

[54] MODULAR PARTITION SYSTEM

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572, 594, 595, 593, 270, 271

[56] **References Cited**

UNITED STATES PATENTS

3,527,004	9/1970	Sorenson	52/284 X
921,036	5/1909	Wheeler	52/572
2,884,780	5/1959	Ramirez	52/570
2,921,693	1/1960	McLean	52/495 X
3,100,953	8/1963	Johnson	52/570 X

FOREIGN PATENTS OR APPLICATIONS

232,845	4/1969	U.S.S.R.	52/615
298,350	9/1963	Netherlands	52/615

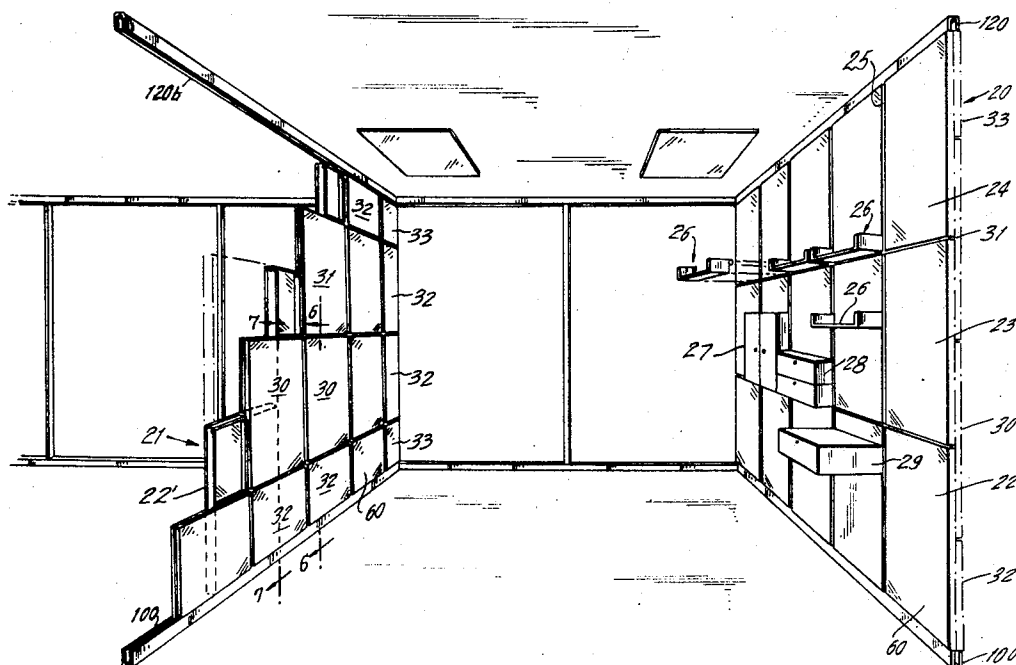
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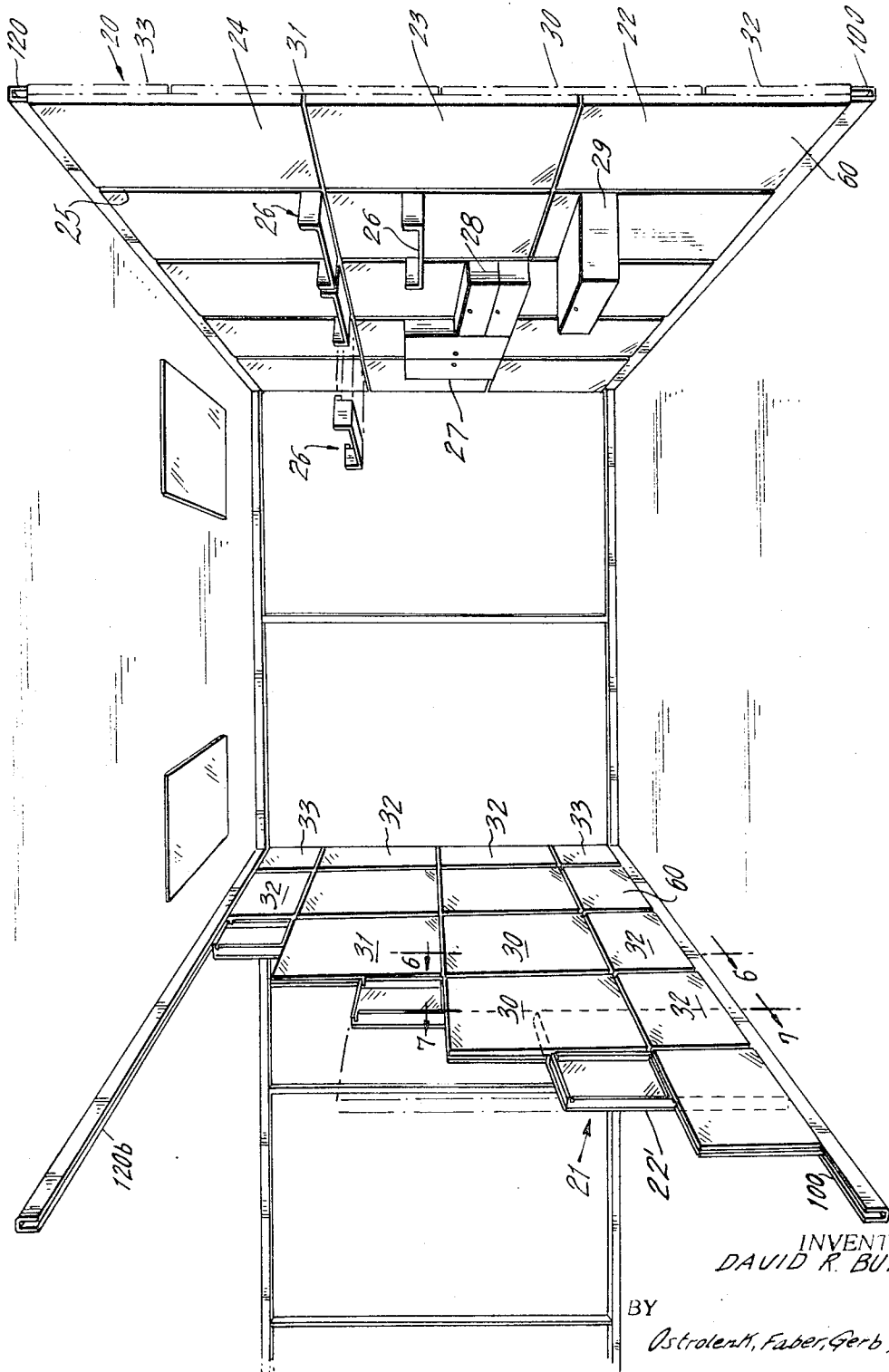
[57] **ABSTRACT**

