

March 4, 1924.

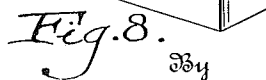
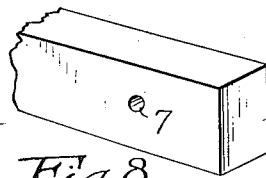
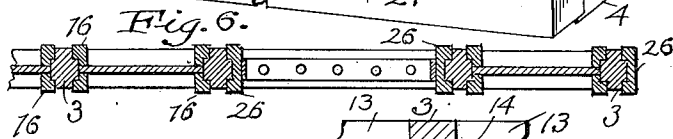
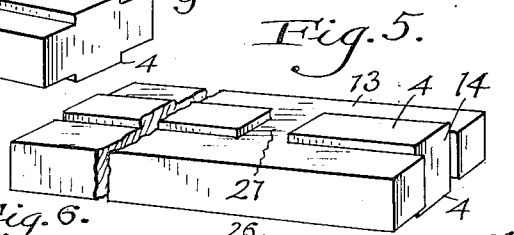
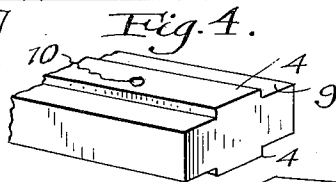
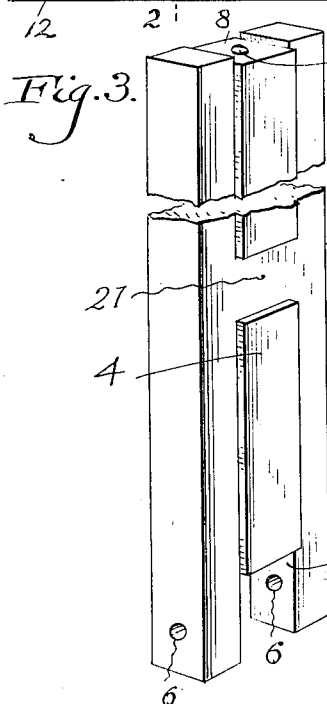
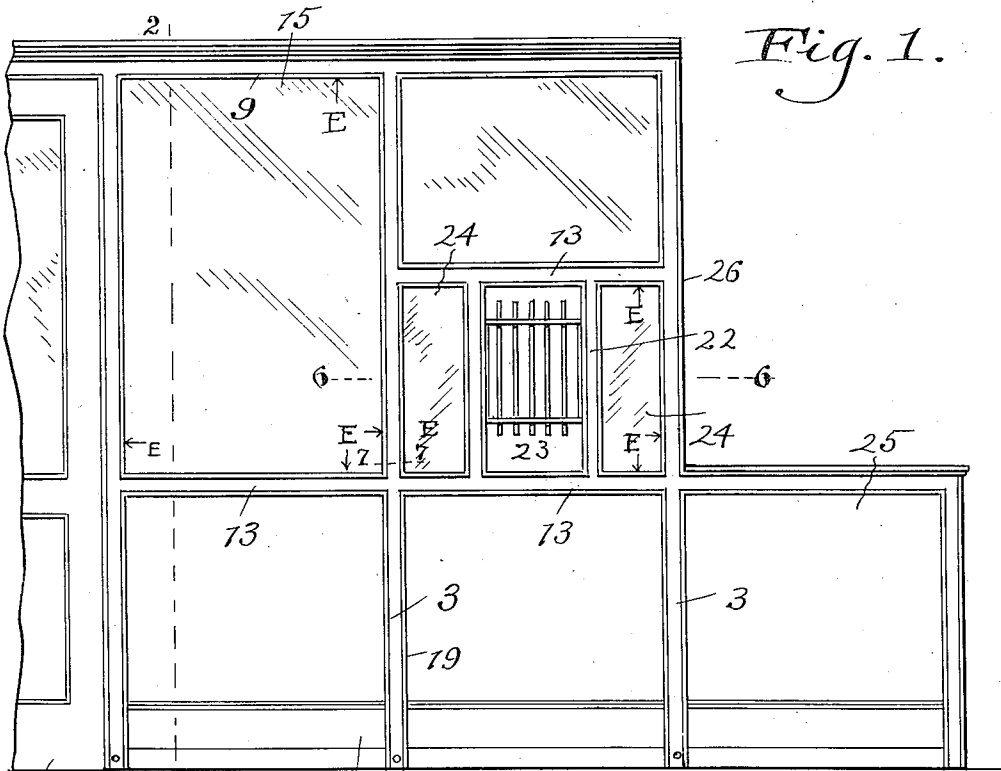
1,485,449

