Nov. 17, 1942. A. C. OLSEN 2,302,047

BUILDING CONSTRUCTION

Filed Jan. 20, 1940 2 Sheets-Sheet 1

Fig. 1.

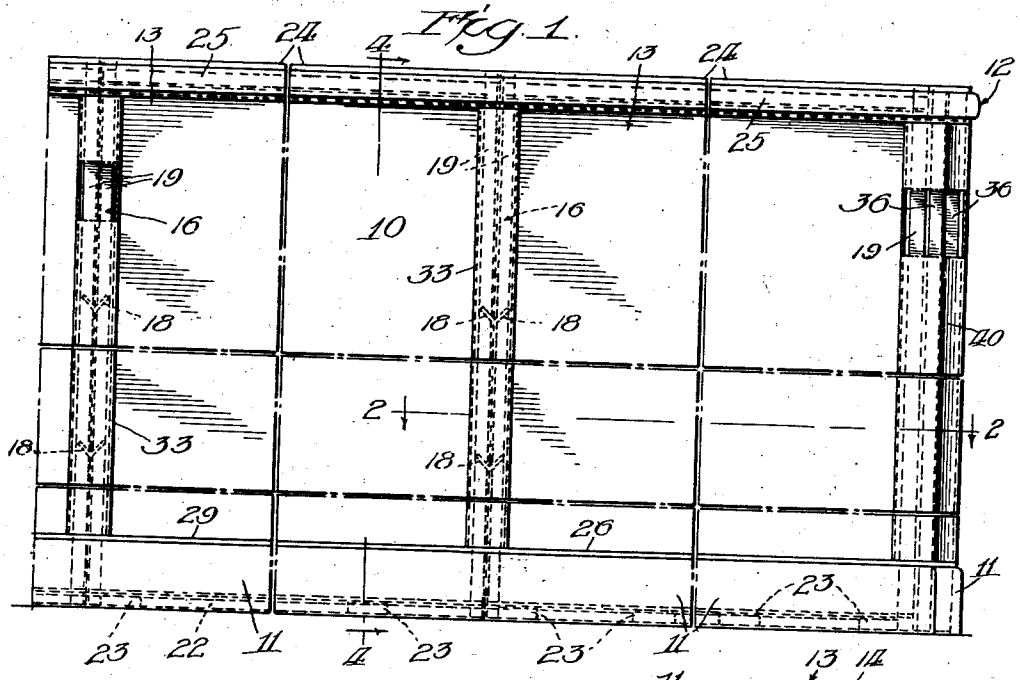


Fig. 2.

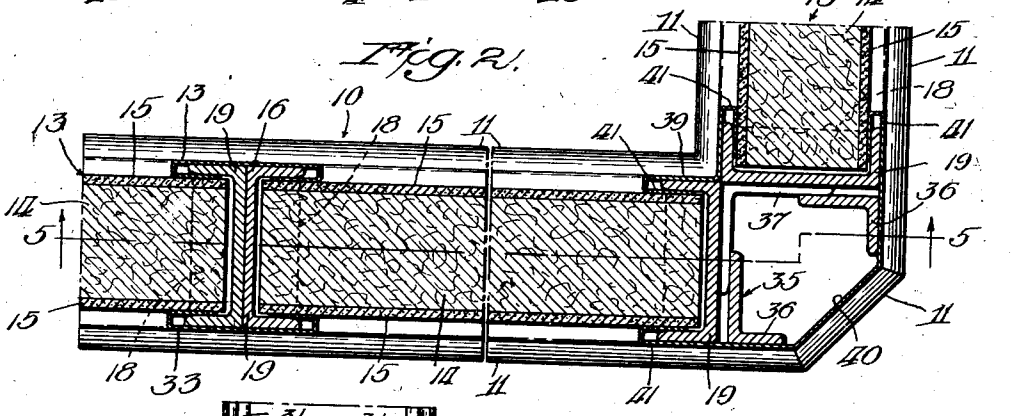
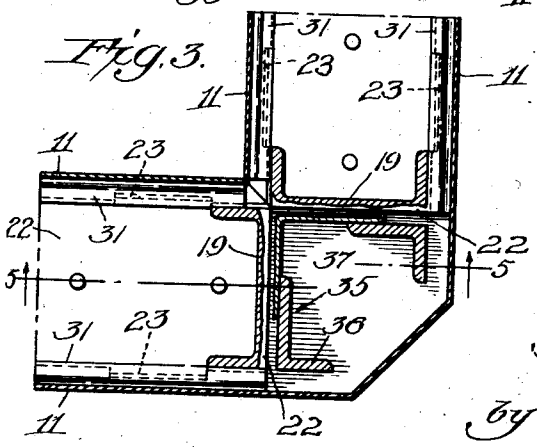


Fig. 3.



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Fig. 4.

