

PATENT SPECIFICATION

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(54) WALL PANEL MOUNTING SYSTEM

(71) We, KAISER CEMENT & GYPSUM CORPORATION, a Corporation organised under the laws of the State of California, U.S.A. of 300 Lakeside Drive, Oakland, California 94604, United States of America, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to improved fastening means for attaching wall panels, such as gypsum board panels, to supporting posts or rails so that minor variations in panel width can be accommodated.

A partition composed of vertically extending metal posts on opposite surfaces of which are fastened gypsum board panels is a widely used structure, particulars in office buildings where a large plurality of relatively temporary, non-load bearing partitions are required. The high cost of labour for installing the partitions and the desirability of reusing materials when a partition is re-located have led to the development of gypsum panels covered with decorative and durable layers of vinyl and the like. Panels of this type are, typically, installed without taping the joints between abutting panels so as to be compatible with the economic factors enumerated above.

In the mass production of wall panels, be they gypsum board panels or panels made of other material, tolerances within about plus or minus 1.6 mm of the nominal panel width are typical. Thus, if a two-sided partition, having a length of say ten panels is erected, posts which are properly located to effect mounting of panels on one side will not necessarily be properly aligned for supporting the panels on the other side. It is therefore desirable that the means used for fastening the panels to the posts should accommodate some displacement of the panels relative to the posts whilst maintain-

ing the security of the fastening.

It is an object of the present invention to provide an improved fastening means for wall panels which shall be economic to manufacture, which shall be readily attach-able to the panels on site without the need for special tools and which shall accommodate some displacement of the panels relative to the posts to which they are to be secured whilst maintaining the security of the fastening.

According to the present invention there is provided fastening means for attaching a wall panel to a support and comprising a plate portion intended to lie against the rear face of the wall panel and defining an elongate slot bounded on two opposed sides by margins of the plate portion which margins together with the rear face of the panel define spaced channels and a projection dimensioned to extend through the slot and having oppositely extending feet or tabs slidably engageable in said channels to restrain displacement of the projection away from the rear face of the panel characterised in that the plate portion is a part of a generally U-shaped base member defined by a planar web integrally formed with the plate portion and a penetrating portion which extend from opposite edges of the web, the penetrating portion being operable to penetrate an edge surface of the panel to retain the base member on the panel and against movement relative thereto with the web against the penetrated edge portion and the plate portion lying on the rear face of the wall panel with the elongate slot extending in the direction of penetration of the edge surface whereby the projection is displaceable relative to the base member in said direction of penetration.

Some embodiments of the invention will now be described by way of example, reference being made to the accompanying drawings in which:—

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Fig. 1 is a fragmentary elevational view of one side of a partition embodying the present invention. A portion being broken away to reveal internal details.

Fig. 2 is a horizontal cross-sectional view taken along the line 2-2 of Fig. 1.

Fig. 3 is an elevation view of a base member engageable with the edge of a panel and forming a part of the fastener of the invention.

Fig. 4 is a side view of the base member of Fig. 3.

Fig. 5 is an exploded isometric view of the fastener of the invention in relation to a post.

Fig. 6 is an elevation view of an alternative embodiment of the base member of Fig. 3.

Fig. 7 is an exploded isometric view similar to Fig. 5 and showing an alternative construction.

Fig. 8 is a horizontal cross-sectional view taken along the line 8-8 of Fig. 7.

Figs. 9 and 10 are exploded isometric views similar to Fig. 5 showing further alternative constructions.

Fig. 11 is a vertical cross-sectional view taken along the line 11-11 in Fig. 10.

Referring more particularly to the drawings and to the embodiment of Figs. 1-5, reference characters P_1, P_2, P_3, P_4, P_5 and P_6 indicate wall panels, such as gypsum board wall panels, that have a core C and a face skin S. Face skin S can be the conventional paper, plastics, e.g., vinyl, or wood veneer. Panels P_1 to P_6 are supported on spaced apart vertically extending elongate posts, two of which are seen at 12 and 14. The upper and lower extremities of the posts are suitably supported such as by a U-shaped or J-shaped track into which the posts fit, or a U-shaped track into which posts and panels fit.

The posts are installed at center line 16 and 18 spaced from one another by a distance corresponding to the nominal width of panels P_1 - P_6 , so that the center lines are in parallel vertical planes at which the vertical edges of adjacent panels of the nominal width would abut. It is not necessary that the upper and lower extremities of posts 12 and 14 be fixed since they both receive support from and provide support for the panels.