A readily assemblable and disassemblable wall or partition, consisting of a plurality of smooth faced rectangular panels, each providing interlocking elements at the rear thereof so that the smooth faces on each set of panels will together form one side of the partition and the interlocking faces of the panels will integrate both sides of the partition. The interlocking panels are so arranged that each panel interlocks four adjacent quadrants of four adjacent panels on the opposite side. The peripheral surface of each panel is so arranged that it provides vertical and horizontal channels between adjacent panels for utilities such as wiring with the wiring concealed and so that it also conceals in such channels mounting means for hanging shelves or other furniture on the walls.

16 Claims, 12 Drawing Figures



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FIG. 6.

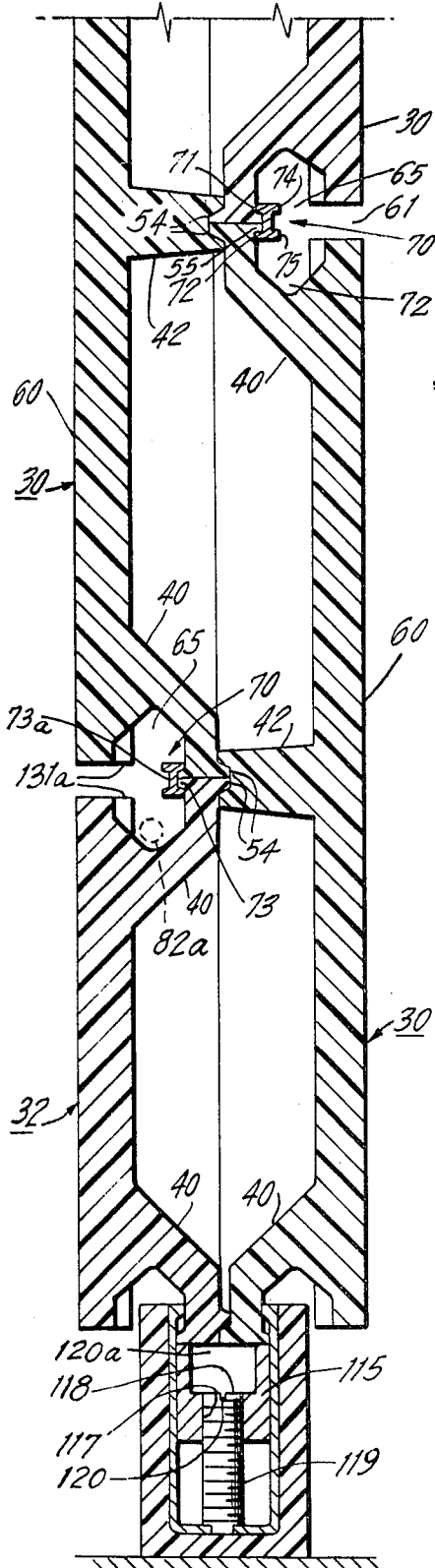
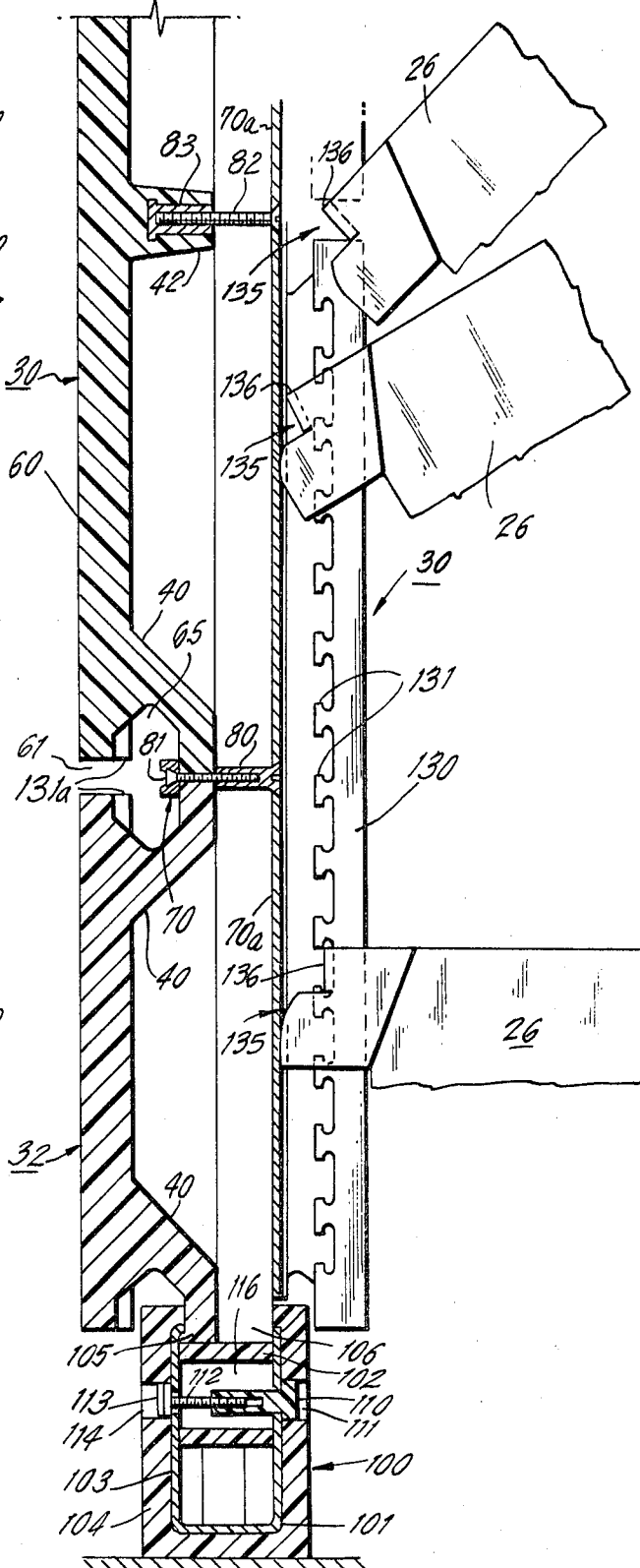
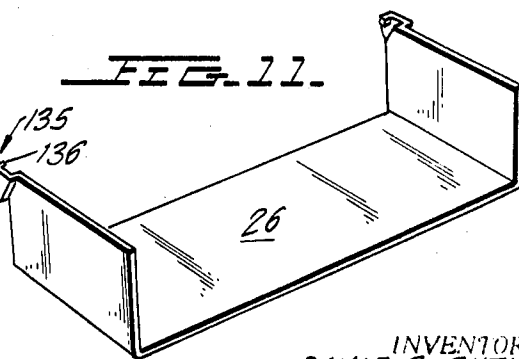
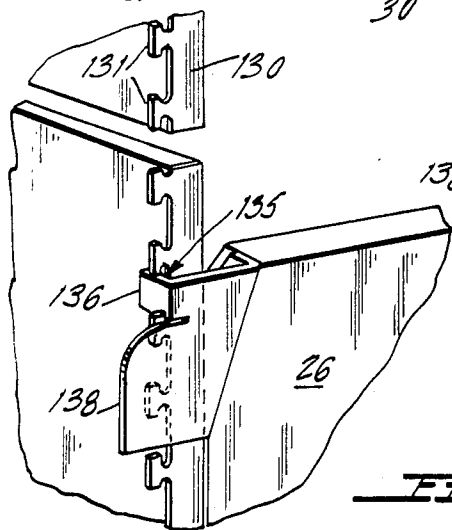
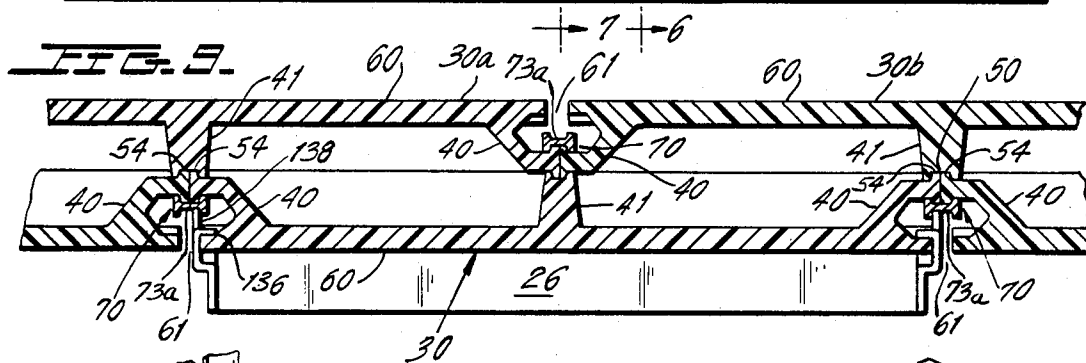
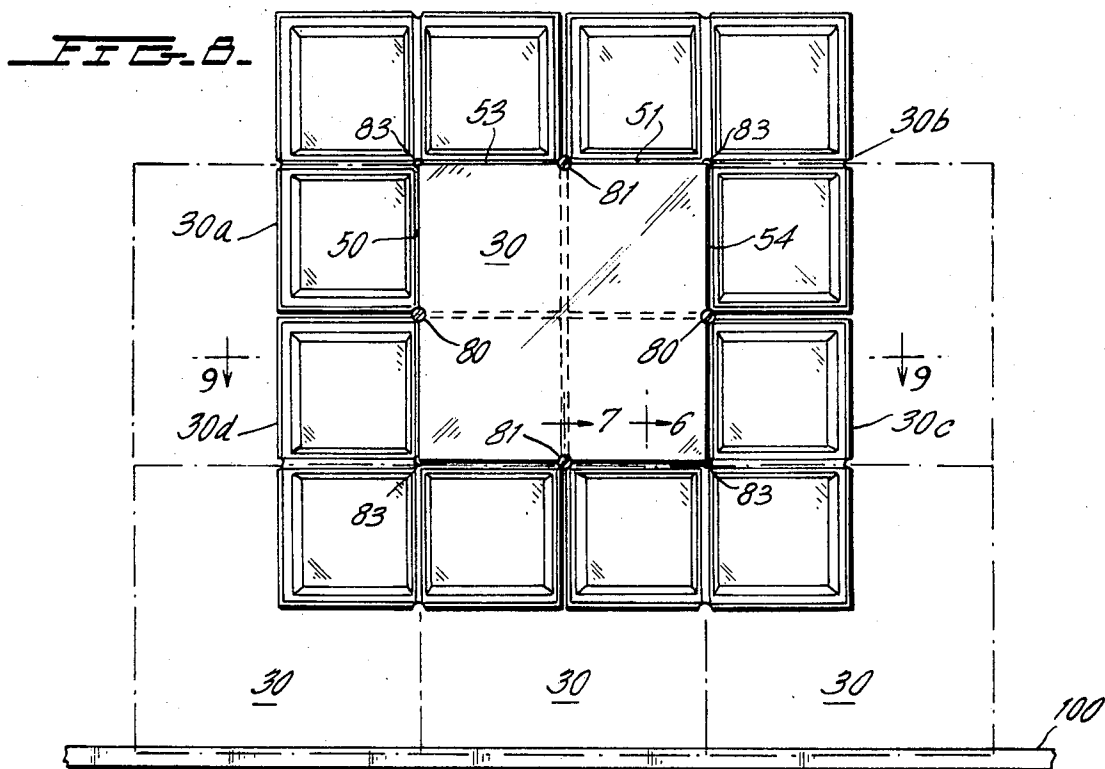


FIG. 7.