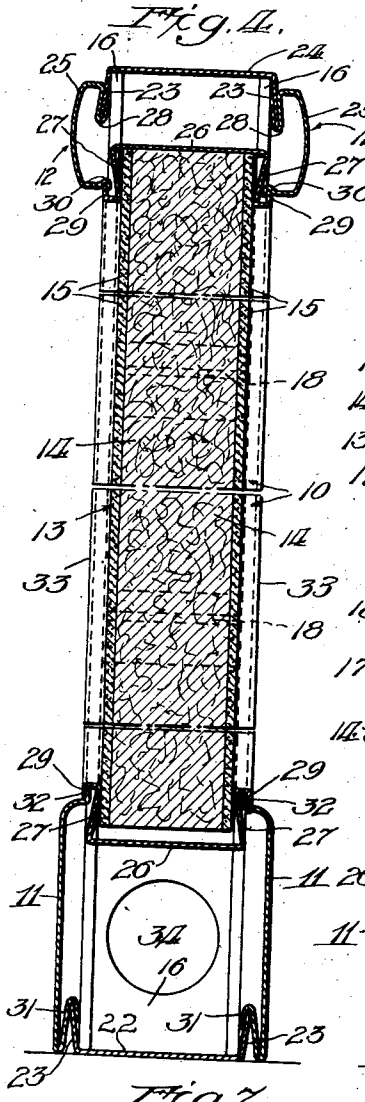


Fig. 5.

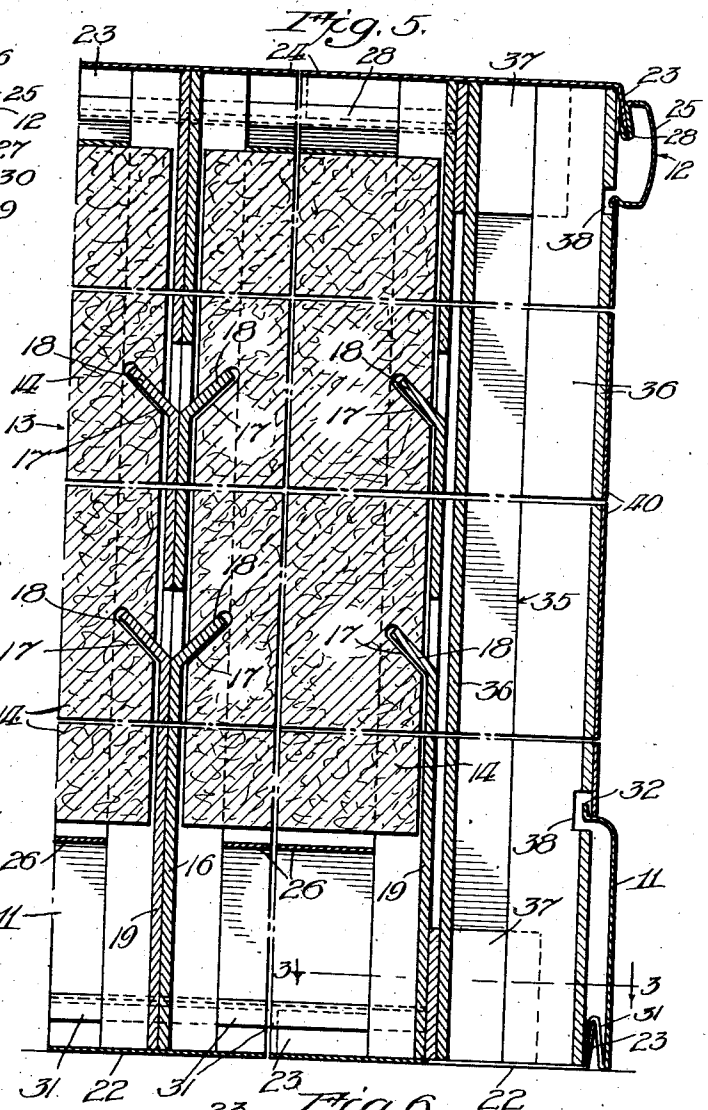


Fig. 7.

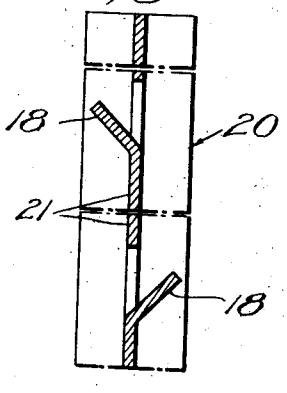
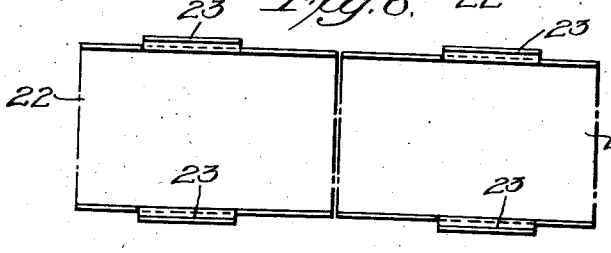


Fig. 6.



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UNITED STATES PATENT OFFICE

2,302,047

BUILDING CONSTRUCTION

Anders C. Olsen, Gwynedd, Pa.