The fastening means for securing the panels to the posts comprises a plurality of two-part fasteners one part of which is a base member which is readily attachable to a panel on site and the other part of which includes a projection which is attachable to the base member in such manner as to be capable of a limited degree of movement relative thereto and which is also engageable with a post.

In the embodiment illustrated in Figs. 1 to

5, the base of the fastener means attachable to a panel comprises a substantially U-shaped sheet metal base member 20 bent to define a web 22 which has a width less than the thickness of a panel to which it is to be attached and from the opposed edges of which extend a penetrating portion 24 and a plate portion 26 both portions extending in a generally perpendicular direction parallel to each other. The plate portions 24 and 26 are not necessarily perpendicular to the web 20 and the angle they assume to the web may vary. Also, the portions 24 and 26 may diverge relative to each other so that the plate portion 26 is drawn against a face of a panel as the penetrating portion 24 is driven into the edge of the panel. The penetrating portion 24 has teeth or points 28 to facilitate it being driven into the core C at the edge of a panel and, as the width of the web 22 is less than the thickness of the panel, this is achieved with the plate portion 26 in face-to-face relationship with the rear face of the panel. As shown in this embodiment, the plate portion 26 extends a greater distance away from the web 22 than the penetrating portion 24 so that it can overlie and be held flat against the rear face of the panel when the points 28 are presented to the panel edge to ensure proper location of the base member 20 when the penetrating portion 24 is driven into the panel edge.

The plate portion 26 includes a pair of spaced arms or furcations 21 between which is defined a horizontally elongate slot 30 which extends in the direction of penetration of the teeth 28 into the edge of the panel. The inner marginal portions of the furcations 21 are deformed outwardly of the space between the plate portions 24 and 26 (such as by stamping) to define inner marginal portions 32 and 34 on either side of the slot 30 which extends in the direction of penetration referred to. These inner marginal portions 32 and 34 are spaced from the panel engaging face of the plate portion 26 by an amount not less than the thickness of locating feet on tabs associated with a projection to be described which projection is engageable with a supporting post. The inner marginal portions 32 and 34 together with the rear face of the panel to which the base member 20 is attached, provide channels in which the locating feet or tabs referred to are slidable and which restrain displacement of the projection away from the rear face of the panel. The outer corners of the furcations 21 remote from the web 22 are bent up at 35 to facilitate the introductions of such locating feet or tabs into the channels. Holes 31 are provided in the portions of the furcations 21 which lie against the rear face of the panel to accommodate staples T which may be

used to assist in retaining the base member 20 on the panel.

The base member 20 described above may be modified in the manner illustrated in Fig. 6 by extending that part of the furcations 21 intended to lie flat against the panel and bridging the ends of the furcations 21 remote from the web 22 with a plate portion 80 so that the slot 30 opens to an enlarged opening 78 which is sufficiently large to allow the locating feet or tabs of the projections referred to above to be admitted to the channels defined by the marginal portions 32 and 34. Holes 82 are provided in the plate portion 80 to receive staples which straddle that part of the plate portion 80 surrounding a hole 82 to make more secure the attachment of the base member 20 to a panel.

The second part of the two-part fastener comprises a projection engageable with a post and locating feet or tabs which can enter the channels defined by the marginal portions 32 and 34 and be located and retained by the channels over a range of displacement therein. The shape, dimension and structure of the projection is such as to permit it to be engaged with a post and alternative forms of projections, posts and locating feet or tabs are described and illustrated.

In the arrangement illustrated in Figs. 1 to 5, the projection is provided by a clip 36 which extends through the slot 30 between the marginal portions 32 and 34 and the locating feet are provided by upwardly extending tabs 38 and 40 engageable in the channel provided by the marginal portion 32 and similar downwardly extending tabs one of which is seen at 42. The locating feet or tabs are generally co-planar. The clip 36 has a tip 44 from which diverge, in the direction towards the tabs, resilient wall members 46 and 48 which connect to the tabs by inwardly converging wall portions 50 and 52. The clip 36 is preferably formed from a single piece of resilient spring steel.

