June 4, 1940.

E. N. WINSLOW

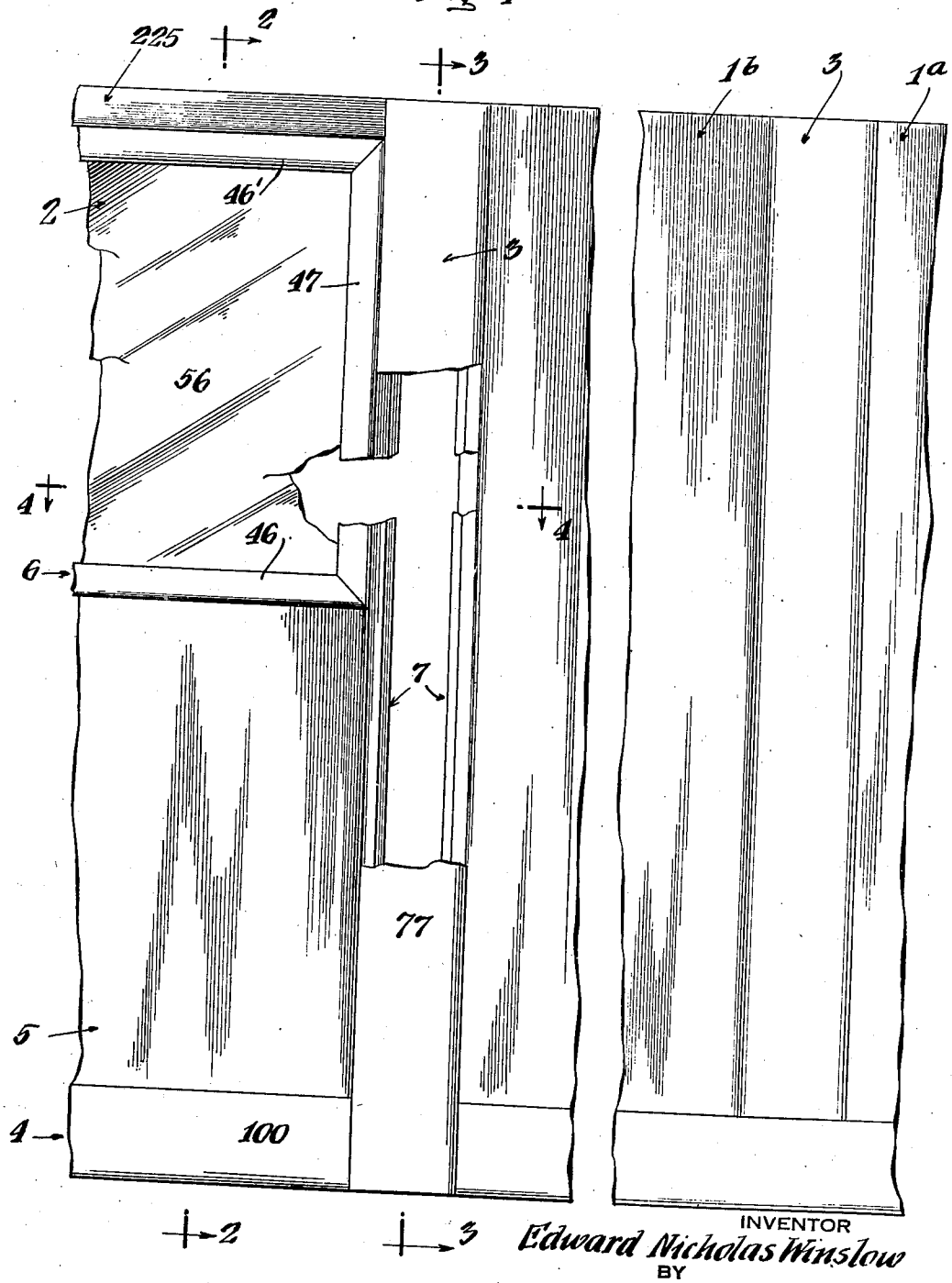
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STRUCTURAL ASSEMBLY

