Jan. 11, 1944. M. PRAEGER 2,338,870

PARTITION CONSTRUCTION

Filed March 19, 1943

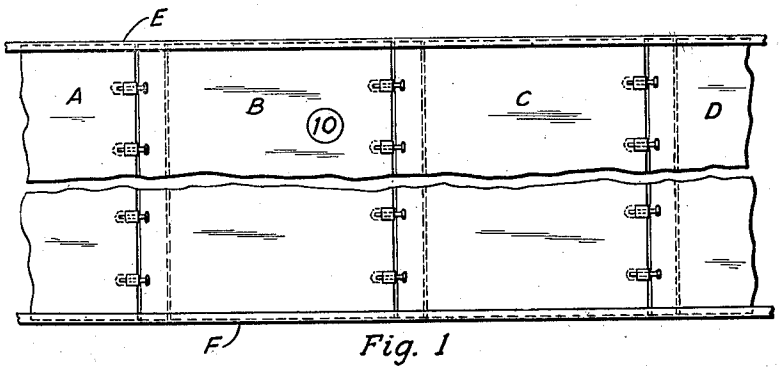


Fig. 1

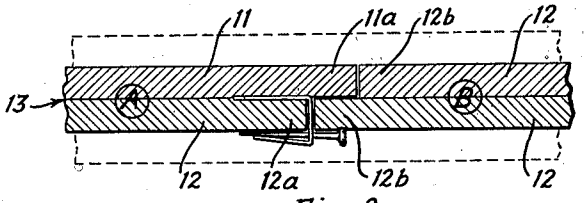


Fig. 2

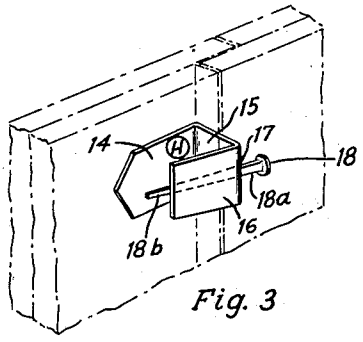


Fig. 3

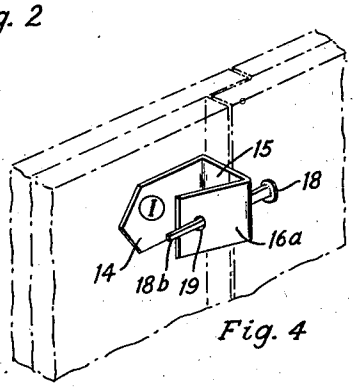


Fig. 4

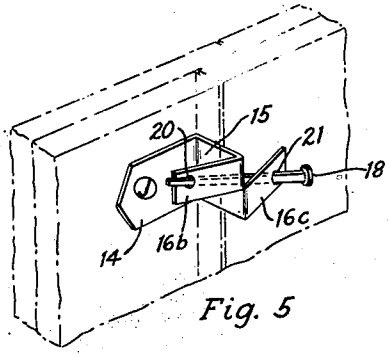


Fig. 5

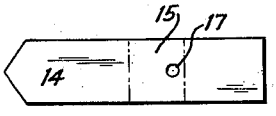


Fig. 6

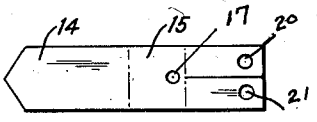


Fig. 7

INVENTOR.

Melville Praeger

BY

ATTORNEY

Patented Jan. 11, 1944

2,338,870

UNITED STATES PATENT OFFICE

2,338,870

PARTITION CONSTRUCTION

Melville Praeger, New York, N. Y.

Application March 19, 1943, Serial No. 479,755

4 Claims. (Cl. 72—118)

This invention relates to improvements in partition structures, being particularly directed to partition formations incorporating laminated plasterboard units defining sections having "butt end" formations and novel clips for connecting such sections at their end jointures.

Up to the present time, in partition construction, particularly for low cost housing, it has been customary to assemble a series of plasterboard units end to end and support the same at their juxtaposed ends by beams or channels in conjunction with clips, or by mounting the boards at their tops and bottoms between ceiling and floor tracks, with connections at jointure zones maintained by spaced clips; in each event, the plasterboard has usually been of one-half inch thickness with the result, therefore, that in order that the building code requirement for a two inch partition be maintained, three-quarters of an inch of plaster must be applied on each face of the partition thus assembled, all of which is costly from the standpoint of both material and labor.