The elongate posts 12 and 14 are of generally C-shaped configuration and include a central web 54, from opposite edges of which extend flanges 56 and 58. Because the configuration of flanges 56 and 58 is identical, only one will be described in detail. At the extremity of flange 56, remote from web 54, is a reinforcing or stiffening lip 60 which affords rigidity to the post. Intermediate web 54 and lip 60, in the mid-region of flange 56, there is defined a planar bearing surface 62 which extends throughout the length of the post and has a width sufficient to support the rear surfaces of two abutting panels, such as P_1 and P_2 . Bearing surface 62 defines the outermost surface of the post so as to assure co-planar alignment between panels that abut one another at the

surface and which nominally would abut at the vertical planes containing the center-lines 16 and 18. Between planar surface 62 and the opposite extremities of flange 56 are two recessed surface regions 64 and 66 which are formed with a plurality of vertically elongate slots or apertures 68 which extend in the direction of length of the post and which, in each flange 56 and 58 of a vertical post, are symmetrically disposed with respect to the vertical plane containing the center line on which the post is installed. Because surface regions 64 and 66 are recessed inward of bearing surface 62, the edge portions thereof that define the slots or apertures 68 are similarly recessed. Thus, even when a clip 36 is fully engaged in a slot 68, the material of which the clip 36 is constructed is stressed to provide a tight fit.

In operation, a plurality of base members 20 are installed on the edge surfaces of the panels by employment of a hammer or like striking tool. Because the gypsum material typically employed in wall panels has a degree of local compressibility, the web 22 of the base member 20 can be driven flush with the edge surface of the panel if this is essential to assure proper abutting relation of adjacent panel edges. With a plurality of the base members 20 installed as described above, clips 36 are inserted into slots 30 of the respective base members. The clearance space between margins 32, 34 and the rear surface of the panel facilitates movement of clip 36 to any desired horizontal position within slot 30. Thereafter, the clip 36 at the upper or lower extremity of the panel edge is inserted in an appropriate post slot 68 which extends in a direction substantially normal to that of the slots and the remaining clips 36 are engaged in corresponding slots 68, correct horizontal alignment of the clips being possible because the horizontal extent of base member slots 30 exceeds the horizontal extent of the locating feet. The adjacent panel, e.g., panel P_2 , is installed in a similar way and because of the movable engagement of the clips in their respective base member slots, the joint between the two panels can be closed, can be positioned in a vertical or plumb orientation, and can be positioned on bearing surface 62 to retain the exposed surfaces of the panels in co-planar relationship.

Fig. 2 indicates in more detail how the invention accommodates panels having minor variations in width. The plane 70 at which panels P_1 and P_2 abut one another is spaced from center-line 16 by a distance 72. Panels P_1 and P_2 abut one another at a plane 74 which is disposed on the opposite side of center-line 16 by a distance 76. Because of the horizontal extent of the bearing surface 62 and because the clips 36 are hori-

zontally slidable in slots 30 of the respective base members 20, alignment and secure attachment of the panels by engagement of the clips 36 in the vertically extending slots 68 is afforded notwithstanding minor variations in the width of the various panels, i.e. departure of the actual panel width from the nominal panel width.

The alternative form of two-part fastener illustrated in Figs. 7 and 8 includes a base member 20 similar to that described with reference to Figs. 1 to 5 and like numerals are used to denote like parts. In this case, the projection is in the form of a clip 84 of resilient sheet steel with oppositely extending locating feet or tabs 86 and 88 which engage in the channels formed by the marginal portions 32 and 34. Two arms extend outwardly of the tabs 86 and 88 and through the slot 30 and are formed with opposed arcuate clip portions 90 and 92 from which guide surfaces 94 and 96 flare outwardly.

In this case the post, indicated at 98, is symmetrical about a mid-plane parallel to the surfaces of panels P_1 and P_2 . A central web 100 terminates in diverging plates 102 and 104 which define bearing surfaces for the rear faces of panels P_1 and P_2 to maintain the exposed surfaces of the panels in co-planar relationship. L-shaped projections 106 and 108 on each side of the web 100 carry vertically extending cylindrical beads 110 and 112 of greater radius than the arcuate clip portions 90 and 92. The beads 110 and 112 engage between and stress the arcuate clip portions 90 and 92 to retain the clip 98 which can move relative to the panels by virtue of the capability of the locating feet or tabs 86 and 88 to move in the channels formed by the marginal portions 32 and 34. The beads 110 and 112 are inward of the bearing surfaces defined by plates 102 and 104 so that when the panels are supported against the bearing surfaces the clip 84 is stressed in its engagement with one of the beads. Fig. 8 shows the edges of panels P_1 and P_2 abutting at line 115 displaced from the centre line of the post 98 by a distance 116 and illustrates how the panels are supported notwithstanding variation in panel width.

In the further alternative arrangement, illustrated in Fig. 9, the base member 20 and the post 12 are similar to those described with reference to Figs. 1 to 5 and like references are used to denote like parts. In this case, the clip indicated at 114 comprises a planar base element 118 and a projection in the form of a nail-like rod 120 having a knurled outer surface dimensioned to enter a slot 68 in the post 12 by resiliently deflecting the walls defining the slot which walls spring back and engage the knurled surface of the rod 120 by the edges of the slot 68 to retain the rod. The planar base

element 118 has opposed co-planar marginal edges which provide the locating feet or tabs which are slidably engaged in the channel provided by the marginal portions 32 and 34.

