Dec. 7, 1954 D. A. WALLANCE ET AL 2,696,419

FRAME AND PANEL TYPE STORAGE FURNITURE

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Fig. 1

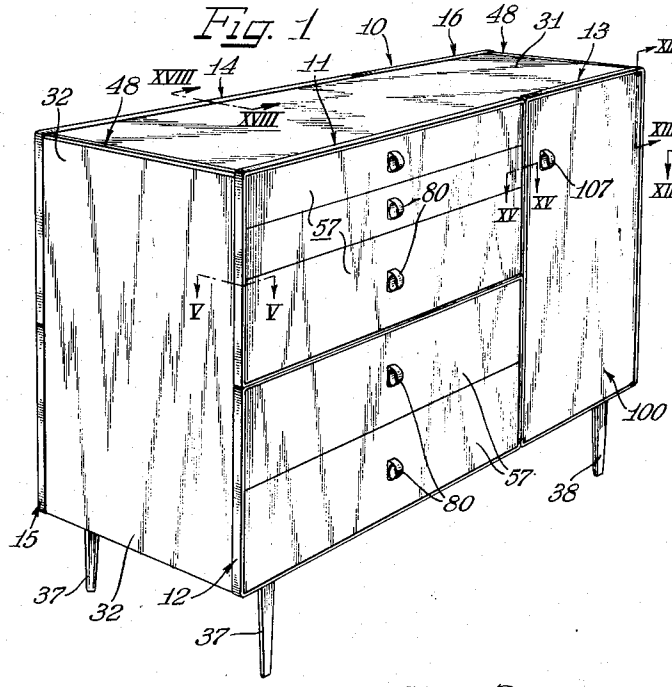


Fig. 2

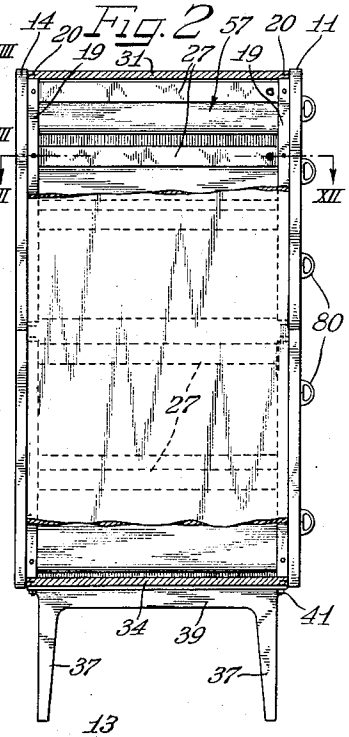
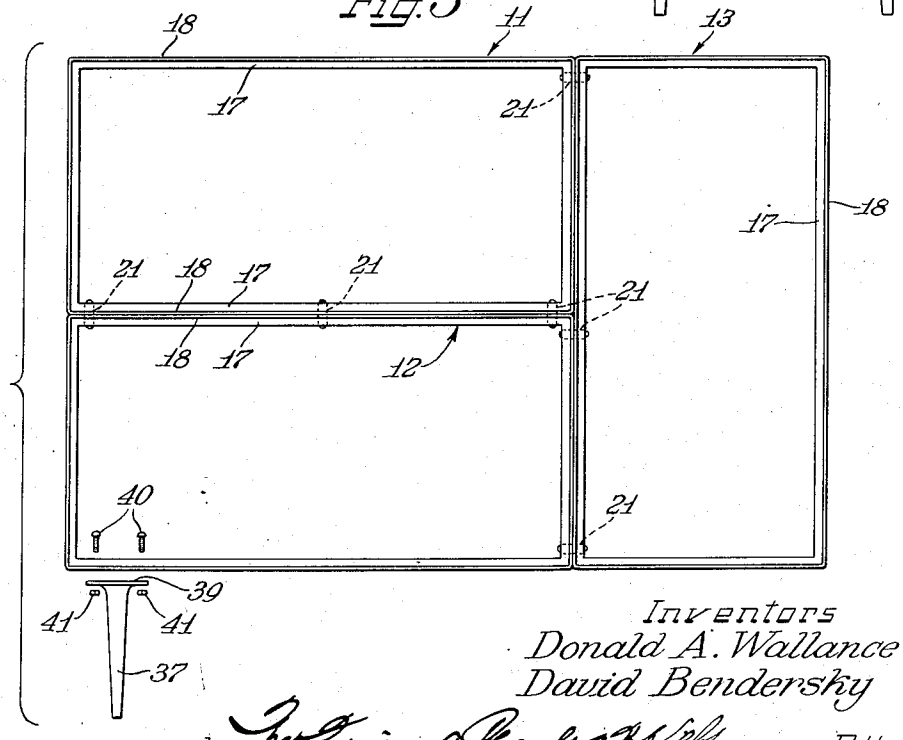