H. F. BALOUN

PARTITION

Filed July 5, 1923

3 Sheets-Sheet 1



Inventor
Harry F. Baloun

By Thurston K. Hudson

Attorneys

March 4, 1924.

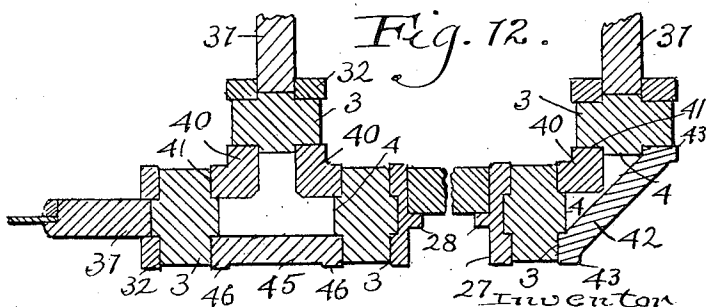
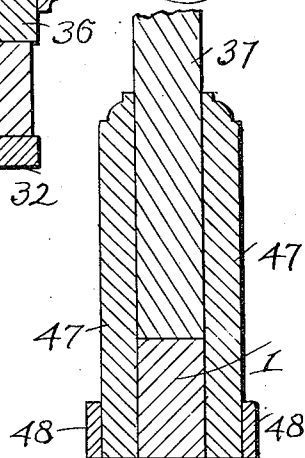
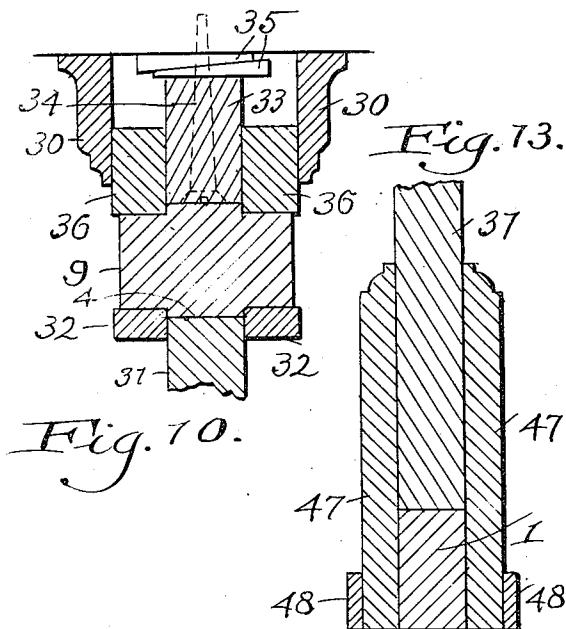
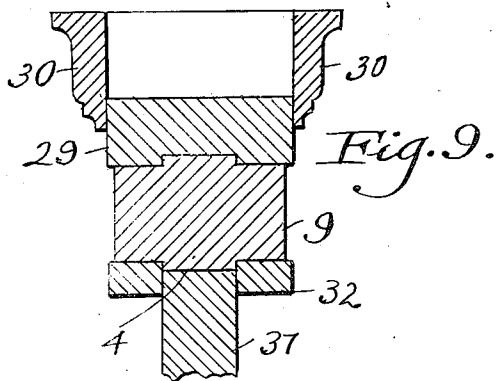
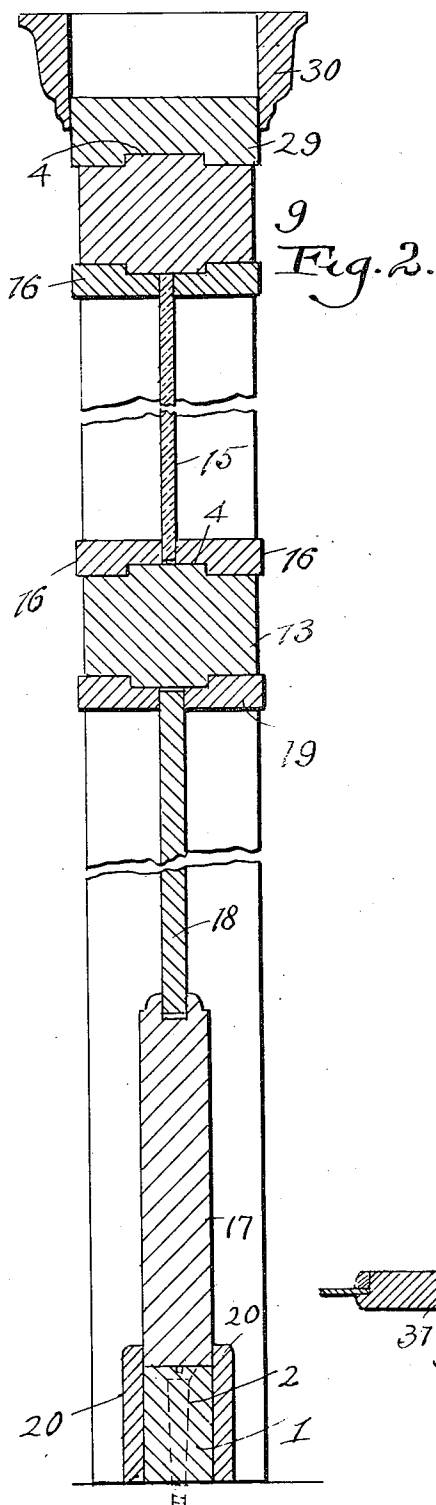
1,485,449