In the still further alternative arrangement illustrated in Figs. 10 and 11, the base member is constructed as previously described and the post 12 whilst similar to that described with reference to Figs. 1 to 5 is modified in that the recessed regions 64 and 66 are omitted, the flange 56 extending in planar fashion between the intermediate web 54 and the lip 60 and affording the bearing surface 62 between the slots 68. The projection in this case is in the form of a cylindrical rod 126 extending outwardly from a generally rectangular planar base plate 124 having opposed marginal edges which provide the locating feet slidably engageable in the channels provided by the marginal portions 32 and 34. The rod 126 has an enlarged head 128 and both are dimensioned to pass through a slot 68 in the post 12. In this case, a retention clip 130 is provided to prevent withdrawal of the head 128 from the post. The retention clip 130 comprises a spring steel sheet metal member folded upon itself to a substantially wedge-shape and has two slots 132 extending therethrough and opening to the lower edge thereof. The retention clip 130 is proportioned to be received between the web 54 and the lip 60. The slots 132 are spaced for alignment with the slots 168 so as to engage behind the heads 128 of fasteners associated with abutting edges of adjacent panels and resiliently draw such adjacent panels into engagement with the bearing surface 62 of the stud 12. Individual retention clips may be associated with each fastener in which case only a single slot 132 would be required.

In the embodiments described above, the fastening means is engaged with the post with a degree or resilience and can be released from the stud if desired. As the base members 20 do not pierce the front or decorative face of the panels, and no painting or taping is necessary, the panels can be reused. Also, as the fasteners including the base members 20, can readily be attached to the panels on site, the panels can be transported in a flat condition without being exposed to projections which might cause damage.

WHAT WE CLAIM IS:—

1. Fastening means for attaching a wall panel to a support and comprising a plate portion intended to lie against the rear face of the wall panel and defining an elongate slot bounded on two opposed sides by margins of the plate portion, which margins together with the rear face of the panel define spaced channels and a projection dimensioned to extend through the slot and having

zontally slidable in slots 30 of the respective base members 20, alignment and secure attachment of the panels by engagement of the clips 36 in the vertically extending slots 68 is afforded notwithstanding minor variations in the width of the various panels, i.e. departure of the actual panel width from the nominal panel width.

The alternative form of two-part fastener illustrated in Figs. 7 and 8 includes a base member 20 similar to that described with reference to Figs. 1 to 5 and like numerals are used to denote like parts. In this case, the projection is in the form of a clip 84 of resilient sheet steel with oppositely extending locating feet or tabs 86 and 88 which engage in the channels formed by the marginal portions 32 and 34. Two arms extend outwardly of the tabs 86 and 88 and through the slot 30 and are formed with opposed arcuate clip portions 90 and 92 from which guide surfaces 94 and 96 flare outwardly.

In this case the post, indicated at 98, is symmetrical about a mid-plane parallel to the surfaces of panels P_1 and P_2 . A central web 100 terminates in diverging plates 102 and 104 which define bearing surfaces for the rear faces of panels P_1 and P_2 to maintain the exposed surfaces of the panels in co-planar relationship. L-shaped projections 106 and 108 on each side of the web 100 carry vertically extending cylindrical beads 110 and 112 of greater radius than the arcuate clip portions 90 and 92. The beads 110 and 112 engage between and stress the arcuate clip portions 90 and 92 to retain the clip 98 which can move relative to the panels by virtue of the capability of the locating feet or tabs 86 and 88 to move in the channels formed by the marginal portions 32 and 34. The beads 110 and 112 are inward of the bearing surfaces defined by plates 102 and 104 so that when the panels are supported against the bearing surfaces the clip 84 is stressed in its engagement with one of the beads. Fig. 8 shows the edges of panels P_1 and P_2 abutting at line 115 displaced from the centre line of the post 98 by a distance 116 and illustrates how the panels are supported notwithstanding variation in panel width.

In the further alternative arrangement, illustrated in Fig. 9, the base member 20 and the post 12 are similar to those described with reference to Figs. 1 to 5 and like references are used to denote like parts. In this case, the clip indicated at 114 comprises a planar base element 118 and a projection in the form of a nail-like rod 120 having a knurled outer surface dimensioned to enter a slot 68 in the post 12 by resiliently deflecting the walls defining the slot which walls spring back and engage the knurled surface of the rod 120 by the edges of the slot 68 to retain the rod. The planar base

element 118 has opposed co-planar marginal edges which provide the locating feet or tabs which are slidably engaged in the channel provided by the marginal portions 32 and 34.