Application January 20, 1940, Serial No. 314,761

12 Claims. (Cl. 72—16)

This invention relates to an improved method and means for forming a wall construction, particularly with respect to a type of partition system comprising panels of wall material and battens concealing the joints, hereinafter referred to as a batten type of partition system, and which is adapted for use in buildings such as offices and the like, wherein there is a definite need for a partition system which may be readily erected or disassembled for changing office conditions.

This invention is concerned primarily with an improved method and means of installing and retaining wall slabs composed of materials possessing such qualities as being fire-retardant, soundproof, and thermal insulating. This invention is a continuation-in-part of the invention disclosed and claimed in the application of Anders C. Olsen, Serial No. 313,780, filed January 13, 1940, relating to Building structures. These slabs are applied between the spaced stud members in the partition construction and are affixed to adjacent studs, being retained in place in the wall or partition by various alternative but non-equivalent methods and means which do not impair the physical or structural characteristics of the slabs or of the wall or partition as a whole.

The principal object of the invention is to provide a novel partition system wherein the erection of the partition or the like wall construction is simplified.

The principal features of the invention are that a panel or wall slab can be readily erected or disassembled, although this type of wall partition is more particularly adapted for permanent installation; however, in salvaging, the partition may be readily taken down without destroying any other parts of the partition. The usual borrowed lights or transoms may also be readily placed in or removed from the partition system and the partition system and the partition may be erected with pre-painted panels so that office partitions and the like may be erected over night for occupancy on the following day.

Another object of the invention is to provide a novel partition system adapted for interchanging office space from larger to smaller units and vice versa, and incorporating certain features such as a novel baseboard construction adapted for erecting the wall slabs thereon and particularly adapted for laying conduits, flexible cables, and telephone connections.

A further object of the invention is to provide a novel partition system suitable for any height of partition and particularly adapted either for a dwarf type of partition, or for a ceiling height type of partition, incorporating such features as having the panels readily removable and having such characteristics as being fire-retardant, thermal insulating, and sound insulating.

Another object of the invention is to provide a novel partition system which will withstand vibration incident to tall building structures such as is inherent to the modern office building.

Another object of the invention is the provision in a partition system of a novel baseboard construction together with a novel form of crown molding construction.

A principal feature of the invention is the provision of a novel stud construction.

Further objects, features and advantages of the invention will become apparent from the following detailed description of the preferred embodiment of the invention and modification thereof as illustrated in the accompanying drawings, wherein like reference characters will indicate similar parts and where:

Figure 1 is a view in elevation, partially with parts broken away illustrating the novel partition system;

Figure 2 is a horizontal sectional view along lines 2—2 of Figure 1, looking in the direction of the arrows, illustrating a detail of the stud construction used between adjacent panels and the novel corner construction;

Figure 3 is an enlarged sectional view along line 3—3 of Figure 5, looking in the direction of the arrows, illustrating the corner construction of the partition system at the baseboard;

Figure 4 is a vertical sectional view along line 4—4 of Figure 1, looking in the direction of the arrows, illustrating the partition system in detail at the baseboard and crown moldings;

Figure 5 is a vertical sectional view along lines 5—5 of Figure 2, looking in the direction of the arrows, illustrating the stud construction for supporting the wall slabs;

Figure 6 is a plan view illustrating a portion of a floor or ceiling channel; and,

Figure 7 is a vertical sectional view of a modified stud construction.

Referring to Figure 1, there is illustrated a novel wall or partition construction 10 primarily adapted for interior partition systems but which obviously may be used for exterior wall constructions. The partition 10 may incorporate the usual door frame constructions which may be of any type well known in the art and particularly the form of door frame construction dis-

closed in my co-pending application, Serial No. 313,780, filed January 13, 1940. The partition also may include the usual borrowed lights as also disclosed in the above-mentioned co-pending application. The partition comprises the usual baseboard construction 11 and crown molding construction 12. The partition may also comprise an extension portion when a dwarf type of partition is extended to a ceiling height type of partition, and the construction preferred is that disclosed and claimed in my co-pending applications for Building constructions, respectively, Serial Nos. 313,778 and 313,779, both filed January 13, 1940, of which this application is a continuation-in-part. As the hardware for the doors, borrowed lights, and transoms are of standard construction, these will not be described in detail as it is obvious that the usual glazed or metal doors may be used and that standard borrowed light sashes and transom sashes may be used with this novel construction, as they have been disclosed in the above-mentioned co-pending applications.

Wall slabs 13 used in this wall construction are of standard width and height, preferably 24 inches in width and 8 feet in height, thus being adapted for standard dwarf type partitions and with extension studs and sections thereof for ceiling height type of partitions, or the partition may be erected with full ceiling height type of partition construction. When this partition system is adapted for ceiling height type of partition, particularly when using extension stud construction, it is preferred to use the construction disclosed and claimed in my above-mentioned co-pending applications.