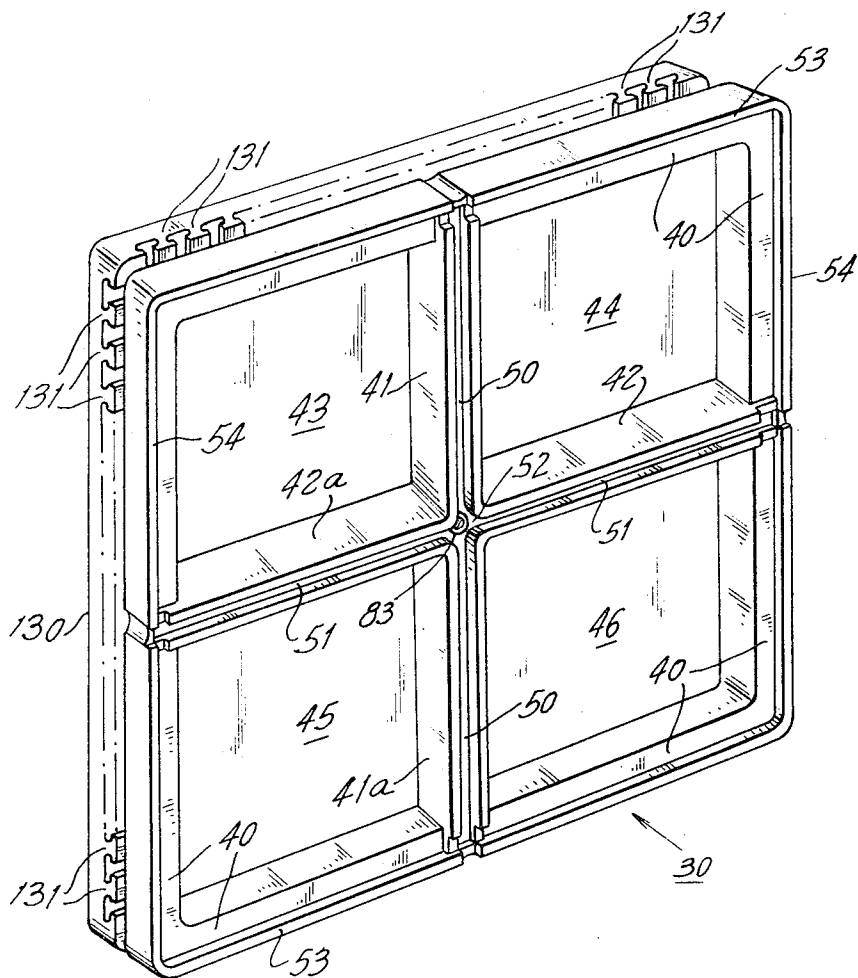


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FIG. 12.



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MODULAR PARTITION SYSTEM

The present invention relates to a partition system suitable for either partial or full, floor to ceiling arrangement, which is assembled from a plurality of interlocking one piece molded cast or otherwise fabricated rectangular panels. The partitions require no studs and can be quickly assembled or disassembled with a minimum of skill. Each of the individual panels may have service runs (open conduit) and bracket supports molded into the panel or carried by the panel. The largest individual panel is of a size such as 30 inches by 30 inches so that the disassembled system may easily be transported to any spot in a new or existing structure.

The panels may be made of any suitable material, preferably a plastic of a sufficient density to create structurally sound panels of sufficient strength to make up a partition which will support floor to ceiling bookshelves or other furniture in loaded condition on both sides of the wall or a dynamically loaded wall with only one side containing full bookshelves and the other side empty. The panels or a portion of the panels should be made of materials which allow for on site modification of the panel dimensions to conform to the space available so that the system may be utilized in any space and not just those that are proportioned relative to the module. In the event of change in decor or in the event of damage to a portion of the partition, a single panel can readily be removed and replaced without affecting the structural integrity of the partition and without requiring modifications of either side of the partition.

Service runs are accessible from the face of the partition without removing any parts and allow for running service wires in both the horizontal and vertical direction. Once in place the wires contained in the service runs are completely hidden from view.

Essentially the front of each of the panels is smooth but may have any functional devices, or decorative arrangement or embossment. Bracket supports may be molded as an integral part of the panels along the edges thereof to provide supports for shelves or other furniture thereto. Such bracket supports may be added as a separate material, mechanically fastened to the panel or molded into the panel.

Essentially the invention contemplates a plurality of panels which are grooved on their rear side in such manner that any one panel will interlock with from one to four panels. In the case of one panel interlocking with four, each quadrant of each panel on one side will interlock with a quadrant of a panel on the other side of the partition. In no case will the joints, vertical and horizontal, on one side of the wall be aligned with the joint on the other side of the portion or wall except of course at the edges top and bottom of the partition.

Since the partition should be finished on both sides whether or not the partition extends from the floor to the ceiling, it will thus be obvious that half panels must be provided that have the full horizontal dimension but only half the vertical dimension (as viewed when used in a horizontal mode) so that the half panels will each interlock with two horizontally adjacent panels.

It is also obvious that quarter panels must also be provided that will have half the horizontal and half the vertical dimension so that the quarter panel will interlock with one panel located at the top or bottom of the end of a partition equal in height to some multiple of the basic full module.

Thus, in any single partition which is, for instance 90 inches high, assuming the utilization of 30 inches panels, one side of the partition will have three full panels in any vertical run while the other side of the partition will have two full vertical panels and one half panel at the bottom and top of each run. The same will be true horizontally; at the lower and upper corners, a quarter panel will be used as shown.

It is therefore the primary object of this invention to provide a modular wall partition which may readily be assembled and disassembled and which consists of a plurality of panels with the rear of each panel provided with interlocking grooves so that any one panel will interlock with a plurality of adjacent panels forming the opposite surface of the wall so that when the wall or partition is completed, all of the panels therein interlock with each other.