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5 Sheets-Sheet 1

Fig. 1



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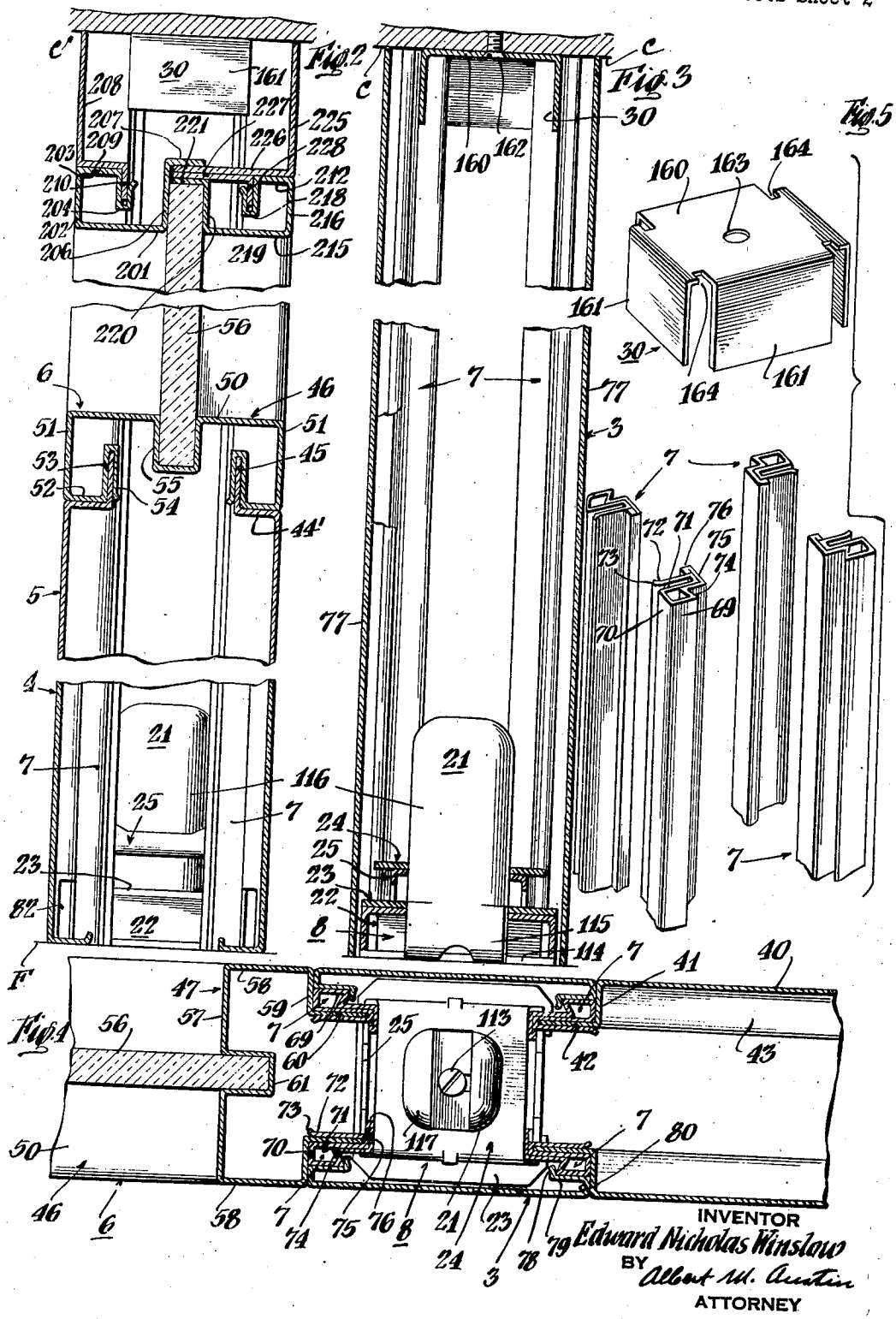
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STRUCTURAL ASSEMBLY

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Fig. 7

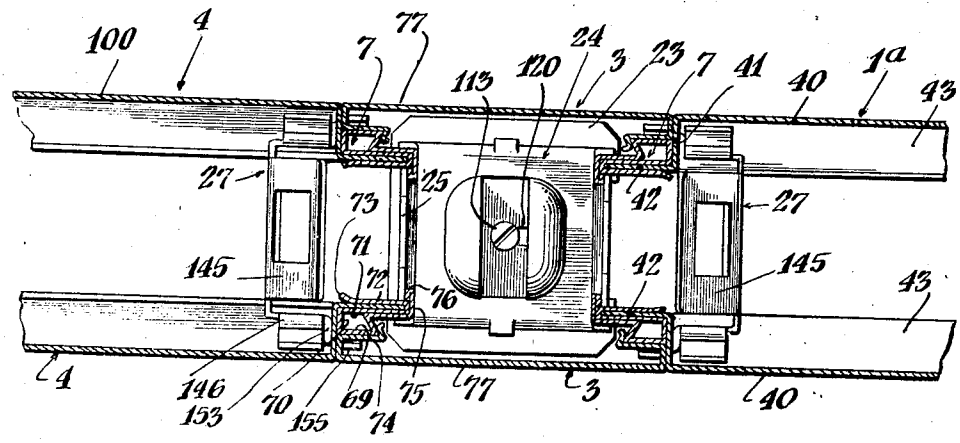
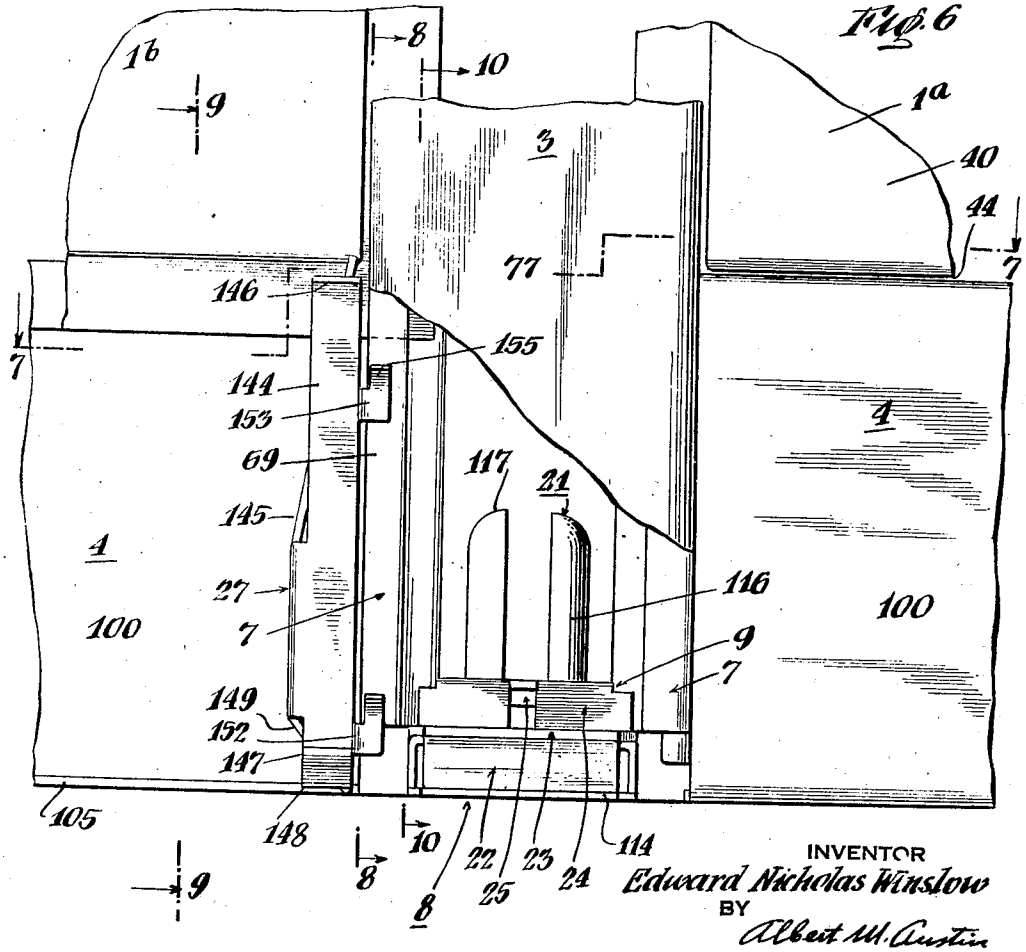