The wall slabs used in this partition system preferably comprise an insulating portion or core 14 preferably formed of felted fibrous material, preferably bagasse or other ligno-cellulose materials. This insulating material may be sized by any suitable process, preferably by precipitating rosin size with alum. There is applied to each face of this core for ornamental purposes a facing 15 preferably of asbestos and cement. The method of forming this sheet material comprises an insulating base and facings of asbestos fiber and cement therefore which is disclosed and claimed in United States patent to T. B. Munroe et al., No. 1,976,684, granted October 9, 1934. It is obvious from the illustrations, particularly in Figures 1, 2, 4, and 5, that by the use of such composite panel there will be provided in a wall construction or partition system a wall construction which has not only a core of insulating material but also an ornamental and weatherproof surface, which is also fire-resistant due to the asbestos fiber and cement coating thereon. It is also evident that the asbestos-cement surface may be suitably ornamented by painting where the surface is exposed or left in its natural finish, or that there may be impressed thereon designs simulating brick siding or other forms of siding material. Also that the ornamental surface applied to the insulating core may have one face which is preferably adapted for an exterior surface while the other face is adapted for an interior surface. When used for an interior partition construction, it is preferred to either leave the facing material in its natural finish or to decorate the surface in colors suitable to the taste of those using the office space provided with the partitions, or, if in a home or apartment construction, to decorate to be suitable to the residents thereof.

When the novel partition system, as illustrated, which will be further described in detail, is changed from the dwarf type of partition system to a ceiling height type as disclosed and claimed in the above-mentioned co-pending applications, extension slabs formed from the same material as the main wall slabs or panels 13 may be utilized or it is obvious that the partition may be finished to the ceiling with other forms of panels or sheathing. This may include asbestos-cement panels, or felted fiber board, gypsum wallboard, or the like material. Although this invention is disclosed primarily for the application of a type of material comprising an insulating base and asbestos fiber and cement facings therefor, nevertheless, it is evident that this system is equally applicable for the erection of various kinds of wall slabs or any other sheet form wall-forming materials known in the building art.

In the novel partition or wall construction to be further disclosed in detail, the wall slabs 13 are erected by the use of a novel stud construction 16. In the construction which is to be described, it is preferred that the wall slabs shall be formed so that there are slots or kerfs 17, Figure 5, uniformly spaced along the edges of the wall slabs, adapted to receive prongs 18 similarly spaced along the length of the studs 16. The slots 17 are preferably cut in the edges of the wall slabs 13 with a suitable saw or other device to extend across the thickness of the material and are preferably at an angle of 45° and also the prongs 18 are complementally formed.

The stud construction 16 preferably comprises two channel members 19 welded or otherwise secured together back to back to form substantially an I-beam form of construction, and it is preferred that the prongs 18 shall be struck therefrom although it is within the scope of the invention that the prongs 18 may be separately formed and secured to the channels complemental to the kerfs 17 in the wall slabs.

A modified stud construction 20 is illustrated in Figure 7 and is in the form of an I-beam and from which a web 21 has the prongs 18 struck therefrom in alternate directions for the erection of a modified form of panels, not shown, but which will have slots or kerfs complementally formed with respect to the prong construction of the modified stud 20.

It is obvious that from this disclosure that the wall slabs 13 and the supporting studs 16 may be formed very cheaply in sizes preferred for the standard height type of partitions or dwarf type of partition, involving only the labor necessary to form the compound wall slab of an insulating material and facing materials for the faces thereof, together with the simple operation necessary for forming the supporting prongs on the studs and the complemental slots or kerfs in the wall slabs. Since the felted fibrous material comprising the wall slab is reinforced with the asbestos fiber and cement facing, the novel prong and slot construction is suitably adapted for the supporting of wall slabs formed of this material without the wall slabs failing at the kerfs. The construction of this invention provides that the wall slabs 13 may be readily erected or dismantled when the partitions or wall constructions are rearranged for changing office conditions, or when the partition or wall constructions are being taken down, thus providing that the entire system may be salvaged. The further details of the construction of the novel wall construction and particu-

larly with reference to a novel partition system will be described by reference to the remaining figures of the drawings.

In erecting the partition, referring to Figures 1 to 6 inclusive, there is first applied to the floor a flooring or floor channel **22**. It is obvious that, before the application of the flooring channel **22**, there may be applied a strip of felted fibrous material, preferably asphalt impregnated to form a seal between the floor and the baseboard construction and also to provide means tending to retard the transmission of sound between the partition and the floor below. The flooring channel **22** is provided with laterally extending portions **23**, Figure 6, adapted to receive the baseboardpanel members **11**. It is also obvious that the flooring channel may be secured to the floor construction in the usual manner such as by the use of lag screws, expansion bolts, or other suitable securing means.