The foregoing and many other objects of this invention will become apparent in the following description and drawings in which:

FIG. 1 is a view in perspective, showing on the right side, the inner surface of a completed partition wall with various types of furniture supported thereon and on the left side a wall in process of erection.

FIG. 2 is a view in elevation of the rear side of one of the full size panels which is utilized to make up the partitions of FIG. 1. The half panels at the bottom and top of the inner surface of the partition on the left side of FIG. 1, constitute simply a bottom half or top half of the structure shown in FIG. 2 with the addition of a channel 65 along the cut edge as shown in panel 32 of FIGS. 6 and 7. The quarter panels shown at the rear of the inner surface of the partition on the left side of FIG. 1, constitute simply a corner quadrant of the structure shown in FIG. 2 with the addition of a channel around the entire perimeter.

FIG. 3 is a cross-sectional view taken on line 3—3 of FIG. 2, looking in the direction of the arrows.

FIG. 4 is a cross-sectional view taken on line 4—4 of FIG. 2, looking in the direction of the arrows.

FIG. 5 is a side view in elevation taken from line 5—5 of FIG. 2, looking in the direction of the arrows.

FIG. 6 is a vertical view in cross-section taken on line 6—6 of FIG. 1, looking in the direction of the arrows.

FIG. 7 is a vertical view in cross-section taken on line 7—7 of FIG. 1, and 7—7 of FIG. 8, looking in the direction of the arrows. At this cross-sectional view it will be noted that the panels on one side are seen edge-on while the panels on the other side of the same partition are seen in cross-section.

FIG. 8 is a vertical elevation of a partition showing the arrangement of the panels with lines in phantom indicating adjacency of panels.

FIG. 9 is a cross-sectional view taken on line 9—9 of FIG. 8, looking in the direction of the arrows, indicating schematically a piece of furniture mounted thereon.

FIG. 10 is a rear view in perspective showing the bracket arrangement on the panels and the manner of mounting furniture elements thereon.

FIG. 11 is a schematic view of a piece of furniture which may be mounted on the partition.

FIG. 12 is a view in perspective of a single panel showing the arrangement of parts.

Referring now to FIG. 1, the partition 20 and the partition 21 are shown with partition 20 fully assembled and furniture supported thereby and partition 21 in a stage of partial assembly. It will be noted with respect

to partition 20 that the inner or visible surface of the partition consists of a series of panels 22, 23, 24 which are vertically arranged, the said panels being repeated in adjacent vertical runs. The small spaces 25 between panels provide access to mounting brackets hereinafter described on which may be hung mounting elements of furniture such as shelves 26, closets 27, drawer arrangements 28 and other furniture such as a desk 29.

The opposite side of the partition 20 consists in each of its vertical runs of full panels 30, 31, half panels 32, and quarter panels 33. As will be seen by examining the partially completed partition 21, the inner side or surface of the partition 21 corresponds to the outer or non visible side of partition 20. In this case the full partition panels 30 and 31 in each vertical run are clearly seen and the half partition panels 32 and the quarter partition panels 33 are each clearly seen.

It will also be noted that in the partially completed partition 21, partition panel 22' corresponds to the partition panels horizontally adjacent to panel 22 of partition 20 and it will therefore be noted that the partition panels 30 and 22' are so arranged that they interlock. Each of the full size partition panels interlocks with four partition panels on the other side of the wall.

Since the partition panels are of predetermined length it will be obvious in order to achieve this interlock that half panels must be used at the top and bottom of one side of the wall and that quarter panels must be used in the corners of the same side of the portion and that these are represented by the partition elements or half modules and quarter modules 32 and 33 respectively on each partition.

The essential element of this invention therefore resides in the partition panels 30, 31, 32 and 33 and a full description thereof will make it possible to determine just how these partition panels are interlocked so that they support each other and present a smooth exterior surface while nevertheless providing mounting means for supporting furniture such as shelves, drawers or closets thereon without interfering with the face of the partition.

FIG. 2 shows a rear view or elevation of one of the partition panels. FIG. 12 shows this rear view in perspective. FIG. 8 shows the face of one of the panels at the center thereof and shows the rear of the partition panel of the opposite side of the wall interlocked by the single partition panel 30. FIGS. 3, 4, and 5 are cross-sectional views as already mentioned showing various elements of the single partition panel 30. FIGS. 6, 7 and 9 show the method of interlock as well as the method of supporting furniture. FIG. 8 shows the set-up for interlocking the panels and FIGS. 9, 10 and 11 show the method by which furniture is mounted thereon.

Hence, a preliminary description of a single partition panel element 30 as shown in FIGS. 2 and 12 and in the cross-sectional view of FIGS. 3, 4, and 5 will make the interlocking method clear. Thereafter, reference to FIGS. 6, 7, 8 and 9 will show the interlocking panels in operation.

Referring now to FIGS. 2 and 12, each partition panel 30 is as previously described, separately made of a single homogeneous material such as urethane plastic foam of sufficient density to create a structurally sound panel or with an integrally molded or attached metal structure of sufficient strength so that when combined with other panels to make up a partition, the partition will support, for instance, bookshelves fully loaded on

both sides of the wall or may constitute a dynamically loaded wall with only one side containing full bookshelves and the other side empty or containing other elements.

Each panel has a peripheral surface which matches the peripheral surface of the adjacent panel on the same side of the wall contacting the same but with no interlocking element on the partition panel interconnecting the same. Therefore, each partition panel may be individually removed and replaced in the event of damage or a desired change of decor or color scheme from say a solid color wall to a wall having panels each of a different color. Each panel provides within itself means for interengagement with the partition panel on the opposite side. Each full size panel engages four corresponding panels on the opposite side.

When the partition panels are in place, the wall is completely integrated and a single structural unit. As hereinafter described also, the partition panels are so arranged that when aligned with each other they furnish wiring runs in both horizontal and vertical directions which are fully concealed and also provide as previously mentioned furniture bracket supports.