Fig. 3



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Fig. 4

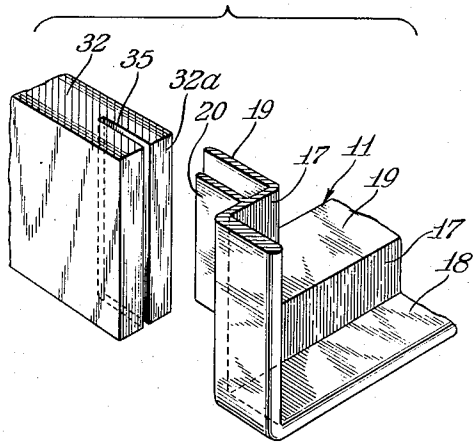


Fig. 5

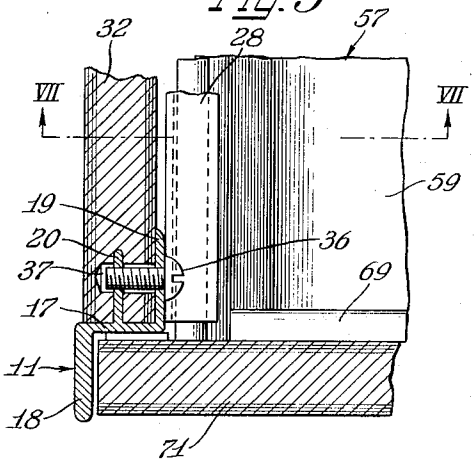


Fig. 6

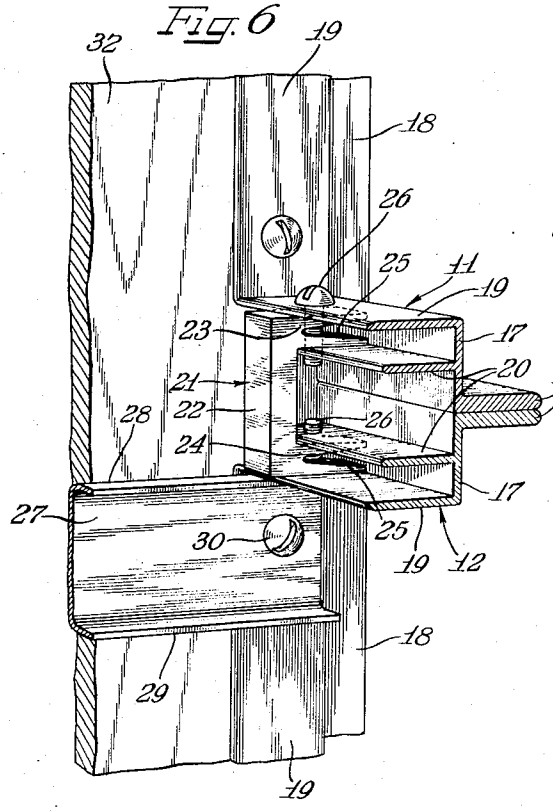
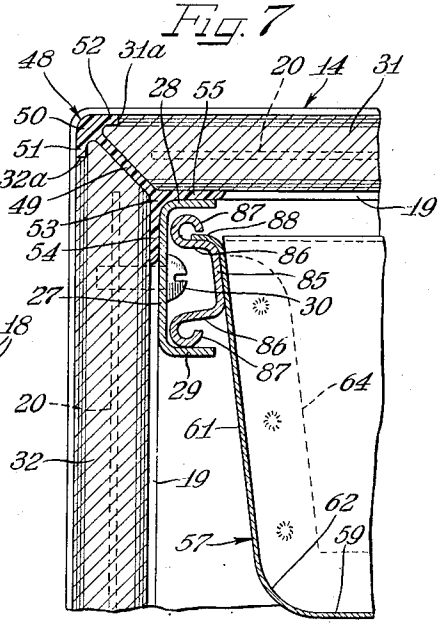


Fig. 7



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FRAME AND PANEL TYPE STORAGE FURNITURE