The crown molding construction **12**, Figures 1, 4, and 5, where a ceiling height type of partition is necessary may have a ceiling channel **24**, which may also serve as the top of a dwarf type of partition, secured to the ceiling construction in the usual manner such as by the use of lag screws or toggle bolts. The ceiling channels **24** are also formed similar to the floor channels **22** and have the laterally extending portions **23** adapted to receive crown molding strips **25**. The studs **16** are then erected between the members **22** and **24** and may be affixed in position in a manner well known to one skilled in the art. The panels **13** may then be placed in position in the following manner. Each of the panels **13** is erected in succession by lifting it upwardly in order that the slots **17** at an edge thereof may engage the prongs **18** of the studs to which it is affixed, and then it is dropped down to engage the prongs which are formed on the stud contiguous to the edge of the panel which is being erected in position. The stud which is to be erected contiguous to the opposite edge of the panel may then be placed in position by sliding it laterally so that its prongs engage the slots formed on the opposite edge with respect to the edge just described as the panel is being affixed to the first mentioned stud by moving the panel laterally as it is dropped down in place, so that now the panel is firmly affixed in position and the next panel is ready to be placed on the stud last erected, after it has been secured in position, to form the partition system. It should be obvious, however, to one skilled in the art that, although this invention is being described with respect to studs formed from channels, the novel stud construction may also be formed from a Z-bar or from angles secured together so as to form a Z-bar construction or a T-shaped channel construction in which case the panels may be inserted in the stud construction after they have been erected and secured in position by sliding the panels after they have been lifted so that the slots in the panels and their complementally formed prongs on the stud are in alignment and then by merely forcing the panel laterally with respect to the partition construction, the panels are very readily erected in place in the partition system without the necessity of first erecting the stud, then placing a panel thereon and then completing the partition by successive erections of the panels and contiguous stud constructions.

After the panels have been erected in place between the stud constructions, the studs may be firmly affixed and secured in position by the usual form of securing means, and it is to be understood that the floor channel constructions **22** and ceiling channel or crown molding construction **12**, and particularly the ceiling channel **24**, shall be levelled by methods approved in the art and also that the panels shall be set plumb in position.

In order to erect the crown moldings **25** and the panels forming the baseboard construction **11** in position, it is preferred that there shall be placed between the studs a U-shaped member **26**, preferably formed of sheet metal having resiliently formed legs **27** adapted to grip the lower edge of the panel **13** to which it is affixed. At the upper ends of the panels **13** forming the partition system, the U-shaped member **26** is also applied in order that its legs **27** shall also grip the faces of the panel at the upper end of the panel. It is preferred that this member **26**, Figure 4, shall be forced down until it engages the upper end of the panels to which it is applied. The ornamental batten strips **25** which form the crown molding are then snapped in position by first placing a resilient U-shaped portion **28** which is complementally formed with respect to the laterally extending portions **23** of the ceiling channel **24** so that the portion **28** engages these members **23** and then snapping the batten strip **25** in position over the lip **29** of the member **26** in order that a complementally formed latching member **30** shall be locked in place over the lip **29**. It is obvious from this description that the crown molding strips **25** may be readily removed by reversing the order of procedure just described when it is necessary to dismantle the partition system.

The baseboard panel members **11** may also be erected in position in substantially the same manner as that described with respect to the crown molding construction **12**. The members **26** may be preferably slid upwardly with respect to the wall slabs **13**, and the baseboard members **11** are then placed in position by placing an inverted U-shaped portion **31** on the bottom edge of the panels **11** over the complementally formed and laterally extending portions **23** of the floor channel **22**. The upper end of the panels **11** are then moved inwardly with respect to the wall slabs and the U-shaped securing member **26** is then forced downwardly so that the edges or lips **29** cover a complementally formed upper edge **32** of the baseboard panels **11** so that the opposite baseboard panels **11** are firmly affixed in position in the partition system. Batten strips **33** for completing the studs **16** are formed of sheet metal and are affixed to the studs by sliding them longitudinally on the studs, Figures 1 and 2. As the batten strips **33** have already been applied to the studs **16** before they were erected in place in the partition system, it is obvious that the crown molding strips **25** together with the baseboard panel construction of the baseboard panel members **11** form a panelled surface which is pleasing to the eye, as illustrated in Figure 1. As illustrated in Figures 1 and 4, the lips **29** of the U-shaped members **26** also serve as further ornamentation for the partition construction. It is evident therefore that there has been disclosed, particularly with reference to the baseboard construction, a simple structure comprising interconnecting chambers formed by the baseboard panels and the panels of wall material spaced from the floor, wherein the baseboard panels **11** may be readily removed for the placing and chang-

ing of electrical conduits and the like constructions which are placed in the spaces between the opposite baseboard panel constructions and the U-shaped members 26. In order to facilitate the placing of the conduits in the partition system, openings or holes 34 are provided in the bottom of the studs, as illustrated in Figure 4. It is to be understood that, in dismantling the partition or wall construction, the dismantling is accomplished by reversing the steps of erection of the partition system as it has just been described, particularly with reference to the baseboard panel construction and the crown molding construction.

Referring to Figures 2, 3, and 5, the preferred form of corner construction for this novel partition and wall construction will now be described. A corner stud 35 is utilized and this corner stud is preferably formed from angle iron members 36 arranged as best illustrated in Figures 2 and 3. The angle irons 36 forming the stud are rigidly secured together by welding or otherwise suitably securing angle-shaped clips 37 at the top and bottom of the stud constructions of the stud members, Figure 5, and it is within the scope of this invention that additional clips or securing members 37 may also be secured along the length of the stud to further stiffen the stud construction. To the angle-shaped clips 37 are then welded channel members 19 which are similar in construction to those from which the stud construction 16 were formed. These channel shaped members 19 of the stud construction 35 also have prongs 18 formed thereon adapted to receive the complementally formed kerfs 17 of the wall slabs 13. In order that the baseboard panels 11 may properly intersect at the corner a notch 38 may be formed, as best illustrated in Figure 5, so that the ends of batten strips 39 and 40 may serve in the same manner as the lips 29 of the members 26. For an equivalent structure, however, the batten strips 39 and 40 at their ends may have projections similar to the lips 29 to serve the same purpose.