The partition panel 30 of FIGS. 2 and 12, comprises preferably a single solid member having an integral frame 40, and integral cross pieces 41, 41a, 42, 42a which define recessed sections 43, 44, 45, 46. The opposite face of the partition in FIG. 2 as seen in FIGS. 1, 2 and 12 is smooth or may be texturally patterned for a variety of visual effects or functional reasons.

The inside face as above mentioned consists of the frame and the cross-elements 41, 41a which are continuous with each other and 42 and 42a which are horizontal and also continuous with each other. The cross elements 41-41a and 42-42a extend toward the peripheral frame section 40. The outer surface of the frame section 40 is smooth at the top and bottom and arranged with vertical recesses as shown in FIGS. 3, 4, 6, 7, 9 and 12 which are hereinafter described.

Each of the cross elements 41, 41a and 42, 42a is provided with a groove 50, 51 in its surface with the two grooves intersecting at the center 52. The grooves, 50, 51 extend from the cross elements 41-41a toward the outer periphery of the frame of the panel; the material defining the groove is notched adjacent the periphery to permit the panels to overlie and interlock each other. These grooves as hereinafter described will receive corresponding elements of the edges of the panels mounted on the other side of the partition so that the arrangement indicated in FIG. 1 and shown more clearly in FIG. 8 can be completed with each panel abutting the rear and being securable with respect to the rear of four panels on the other side of the same partition.

Each side of the frame section 40 is provided with a peripheral ridge 53 (horizontal) and 54 (vertical). These peripheral ridges 53 and 54 are so dimensioned that two of them will fit closely into any one of the channels 50 and 51 to permit the panels to be so arranged that a panel on one side of the wall will intersect four panels on the other side of the wall, except for the bottom, top, and side runs of panels of FIGS. 1 and 2 as previously mentioned, in which case the intersection of the half panels is with two adjacent panels on the other side; and in the case of the corners of the same partition in which case the intersection of the quarter panel is with one panel on the other side. This is clearly

shown in FIGS. 6, 7, 8 and 9 wherein the full panel 30 in FIG. 8 intersects with corresponding full panels 30a, 30b, 30c and 30d on the opposite side. The raised elements or beads 53 and 54 of the panel 30 entering into the grooves 50 and 51 respectively of the panel 30a, b, c, d, leave enough room in the grooves so that the raised elements 53, 54 of vertically and horizontally adjacent panels may also enter the said grooves 50 and 51. In order to clarify matters, only one set of such beads and grooves is provided with reference numerals in FIG. 9.

Each panel is so constructed that its front surface 60 is smooth. However the surfaces on the vertical and horizontal sides of the panel are so arranged that they do not extend the full distance across the width of the panel but are less than the width of the panel by the thickness of the vertical backing strip 70 to be described later.

When the panels are installed, this provides a gap 61 between panels. The gaps 61 of the vertically aligned panels on each side are themselves vertically aligned to form an entry to a channel formed by two horizontally adjacent panels. The channel 65 is a vertical channel formed by the recess in the vertical side of each frame member 40. When the panels are put together the gap 61 permits entry to the channel 65 for installation of wiring as well as for mounting furniture as hereinafter described. The horizontal edges of the panel are similarly formed to provide similar horizontal channels 65.

It will thus be seen that a complete wall partition may be assembled by arranging the series of panels so that the rear of any one panel on one side intersects with the rear of four panels on the other side, each of the panels being placed in position sequentially; when the panels are in place, the channels 65 are formed, the vertical channel 65 being arranged to provide access for mounting means as well as other materials such as wiring which is to be run vertically; and similar matching channels in the horizontal element providing access also for wiring or other devices which are to run longitudinally of the wall.

Since the vertical beads 54 of each panel engage the groove 50 of the staggered adjacent panel on the other side of the partition, a quadrant of each panel thereby engages a quadrant of an entirely different panel on the other side of the wall, and a pair of beads 54 of adjacent panels on the same side completely fill the groove 50, initial integration or interlock of the wall parts is achieved. This also applies to the horizontal beads 53 of each panel which engage the horizontal groove 51 in each of the adjacent panels.

As the wall is being erected the wall is integrated by placing a backing strip 70 in each vertical and horizontal channel as the panels are successively placed to form the channels. The backing strip 70 as shown in FIGS. 6, 7 and 9, is of generally H shaped form (see particularly FIG. 6) with extensions 71 and 72 defining a groove 73 which receives the adjacent beads 54; it also has extensions 74, 75 which define a groove 73a and which provide (in the case of the backing strip 70 which runs vertically) a support or guide for a portion of the furniture mounting element as hereinafter described. The horizontal backing strips are identical in form with the vertical backing strips and are similarly placed in horizontal grooves. In addition to acting as a supporting plate for the extension of the furniture bracket, the backing strip functions as a washer to

spread the force of the through-the-wall fasteners (81 and 80) over a large area. The backing strip also interlocks adjacent panels in that it captures adjacent panel beads (55) in both a vertical and horizontal direction. It will be seen particularly from FIG. 7 that the horizontal backing strip 70 in the horizontal grooves and the vertical backing strip 70a in the vertical grooves, cross each other on opposite sides of the partition, each within its recess 65.

When the partition panels are assembled, in the arrangement as shown in FIGS. 1 and 8 with each panel on one side interengaging four panels on the other side (except for the half panels on the bottom, top and sides of one side of the partition in which case the half panels only engage two horizontally adjacent panels on the other side), the structure is integrated by the placement of the backing strips 70 and 70a in the recesses 65 and at the intersection on opposite sides of the vertical and horizontal backing strips 70 and 70a. They are attached together by screw sleeve 80 or by an appropriate fastening device which goes through the center of the particular panel on one side (the right side of FIG. 7) and by screw or device 81 which goes through the vertical backing strip 70 and into the screw sleeve 80. A screw sleeve device 83 may be embedded at the intersection 52 of the cross pieces 41 and 42 (see FIGS. 2, 4, 7, 8 and 12) to receive a screw 82 or other appropriate fastening device which passes through the backing strip 70a. Thus the same kind of backing strip 70 or 70a may be used interchangeably for the vertical and horizontal channels 65. As indicated in FIG. 6, the vertical and horizontal channels 65 may now be used as conduits for wires 82a or for concealing other service elements, even plumbing.