Fig. 6



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STRUCTURAL ASSEMBLY

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Fig. 8

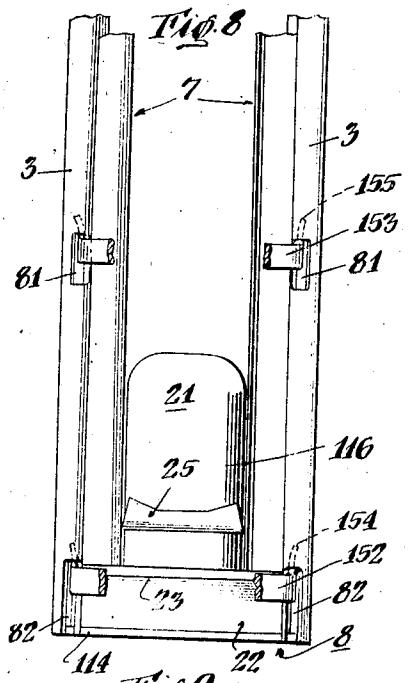


Fig. 9

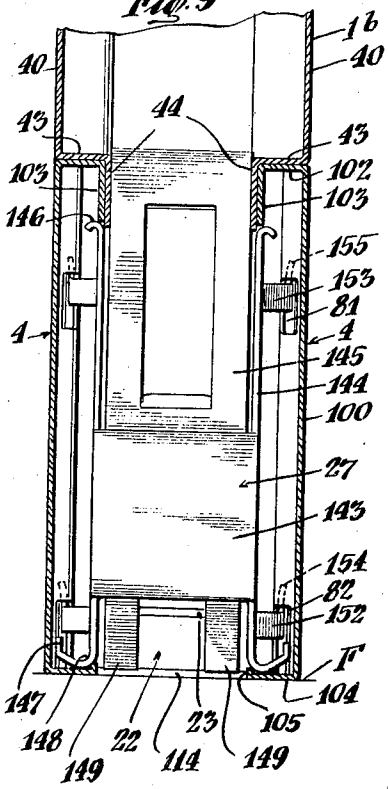


Fig. 11

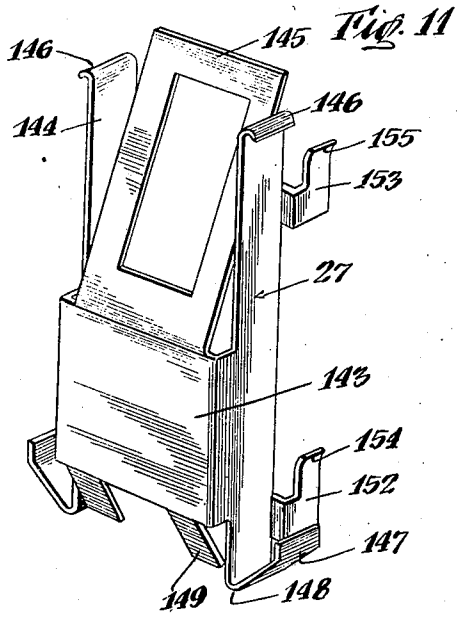
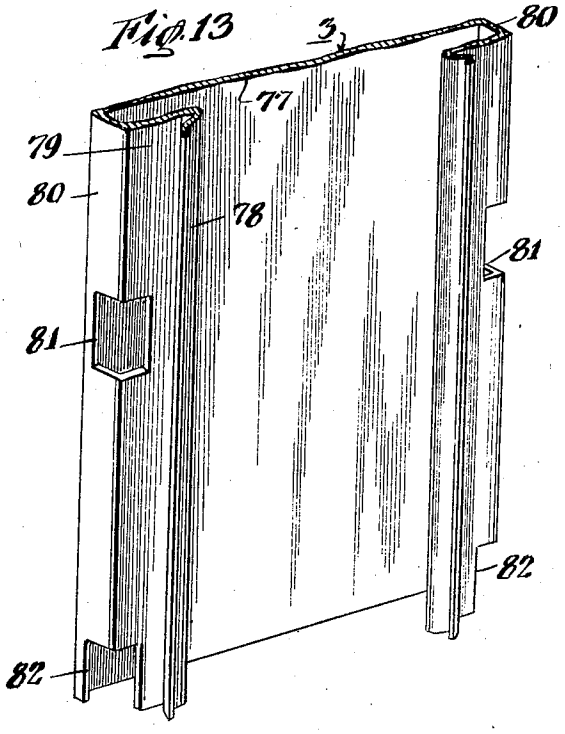