In erecting the wall panels 13 in position in the partition construction, it is preferred that the corner stud construction 35 shall be first erected in place in the partition construction. The panels contiguous to the corner construction are then erected in place as has been previously described by lifting the panels 13 to allow the saw kerfs 17 to be in alignment with the prongs 18 so that, as the panels are dropped in position, the panels will be forced into position contiguous to the studs and between the legs of the channel members 19 forming part of the corner stud construction.

Referring to Figures 2, 3, and 5, an inner ornamental batten strip 39 and the outer ornamental corner batten strip 40 have been previously erected in place on the stud construction by sliding them in place longitudinally with respect to the stud construction before it is erected in position. The inner corner ornamental batten strip 39 is substantially L-shaped in section having U-shaped portions 41 which engage the complementally formed leg portions of the channels 19.

It is obvious from this construction that the batten strips 39 may be readily slid in place over the contiguous leg portions of the channel members 19 where they intersect to form the inner corner structure of the corner stud construction. The outer corner ornamental batten strip 40 has U-shaped portions 41 corresponding to similar portions of 41 of the inner ornamental batten strip 39 and these in turn are so positioned as to engage the leg portions 19 opposite to those which form the inner corner stud construction. Thus, when the ornamental batten strips 39 and 40 are applied to the stud construction 35, there is formed a corner construction which is not only rigid but is suitably ornamented to form an inner corner construction and an outer corner construction; and, as the wall slabs have been placed in position, it is obvious that there has been formed a novel corner construction including a novel stud construction with which one may readily assemble a partition or wall construction. A notch 38 may also be formed in the upper end of the stud construction and it is similar to the notch 38 at the bottom portion of the stud construction, so that, when the crown molding strips 25 are erected in place in the corner stud construction, a neat joint may be formed between the crown molding strips and the members forming the corner stud construction. This construction, however, may be modified as described above, by having the upper ends of the batten strips 39 and 40 formed with lips similar to the lips 29 of the members 26. It is obvious that both the crown molding construction 12 and the baseboard panel construction 11 at the corner stud construction should be formed as illustrated in Figures 1 and 2 to provide a neat crown molding construction and a neat baseboard panel construction.

The baseboard panels 11 and the crown molding strips 25 at the corner stud construction are erected in position in the same manner as has been previously described with reference to the partition construction when the partition is erected in a co-planar construction. Although the corner stud construction has been particularly disclosed with reference to a right angle corner construction, it is obvious that within the scope of the invention, the corner stud construction may be formed for any suitable angular relationship between the intersecting partitions of a partition system or wall construction.

When it is necessary to form intermediate joints between the main panels particularly where it is desirous of obtaining further ornamentation by arranging the battens and panels in suitable designs, the construction as disclosed and claimed in detail in my co-pending application, Serial No. 313,780, filed January 13, 1940, may be utilized. In this form of construction, the contiguous edges of the panels 13 which are preferably of a form of material having ornamental facings of asbestos fiber and cement applied to an insulating base rather than a single facing of asbestos fiber and cement applied to an insulating base, are secured together by U-shaped batten strips and securing members. It is obvious that with this construction, as disclosed in the above-mentioned co-pending application, the panels are securely affixed together, yet it permits the lateral and longitudinal expansion of the panels which takes place because of changes in humidity or temperature.

Figures 1, 2, 5, and 7 have been previously described in detail with reference to the particular panel structure and particularly relate to a construction of the prongs 18 and the complementally formed kerfs or grooves 17 in the panel construction 13. Although in describing the formation of the prongs 18 on the studs 16 and 20, it has been described that the prongs are formed on the studs 16 and 20, it is obvious that this is a generic use of the term; and, that, by

forming of the prongs on the studs, this term may also include equivalent mechanical expedients such as striking the prongs from the original metal of the studs, or forming the prongs separately and subsequently spot welding or otherwise securing the prongs to the base or legs of the studs. Other equivalent expedients may be dowels or similar members welded or otherwise secured between the legs of the stud in the same relative position as the prongs.