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Fig. 8

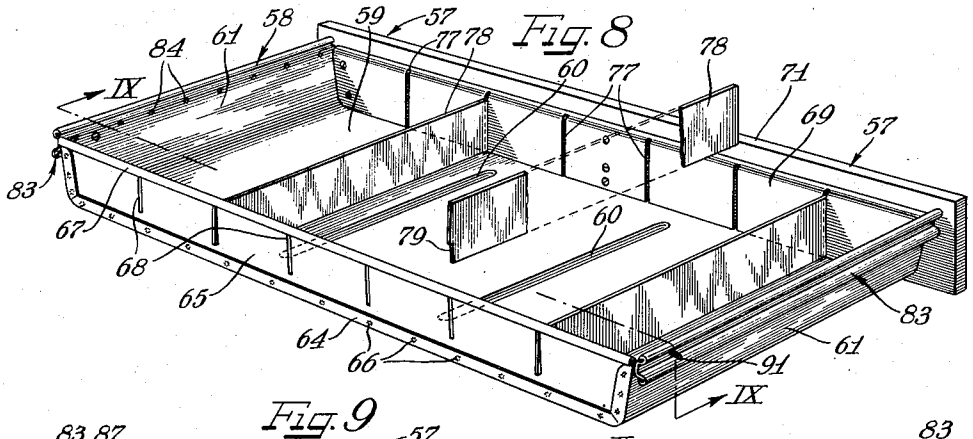


Fig. 9

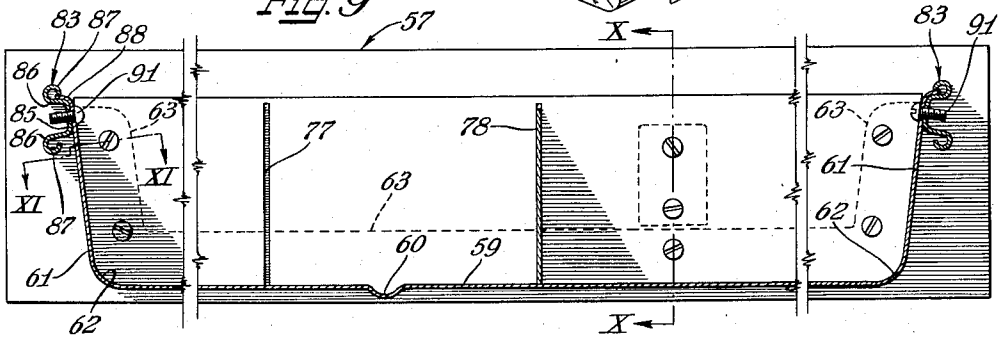


Fig. 10

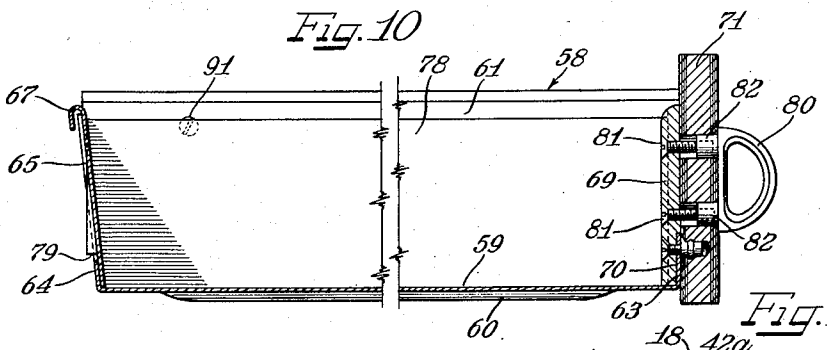


Fig. 11

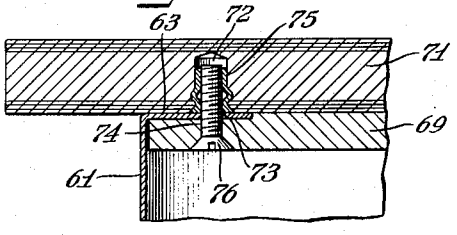
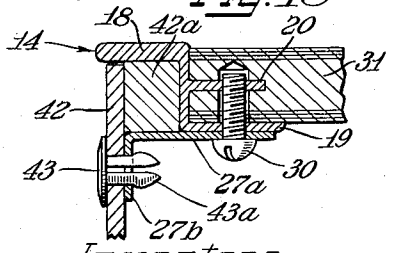


Fig. 18



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FRAME AND PANEL TYPE STORAGE FURNITURE