H. F. BALOUN

PARTITION

Filed July 5, 1923

3 Sheets-Sheet 2



Inventor
Harry F. Baloun
Thurston West Hudson
Attorneys

March 4, 1924.

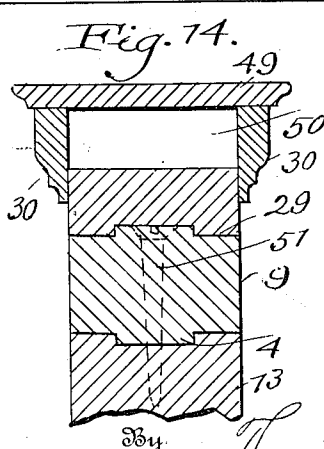
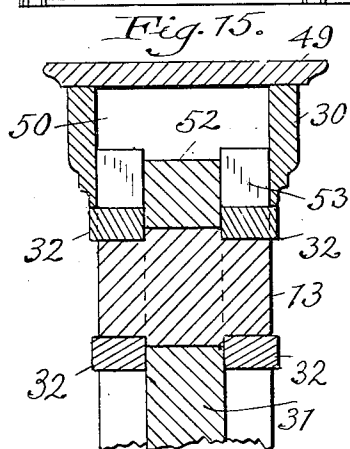
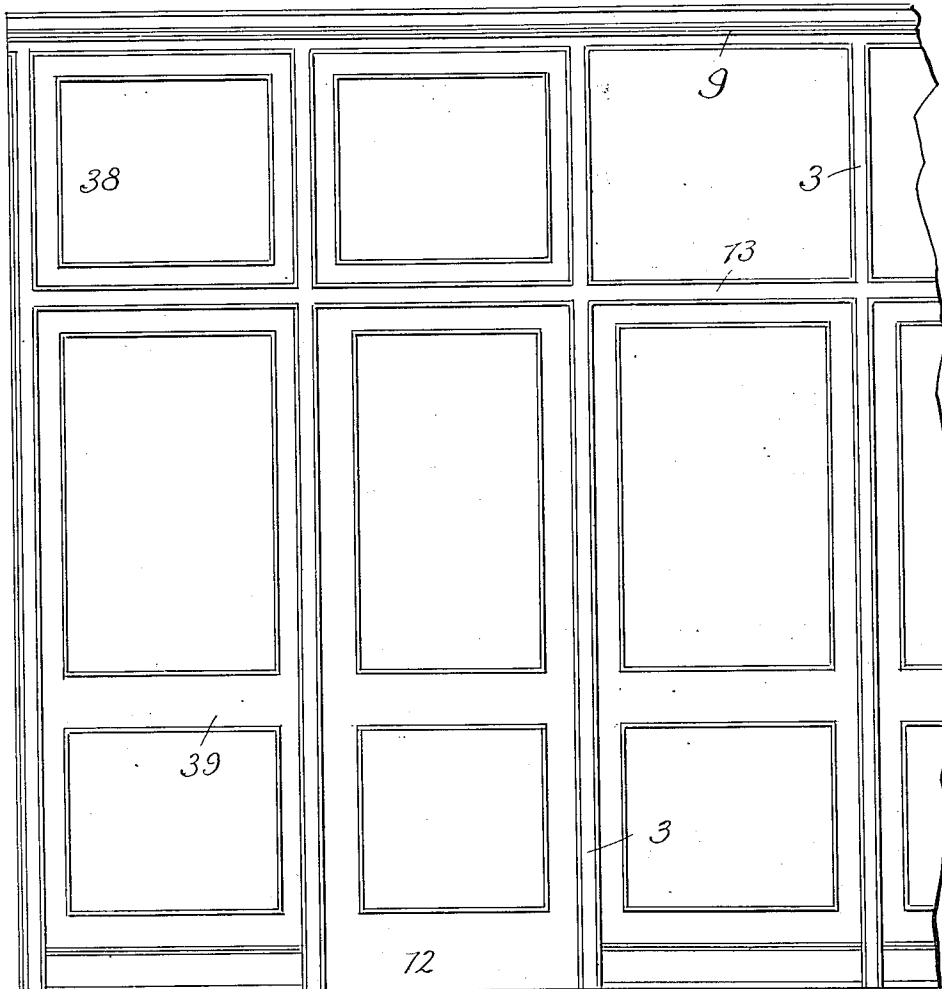
1,485,449

H. F. BALOUN

PARTITION

Filed July 5, 1923

3 Sheets-Sheet 3



Inventor

Harry F. Baloun

Thurston Kins & Hudson

Attorney S.

UNITED STATES PATENT OFFICE.

HARRY F. BALOUN, OF CLEVELAND, OHIO.

PARTITION.

Application filed July 5, 1923. Serial No. 649,452.

To all whom it may concern:

Be it known that I, HARRY F. BALOUN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Partitions, of which the following is a full, clear, and exact description.

This invention relates to sectional partition structures for use in office and other buildings where it is desired to subdivide the rooms according to the requirements of the users, the frame members, panels, doors and other parts of the partitions being constructed at the factory in certain standard sizes which may be combined in various ways to meet the requirements of different jobs.

An object of the present invention is to provide a partition structure which is ornamental yet economical to manufacture and easy to erect for the reason that a minimum number of structural shapes are required for the frame work and a minimum number of fastening devices are employed in the construction thereof.

A further object is to provide a sectional partition structure in which the doors and panels are removably and interchangeably mounted so that any door may be replaced by panels and any set of panels by a door without disturbing the frame work.

A further object of the invention is to provide adjustable interlocking connections between the pilasters or posts and cross-rails to accommodate panels of different sizes.

A further object is to provide detachable interlocking connections between pilasters and cross rails which will permit detachment and removal of certain of the frame members without disturbing the other frame members.

The above and other objects of the invention are accomplished by the means shown in the accompanying drawings and described in the following specification, the invention comprising the structure described in the specification and specifically defined in the accompanying claims, together with such modifications thereof as will be obvious to those skilled in the art.

