post 40' thereon.

FIG. 17 shows a rectangular frame 125 which can be used at the bottom, top or side of a cabinet frame. The frame has four flat slats 126 with overlapping ends provided with registering holes 128. Oblique corner cross plates 127 are secured by screws or rivets 130 to hold the slats in a flat rectangular array. Each corner of the frame 125 will be abutted to the outer side of corner assembly 25c as shown in FIG. 17 with holes 128 registering with a threaded hole 128' in the corner assembly. A cabinet wall or panel 131 can be abutted to the outer side of frame 125 with hole 133 registering with holes 128 and 128'. A screw 132 will then be inserted through the registering holes to secure the panel 130, frame 125 and corner assembly 25b together.

FIGS. 18-21 show a drawer or shelf guide assembly 75' which is similar to the assembly 75 except that the sliders 92a are formed of cylindrical rods. At the front ends of the rods are cylindrical heads 140 to which are secured apertured plates 142. These plates will be secured to the horizontal underside 20'' of a shelf or drawer 20a by screws in the same manner as flanges 94 are secured to the undersides 19', 20' of the shelf 19 and drawer 20. A round cylindrical tube 76a slidably receives the slider 92a. Each tube 76a has laterally extending arms 78' which support the tube in axially horizontal position. The ends of the arms have holes 79' which receive screws 81'. The screws are engaged in horizontal walls 74' of crossbars 70a', 79b'. These crossbars in turn have walls 72' secured to vertical posts 40 of frame F'. At the rear ends of the sliders 92a are apertured bracket blocks 150 which are secured to the underside of the shelf or drawer 20a by screws 152. Rear ends of the sliders may be threaded at 153 and may be engaged in threaded holes 154 formed in front faces of the blocks. The sliders 92a will support the drawer 20a in a horizontal position so that it can easily be pulled out of cabinet C' or pushed into the cabinet. The end blocks 150 will serve as stop members to prevent the drawer from being pulled completely out of the cabinet since the blocks will be stopped at the rear ends of the tubes 76a. Other parts corresponding to those of cabinet C and frame F are identically numbered.

FIGS. 22 and 23 show an extruded post 160 which can be used in assembling a cabinet. This post has a rectangular body 162. Two flat parallel flanges 163 extend laterally outward of one side to define a groove 164 into which a panel can be inserted. Another pair of flat parallel flanges 167 extend laterally outward of an adjacent side of the post body to define a groove 168 for receiving another panel. A threaded hole 171 in the top of the post body receives a screw 170 by means of which a top panel 172 can be secured to the top of the post. Another similar panel can be secured to the other end of the

post. The posts 160 can be used to make up a cabinet frame quickly and inexpensively, and the cabinet can be quickly completed by inserting the panels in the post. The posts can be secured to any of the prefabricated corner assemblies 25, 25a-25c described above. The shelf and drawer mounting assemblies 75 or 75a can be mounted on posts 160 in the same manner as explained and illustrated in connection with frames F and F'.

It is also possible to assemble a cabinet using frames 125 and panels 131 with corner posts 160 as illustrated in FIG. 23. The slats 126 of frames 125 and an end of each cross or brace plate 127 will fit into the grooves 164 and 168 along with edges of panels 131.

FIGS. 24-26 show another drawer mounting assembly for a cabinet in which parts corresponding to those of cabinet CC in which parts corresponding to those of cabinet C are identically numbered. The drawer 20b is a molded plastic unit made of polyethylene, vinyl or the like. It has lateral flanges 180 at upper edges of its side walls 182. These flanges fit slidably into two horizontal channel bars 184 and 185 supported by angle brackets 186 at inner sides of the side walls 12a, 12b. The angle brackets have apertured flanges 192 secured by flathead bolts 188 and nuts 189 to the vertical posts 40 at opposite ends of the channel bars 184, 185. The channel bars are secured at their ends by flathead bolts 190 and nuts 191 to apertured flanges 193 of the brackets. By this arrangement the drawer slides freely in and out of the cabinet. The drawer can be removed entirely from the cabinet. For a permanent non-removable drawer mounting the arrangement of drawer 20 with sliders 92 may be used.