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Fig. 12

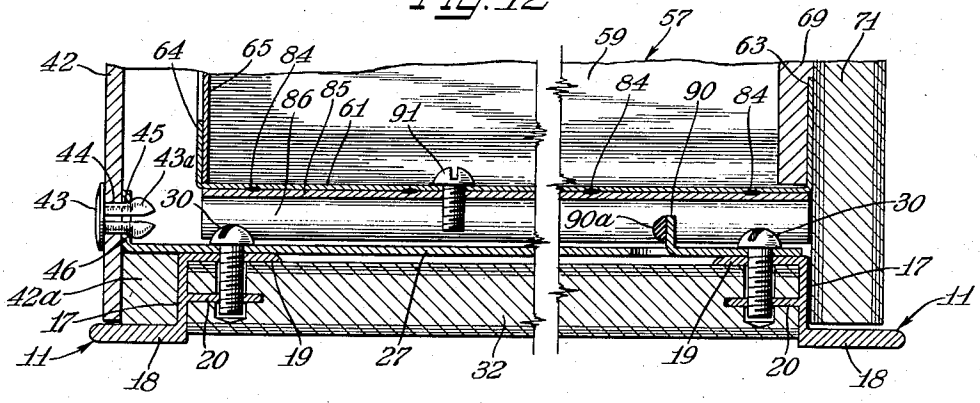


Fig. 13

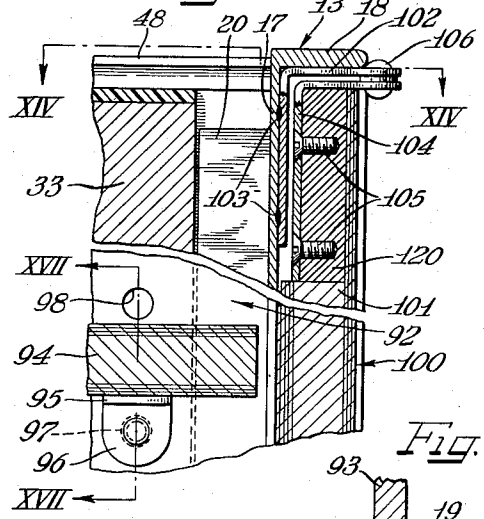


Fig. 14

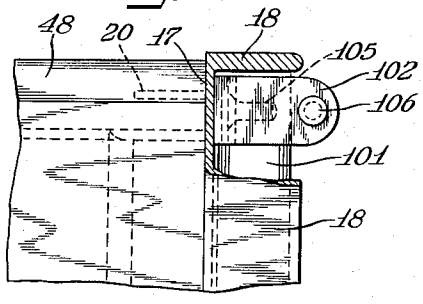


Fig. 15

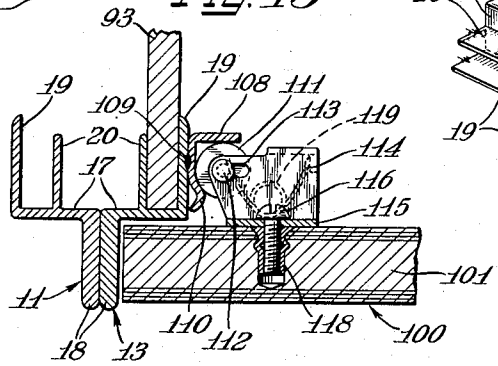


Fig. 16

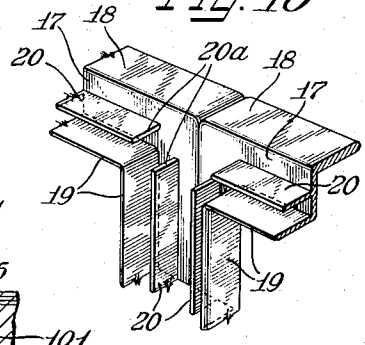
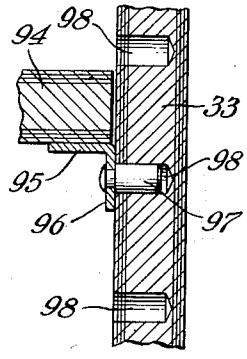


Fig. 17



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FRAME AND PANEL TYPE STORAGE FURNITURE

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Application January 7, 1950, Serial No. 137,366

6 Claims. (Cl. 312—257)

The present invention relates to an article of furniture, and more particularly to an article of furniture of the frame and panel type.

The furniture article of the present invention employs a novel frame and panel construction in which spaced, rigid frame members formed of a suitable structural material, such as metal, carry non-load bearing panels formed of cellulosic material which provide closure walls for the article. The arrangement of the structural frames and the panels is such that substantially all of the internal and external loads imposed upon the article are directly transmitted to the flooring or other supporting surface through the frame structure. The relatively minor loads imposed on the panels are primarily diagonal loads in the plane of the panel surface which may be easily resisted by the panels.

The structural frame and the panels carried thereby may be assembled in a myriad of arrangements to make possible the formation of various furniture articles, ranging from a night stand or end table to a complete storage wall, by the employment of only a relatively few different types of standard frame and panel units. The extreme flexibility of arrangement thus constitutes one of the primary advantages of furniture construction of the present invention.

The panels of the present invention are preferably made of low-strength, low-density core materials, such as ground wood or other fiber bonded together by means of a ligno-resin or other resin binder, or by a chemical pulp; cellular forms of a synthetic plastic such as cellulose acetate; or paper pulp. The core is laminated with surface layers of wood, wood veneer, or resin-impregnated paper, cloth, or the like. Such inexpensive, light-weight panels may be employed in the present invention due to the transmission of the major loads imposed upon the structure through the structural frame directly to the base or legs of the article. By the employment of aluminum, magnesium, and other relatively light-weight metals and alloys for the frame, it is possible to provide light-weight furniture of great structural strength.

At those points where a plurality of frames are joined, as in the assembly of a large storage article, a single panel extends across the joint between adjacent frames to form one side or end surface of the article. Thus, a smooth, unbroken panel surface is presented across the entire width or length of the furniture article despite the joining of a plurality of frames to form the article.

The storage furniture construction of the present invention is easily assembled and disassembled with the panels being securely locked in position between cooperating frame members and in extended surface contact therewith. The frames and other components of the assembly are nestable, so that the individual portions of the assembly may be shipped in "knocked-down" condition, thereby effecting a substantial saving in shipping space and handling expense.

It is, therefore, an important object of the present invention to provide an improved storage furniture unit including a plurality of spaced, load-bearing frames, and panels connecting said frames to enclose a storage space.

Another important object of the present invention is to provide an improved storage article assembled from a plurality of aligned, parallel frames and panels extending between the frames to enclose a storage space, so arranged that loads imposed upon the article are transmitted through the frame to permit the employment of low-strength material for said panels.

Still another important object of the present invention is to provide an improved article of furniture in which a plurality of structural frame members are employed to maintain in assembled relation a plurality of panels defining an interior storage space, the frames and panels being capable of assembly in numerous different arrangements with a single panel serving to join a plurality of frames to present a continuous panel surface across the joints between the frames.

Yet a further important object of the present invention is to provide an improved frame and panel-type furniture construction adaptable for assembly in a plurality of varying arrangements to form various types of furniture articles with major loads imposed upon the structure being transmitted through structural frame members to permit the employment of low-density, low-strength material for the panels.

Other and further important objects of this invention will be apparent from the disclosures in the specification and the accompanying drawings.

On the drawings:

Figure 1 is a perspective elevational view of a furniture article of the present invention;

Figure 2 is a side elevational view of the article of Figure 1, with parts broken away and in section;

Figure 3 illustrates the assembly of a plurality of frame members as a step in the assembly of the article of Figure 1;

Figure 4 is a fragmentary, exploded, perspective view showing the mode of assembly of a panel and a frame member to form the article of Figure 1;

Figure 5 is a fragmentary, sectional view taken along the plane V—V of Figure 1;

Figure 6 is a fragmentary, perspective view further showing the assembly of the panels and frames of the article of Figure 1;

Figure 7 is a sectional view taken along the plane VII—VII of Figure 5;

Figure 8 is a perspective, elevational view of a drawer assembly of the article of Figure 1;

Figure 9 is a broken sectional view taken along the plane IX—IX of Figure 8;

Figure 10 is a broken sectional view taken along the plane X—X of Figure 9;

Figure 11 is a fragmentary sectional view taken along the plane XI—XI of Figure 9;

Figure 12 is a broken sectional view taken along the plane XII—XII of Figure 2;

Figure 13 is a fragmentary sectional view taken along the plane XIII—XIII of Figure 1;

Figure 14 is a fragmentary sectional view taken along the plane XIV—XIV of Figure 13;

Figure 15 is a fragmentary sectional view taken along the plane XV—XV of Figure 1;

Figure 16 is a fragmentary sectional view further illustrating the attachment of a pair of frames to form the article of Figure 1;

Figure 17 is a fragmentary sectional view taken along the plane XVII—XVII of Figure 13; and

Figure 18 is a fragmentary sectional view taken along the plane XVIII—XVIII of Figure 1.