Reference should be had to the accompanying drawings forming a part of this specification in which Fig. 1 is a side eleva-

tion of a partition structure embodying the invention; Fig. 2 is a vertical section on line 2—2 of Fig. 1; Fig. 3 is a perspective view of one of the pilasters; Fig. 4 is a fragmentary perspective view of the top cross rail; Fig. 5 is a perspective view of an intermediate cross rail; Fig. 6 is a section on line 6—6 of Fig. 1; Fig. 7 is a section on line 7—7 of Fig. 1; Fig. 8 is a fragmentary perspective view of the floor runner; Fig. 9 is a vertical section through the top portion of a partition showing the manner of securing a frame panel in place; Fig. 10 is a vertical section through the top portion of a partition which extends to the ceiling showing the manner in which the partition is secured to the ceiling; Fig. 11 is a fragmentary side elevation of a partition in which the panels are all provided with sashes and in which the lower panels are of the same height as the door; Fig. 12 is a fragmentary horizontal section showing the structure employed at partition corners and intersections; Fig. 13 is a vertical section through the bottom portion of a partition showing a slightly modified baseboard construction; Fig. 14 is a vertical section through the top portion of a partition at the intersection of a pilaster and the top cross rail; Fig. 15 is a section similar to Fig. 14 showing a slightly modified frame construction.

Referring first to Figs. 1 to 8 inclusive of the drawing wherein the frame construction is shown in detail, the partition is secured at the base upon the floor runner 1 which is rectangular in cross-section and which is rigidly secured to the floor at suitable intervals by means of screws 2 (see Fig. 2). The pilasters 3 are provided upon opposite sides with low relatively wide ribs or raised portions 4 which are of the same width as the runner 1, and, at their lower ends, the pilasters 3 are provided with notches 5 of the same width as the ribs 4 and in alignment therewith, the notches 5 having a depth equal to the height of the floor runner 1 so that the notches 5 receive the floor runner 1 and the pilasters rest at their lower ends upon the floor upon opposite sides of the runner 1. The lower portions of the pilasters 3 which overlie the runner 1 are provided with bolt holes 6 which are adapted to register with bolt holes 7 provided at suitable intervals along the length of the

runner 1 so that the pilaster 3 may be rigidly secured by means of bolts to the runner 1. The upper end of each of the pilasters 3 is provided with a shallow groove 8 which is of the same width and depth as the rib 4 of the pilasters and which is in alignment with the ribs 4 of the pilaster. The top cross rail 9 is of the same cross-sectional size and shape as the pilaster 3 and is laid across the tops of a series of pilasters with the rib 4 on its underside fitting within the notches 8 at the upper ends of the pilasters. The top cross-rail 9 has holes 10 drilled therethrough at the center of ribs 4 which are adapted to be aligned with similar drilled holes 11 at the center of the upper end of each of the pilasters so that the top cross-rail may be rigidly secured to the pilasters by means of suitable screws.

The floor runner 1, pilasters 3 and top cross-rail 9 form the rigid framework upon which the partition structure is built, the remainder of the partition structure being built up upon this rigid framework. One or more doors 12 may be mounted between pairs of adjacent pilasters and the panels are enclosed within the pilasters, upper and lower panels being separated by means of intermediate cross rails 13 which are of the same cross-sectional size and shape as the pilasters 3 and cross rails 9 and which are adjustably and detachably mounted between the pilasters. The cross rails 13 are disposed with the ribs 4 thereof at the top and bottom and are provided at their ends with shallow grooves 14 which receive the ribs 4 of the pilaster. In the construction shown in Figs. 1 to 8 the upper panels 15 which may be of glass, thin wood, veneer, composition board or the like are secured centrally of the ribs 4 of the pilasters and the top and intermediate cross-rails 9 and 13 by means of suitable shouldered stops or strips 16 which fit against the sides of the frame members outside the ribs 4 thereof and have an inner portion overlying the ribs. The lower panels comprise a baseboard 17 which is of the same thickness as the runner 1 and a thin panel portion 18 which fits within the frame members above the baseboard and is seated in a groove in the upper end of the baseboard 17. Strips 19 similar to the strips 16 are employed for securing the lower panel within the frame members at the sides and top and the baseboard 17 is secured upon the runner 1 by means of floor strips 20 which are attached to opposite sides of the runner 1 and extend from the floor to a short distance above the upper edge of the runner 1.