Fig. 13



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STRUCTURAL ASSEMBLY

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Fig. 10

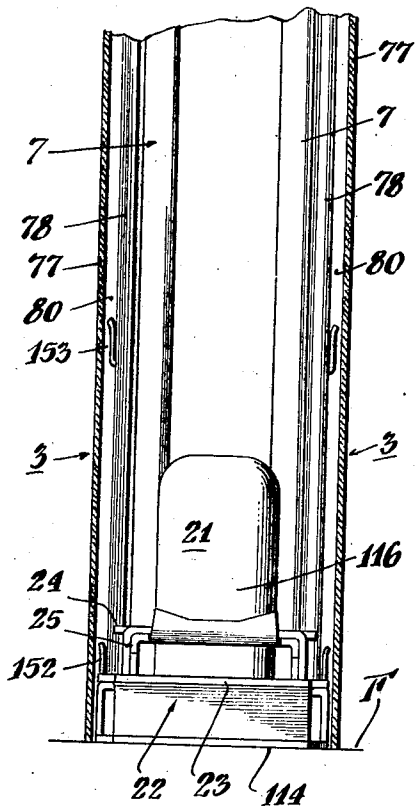


Fig. 12

Fig. 12e

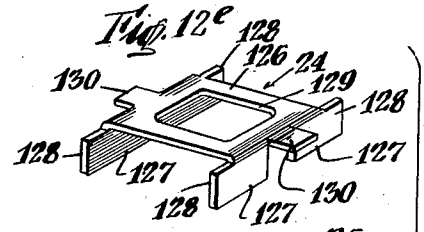


Fig. 12d

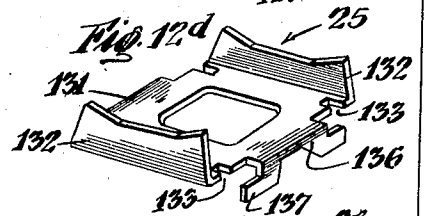


Fig. 12c

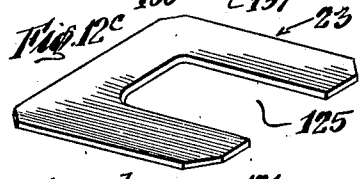


Fig. 12b

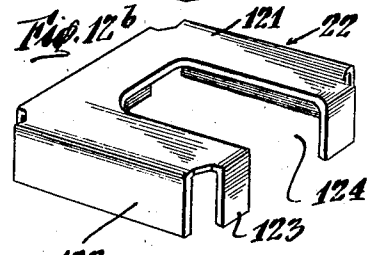
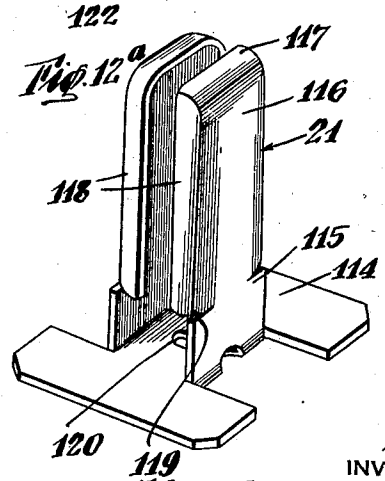


Fig. 12a



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Patented June 4, 1940 2,202,881

UNITED STATES PATENT OFFICE

2,202,881

STRUCTURAL ASSEMBLY

Edward Nicholas Winslow, Shaker Heights, Ohio, assignor to The Mills Company, Cleveland, Ohio, a corporation of Ohio

Application October 15, 1937, Serial No. 169,280

12 Claims. (Cl. 189—34)

This invention relates to a structural assembly and more particularly to an assembly of members adapted to be built up into a variety of partitions, walls, cabinets, structural units and structural frames.

In the construction of interior walls and partitions, cabinets, cases, door frames and trims, it is usually necessary to satisfy a large variety of wall types and conditions. It is desirable that the various preformed parts be of such design that a minimum number of different shapes and sizes are sufficient to satisfy all of the various conditions met. Preferably, the parts should be so shaped and dimensioined that they can be combined and interchanged in various ways to form a large variety of different types of partitions or other products mentioned above.

In partitions constructed from preformed parts, it is particularly desirable that the several parts be connected together rigidly and securely when the partition is erected so that the partition will not rattle or be loose and will be properly supported on its predetermined base in a building. It is important that the partition be secured firmly and positively to the floor or base upon which it rests and, where it is a full height partition, it should also be securely attached to the ceiling.

In order to conform with modern designs, it is often desirable that the partition shall be relatively plain and formed with as few projections and indentations as possible in the exposed wall forming faces of the various members, and it is often desired that the exposed wall forming faces of the various members lie substantially in a single plane or in a relatively small number of offset planes.

According to the present invention, suitable frame members, such as posts and the like, are formed by suitably shaped key members of novel form which are secured together in pairs and adapted to receive the edges of panel forming members, door frame members, transom frame members and the like. Preferably, the key members are spaced at equal widths and the members with which they cooperate are similarly spaced throughout the partition and thus are adapted interchangeably to receive the various members with which they cooperate. Preferably, substantially all of the principal members which have portions thereof adapted to be exposed as exterior wall surfaces are so formed that when erected to form a partition, the exposed surfaces lie substantially in a plane thus providing a substantially flush wall surface at each face of the partition. This is accomplished by forming the several members with inwardly projecting portions adapted to engage structural supporting members within the space between the two faces of the partition, the portions of these members which are exposed as wall surfaces being offset sufficiently so that all of these surfaces are substantially flush.

The invention also includes the provision of a novel floor supporting member which is readily secured in position on the floor on which the partition is to be erected and cooperates with the partition members to rigidly and securely lock them in erected position. The floor members are so formed as to be fully interchangeable throughout the partition and readily locked to the other members of the partition without requiring screws, bolts or securing means other than a simply installed and readily removable clip arrangement. The invention also provides a novel device for securing the partition rigidly and securely to a ceiling where the partition is adapted to extend to the full height of the room.

According to the invention, there is also provided a novel spacing and securing member for interconnection with the post, base cover and post cap, which securely maintains these members in assembly and properly spaced relation.

An object of the invention is the provision of a simple and flexible structural assembly which can be made from a relatively small number of master parts which are so interchangeable that any variety of structural conditions will be satisfied.

Another object of my invention is to provide a few simple devices adapted to interlock and bind with the various structural parts to firmly and rigidly hold the structural assembly in set-up condition, which securing devices can furthermore be easily disconnected or removed so as to permit the ready disassembly of the structure.