It will be apparent from the foregoing that the invention provides a number of related but non-equivalent methods and means of attaching relatively thick slabs of wall material between and to stud members in the walls of a partition construction. Each of these methods and means is particularly well adapted for use with wall slabs composed primarily of the so-called rigid type of heat insulating material, such as the preferred form, in this instance, of an insulating base member to which is applied one or more ornamental faces of asbestos fiber and cement, asbestos fiber and cement panel members, or gypsum wall panels. They may also include slabs of insulation composed of fibrous materials as well as other types of insulating slabs or blocks, or ornamental panelling members, such, as, for example, cast or molded materials containing ingredients of good insulating quality or high percentage of relatively small voids or pockets of entrapped air or inert gas wherein the panels or slabs are so formed that they have relatively high strength and have incorporated therein the kerfs 17 or other similarly formed structures for erecting the panels on the studs. The features of the invention are particularly desirable in connection with the use of slabs or blocks of insulating materials since the method and means of attachment provided do not materially decrease the overall efficiency of the insulating material used and also eliminate penetrating members of high heat conductivity. In this particular partition system, however, the studs are a source of heat loss because the studs extend from one face to another of the partition. However, this form of partition is not particularly adapted for exterior use where a high degree of heat insulation is required.

The invention, however, is not limited to the use of materials of good heat insulating quality for the wall slabs since the methods and means provided for attaching the slabs between and to the spaced stud members in the partition or wall construction will also prove advantageous for attaching other types of wall materials where a high degree of insulating efficiency is not essential. Molded or precast slabs or hydraulic cement, natural or synthetic resins, ceramic materials, and the like may be attached to the studs of the partition construction or of any type of construction in the manner and by the means herein provided.

As applied to buildings such as houses, office buildings, factories, and the like, any desired form or type of interior and exterior wall material may be utilized in conjunction with the wall slabs. Although the partition system has been particularly described with reference to interior partition systems, and it is preferred that the partitions shall be left either in their natural color or may be suitably decorated by any of the finishing materials well known in the art, nevertheless, if necessary these wall slabs may have plaster applied thereto as an interior finish, and when necessary, it may be directly applied to the wall slabs. Stucco and kellastone or the like may be applied to the exterior surface of the slabs either without, or preferably with, a suitable reinforcing mesh. Brick or stone veneer may be applied over the slabs, and wood or metal siding of any desired type as well as wood or composition shingles may be employed as an external finish; although the panels suitably calked, as originally erected, may be utilized for an exterior surface when the panels or slabs comprising an insulating base and ornamental surfaces therefor or solely of asbestos fiber and cement have been suitably sized and painted with a weather-resisting surfacing coat. When wood siding, shingles, or panels of wood, metal or composite materials are employed, suitable nailing strips may be anchored to the slabs in any desired manner, such as, for example, by attaching the nailing strips to bolts, metal clips, or the like which have been suitably embedded or anchored in the material forming the panels. Masonry veneer may also be anchored to the slabs in a similar manner.

It will also be understood that while metal studs have been disclosed for the erection of the particular panels described, nevertheless, wood framing may be employed with equal facility in which case the studs may be formed with the clips or prongs 18 such as has been disclosed in detail with reference to the metal studs, and either nailed or otherwise secured to the equivalent wood stud construction.

It will, of course, be understood that various combinations of the features of the invention other than the combinations illustrated and described, will be obvious to those skilled in the art, and are therefore entirely within the scope of the invention as defined by the appended claims. The same applies to various modifications and minor departures from the specific forms of wall slabs as well as the method and means of attaching the wall slabs herein illustrated and described.

What is claimed is:

1. A wall comprising, in combination spaced stud members, each of said stud members comprising in part a web portion, solid panels of wall thick material disposed between adjacent stud members, longitudinally spaced, oppositely directed outwardly and upwardly extending prongs struck out of the web portions of the stud members, said prongs constituting support means extending transversely across the studs and of substantially the width of the web portions thereof for supporting and affixing panels to opposite sides of the web portion and complemental recesses extending into and across the side edges of the panels and engaging the prongs whereby the panels are held against the stud members by a force which is normal to the web of the stud members and is a function of the weight of the panel and the inclination of the prongs supporting the panel.

2. A wall comprising, in combination, spaced stud members having web portions, solid wall thick panels of wall material disposed on opposite sides of the web portions of the stud members supporting the panels, transversely extending prongs substantially the width of the webs formed on the web portions and upwardly and outwardly inclined with respect to the web portions for supporting panels on opposite sides of the web portions of the stud members, complemental transversely extending means formed on the edges of the panels and providing downwardly facing supported surfaces extending across the width of a panel, each such supported surface

supported on the upper inclined face of a complementing prong member and affixing the panels to the web portions of the stud members, and batten strips affixed to the stud members whereby an ornamental joint is formed at each stud member supporting contiguous panels.

3. As an article of manufacture, a stud for supporting contiguous wall panels, the stud fabricated from a plurality of channel-shaped members affixed together with the bases of the channel-shaped members abutting, transversely extending panel supporting ledge form prongs for supporting panels formed on the bases of each of the aforesaid channel-shaped members, whereby a stud member in the form of an I-beam is formed with supporting ledges extending substantially the full width of the web and comprising continuous outwardly extending and upwardly inclined prong members laterally formed with respect to the web portion of the stud.

4. A partition construction comprising, in combination, a floor channel and a ceiling channel, spaced stud members mounted therebetween, panels of wall thick wall material mounted between the spaced stud members, a crown molding construction comprising resilient U-shaped members resiliently gripping the upper ends of the panels, a removable ornamental molding strip on each side of the partition construction detachably affixed to the ceiling channel and the resilient U-shaped members, and a baseboard construction comprising other U-shaped members resiliently gripping the bottom edges of the panels and baseboards detachably affixed to the said other U-shaped members and the floor channel, whereby the partition construction may be assembled and disassembled.