As shown on the drawings:

In Figure 1, reference numeral **10** refers generally to an article of storage furniture, particularly illustrated in the form of a combined chest of drawers and shelf cabinet.

The article **10** includes a plurality of structural frames secured together to define the outline of the article **10**. More particularly, the frames **11**, **12** and **13** are secured together to form the outline of the front wall of the article **10**, while similar frames **14**, **15** and **16** form the outline of the rear wall. The frame members **11–16**, inclusive, are each identical in size and shape, although the frame may take varying forms as desired, and a plurality of different sizes of frames may be assembled in various relationships to form different articles.

As best shown in Figures 3 and 4, each of the frame members includes a central web portion **17** having oppositely directed, substantially parallel, first and second terminal flanges **18** and **19**, respectively. An additional flange **20** extends from the web portion **17** intermediate

the terminal flanges 18 and 19 in the same direction and parallel to the second flange 19. As best seen in Figures 3, 4 and 16, the web portion 17, the first flange 18 and the second flange 19 are each continuous about the entire perimeter of the frame, while the intermediate flange 20 is cut away at each corner of the frame, as at 20*a* (Figure 16), for a purpose to be hereinafter more fully described.

It is preferred that the frames 11–16, inclusive, be formed of an extruded or die-cast light weight metal, such as aluminum or magnesium, or alloys of these metals. In case the frames are extruded, it is merely necessary to deform the extruded strip to the desired shape and then to weld the abutting ends of the strip to form the rectangular frame members 11–16, as shown in the drawings. The additional ribs or flanges 20 can then be cut away at each of the corner portions of the frame.

Each group of frames 11–13 and 14–16, respectively, are secured together by means of a plurality of frame connectors 21, as best shown in Figures 3 and 6. Each frame connector 21 comprises a central web portion 22 having terminal, inturned legs 23 and 24. each of the legs 23 and 24 being cut away inwardly of its free end, as at 25, to reduce the weight of the connector. The connector is of such size and configuration that the legs 23 and 24 each fits within that space provided between the second flange 19 and the additional flange 20 of one of the frame members 11–16, the free end of each of the legs abutting the web 17 of the frame member. The flanges 19 and 20 are provided with apertures for alignment with corresponding apertures in each of the legs 23 and 24. These apertures serve for receiving self-tapping screws 26. It will be seen that the screws 26 and the connecting units 21 are employed to secure the frames of each group of frames 11–13 and 14–16 in assembled relation.

In Figures 1 and 2, it will be seen that sets of frames 11–13 and 14–16, inclusive, are maintained in spaced apart, parallel relation in order to define the outline of the storage unit 10. The group of frames are maintained in this alignment by means of members 27 (Figures 6 and 7) which are secured to the inner surfaces of the flanges 19 of the frames 11–13 and 14–16 to extend therebetween. The members 27 generally take the form of U-shaped channels having upper and lower inturned flanges 28 and 29, respectively. The channel members 27 are secured to the flanges 19 by means of self-tapping screws 30 extending through aligned apertures formed in the members 27, the flange 19, and the intermediate flange 20 of each of the frame members.

From the foregoing description it will be appreciated that the frames 11–16, together with the transversely extending channel members 27 secured to the frame, cooperate to define the outline of a furniture article 10. The space thus outlined by the frame members is enclosed by a plurality of panels extending between the frames. For example, in Figure 1 a top panel 31 extends between the upper edges of the frames 11, 13, 14 and 16 to define the upper surface of the article 10, and a side panel 32 extends between side portions of the frames 11, 12, 14 and 15 to define one side surface of the article 10, while an additional side panel 33 (Figure 13) extends between the panels 13 and 16 to define the other side surface of the article 10. The bottom of the article 10 is closed by a bottom panel 34 identical with the panel 31 and extending between the frames 12, 13, 15 and 16.

The securing of the panels 31–34 within the frames 11–16, inclusive, is illustrated in Figures 4 and 5 in which it will be seen that opposing edges of each of the panels, for example, the edge 32*a* of the panel 32, is slotted or recessed as at 35 to a depth corresponding to the width of the intermediate flange or rib 20 of the corresponding frame member. The rib 20 is inserted into the slot 35 and secured therein by means of a self-tapping screw 36 extending through aligned apertures formed in the flanges 19 and 20 from the adjacent frame member. The panel 32 is preferably recessed as at 37 to receive the self-tapping screw 36 in order to prevent binding of the threads of the screw upon threaded engagement with the flanges of the frame member.

By this employment of a self-tapping screw threadedly engaged by the flanges 19 and 20, the portion of the panel member between the flanges is squeezed and securely held therebetween. Thus, it is possible to employ inexpensive, light-weight or low-density cellulosic material for the panel construction, although standard structural panels, such as plywood, conventional wood sheeting, and the like, may be employed.