It is an object of this invention to provide a partition structure wherein, by adhesively bonding at leas two plasterboard panels in "butt" formation and interconnecting the same at such "butt" formations by a novel form of clip wherein resilient pressure is maintained in the zones at the end of the juxtaposed panels, whereby a firm body is present in the partition with a reduced requirement for facing plaster, namely, the one-half inch on each face.

Specifically, it is an object of this invention to provide for a partition structure in low cost housing developments wherein plasterboard sections, formed of "butt-ended" laminated panels are interconnected at their juxtaposed ends by resilient spaced clips and mounted between ceiling and floor tracks, thereby eliminating the necessity of upright supports at jointures of the respective sections and reducing thickness of the required plaster surface covering, while, at the same time, increasing the rigidity of the partition wall thus formed.

These and further objects of the invention will become more apparent in the following description of a preferred embodiment of the invention illustrated in the drawing, wherein:

Figure 1 is a front elevation of a partition wall formed in accordance with my invention;

Figure 2 is a plan view of the same in condition for application of surface plaster coating;

Figure 3 is a perspective view of a preferred embodiment of the clip incorporated in my invention;

Figure 4 is a perspective view of another embodiment of the clip incorporated in my invention;

Figure 5 is a perspective view of a still further embodiment of the clip incorporated in my invention;

Figure 6 is a front view of the blank for the preferred embodiment of my clip as shown in Figure 3; and

Figure 7 is a front view of the blank for the embodiment of my clip shown in Figure 5.

Referring to the reference characters in the drawing, numeral **10** represents a wall partition comprising a series of sections A, B, C, and D, each of which is composed of panels **11** and **12** bonded with adhesive as at **13** and providing a "butt" formation at the ends **11***a* and **12***a* of the panels. The laminated sections A to D are mounted at their tops and bottoms in ceiling track E and base track F, as shown in Figure 1, with the ends **12***b* and **11***b* of the panels of section B being in juxtaposition with the ends **11***a* and **12***a* of the panels of section A, as shown in Figure 2, to form opposing straight faces.

To rigidly connect the respective sections A to D at the jointure of their "butt ends," I apply a series of vertically spaced clips H, I and J, as shown in detail in Figures 2 to 5. Each of these clips is substantially U shaped in configuration, having a wedging leg **14**, which is adapted to be inserted in an aperture manually formed in the bonding zone between the panels **11** and **12** or which may be embedded between the panels as they are bonded with adhesive during the formation of the laminated sections. The base **15** of the clip is of width substantially greater than the thickness of a panel, while the free leg **16** of the clip in each embodiment is angularly displaced towards the other embedded leg.

In the embodiment of Figure 3, an aperture **17** is formed in the base **15** at a distance greater than the thickness of an individual panel so that when the locking nail **18** is driven half-way therethrough in a horizontal direction adjacent the cooperating panel surfaces of the juxtaposed "butt ends" of the respective sections, as for example, A and B, one-half **18***a* of locking nail rests against the panel of one section B, while the other half, **18***b*, of locking nail rests against the corresponding panel of section A; the angularly inbent leg **17** serves to resiliently press against the nail half **18***b* by virtue of the displacement away thereof from normal angular position dur-

ing the driving of the nail and the continued contact thereagainst of portion 18b of the nail.

In the embodiment shown in Figure 4, I have provided an aperture 19 in the angularly disposed leg 16a, this aperture being sufficiently distant from the free end thereof, so that as nail 18a is driven through the apertures 17 and 19 of the base and leg in parallelism with the surface of the panels at the "butt end" of the juxtaposed sections, the free end of leg 16a exerts a positive resilient pressure against the panel of section A adjacent nail portion 18b.