In order to secure the partition appropriately, the modular partition system utilizes a base rail as shown in FIGS. 1, 6, 7 and 8. The base rail 100 is a metal channel 101 having the vertical legs 102, 103 and an outer covering 104 of a vibration and sound absorbing composite material. As shown in FIGS. 6 and 7, the lower ends 105, 106 of the bottom panel on each side, enter the channel formed by legs 102, 103 of the steel channel 101. A plurality of clamping screws 110 is provided along the length of the channel, each screw head being available through a recess 111 in the composite covering 104 and engaging a threaded member 112 which is connected to a clamping element 113 in recess 114 on the opposite side of the rail. Rotation of the screw head 110 will cause the clamping element 113 to move toward or away from the screw head 110 in accordance with the direction in which the screw head 110 is turned, thereby drawing the elements 103, 102 of the metal rail toward each other, or permitting them to relax if turned in the opposite direction. This will serve to clamp the lower ends 105, 106 of the panels in place.

A longitudinal levelling rail 115 is provided between the legs 102, 103 of the steel rail 101. The said longitudinal levelling rail is provided with through openings 116 at appropriate intervals (FIG. 7) so that the clamping operation above described can take place. Sections of the levelling rail 115, not aligned with the clamping elements 110, 112, 113 are provided with levelling screws 119. Each levelling screw 119 is rotatably mounted in the base of rail 101 and engages a threaded opening 117 in the levelling rail 115. The upper surface 118 of the levelling screw is provided with an appropriately shaped recess (120) to receive a turning tool. Ro-

tation of the levelling screw 116 will thus cause the levelling rail 115 to move up and down. By providing such levelling screw arrangements at various portions of the channelling rail, complete levelling of the levelling rail can be obtained.

The levelling rail 115 may be recessed at its upper surface to form a longitudinal wire or service conduit 120a communicating with vertical channels 65.

Preferably when the partition is erected, the clamping screw heads 110 will be located at such a point so that when it is desired to remove a bottom panel the appropriate clamping screw head 110 may be turned to loosen the clamp at that point to permit removal of the bottom panel.

The top rail 120b at the ceiling may also be similarly constructed. Although the levelling element is not essential, the utilization thereof is desirable in order to rigidify the wall. If the top rail is not secured to the ceiling, then the top rail will be secured to appropriate posts which have sufficient strength to withstand any dynamic forces on the wall. For a perfectly rigid wall, it may be highly desirable to utilize the levelling rail at the top as well.

It will be obvious that the various panels may be inserted sequentially as indicated at the left side of FIG. 1 in order to form the partition.

Furniture may be hung on the wall in the manner shown in FIGS. 1, 7, 9, 10 and 11. The side of each panel may be provided with a vertical metallic bracket support member 130 having a series of bracket support hook elements 131 thereon. This vertical metallic bracket support member may, as shown particularly in FIGS. 5 and 10, simply be integrated with the vertical and horizontal side of each panel or secured thereto in any suitable manner.

The panels are symmetrical on horizontal and vertical axes and therefore have no specific top, bottom or sides. The specific orientation of each panel determines which is its top side. It is also possible since the panels are molded, to mold such bracket supports as an integral metal structural frame, embedded in or on the outside of each panel so that, in any case, the bracket is securely affixed to the panel and carries the load of the furniture bracket tab 136 on the vertical edge of each panel as indicated at 131a of FIGS. 6 and 7. The bracket supports are designed to cooperate with the bracket hook elements 135 of FIGS. 9, 10 and 11 on furniture unit 26.

It will be seen that the opening into the vertical channels 65 is sufficiently wide to permit the re-entrant bracket hook section 136 of bracket 135 to be received within the opening 65. The re-entrant bracket hook section 136 of bracket 135 then engages one of the bracket support hooks 131 of bracket support 130 and rests thereon. The bracket element 135 is also provided with an extension 138 which bears against the vertical channel groove 73a in FIG. 9. The arrangement of the gap 65 is such that bracket elements of adjacent pieces of furniture may be hooked in the same channel adjacent each other. The method of insertion of the hook and the furniture element is indicated in FIG. 7.

Thus, various types of furniture may be mounted on the wall, shelves 26 of FIG. 1 being mounted adjacent to each other or staggered with respect to each other; and any furniture which has been provided with the brackets 135, may also be mounted on the wall. Even a piece which is intended to stand on the floor may be

secured to the wall so that it cannot accidentally be moved.

While the panels have been described as having grooves at right angles to each other, each running along a central axis of the rear surface and a peripheral bead, it will be obvious that the same operation and interlocking arrangement may be achieved by utilizing beads at right angles to each other each running along each central axis of the rear surface and a peripheral groove.

It will also be obvious that where a foam material is used for a panel, an appropriate armature may be included where necessary for strength or rigidity; strengthening elements may be included within the material as it is molded; or peripheral rigidifying structural members may be included in said panels or secured thereto.

While for convenience the surface of each panel has been referred to as smooth, basically the surface of each panel is an ornamental surface while the back surface is the operative or interlocking surface. Therefore, the front surface of each panel may have any conformation consistent with the structure of a wall; it may be three dimensionally grained or vertically or horizontally corrugated or have ornamental and even functional moldings, embossments, structures, extensions or supporting elements thereon.

By this means therefore a simplified partition is provided which presents an erectable and disassemblable partition in which the visible walls are smooth, being composed of 30" squares which are self supporting, in which each of the panels forming one of the squares of a partition cooperate and support adjacent quadrants of four similar panels on the opposite wall, in which means is provided for supporting various types of hanging furniture and localizing and securing floor furniture, wherein conduits or channels are provided for utilities, and said conduits or channels concealing the utilities such as electric wire.

Although the partition is thus integrated, solid and strong, it may readily be disassembled merely by removing the screws or fasteners 80 or 81 as the case may be, any individual panels being removable simply by removing the particular screws or fasteners which hold it in place without affecting the structure of the wall. Thus a partition which is damaged or which is intended to have a different color scheme or which for instance is supposed to have a blackboard face, may be modified by inserting a new panel or panels in place of an existing panel or panels without affecting the structure of the partition.