Not only may the panels be pre-finished prior to assembly, but the panels require no edge treatment whatsoever. Edge treatment in the manufacture of wood furniture is always a problem due to the difficulty of smoothly finishing these portions of a panel, the unsightliness of the edge, and the poor mechanical strength thereof. In the present invention, the web portion 17 of the frame 11 lies against opposing, free edge portions of each of the top, bottom and side panels so that these edges of the panels require no finishing.

The article 10 is provided with a plurality of sets of legs 37 and 38. Each of the sets of legs 37 and 38 comprises an upper web portion 39 having a plane upper surface adapted to abut the undersurface of the bottom panel 34 of the article 10. The legs are secured to the panel by means of bolts 40 extending through the web 39 and the associated frame members 12 and 13 to receive nuts 41. Each of the sets of legs 37 and 38 is thus secured directly to a frame member through the bottom panel 34, so that the major load placed upon the article 10 is transmitted by the frame members to the legs with only a compressive load equal to the weight of the article 10 and its contents being placed upon that portion of the lower panel 34 directly interposed between the legs and the associated frame members.

In Figure 12, the method of attaching the back member 42 to the frame members and to the associated longitudinal supporting members 27 is illustrated. The back 42 is of light-weight material which need have no great structural strength, inasmuch as no load is imposed on this member. For example, the back portion 42 may be made of pressed fiber board, compounded paper pulp, fiber material, or the like. The back is secured to the adjacent frame members, such as a frame member 27, by means of expanded rivet studs 43 having flexible legs 43*a* formed with terminal protuberances. In order that the plane surface may be provided to receive the back 42, wooden or other filler strips 42*a* are interposed between the back 42 and the frame members. The studs 43 are inserted through an aperture 44 formed in the back 42 and through a registering aperture 45 formed in a terminal, inturned ear 46 of each of the longitudinal supports 27. Upon insertion of the rivet studs 43 through the registering apertures and the outward springing movement of the legs 43*a*, the back is secured to a longitudinal support member 27, which in turn is secured to the frame members by means of screws 30, as hereinbefore described.

The studs 43 may also be employed to secure the back to the top and bottom longitudinal edges of the frames 14, 15 and 16 where no supports 27 are present. Rear panel brackets 27*a*, Fig. 18, are secured to the inner flange 19 of the frame by means of screws 30, the offset legs 27*b* of the brackets lying flat against the inner surface of the rear panel 42. The rivets 43 extend through registering apertures in the legs 27*b* and the back panel to secure the panel to the bracket as hereinbefore described.

At the meeting edges of the top panel 31 and the side panels 32 and 33 (Figures 1 and 7) an edge strip 48 is employed to provide an edge treatment without the necessity of accurately cutting, hand-lapping and manually finishing this joint. The edge strip 48 is preferably formed of resilient, flexible plastic material, such as cellulose acetate butyrate, and is designed to be extruded in the form of elongated strips which may be cut to the desired length to fit the free edges of the top panel 31 and the side panels 32 and 33. The edge strip comprises a generally plane central web portion 49 having an integrally formed head portion 50 provided with outwardly directed side arms 51 and 52, each extending at a plane at an angle of approximately 45° to the plane of the web strip 49. The web 49 carries a foot portion 53 provided with terminal legs 54 and 55 extending therefrom, the legs 54 and 55 being slightly deformed inwardly of the arms 51 and 52, respectively. The elongated strip 48 is merely inserted between the rough-cut, beveled mating edges of the panels 31 and 32, the outer portions of the panel edges being recessed as at 31*a* and 32*a* to receive the head 50 and arms 51 and 52. Due to the

resilient character of the strip 48, tight sealing engagement is obtained between the strip and the associated panel, and the slight inwardly deformation of the legs 54 and 55 exert a gripping action on the inner panel surfaces to properly seat the strip. The outer surfaces of the arms 51 and 52 and of the rounded exterior face of the head 50 form a smooth corner at the juncture of the panels 31 and 32. Since the legs 54 and 55 of the foot portion 53 of the strip 48 are of substantially the same thickness as the thickness of the inner flanges 19 of the frame member 14, the longitudinal supporting member 27 extending between the front and rear frame assemblies 11–13 and 14–16 aids in maintaining the strip 48 in position by snugly fitting thereagainst.

In Figures 1, 2, 5, 7 and 12, it will be seen that a plurality of drawers 57 extend into the space defined by the cooperating frame members 11–12 and 14–15, respectively, and the panels 31, 32 and 34. One of the drawers 57 is particularly illustrated in Figures 8–11, inclusive, and it will be understood that the construction of each of the drawers 57 is substantially identical to that illustrated, the only difference being in the size of the drawers.

The drawer 57 comprises a metal drawer shell 58 including a generally rectangular, substantially plane lower supporting surface 59 having transversely extending strengthening ribs 60 and opposed, upturned marginal flanges 61. Each of the flanges 61 is joined to the support surface 59 by curved portions 62, thus avoiding a sharp, dust-collecting corner at the juncture of the flange and the supporting surface. The shell 58 also carries integrally formed, opposing front and rear flanges 63 and 64, respectively. These flanges lie approximately normal to the plane of the supporting surface 59 and extend upwardly from the surface 59 to follow the contour of the side flanges 61. A drawer back panel 65, also preferably formed of metal, extends along the length of the flange 64 and is secured to the flange 64 by suitable means, as by spot welding 66. The free upper edge of the backing plate 65 is rolled, as at 67, to eliminate any sharp edge and to stiffen the plate, and the plate carries transversely extending, generally perpendicular slots 68 spaced along the length thereof for a purpose to be hereinafter more fully described.