There has thus been described a novel cabinet frame construction with prefabricated corner assemblies and with prefabricated drawer and shelf slides. Instead of a single door 15 mounted on a single hinge 16 to a single post 40, two doors can be provided mounted on adjacent front posts 40 for making a wider cabinet. If desired, the drawers 20, 20a, 20b can be wholly concealed inside the cabinet by making the door or doors 15 longer to cover the front ends of the drawers.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and a right angle bridge plate engaged on the abutted horizontal walls to reinforce the corner assembly, each post and cross member being an angle bar with mutually perpendicular walls, the ends of the walls of the posts and of the cross members being formed with offset flanges engageable inside the short angle bars of the corner assemblies so that intermediate wall portions of the posts and cross members are flush with outer sides of the vertical and horizontal walls of the short angle bars for mounting wall panels thereon.

2. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each

corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted to gether at their ends in mutually perpendicular coplanar disposition, and means engaged on the walls of the angle bars connecting the same to reinforce the corner assembly, each post and cross member being an angle bar with mutually perpendicular walls, the ends of the walls of the posts and of the cross members being formed with offset flanges engageable inside the short angle bars of the corner assemblies so that intermediate wall portions of the posts and cross members are flush with outer sides of the vertical and horizontal walls of the short angle bars for mounting wall panels thereon.

3. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and a pair of flat cross plates secured to opposite sides of the horizontal walls of the angle bars to reinforce the corner assembly, each post and cross member being an angle bar with mutually perpendicular walls, the ends of the walls of the posts and of the cross members being formed with offset flanges engageable inside the short angle bars of the corner assemblies so that intermediate wall portions of the posts and cross members are flush with outer sides of the vertical and horizontal walls of the short angle bars for mounting wall panels thereon.

4. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and means engaged on the walls of the angle bars connecting the same to reinforce the corner assembly; another pair of horizontal cross members each connected at opposite ends to two of the vertical posts, a pair of axially horizontal short tubes secured to the other cross members respectively at intermediate points and laterally inward thereof, elongated sliders movable axially inside the respective tubes, and bracket means at opposite ends of the sliders securable to a shelf for slidably mounting the same in said frame structure.

5. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and means engaged on the walls of the angle bars connecting the same to reinforce the corner assembly; a pair of axially horizontal short tubes secured to a pair of said cross members laterally inward thereof, elongated sliders movable axially inside the respective tubes, and bracket means at opposite ends of the sliders

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securable to the underside of a horizontal drawer for slidably mounting the same in said frame structure.

6. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and means engaged on the walls of the angle bars connecting the same to reinforce the corner assembly; another pair of horizontal cross members each connected at opposite ends to two of the vertical posts, a pair of axially horizontal short rectangular tubes secured to the other cross members respectively at intermediate points and laterally inward thereof, cross rollers rotatably secured in the tubes at opposite ends thereof near upper and lower walls of the tubes, elongated sliders movable axially inside the respective tubes, said sliders being supported by the rollers out of contact with the upper and lower walls of the tubes, and bracket means at opposite ends of the sliders securable to a shelf for slidably mounting the same in said frame structure.

7. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and means engaged on the walls of the angle bars connecting the same to reinforce the corner assembly; a pair of axially horizontal short rectangular tubes secured to a pair of said cross members and disposed laterally inward thereof, cross rollers rotatably secured in the tubes at opposite ends thereof near upper and lower walls of the tubes, elongated sliders movable axially inside the respective tubes, said sliders being supported by the rollers out of contact with upper and lower walls of the tubes, and bracket means at opposite ends of the sliders securable to a drawer for slidably mounting the same in said frame structure.

8. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and means engaged on the walls of the angle bars connecting the same to reinforce the corner assembly, each post and cross member being an angle bar with mutually perpendicular walls, the ends of the walls of the posts and of the cross members being formed with offset flanges engageable inside the short angle bars of the corner assemblies so that intermediate wall portions of the posts and cross members are flush with outer sides of the vertical and horizontal walls of the short angle bars for mounting wall panels thereon; another pair of horizontal cross members each connected at opposite ends to two of the vertical posts, a pair of axially horizontal short rectangular tubes secured to the other cross members respectively at intermediate points and laterally inward thereof, cross rollers rotatably secured in the tubes at opposite ends thereof near upper and lower walls of the tubes, elongated sliders movable axially inside the

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respective tubes, said sliders being supported by the rollers out of contact with the upper and lower walls of the tubes, and bracket means at opposite ends of the sliders securable to a shelf for slidably mounting the same in said frame structure.

9. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and means engaged on the walls of the angle bars connecting the same to reinforce the corner assembly, each post and cross member being an angle bar with mutually perpendicular walls, the ends of the walls of the posts and of the cross members being formed with offset flanges engageable inside the short angle bars of the corner assemblies so that intermediate wall portions of the posts and cross members are flush with outer sides of the vertical and horizontal walls of the short angle bars for mounting wall panels, thereon; a pair of axially horizontal short rectangular tubes secured to a pair of said cross members and disposed laterally inward thereof, cross rollers rotatably secured in the tubes at opposite ends thereof near upper and lower walls of the tubes, elongated sliders movable axially inside the respective tubes, said sliders being supported by the rollers out of contact with upper and lower walls of the tubes, and bracket means at opposite ends of the sliders securable to a drawer for slidably mounting the same in said frame structure.

10. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including a pair of short angle bars having vertical walls abutted together at their ends in mutually perpendicular planes and having horizontal walls abutted together at their ends in mutually perpendicular coplanar disposition, and means engaged on the walls of the angle bars connecting the same to reinforce the corner assembly, each post and cross member being an angle bar with mutually perpendicular walls, the ends of the walls of the posts and of the cross members being formed with offset flanges engageable inside the short angle bars of the corner assemblies so that intermediate wall portions of the posts and cross members are flush with outer sides of the vertical and horizontal walls of the short angle bars for mounting wall panels thereon; a pair of axially horizontal short tubes secured to a pair of said cross members laterally inward thereof, elongated sliders movable axially inside the respective tubes, and bracket means at opposite ends of the sliders securable to the underside of a horizontal drawer for slidably mounting the same in said frame structure.

11. In a cabinet, a rectangular frame structure, said frame structure comprises four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, and horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including three short mutually perpendicular angle bars having walls integrally formed into a unitary structure for mounting wall panels thereon, each post and cross member being an angle bar with mutually perpendicular walls, the ends of the walls of the posts and of the cross members being formed with offset flanges engageable inside the short angle bars of the corner assemblies so that intermediate wall portions of the posts and cross

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members are flush with outer sides of the vertical and horizontal walls of the short angle bars for mounting wall panels thereon; another pair of horizontal cross members each connected at opposite ends to two of the vertical posts, a pair of axially horizontal short rectangular tubes secured to the other cross members respectively at intermediate points and laterally inward thereof, cross rollers rotatably secured in the tubes at opposite ends thereof near upper and lower walls of the tubes, elongated sliders movable axially inside the respective tubes, said sliders being supported by the rollers out of contact with the upper and lower walls of the tubes, and bracket means at opposite ends of the sliders securable to a shelf for slidably mounting the same in said frame structure.

12. In a cabinet, a rectangular frame structure, said frame structure comprising four vertical corner posts, a pair of corner assemblies at lower and upper ends of each post, and horizontal cross members connecting each corner assembly with two other corner assemblies at adjacent corners of the frame structure, each of said corner assemblies including three short mutually perpendicular angle bars having walls integrally formed into a unitary structure for mounting wall panels thereon, each post and cross member being an angle bar with mutually perpendicular walls, the ends of the walls of the post and of the cross members being formed with offset flanges engageable inside the short angle bars of the corner assemblies so that the intermediate wall portions of the posts and cross members are flush with outer sides of the vertical and horizontal walls of the short angle bars for mount-

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ing wall panels thereon; a pair of axially horizontal short tubes secured to a pair of said cross members laterally inward thereof, elongated sliders movable axially inside the respective tubes, and bracket means at opposite ends of the sliders securable to the underside of a horizontal drawer for slidably mounting the same in said frame structure.

13. In a cabinet frame structure, a plurality of vertical corner posts, horizontal cross members connecting the vertical posts; a pair of axially horizontal short rectangular tubes secured to a pair of said cross members and disposed laterally inward thereof, cross rollers rotatably secured in the tubes at opposite ends thereof near upper and lower walls of the tubes, elongated sliders movable axially inside the respective tubes, said sliders being supported by the rollers out of contact with upper and lower walls of the tubes, and bracket means at opposite ends of the sliders securable to a drawer for slidably mounting the same in said frame structure.

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