Another object of the invention is the provision of a simple and readily assembled supporting and positioning structure which securely and rigidly positions the partition on the floor or other structure on which the structure is erected.

Various other features and advantages of the invention will be apparent from the following particular description and from an inspection of the accompanying drawings.

Although the novel features which are believed to be characteristic of this invention will be particularly pointed out in the claims appended hereto, the invention itself, as to its objects and

advantages, and the manner in which it may be carried out, may be better understood by referring to the following description taken in connection with the accompanying drawings forming a part thereof, in which:

Fig. 1 is a fragmentary side elevational view showing a portion of a partition constructed in accordance with the invention, the partition shown for the purposes of illustration being one having both a glazed panel unit and a plurality of solid panel units;

Fig. 2 is an enlarged vertical sectional view taken along line 2—2 of Fig. 1 and illustrating the interior construction of a glazed panel unit;

Fig. 3 is an enlarged vertical sectional view taken along line 3—3 of Fig. 1 and illustrating the interior construction at the post between two adjacent panel units;

Fig. 4 is an enlarged horizontal sectional view taken along line 4—4 of Fig. 1 and illustrating the construction at each post intermediate a solid panel unit and a glazed panel unit;

Fig. 5 is a fragmentary, exploded perspective view showing a ceiling clip and a portion of four associated post-forming keys;

Fig. 6 is an enlarged fragmentary elevational view adjacent the lower portion of a post, certain of the parts being broken away to show the interior construction;

Fig. 7 is a horizontal sectional view taken along line 7—7 of Fig. 6;

Fig. 8 is a vertical sectional view taken along line 8—8 of Fig. 6;

Fig. 9 is a vertical sectional view taken along line 9—9 of Fig. 6;

Fig. 10 is a sectional view taken along line 10—10 of Fig. 6;

Fig. 11 is a perspective view of the spacer for spacing and securing the base covers and post covers;

Fig. 12 is an exploded perspective view of the several members forming the assembly for securing the panel units together at the floor, Sub-Figures 12A to 12E, inclusive, representing the floor stud, the master shim, the simple shim, the male clip and the female clip respectively; and

Fig. 13 is an enlarged fragmentary view of a post cap.

In the following description and in the claims, various details will be identified by specific names for convenience, but they are intended to be as generic in their application as the art will permit. Like reference characters denote like parts in the several figures of the drawings.

In the drawings accompanying and forming part of this specification, certain specific disclosure of the invention is made for purposes of explanation, but it will be understood that the details may be modified in various respects without departure from the broad aspect of the invention.

Referring now particularly to Fig. 1, there is shown for the purposes of illustration, a partition constructed in accordance with the present invention. The partition includes a plurality of solid panel units 1*a* and 1*b* and a glazed panel unit 2, which latter may include a solid portion 5 and a glazed portion 6 suitably mounted in a frame 6, hereinafter more fully described. Intermediate each pair of panel units 1*a*, 1*b* and 2 are post covers 3 covering the space between the ends of the panel units and forming portions of the wall surfaces of the partition. Extending continuously across the base of all of the panel units 1*a*, 1*b* and 2 is a base cover 14.

Referring now to Fig. 7, the solid panel unit 1*a* may include a pair of spaced and generally parallel panel sheets 40, each of which is preferably formed of a metal sheet having at its upright edges inturned flanges 41. Flange extensions 42 project from the inner ends of the flanges 41 and generally parallel to the outer face of the panel sheet. The top and bottom edges of the panel sheet 40 are also formed with inturned flanges 43 having vertical flange extensions 44. In certain cases, the flanges 41 and 43, as well as the extensions 42 and 44 are formed integral.

The panel sheets 40 are maintained in spaced parallel relation by spaced upright key members 7 hereinafter more fully described, which form framing members of the panel units. The key members 7 are in turn maintained in spaced upright relation by a floor assembly, designated generally by the reference numeral 8, and by a ceiling clip 30. If desired, additional clip assemblies 9 may be interposed between the floor assembly 8 and the ceiling clip 30.

The key member 7 (Fig. 5) may be generally described as a tubing made from a single sheet which is crimped and locked together in such a way as to provide a member of unusual strength. The key member comprises face portions 69 and 70 which provide abutments as hereinafter described.

A wall portion 71 extends from the face 70 and terminates in a flange portion 72, which is spaced from portion 71 to permit the insertion therebetween of the flange extension 42 of the corresponding panel sheet 40. The free edge 73 of the flange portion 72 may be rounded off to facilitate insertion of the flange extension. A shoulder portion 74 forms an acute angle with the face 69 for a purpose hereafter to be described. A wall portion 75 extends from the shoulder portions 74, closely hugs the wall portion 71 and terminates in a return lip portion 76, which grips and locks with the connected end of the lower end of wall portion 72, in such a way as to form, in effect, an interlocked seam, similar to the interlocked seam of the well known seamed tubing.

From a comparatively narrow gauge metal sheet, I have thus been able to produce a structural member of unusual strength and rigidity. The key member 7 forms a part of every straight-way, two-way, three-way, four-way and dead end post. In addition, the key member 7 forms a part of certain other framing and structural members not herein shown, but shown and described in my copending application hereinafter identified.

Referring now particularly to Figs. 3, 6 and 13, the structure is anchored to the floor by means of a floor stud 21, formed from a single stamping of sheet metal into the shape shown in Fig. 12*a*. The floor stud comprises a floor contacting plate portion or base 114 having a pair of wall portions 115 cut out therefrom and bent upwardly. Stud forming portions 116 are formed integrally with wall portions 115 and extend upwardly therefrom. The top 117 and the sides 118 of the spindle portions 116 are given a rounded contour as is clearly shown in Fig. 12*a* by severing the metal, as at 119, and bending the side and top edges of the spindle portions 116 into the desired form. The rounded contour of the spindle portions facilitates the telescoping of the post securing clips thereover, as will be described more in detail hereinafter.