It is often desirable after a partition has been erected to change the position of the doorway and the present construction permits such change to be made with very little labor and without tearing down portions

of the rigid frame work. In order to accomplish this result means have been provided whereby panels and cross rails between any two pilasters may be quickly removed. To this end each of the pilasters 3 has a portion of the rib 4 thereof cut away at one or more points as indicated by the numeral 21 in Fig. 3 so that intermediate cross rails 13 may be slipped up or down along the pilasters until the ends thereof register with the cut-away portions 21 enabling the cross rails to be removed laterally from between the pilasters 3. In removing the panel work between the two pilasters, the panel retaining strips are first removed permitting the panels to be lifted out laterally after which the cross rails 13 may be moved into registry with the cutaway portions 21 of the pilasters and removed from between the pilasters. After the panel work has been removed from between any pair of pilasters the portion of the runner extending between the pilasters may be cut away to permit the mounting of a door and the panel work removed may be placed between the pilasters between which the door was originally mounted.

It may also be desired after a partition has been erected to provide an opening such as a teller's window in one of the panel spaces and the present structure permits this to be done by removing the panel and building up the framework of the window within the panel space. To this end each of the cross rails 13 has a cut away portion 21 in each of the ribs 4 thereof which permit insertion and removal of intermediate posts 22 between adjacent cross rails 13. The posts 22 being of the same cross sectional size and shape as the other frame members. The points at which the ribs 4 of the various frame members are cut away is indicated by the reference letter E in Fig. 1, the cut away portions being preferably located adjacent the bottom and the side of each panel space. As shown in Fig. 1 of the drawing, a cashier's window is provided by removing one of the upper panels 15 inserting an additional cross rail 13, interposing two intermediate posts 22 between the two cross rails 13, securing a suitable wicket structure 23 between the posts 22 and mounting narrow panels 24 between the intermediate posts 22 and the pilasters 3.

As shown at the right in Fig. 1 any portion of the partition may be a height suitable for a railing or counter as indicated at 25 in said figure. Where a portion of the partition projects above an adjoining portion, for instance where a portion of the partition forms a railing or counter, the end pilaster of the high portion of the partition has a finishing board 26 secured to its outer face, the board 26 having a flat outer surface and a groove upon its inner

face to receive the rib 4 of the pilaster, (see Fig. 6). The finishing board 26 is also employed to form the frame of the wicket 23 as shown in Fig. 6. A frame board 27 similar to the finishing board 26 is employed at the doorway to form a door frame, the frame board 27 having inwardly projecting stops 28 to limit the swinging movement of the door. It will be readily understood that frame boards of finishing strips such as 27 or 26 may be employed for mounting any hinged closure member such, for instance, as a transom adjacent the top of the partition.

As shown in Fig. 2 of the drawing, a cap strip 29 which has a groove in its underside to receive the upper rib 4 of the cross rail 9 is secured upon the top of the upper cross rail. A suitable molding 30 is secured to opposite edges of the strip 29, the molding 30 projecting above the top of the strip 29 and forming therewith a channel which may be used as a conduit for electric wires.

While in Figs. 1 to 8 thin panels are shown occupying the entire space between the frame members, the structure is equally well adapted to receive framed panels since the width of the ribs 4 is equal to the thickness of the standard sash. In Fig. 9 of the drawing a structure is shown in which the upper panels 15 are replaced by frame panels, the sash 31 of which is secured upon the ribs 4 of the frame members by means of strips 32 which may be rectangular in cross-section and are secured upon the inner faces of the frame members outside the ribs 4.

Fig. 10 of the drawing shows a manner of attaching a partition structure to the ceiling in cases where the partition extends from the floor to the ceiling. In this case a runner 33 similar to the runner 1 is attached at intervals to the ceiling by means of suitable screws 34, adjusting wedges 35 being provided between the upper edge of the runner 33 and the ceiling and to permit the runner to be adjusted to compensate for inequalities in the ceiling. The upper cross rail 9 in this case is interlocked with the runner 33 by means of rectangular strips 36 which are secured to the opposite sides of the top rib 4 of the runner 33 and project slightly below the lower edge of the runner. The upper rib 4 of the cross rail 9 fits against the lower edge of the runner 33 and at the sides of the rib 4, the upper face of the cross rail 9 is engaged by the stop strips 36.