The front terminal flange 63 serves to carry a drawer front, including a wood, plastic, or presswood backing panel 69 recessed as at 70 to receive the front flange 63 and a front panel 71 formed with the same outer veneer or surface as the top panel 31, side panels 32 and 33, and bottom panel 34 of the structure 10. The panels 69 and 71 are secured to the flange 63 by means best shown in Figures 10 and 11, including a recess 72 in the member 71, an aperture 73 in the flange 63 aligned with the recess 72, and an aperture 74 in the panel 69 also registering with the recess 72. An internally threaded, expanding type sleeve 75 is inserted within the recess 72 to receive a screw 76 extending through the registering apertures 73 and 74. The sleeve 75 is deformed outwardly into the core of the member 71 prior to assembly to secure the member 71 and the member 69 to the flange 63 upon threading the screw 76 into the sleeve, even though the member 71 is not capable of retaining a thread screw alone.

The panel 69 is slotted, as at 77, in alignment with the slots 68 in the rear panel 65. These aligned slots receive partition panels 78 extending therebetween to transversely divide the interior of the drawer into spaced sections. It will be noted that the edge of the partition panel 78 insertable into the slot 68 is recessed as at 79 to provide an edge overlying the bottom of the associated slot 68 to allow support of the partition panels by the sloping rear panel 65.

A drawer pull 80 is provided for each drawer 57 and is secured thereto by means of a pair of screws 81 extending through registering apertures formed in the inner and outer panels 69 and 71, respectively, for threaded engagement with an internally threaded boss 82 formed integrally with the handle 80.

Each of the upturned marginal side flanges 61 carries at its upper end a drawer slide 83 secured thereto by suitable means, as by spot welds 84. Each drawer slide 83 includes a central web portion 85 and outwardly extending arm portions 86 provided with inwardly rolled edges 87. Each of the marginal flanges 61 of the drawer 57 is provided with an outturned lip 88 (Figure 7) for conforming engagement with the slide web portion 85 and the upper outturned arm 86 of the slide.

Each drawer slide extends along the entire length of the flange 61 and is dimensioned to fit within one of the longitudinal supporting members 27, which also serve to join the front and rear frame assemblies 11–13 and 14–16 as hereinbefore described. In Figure 7, the interfitting sliding relationship of the drawer slides 83 and the longitudinal support member 27 may be seen. The inturned end portions 87 of the arms 86 of the drawer slide serve to provide smooth running sliding contact between the drawer slides and the associated drawer guide.

A stop for the drawers is provided by an out-turned ear 90 (Figure 12) struck from one of each pair of support members 27 serving as drawer guides, the ear 90 being turned in to lie between the arms 28 and 29 of the member 27 adjacent the front of the article 10. A screw 91 is threaded through the flange 61 of each drawer 57 and the web 85 of the associated drawer slide adjacent the rear end of the drawer, the screw 91 being positioned to abut the ear 90 to prevent accidental withdrawal of the drawer from its position within the article 10. A resilient pad 90*a* of rubber or similar material is affixed by a suitable adhesive to the face of the ear 90 to cushion the shock transmitted to the ear upon opening of the drawer.

The frame members 13 and 16 of the article 10, together with the portions of the top panel 31, the side panel 33 and the bottom panel 34 extending therebetween, cooperate to define an interior storage space 92 (Figure 13). The drawer space defined by the frame 11–12 and 14–15 is separated from the space 92 by a partition panel 93 (Figure 15) extending between the frames 13 and 16. The partition 93 is of such thickness as to be insertable into the space between the cooperating flanges 19 and 20 of the frame members 13 and 16 and is preferably of pressed board or other similar construction.

A plurality of shelves 94 (Figures 13 and 17) are adapted to be mounted within the space 92 by means of angle iron supports having an elongated upper arm 95 on which the bottom surfaces of the shelves 94 rest. A second arm 96 extends normally to the arm 95 and carries cylindrical studs 97 projecting normally therefrom for entry into any of a plurality of aligned spaced apertures 98 formed in the side panel 33 and the partition panel 93.

The space 92 is closed by means of a door 100 (Figures 1, 13, 14 and 15) comprising a panel 101 having a veneer facing or surface similar to that of the top, side and bottom panels 31–34, inclusive, hereinbefore described, the panel also preferably having a solid wood core strip 120 (Figure 13) extending along the upper and lower edges of the panels. The remainder of the core may be a low-density material or the entire core may be solid wood with a veneer facing, if desired. The panel 101 is secured to the frame member 13 by an offset-type hinge having a first offset leg 102 secured to the frame web 17 as by spot welds 103. A second hinge leg 104 is secured to the door panel 101 by suitable means, such as screws 105, which are threadedly retained by the solid wood core strip 120. The hinge arms 102 and 104 are pivoted together by means of a pivot pin 106. A second hinge, similar to that shown in Figure 13, is provided for the lower outer corner of the door 100 so that the door may be swung into selected open or closed position. A door handle 107, similar to the drawer handle 80 hereinbefore described, is also carried by the door to facilitate opening movement thereof, the handle 107 being secured to the door by means similar to that described in connection with the drawer handle 80.