The plate portion 114 is provided with a key slot 120, located between the wall portions 115. A floor screw 113 (Fig. 4) is inserted through the

key slot 120 and is screwed to the floor F. The key slot 120 permits a certain amount of shifting of the floor stud with reference to the floor, permitting the floor stud to be located to accommodate the post position. This floor stud can be very economically made, and since it can be used in connection with any type of post, these studs can be shipped to the place of installation without checking or detailing and can be secured to the floor at approximately the correct location without any thought being given to the type of post which is to be positioned thereover.

I have shown in Fig. 12*b* a master shim 22, which is generally horseshoe shaped, and is adapted to be telescoped laterally across the stud 21 so as to rest upon the plate portion 114 thereof. The master shim 22 comprises generally a top wall portion 121, and downwardly extending flanges defining side and rear wall portions 122, and a front wall portion 123. The top wall portion 121 and the front wall portion 123 are provided with a horseshoe cutout 124 which permits the master shim to be removed and telescoped laterally into position with respect to the stud. The master shim 22 may be stamped from a single piece of sheet metal and may be cut at the corners, as shown in Fig. 12*b*, to facilitate the bending and shaping thereof. The removal of the master shim permits the disassembly of the partition for alterations and changes, by simply driving the same out of position, which permits the partition structure to drop down.

To shim up the partition the desired height, I provide a simple shim 23 (Fig. 12*c*), one or more of which may be placed upon the master shim 22 as may be necessary to provide a sufficient elevation of the partition. The simple shim 23 comprises a rectangular piece of sheet metal having a horseshoe cutout 125 therein. The simple shims can be made up in quantities from waste sheet material which is found around the factory.

In Figs 12*d* and 12*e* I have shown a pair of cooperating male and female clips 24 and 25, respectively, used to secure the sectional units into assembled position. The male clip 24 comprises a top wall portion 126 and side flange portions 127 along the two sides thereof. Each of the flange portions 127 are provided with a retaining lug 128 at each end thereof. Retaining lugs 128 are adapted to engage the outside face of the key members 7 to hold the keyed members 7 of each sectional unit from spreading apart. To permit conduits and wiring to be run through the post, an aperture 129 is provided in the top wall portion 126 of the clip as clearly shown in Fig. 12*d*. Lug portions 130 are struck out from the flange portion 127 and closely nest between the flanges 132 of the first clip 25 to hold the clips cooperatively assembled together when four clips are used as in two-way, three-way and four-way posts.

The female clip member 25 (Fig. 12*c*) comprises a bottom wall portion 131 and upstanding flange portions 132 positioned on opposite sides thereof. A notch 133 is cut near each corner of the plate portion 131 and is arranged to receive the inturned flange portion 75 of the spaced key member 7, as shown for example in Fig. 6. When the male clip member 24 is positioned adjacent to the female clip member 25 in the manner more described below, the four spaced key members are securely locked together in rigid assembly. The flange portions 132 give strength to the female clip 25. Downturned flange portions 136 may also be provided with outwardly extending lug portions 137 which come into play in connection with the crating of the sectional units.

The key members 7 may be secured together at their upper ends by a ceiling clip 30, shown in detail in Fig. 5. The ceiling clip 30 is formed with a top wall 160, preferably of square shape, and side walls 161 formed by flanges depending from the side edges of the top wall 160. The clip 30 may be secured to the ceiling C by a screw 162 or other suitable member extending through an opening 163 in the top wall 160.

The side walls 161 are spaced from one another and a notch 164 is provided in the top wall 160 at each corner. The notches 164 are formed and positioned similarly to the notches 133 of the female clip 25 and receive the return lip portions 75 in an analogous manner. Preferably, the side walls 161 are suitably positioned to abut against the wall portions 75 and flanges 72 respectively.

If desired, one or more clip assemblies 9, constituted by a male clip 24 and female clip 25, arranged as above described, may be provided intermediate the upper and lower ends of the posts for providing additional rigidity thereto. However, the floor assembly 8 and the ceiling clip 30 will in most cases provide sufficient stiffness and rigidity.

The space between the adjacent panel units is covered by a post cover 3 of generally channel shape and having a web portion 77 adapted to lie substantially flush with the wall-forming portions of the panel sheets 40 and forming therewith a substantially continuous, flush wall surface. The post cap 3 is formed with side flanges 80, flange extensions 79 and return-bend clip portions 78. The post cap snaps into place by forcing the clip portions 78 into resilient engagement with the shoulder portions 74 of the key members 7. The flanges 80 abut the faces of the inturned upright flanges 41 and the flange extensions 79 bear against the face portions 69 of the key members 7 respectively.

The post cap 3 is provided with openings 81 and notches 82 in the flanges 80 and flange extensions 79 for cooperation with a spacer member 27, as hereinafter more fully described.

The base covers 4 are held in assembled position by means of a spacer member 27 (shown in detail in Fig. 11) positioned on each side of the post between the baseboards 4. The spacer member 27 comprises generally a body portion 143 having flange portions 144 extending laterally therefrom. An inclined wall portion 145 extends upwardly above the body portion 143. The side edges of the inclined portion 145 are spaced from the flange portions 144 sufficiently to permit a metal sheet to be inserted therebetween. The upper end of each flange portion 144 is provided with an outwardly flared lip 146 which is adapted to releasably engage the upper flange extension 103 of the base cover 4. The lower end of each flange portion 144 is provided with a shoulder portion 148 and a laterally extending guide portion 147.

The lower end of the base cover 4 slides on the guide portion 147 and snaps behind the shoulder portion 148, thus resiliently retaining the base cover in assembled position. The spacer member 27 is provided with a pair of downwardly extending legs 149, to grip and retain special mop strips (not here shown) applied over the base covers. The free edge of each flange portion 144 is provided with a pair of spaced lugs 152 and 153 having flared lips 154 and 155 adapted to enter the

openings 81 and 82 respectively, of the post cap 3. Spacer members 27 may also be positioned between posts to strengthen and stiffen the base covers.