The partition frame work is the same in all of the modifications herein disclosed, this frame work being adapted to receive the various panel structures. Fig. 11 of the drawing shows in side elevation a part of a partition structure in which the lower panels are of the same height as the door and in which the upper panels 38 are above the doors. The lower panels have a frame work similar to

that of the door, an intermediate cross rail 39 being provided in the panel structure. If desired, any or all of the upper panels may be in the form of hinged transoms.

Fig. 12 of the drawing shows in horizontal section, the structure employed for corners and intersections of a partition structure. At each corner an additional corner post 40 is provided which has portions 41 fitting against the inner sides of the ribs 4 of the end pilasters of the angularly disposed partition units and against the faces of said pilasters on the inner sides of the ribs thereof. A corner cover board 42 is secured to the pilasters outside the corner posts 40 and is provided with beaded edges 43 fitting against and secured to the end pilasters of the angularly disposed units outside the ribs thereof. Where a dividing partition abuts against an intermediate portion of a partition wall, corner posts 40 are provided between the end pilaster of the dividing partition and end pilasters of units of the main partition. A cover board 45 provided with longitudinal beads 46 at its outer edges covers the space between the pilasters of the main partition and is secured against the outer edges of the ribs 4 thereof.

Fig. 13 of the drawing shows a modified floor board construction in which the sash 31 of the lower panel is secured upon the runner 1 by means of floor boards 47 which project upwardly a substantial distance above the runner 1 and are secured against the sides of the runner 1 by means of suitable floor strips 48 at the sides thereof along the floor.

Fig. 14 of the drawing shows a structure for the top of a partition which is of less height than the ceiling of the room, either door height or counter height. In this construction a top board 49 is secured upon the upper edges of the molding members 30 forming a wire conduit 50 above the cap strip 29. Fig. 14 also shows the screws 51 employed for securing the top cross rail 9 to the pilasters 3.

Fig. 15 of the drawing shows a slight modification in the frame structure. In this case a short cross rail 13 is employed at the upper end of the pilasters and a runner 52 extends across the upper ends of the pilaster 3, the runner 52 being rectangular in cross section and of the same width as the ribs 4 of the cross rail. The upper ends of the pilasters are notched to receive the runner 52 and have portions 53 extending along opposite sides of the runner 52. The molding members 30 are attached to the projecting end portions 53 of the pilasters and stop strips 32 are secured along both the upper and lower sides of the cross rail 13, the lower stops 32 serving to secure the sash panel 31 in place and the upper stop strips 32 serving to position the molding members 30.

Having described my invention, I claim—

1. In a partition, frame members comprising pilasters and cross rails of the same cross sectional size and shape, certain of said frame members being interposed between other of said frame members with the ends thereof abutting against the opposed side faces of other of said frame members, said interposed members being slidable lengthwise of the members between which they are interposed and removable bodily from between said members, said interposed frame members having an interlocking connection with the frame members between which they are removably mounted, and panels removably secured within said frame members.

2. In a partition, frame members comprising pilasters, a top cross rail extending across the upper ends of the pilasters, said pilasters having a sliding and interlocking connection with the top cross rail, intermediate cross rails interposed between adjacent pilasters and having a sliding and interlocking connection therewith, the connection between the pilasters and intermediate cross rails permitting removal of said rails, said pilasters and cross rails all being of the same cross sectional size and shape, and panels detachably mounted within the spaces formed between the cross rails and pilasters.

3. In a partition, frame members comprising pilasters and cross rails, said frame members each having longitudinally extending raised portions upon opposite sides thereof, certain of said frame members being arranged with their opposite ends abutting the side faces of other of the frame members and having grooves in their ends to receive the raised portions of the frame members against which the ends abut, panels secured within the raised portions of the frame members against which they abut, and detachable stops for retaining the panels in place secured to the faces of the frame members outside the raised portions thereof.