5. A wall panel for mounting between studs in a wall construction, said panel being of wall thickness and along each of its side edge faces having kerfs substantially uniformly spaced and extending substantially through the thickness of the panel inwardly from a side edge face into the body of the panel, the kerfs inclined with respect to their respective side edge faces of the panel and the upper inclined surface of said kerf affording means for supporting the panel on complementally formed studs of a wall construction.

6. As an article of manufacture, a stud member comprising a web and flanges fabricated as an I shaped member for supporting a wall panel on the web and between a pair of the opposed flanges thereof, longitudinally spaced prongs on the web of the stud, the prongs extending transversely, substantially the width of the web and directed outwardly from the web and upwardly, whereby the upper surfaces of said prongs comprise supporting surfaces for supporting complementing surfaces of edge kerfed wall panels fabricated for mounting on the stud member.

7. A partition construction comprising, in combination, a flooring channel and a ceiling channel, spaced stud members mounted therebetween, wall thick panels of wall material affixed between the stud members, elongated resilient U-shaped members extending along the upper and lower edges of the panels between contiguous faces of adjacent studs, the flanges of the U-shaped members gripping opposite side faces of the panels, a crown molding construction on each side of the partition construction affixed to the ceiling channel and to the resilient U-shaped member at the upper edge of the panels, and a baseboard construction on each side of the partition construction affixed to the resilient U-shaped member at the bottom edge of the panels and to the flooring channel.

8. A partition construction comprising, in combination, a flooring channel and a ceiling channel, spaced stud members mounted therebetween, wall thick panels of wall material affixed between contiguous stud members, elongated resilient U-shaped members extending along the upper and lower edges of the panels between contiguous faces of adjacent studs, the flanges of the U-shaped members gripping opposite side faces of the panels and affixing the U-shaped members to the panels, the resilient U-shaped members having at the extremities of the flanges thereof symmetrically formed lips formed on opposite sides of the partition construction, a crown molding construction on each side of the partition construction affixed to laterally extending portions of the said ceiling channel and to the symmetrically formed lips of the resilient U-shaped member at the upper edge of the panels, and a baseboard construction on each side of the partition construction affixed to the symmetrically formed lips of the resilient U-shaped member at the bottom edge of the panels and to laterally extending portions of the flooring channel.

9. A wall construction comprising, in combination, a floor, a flooring channel affixed thereto, spaced stud members mounted on the flooring channel, panels of wall thick wall material mounted on and extending between contiguous faces of adjacent stud members and spaced vertically from the flooring channel, a metal baseboard construction overlying the panels of wall material at the lower ends thereof and mounted between the floor and the lower ends of the panels of wall material at the lower ends thereof, said metal baseboard construction comprising resilient U-shaped members extending along the lower edges of the panels between contiguous faces of adjacent studs, the flanges of the U-shaped members gripping opposite side faces of the panels and affixing the U-shaped members to the bottom edges of the panels and ornamental baseboard panels on both sides of the wall construction affixed at their upper edges to the resilient U-shaped member and at their lower edges to the flooring channel.

10. A partition construction comprising, in combination, a flooring channel, spaced stud members mounted thereon, wall thick panels of wall material affixed between opposed faces of contiguous stud members, a baseboard construction comprising resilient U-shaped members extending along the lower edges of the panels between contiguous faces of adjacent studs, the flanges of the U-shaped members gripping opposite side faces of the panels and affixing the U-shaped members to the panels and baseboard panels detachably mounted on the resilient U-shaped member and flooring channel.

11. A solid partition construction comprising, in combination, a floor channel, spaced stud members mounted thereon, panels of wall thick wall material affixed between contiguous faces of adjacent studs and forming a solid partition construction, the bottom edges of the panels terminating short of the floor channel to form chambers, a baseboard construction comprising resilient U-shaped members extending along the lower edges of the panels between contiguous faces of adjacent studs, the flanges of the U-shaped members gripping opposite side faces of the panels and affixing the U-shaped members to the lower edges of the panels and baseboard panels remov-

ably attached to the resilient U-shaped member and the floor channel, said spaced stud members having openings therethrough interconnecting the chambers formed beneath the panels of wall material between contiguous studs, the chambers enclosed by the baseboard panel construction and the wall panels being entered into by the removal of the removable baseboard panels.

12. A partition construction comprising, in combination, a flooring channel and a ceiling channel, spaced stud members mounted therebetween, panels of wall thick wall material mounted on and extending between contiguous faces of adjacent spaced stud members, a crown molding construction comprising resilient U-shaped members extending along the upper edges of the panels between the contiguous faces of adjacent studs, the flanges of the U-shaped members gripping opposite side faces of the panels and affixing the U-shaped members to the panels and removable ornamental molding strips on both sides of the partition construction detachably affixed to the ceiling channel and the resilient U-shaped members.

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