Referring now to Fig. 9, the base cover 4 includes a web 100 adapted to be exposed as a wall surface of the partition and a flange 102 adapted to abut the flange 43 of the panel unit 40. The flange 102 has an extension 103 adapted to abut the flange extension 44 and resiliently engage the flared lip 146 of the spacer. The base cover 4 is provided at its bottom edge with a flange 104 having an upturned lip 105 adapted to engage under the shoulder portion 148 of the spacer 27. The flanges 102 and 104 of the base cover are so dimensioned that the web 100 lies substantially flush with the face of the corresponding panel sheet 40.

Referring now to Figs. 1 and 2, the glazed panel unit 2 preferably may include a solid portion formed by a panel sheet 5 having an inturned flange 44' provided with a flange extension 45. Mounted above the panel sheet 5 is a frame 6 formed by horizontal frame members 46, 201 and 202 (Fig. 2) and vertical frame members 47 (one of which appears in Fig. 1). The frame members may have mitered or otherwise suitably shaped edges at the corners of the frame to permit assembly to form the frame.

The frame member 46 (see Fig. 2) is formed of generally channel shaped cross-section and has a web 50 and side flanges 51. Extending inwardly from the end of each side flange 51 is a flange extension 52 having an upwardly bent portion 53 and a rebent portion 54 providing a seat for the flange extension 45 of the panel sheet 5. The web 50 is formed with an offset grooved portion 55 providing a seat for a panel stretcher 56 of less thickness than the width of the panel; the panel stretcher 56 may be formed of glass, either transparent or opaque, or of other suitable material. The portion of the web 50 between the side flange 51 and the portion 55 may be formed as illustrated or may be stepped or otherwise shaped to provide a decorative effect.

Each vertical frame member 47 is formed somewhat similarly to the horizontal frame member 46 and has a web 57, side flanges 58, inturned flange extensions 59 and edge portions 60 bent parallel to the flanges 58 and adapted to enter the seats provided by the adjacent key members 7. The web 57 is provided with a recessed grooved portion 61 forming a vertical seat for the panel stretcher 56.

The panel sheets 5 which are below the lower vertical frame member 47 have flange extensions (not shown) generally similar to the flange extensions 42 of the panel sheets 40. These flange extensions of the panel sheets enter the seats provided by the key member 7 below the edge portions 60 and cooperate with the seats in a manner generally similar to that in which the flange extensions 42 (shown at the right hand side of Fig. 4) enter and cooperate with the seats in key members 7.

The upper horizontal portion of the frame 6 preferably is formed in a manner generally similar to the lower horizontal 46 but is constituted by a plurality of members in order to permit convenient insertion and removal of the panel stretcher 56. The frame member 201 has a flange 202 forming a wall surface, an inturned flange extension 203 and a rebent seat portion 204. The frame 201 also has an inner flange 206 and a bent over flange extension 207.

A filler sheet 208 may extend from the top of the frame 6 to the ceiling C, and may be formed with an inturned flange 209 adapted to abut the flange extension 203 of the frame member 201, and a flange extension 210 adapted to enter the rebent seat portion 204 of the frame member 201. The face of the filler sheet 208 preferably lies substantially flush and in the common plane with the wall-forming faces of the frame member 202 and 46 and the panel sheet 5.

On the other side of the partition there is provided a frame member 215 having a flange 216 forming a wall surface, an inturned flange extension 212 and a rebent seat portion 218. The frame member 215 also has a flange 220 and inturned flange extension 221. An angle member 227 bears against the flange extension 221 and has a tongue 228 seated in the rebent seat portion 218.

A filler sheet 225 has a face substantially in the plane of the wall portion 216 and the corresponding panel sheet and has an inbent portion 226 extending along the top surface of the flange 212 and the flange 221 and extending along the lower face of the flange 207.

The flanges 206 and 220, together with their extensions 207 and 221, provide an upper seat for the panel stretcher 56 and also serve to retain the flange 226 and the angle member 227. With this construction the panel stretcher 56 is inserted in the seat formed by the portion 55 of the lower horizontal frame member 46 and the upper frame portion constituted by the several members above described may be assembled around the panel stretcher. When it is desired to remove the panel stretcher, one side of the upper frame structure can be removed and the panel stretcher can then readily be disassembled from the frame.

In erecting the partition in the field a chalk line is drawn on the floor to locate the partition run. Holes are drilled in the floor at each spaced point where a post member is to be erected. The floor studs 21 are then secured to the floor by stud bolts which extend through the key-shaped apertures 120 therein. The stud is preferably positioned as shown in Figs. 3 and 6. A master shim 22 is then slipped over each of the stud members 21.

Where a partition is to be run to a ceiling or the like, as is usually the case, it is generally desirable to securely connect the upper end of the partition to the ceiling. A ceiling clip 160 is positioned directly above each floor stud 21 and may be secured to the ceiling in a suitable manner, as by a screw 162 extending through the opening 163. The several key members 7, forming the post, are secured to the ceiling clip 160 in a manner which will be apparent from the drawings and the foregoing description.

Where the partition is erected in the field, it is generally desirable to form sectional panel units before erecting the partition, in which case the wall-forming members, such as the panel sheets 40, are assembled with their corresponding key members 7. If desired, the key members 7 may be securely fastened to the panel sheets or other wall-forming members, as by a crimping operation.

The panel units which have heretofore been made up at the plant to conform with the specifications are then positioned on the floor between the studs 21 with the lower end of each half post resting on the adjacent master shim 22 of adjacent studs. A female clip 25 is first con-

nected by giving a simple twist to the clip in such a way that the slot portions 133 thereof slip over and hook lip portions 76 of the key members 7. The male clip 24 is then placed over the female clip and manipulated so that the lug portions 128 thereof extend along the outside walls 75 of the key members 7. The male and female clips are then pressed together and the half posts of adjacent sections are firmly locked together. Any number of cooperating paired clip members may be used.