4. In a partition, frame members comprising pilasters and cross rails, said frame members each having longitudinally extending raised portions upon opposite sides thereof, certain of said frame members being arranged with their opposite ends abutting the side faces of other of the frame members and having grooves in their ends to receive the raised portions of the frame members against which they abut, each pair of frame members between which a third frame member is disposed having parts of their inwardly facing raised portions cut away to permit said third frame member to be inserted or removed, and panels detachably secured within the raised portions of the frame members.

5. In a partition, frame members comprising pilasters and horizontal cross rails,

said frame members each having longitudinally extending raised portions upon opposite sides thereof, said cross rails being interposed between adjacent pilasters with their ends abutting the pilasters and with the raised portions at the top and bottom thereof aligned with the raised portions of the pilasters, said cross rails having grooves at their ends to receive the raised portions of the pilasters, the pilasters of each adjacent pair having horizontally aligned parts of their raised portions cut away to permit insertion and removal of the cross rails, and panels detachably secured within the raised portions of the pilasters and cross rails.

6. In a partition, frame members comprising pilasters and horizontal cross rails, said frame members each having longitudinally extending raised portions upon opposite sides thereof, said cross rails being interposed between adjacent pilasters with their ends abutting the pilasters and with the raised portions at the top and bottom thereof aligned with the raised portions of the pilasters, said cross rails having grooves at their ends to receive the raised portions of the pilasters, the pilasters having parts of the raised portions thereof cut away to permit insertion and removal of the cross rails, and said cross rails having portions of their raised portions cut away whereby intermediate posts may be inserted between adjacent cross rails, and panels detachably secured within the raised portions of the frame members.

7. In a partition, frame members comprising pilasters and cross rails, said frame members each having longitudinally extending raised portions disposed centrally upon opposite sides thereof, certain of said frame members being provided with grooves across the ends thereof in alignment with the raised portions thereof, said members with the grooved ends being arranged with their ends abutting the side faces of adjacent frame members and with the raised portions of the frame members against which they abut fitting in the grooves, the frame members between which other frame members are interposed having parts of their raised portions cut away to permit insertion and removal of the interposed frame members, and panels detachably mounted within the raised portions of the pilasters and cross rails.

8. A partition having pilasters extending from the bottom to adjacent the top thereof, cross rails slidably and detachably mounted between adjacent pilasters, intermediate posts slidably and detachably mounted between certain of the cross rails, panels enclosed by pilasters and cross rails, and additional panels enclosed by cross rails, a pilaster and an intermediate post, the pilasters, cross rails, and intermediate posts being

all of the same cross sectional size and shape, and each of said panels being removably secured in place.

9. A partition comprising vertical and horizontal frame members enclosing rectangular spaces for receiving stationary panels or hinged closure members, said vertical and horizontal frame members each having upon opposite side faces centrally disposed longitudinally extending ribs, certain of said frame members fitting between other of said frame members and having grooves in their ends aligned with the ribs thereof to receive the ribs of the frame members against which the ends abut, frame pieces for hinged closure members fitting upon the partition frame members in certain of the rectangular spaces and grooved to receive the ribs of the frame members, and panels detachably secured within the ribs of the frame members enclosing other rectangular spaces.

10. In a partition, a runner secured to the

floor, a series of pilasters having notches at their lower ends to receive the runner and longitudinal ribs upon opposite sides thereof aligned with the notches and of the same width as the runner, a top cross rail of the same cross sectional size and shape as the pilasters, said pilasters having grooves at their upper ends to receive the ribs of the top rail, intermediate cross rails of the same cross sectional size and shape as the pilasters and top cross rail, said intermediate cross rails having grooves in their ends aligned with the ribs thereof which are adapted to receive the ribs of the pilasters, bottom panels detachably secured upon the runner and within the ribs of adjacent pilasters and cross rails, and upper panels detachably secured within the ribs of enclosing pilasters and cross rails.

In testimony whereof, I hereunto affix my signature.

HARRY F. BALOUN.