A simple spring-urged latch for the door 100 is provided by means of an angle 108 (Figure 15) secured to the flange 19 of the frame member 13, as by spot welding at 109, the latch angle having a curved latching lip 110 adjacent the forward open edge thereof. The latch itself includes a cylindrical roller 111 rotatable about an axle 112 journaled within a slot 113 formed in a generally U-shaped flange housing 114 having integral out-turned ears 115. The latch housing 114 is secured to the door panel 101 by means of a screw 116 and an expansible collar 118, as hereinbefore described in connection with the collar 75 and the screw 76 of the drawer 57 as shown in Figures 10 and 11. A coiled

leaf-type spring **119** is employed to urge the latch roller **111** into contact with the latching plate **108** to latch the door in closed position behind the lip **110**.

The storage furniture article herein described possesses the advantage of being readily assembled and disassembled without the necessity of employing any tools other than a screwdriver. To assemble the structure, the frame assemblies **11–13** and **14–16** are first individually assembled by means of the brackets **21** and the screws **23**. The rear frame assembly **14–16** is then placed flatwise upon a supporting surface, such as the floor, and a top panel **31**, the side panels **32** and **33**, and the bottom panel **34** are inserted therein as illustrated in Figure 4. The combined fastening members and drawer guides **27** are next secured to the panel, and the holding screws **30** are then secured to the frame assembly **14–16** and the panels secured to the frame and its supporting members **27** by means of the screws **36**, as shown in Figures 5 and 12. The next step in the assembly of the article **10** is the fitting of the panel subassembly **11–13** in position and the fastening of this frame to the support members **27**, with the panel members receiving the flanges **20** and abutting the web members **17** of the front frame assembly. The front frame assembly is then secured to the remainder of the structure and the legs **37** and **38** are secured to the frame by means of the bolts and nuts **40** and **41**.

It will be understood that the hinge arm **102** has been previously secured to the frame **13** of the front frame assembly so that the door **100** may next be assembled upon the article **10** and the drawers **57** may be inserted into the article with the drawer slides **85** riding on the drawer guides **27**.

Due to the fact that the side panels or front panels and doors have been pre-finished, the assembly of the article results in the formation of a finished storage piece **10** ready for immediate use.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

We claim as our invention:

1. An article of furniture comprising parallel rows of aligned frame members joined together to define a load-bearing frame, each of said rows comprising a plurality of frames joined together at adjacent edges and panels of relatively low-strength, low-density material extending between said rows of frame members, first means on said panels and second means on said frame for interlocking the edges of said panels to said frames at the edge surfaces of said panels to define a top, and at least one side closure wall for said article, one of said means being discontinuous at the joints between the frame members whereby the respective panels forming the closure walls each extend across the joints between said frames in each of said rows to present respective unbroken closure walls.

2. An article of furniture comprising a first group of generally rectangular frames assembled to define the outline of the front of said article, a second group of generally rectangular frames assembled to define the outline of the back of said article, each of said sets of frames having inwardly directed spaced generally parallel marginal flanges, means securing said first group of frames to said second group of frames to complete the outline shape of said article, and a plurality of panels extending between said groups of frames and having portions confined between said spaced parallel frame flanges to define side, top and bottom closure walls for said article.

3. In an article of furniture, a load-bearing structural frame comprising a plurality of generally rectangular hoop-shaped metal frames each having a pair of external spaced parallel flanges extending perpendicular to the plane of said frame, means securing certain of said frames together to define the outline of the front of said article and for securing together other frames to define the outline of the back of said article, said means including a U-shaped bracket having spaced legs insertable between the spaced flanges of abutting frames, means extending through said flanges and said legs to secure said brackets to said frames, and channel irons extending between said groups of frames and secured to the flanges thereof to maintain said groups of frames in fixed spaced relation to complete the outline of said article.

4. An article of furniture comprising a first set of generally rectangular structural frames secured together to define the outline of the front of said article, a second set of generally rectangular structural frames secured together to define the outline of the rear of said article, bracing means extending between said sets of frames and secured thereto to complete the outline of said article, said bracing means having apertured inturned ears formed integrally therewith and positioned adjacent said second set of frames, a rear closure wall for closing the rear of said article, and resilient deformable means carried by said rear wall and extending through said apertured ears to secure said rear wall to said bracing means.

5. A frame comprising a pair of members each having a web portion with three parallel flanges extending normal thereto, one being an intermediate flange and the other two being end flanges, said pair of members being arranged with corresponding end flanges back-to-back, a U-shaped connector having bifurcated legs extending between the other end flanges and their corresponding intermediate flanges and securing means passing through said other end flanges, bifurcated legs and corresponding intermediate flanges to secure said pair of members together.

6. A panel and frame construction comprising a first frame member having a right angle corner thereon formed by first and second joined sides and a second frame member having a right angle corner thereon formed by third and fourth joined sides, each of said sides comprising a web lying in a plane substantially parallel to the plane of its respective frame member, each web having a longitudinal flange extending therefrom substantially perpendicular thereto and a second longitudinal flange extending therefrom substantially parallel to said first flange and between said first flange and the outer edge of the web, said second flange being discontinuous around said corners, means securing first and third sides together by the outer edges of the webs thereof with the second and fourth sides extending in opposite directions and in alignment with each other, and a panel extending across the joint between said first and third sides and having its edge interlocked with the flanges on said second and fourth sides and passing through the discontinuities in said second flanges to provide a continuous unbroken panel surface across the joint between the second and fourth sides.

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