In the modified embodiment of the clip shown in Figure 5, I have split the angular leg longitudinally as it is blanked (see Figure 7) and formed apertures 20 and 21 in each of them, and then angularly bent the split wings in opposing directions so that these wings 16b and 16c rest against the surfaces of adjacent panels of the juxtaposed sections. The nail 18 is passed through the apertures 20 and 21 of the opposing wings of the leg and through the apertures 17 of the base, so that the nail is disposed at an angle to the horizontal and at a three-point support while it exerts force on the free ends of the wings 16b and 16c so that the required pressure is exerted against the surfaces of the panels, as clearly shown in Figure 5.

Of course, after the sections are assembled with their "butt ends" in juxtaposition and their tops and bottoms in the respective ceiling and floor tracks, a one-half inch plaster coating is sufficient to cover the same for defining the outer wall surface of the rooms divided by the partitions thus formed.

Various changes and modifications may be made to the details of construction of the invention without departing from the broader spirit and scope thereof, as set forth in the following claims.

I claim:

1. The combination with a series of laminated wall board sections having butt end formations mounted in juxtaposition to form a continuous partition, of a series of resilient mounting clips disposed vertically along the jointure of said sections, said clips being of substantially U conformation, one of the legs of which is normal to the base and the other of the legs of which is at an acute angle to the base, the first of the legs of said clip being embedded between the laminated members of one section adjacent the inner member of the butt end thereof, the base of the clip being adjacent the end of said member and the inclined leg of said clip extending along said member, an aperture in the base of said clip disposed at a distance from the first leg greater than the thickness of the member, and a fastener nail passing partially through the aperture of the base against the inclined leg to tense the same, said fastener nail being disposed into parallelism with the adjacent members of the juxtaposed wall board sections.

2. The combination with a series of wall board sections formed of panels laminated to provide butt end formations, and mounted for juxtaposition to form a continuous partition length, of a series of resilient mounting clips disposed vertically along the jointure of one side of said sections, said clips being of substantially U conformation, one of the legs of which is normal to the base and the other of which is at an acute angle to the base, the base being of greater width than a panel member and having an aperture therein spaced from the leg normal thereto a distance greater than the width of the panel, the first of the legs of the clip being embedded between the laminated panels at the butt end of the section adjacent the inner panel, the base of the clip being disposed in parallelism with the end of said inner panel, and the inclined leg of said clip extending along said inner panel, and a fastener nail passing through the aperture of the base and against the inclined leg to tense the same, said fastening nail being disposed in parallelism with the adjacent panels of the juxtaposed wall board section at the jointure thereof.

3. The combination with a series of wall board sections formed of panels laminated to provide butt end formations, and mounted for juxtaposition to form a continuous partition length, of a series of resilient mounting clips disposed vertically along the jointure of one side of said sections, said clips being of substantially U conformation, one of the legs of which is normal to the base and the other of which is at an acute angle to the base, the base being of greater width than a panel member and having an aperture therein spaced from the leg normal thereto a distance greater than the width of the panel, the first of the legs of the clip being embedded between the laminated panels at the butt end of the section adjacent the inner panel, the base of the clip being disposed in parallelism with the end of said inner panel, and the inclined leg of said clip extending along said inner panel, an aperture in the inclined leg of said clip, and a fastener nail passing through the aperture of the base and through the aperture of the inclined leg to tense the same said fastening nail being disposed in parallelism with the adjacent panels of the juxtaposed wall board section at the jointure thereof.

4. The combination with a series of wall board sections formed of panels laminated to provide butt end formations, and mounted in juxtaposition to form a continuous partition length, of a series of resilient mounting clips disposed vertically along the jointure of one side of said sections, said clips having a base, a leg normal to the base and a plurality of legs integral with the base spaced from the first leg and extending in opposing directions at an acute angle to the base, the base being of greater width than a panel member and having an aperture therein spaced from the leg normal thereto a distance greater than the width of the panel, the first of the legs being embedded between the laminated panels at the butt end of the section adjacent the inner panel, the base being disposed in parallelism with the end of said inner panel, and the inclined legs of said clip extending along the adjacent panels at their jointure on apertures in each inclined leg, and a fastener nail passing through the aperture of the base and through the aperture of each inclined leg to tense the same, said fastening nail being angularly disposed in parallelism with the adjacent panels of the juxtaposed wall board section at the jointure thereof.

MELVILLE PRAEGER.