The paired clip members 24, 25 may be positioned at any place desired along the half posts since no deformation or special construction of the half posts is required to receive the paired clips. This is often of great advantage where an unusually strong connection is desired or where the sectional units must be pulled together when unusual strains develop. The paired clips at the lower end of sectional units are telescoped over the rounded stud portions 116 of the floor stud, as shown in Figs. 6 and 7. The apertures 129 and 134 of the paired clips are so shaped as to conveniently fit around the stud. An unusually strong connection is thus effected.

After the panel units have been erected and locked together in a manner described, the post caps 3 are inserted in the space between adjacent panel units and secured by springing the flange extensions 78 over the acute-angled edges of the corresponding key members 7. It will be noted that the flanges 80 of the post caps 3 are of such depth as to position the outer faces of the web portions substantially flush with the exposed faces of the panel sheets 40.

Each post cover is assembled by engaging the flange extension 103 over the outwardly flared lip 146 of the spacer member 27, the flange 102 being urged into firm abutment with the flange 43 of the panel sheet. The upturned lip 105 at the end of the lower flange 104 is then sprung under the shoulder portion 148 of the side flange 144.

It will now be seen that the present invention provides a simple yet highly flexible structural assembly which can be readily assembled in the field with a minimum of difficulty and expense and without the necessity of special tools.

The members forming the partition are firmly and securely locked together by readily assembled locking members and the partition as a whole is positively secured in predetermined position in the structure in which it is installed. The partition may be disassembled and readjusted without damage to any of the parts and may be completely removed from the structure in which it is erected with a minimum of damage or defacing of the floor, walls and ceiling.

While certain novel features of the invention have been disclosed and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes may be made by those skilled in the art without departing from the spirit of the invention.

This application is in part a continuation of my copending application, Serial No. 613,801, filed May 27, 1932, and now Patent Number 2,097,484, granted November 2, 1937.

What is claimed is:

1. A sheet metal floor stud including a flat, floor-contacting base, and a resilient, bifurcate stud forming portion upstanding from said base, said stud forming portion having a smooth exterior to slidably receive an associated post element and a non-circular cross-sectional area adapted to fit the post element and prevent rotation of said element relatively to said stud.

2. A shim including a top wall portion, and supporting legs depending from said top wall portion, said shim having an open slot formed in said top wall portion extending inwardly from an edge to a point past the center of said top wall portion and adapted to accommodate a stud and to permit lateral withdrawal of said shim from the stud.

3. In a structural assembly, a supporting and positioning unit including a stud having a base and an upstanding stud forming portion, a shim having a top wall portion formed with an open slot adapted to receive said stud, and legs depending from said top wall portion, said slot and the adjacent portion of said stud forming portion being shaped to prevent angular displacement of said shim relatively to said stud.

4. A structural assembly including in combination, post members, spacer members positioned therebetween, a baseboard removably secured to said spacer members, and post covers removably connecting said spacer members.

5. A structural assembly including in combination, a post, spacer members positioned on two sides of said post, and a post cover positioned on another side of said post and removably secured to said spacer members.

6. A partition comprising adjacent sectional units, and means for securing adjacent sectional units together in assembled relationship including cooperating clip members removably secured to said units, and a floor stud having a foot portion adapted to rest on a floor or base, and an upwardly projecting stud portion projecting through said clip members.

7. In a partition structure, a floor stud formed from a single sheet metal member having a flat base and spaced upstanding stud forming portions bent up from said base, said stud forming portions each being substantially unbent and flexible at the portion adjacent said base and laterally bent and relatively inflexible at a portion removed from said base.

8. In a partition, a plurality of spaced panel sheets each having a face exposed as a wall surface, a frame having flange portions exposed as wall surfaces, a web extending between said flanges and adapted to support a panel member intermediate the planes of the wall surfaces, and inturned flange extensions having edge portions substantially parallel to the wall surfaces, a plurality of key members engaging said panel sheets and said edge portions and secured together to form a post, and a post cap engaging said key members, said panel sheets, frame and post cap each having their wall surfaces lying substantially flush in the planes of the wall surfaces of the partition.

9. In a partition in combination, a plurality of key members, means securing said key members together to form a post, sheet metal panel sheets extending on opposite sides of said post and having portions adapted to form a wall surface of said partition and inset edges defining shoulders along at least the side and bottom edges of the panel sheets, said side edges engaging said key members, a sheet metal post cap having a portion adapted to form a wall surface of said partition substantially flush with the partition wall surface entirely to the bottom of the partition and portions seated against the shoulders of said panel sheets, and sheet metal base members on both sides of said post having portions

forming wall surfaces flush with the wall surfaces of said panel sheets and post cap and having inturned top edges seated against the bottom shoulders of said panel sheets.

10. In a partition, in combination, a plurality of key members extending vertically, substantially throughout the height of the partition, means securing said key members together to form a post, panel sheets extending from said post and having faces exposed as wall surfaces and inbent edges engaging said key members, said inbent edges being formed with shoulders to provide recessed seats for said key members, and a post cap spanning the space between adjacent panel sheets and having a face portion flush with the faces of said panel sheets, flat flange portions abutting said shoulders, and inbent edges resiliently engaging said key members within said recessed seats.

11. In a partition, in combination, a post, panel sheets engaging said post and extending therefrom to define wall surfaces, base covers extending along the bottom of the partition, spacer members disposed between said panel sheets and base covers for stiffening said partition and positioning said base covers, a post cap extending vertically along said post between adjacent panel sheets, and means on said spacer member engageable with said post cap.

12. A wall support including in combination, a floor stud having a floor contacting portion and an upwardly projecting stud forming portion, a master shim of horseshoe form having a top wall portion and downwardly extending flange portions, said master shim being adapted to straddle the stud forming portion and rest on the floor contacting portion of the floor stud, and a simple shim adapted to rest on said master shim.

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