Also, if it is necessary to move the partition for any reason, the partition as a whole may readily be disassembled and reassembled at the new or moved location. This makes it possible not merely to erect and disassemble a set of partitions, but in an office arrangement it makes it possible very readily to enlarge cubicles or rooms and to change the arrangement of cubicles or rooms. A corner office for instance which was regarded as of the proper size by one occupant, may readily be enlarged by moving the wall at the expense, of course, of decreasing the size of an adjacent room.

Since it has become customary to use office space in a manner which does not predetermine the size of rooms, but wherein cubicles or rooms are arranged with walls which are intended to be moved or partitions which are intended to be knocked down to reshape the

rooms and the offices as variations and requirements make necessary, the utilization of the novel partition of this type facilitates such rearrangement while nevertheless permitting the partitions to be erected, if desired, in such a manner as to create what appear to be fully enclosed rooms. Where desired, doors or other pass through elements may be arranged so that they are, for instance, at modules 30 inches wide and approximately 75 inches high in order to be integrated with the panels, utilizing a half panel at the top in order to complete the wall. This would make possible the moving even of doors as well as the partitions themselves.

In the foregoing, this invention has been described in connection with preferred illustrative embodiments thereof. Since many variations and modification of this invention will now be obvious to those skilled in the art, it is preferred that the scope of this invention be defined not by the specific disclosures herein contained but only by the appended claims.

I claim:

1. An erectable and disassemblable partition including a plurality of rectangular panels arrangeable back to back in interlocking positions; each panel having a front surface and a rear surface; the rear surface of each panel having a pair of grooves at right angles to each other, each groove running along a central axis of the said surface; and a bead adjacent the periphery thereof; the back of at least one panel on one side interlocking with the back of four adjacent quadrants of adjacent panels on the other side; each groove in the back of each panel on one side of the partition receiving and positioning a bead of a portion of a panel on the other side of the partition.

2. The partition of claim 1 in which additional half panels are provided one side adjacent an edge of said partition, each said additional panel having a groove across its short dimension bisecting the panel and a rabbet at one edge of its long dimension and a bead along at least a portion of its periphery.

3. The partition of claim 1 in which additional quarter panels are provided on one side in the corner of said partition, each said additional panel having a rabbet at two abutting sides of its periphery and a bead along the other two sides and all sides being equal to half the dimension of the size of a full panel.

4. An erectable and disassemblable partition including a plurality of rectangular panels arrangeable back to back in interlocking positions; each panel having a front surface and a rear surface; the rear surface of each panel having a pair of grooves at right angles to each other, each groove running along a central axis of the said surface; and a bead adjacent the periphery thereof; the vertical edges of at least one panel having a plurality of vertically aligned bracket support hooks, the edges adjacent the front surface of adjacent panels being spaced to provide access to said bracket hooks.

5. The partition of claim 4 in which a plurality of horizontally aligned panels each have said bracket support hooks; the said hooks providing means for hanging furniture; and at least one piece of furniture having a pair of corresponding bracket members spaced horizontally by the distance between the spaces between horizontally adjacent panels; said bracket members of the piece of furniture engaging bracket support hooks of the panels to suspend said furniture.

6. The partition of claim 5 wherein the edges of said adjacent panels are each correspondingly recessed to

the rear of the hooks to provide a channel which is substantially concealed between said panels for utility services.

7. The partition of claim 5 in which the panels are arranged to provide vertical channels between them, the hooks being accessible through said vertical channels; and in which a piece of furniture is provided with a bracket on each side spaced by the distance between vertical channels; each bracket having a hook engaging element and a bracing element; said bracing element bearing against an inner surface of said channel.

8. An erectable and disassemblable partition including a plurality of rectangular panels arrangeable back to back in interlocking positions; each panel having a front surface and a rear surface; the rear surface of each panel having a pair of grooves at right angles to each other, and a bead adjacent the periphery thereof; the edges of adjacent panels being each correspondingly recessed to provide a channel the cross-sectional area of which is substantially concealed; the said backing strips extending along the base of each vertical channel on one side and along the base of each horizontal channel on the other side; and fastening devices extending through each backing strip on one side at the point where the backing strip crosses the center of a panel on the other side; said fastening device extending into the said center of the panel on the other side.

9. The partition of claim 8 in which any one such fastening device secures the adjacent corners of four panels on one side to the center of one panel on the other side.

10. An erectable and disassemblable partition including a plurality of rectangular panels arrangeable back to back in interlocking positions; each panel having a front surface and a rear surface; the rear surface of each panel having a pair of grooves at right angles to each other, each groove running along a central axis of the said surface; and a bead adjacent the periphery thereof; the back of at least one panel on one side interlocking with the back of four adjacent quadrants of adjacent panels on the other side; a portion of the groove in the back of the said panel on one side of the partition receiving and positioning a portion of the bead on the said panel on the other side of the partition.

11. The partition of claim 1 in which the said interlocked panels on opposite sides of the partition are identical.

12. The partition of claim 10 in which the said interlocked panels on opposite sides of the partition are identical.

13. An erectable and disassemblable partition including a plurality of rectangular panels arrangeable back to back in interlocking positions; each panel having a front surface and a rear surface; the rear surface of each panel having a pair of beads at right angles to each other, each bead running along a central axis of the said surface; and a groove adjacent the periphery thereof; each groove in the back of each panel on one side of the partition receiving and positioning a bead of a portion of a panel on the other side of the partition.

14. The partition of claim 4 in which said vertical edges are recessed and the hooks are hooked in vertical series in said recess, said hooks being concealed by said recess.

15. The partition of claim 14 in which a plurality of horizontally aligned panels each have said recesses, the front surface of said panel being of lesser extent than

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the rear wall thereof; the corresponding edges of adjacent panels forming channels communicating with said recesses.

16. The partition of claim 15 in which a furniture bracket is provided, said bracket having an extension 5

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insertable and slidable in said channel; and a tab on said extension at an angle thereto engageable with a selected hook.

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