In the still further alternative arrangement illustrated in Figs. 10 and 11, the base member is constructed as previously described and the post 12 whilst similar to that described with reference to Figs. 1 to 5 is modified in that the recessed regions 64 and 66 are omitted, the flange 56 extending in planar fashion between the intermediate web 54 and the lip 60 and affording the bearing surface 62 between the slots 68. The projection in this case is in the form of a cylindrical rod 126 extending outwardly from a generally rectangular planar base plate 124 having opposed marginal edges which provide the locating feet slidably engageable in the channels provided by the marginal portions 32 and 34. The rod 126 has an enlarged head 128 and both are dimensioned to pass through a slot 68 in the post 12. In this case, a retention clip 130 is provided to prevent withdrawal of the head 128 from the post. The retention clip 130 comprises a spring steel sheet metal member folded upon itself to a substantially wedge-shape and has two slots 132 extending there-through and opening to the lower edge thereof. The retention clip 130 is proportioned to be received between the web 54 and the lip 60. The slots 132 are spaced for alignment with the slots 168 so as to engage behind the heads 128 of fasteners associated with abutting edges of adjacent panels and resiliently draw such adjacent panels into engagement with the bearing surface 62 of the stud 12. Individual retention clips may be associated with each fastener in which case only a single slot 132 would be required.

In the embodiments described above, the fastening means is engaged with the post with a degree of resilience and can be released from the stud if desired. As the base members 20 do not pierce the front or decorative face of the panels, and no painting or taping is necessary, the panels can be reused. Also, as the fasteners including the base members 20, can readily be attached to the panels on site, the panels can be transported in a flat condition without being exposed to projections which might cause damage.

WHAT WE CLAIM IS:—

1. Fastening means for attaching a wall panel to a support and comprising a plate portion intended to lie against the rear face of the wall panel and defining an elongate slot bounded on two opposed sides by margins of the plate portion, which margins together with the rear face of the panel define spaced channels and a projection dimensioned to extend through the slot and having



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oppositely extending feet or tabs slidably engageable in said channels to restrain displacement of the projection away from the rear face of the panel characterised in that

- 5 the plate portion is a part of a generally U-shaped base member defined by a planar web integrally formed with the plate portion and a penetrating portion which extend from opposite edges of the web, the penetrating portion being operable to penetrate an edge surface of the panel to retain the base member on the panel and against movement relative thereto with the web against the penetrated edge portion and the plate portion
- 10 lying on the rear face of the wall panel with the elongate slot extending in the direction of penetration of the edge surface whereby the projection is displaceable relative to the base member in said direction of penetration.

- 20 2. Fastening means according to Claim 1 wherein the plate portion comprises a pair of spaced furcations extending away from the web in said direction of penetration and defining two opposed sides of said slot, each furcation having an inner marginal edge deformed outwardly of the space between the plate and penetrating portions to define said channels.

- 30 3. Fastening means according to Claim 2 wherein the inner marginal edge of the furcations is deformed outwardly of the general plane of the second plate portion by an amount corresponding to the thickness of the locating feet.

- 35 4. Fastening means according to Claim 2 or 3 wherein the end remote from the web of each outwardly deformed marginal edge of the furcations is further outwardly deformed to facilitate introduction of the locating feet into the channels.

- 40 5. Fastening means according to any one of the preceding claims wherein the slot is closed by a bridging portion spaced from the web and capable of being secured to the rear face of the panel.

- 50 6. Fastening means according to any one of the preceding claims wherein the plate portion extends from the web by a distance greater than the penetrating portion whereby the plate portion overlies the rear face of the panel in face-to-face relationship when the penetrating portion is presented to the panel edge.

- 55 7. Fastening means according to any one of the preceding claims wherein the projection comprises a pair of resilient spaced arms.

- 60 8. Fastening means according to Claim 7 wherein the arms diverge from the locating feet and then converge towards the tip of the projection to define a leading end and a re-entrant portion between the leading end and the locating feet.

- 65 9. Fastening means according to Claim 7

wherein the arms are formed with confronting arcuate portions intermediate their length to define a generally cylindrical space therebetween and are flared outwardly towards their ends.

10. Fastening means according to any one of Claims 1 to 6 wherein the projection is a cylindrical rod formed with a knurled surface.

11. Fastening means according to any one of Claims 1 to 6 wherein the projection is a cylindrical rod formed with an enlarged head and a retaining clip is provided engageable about the cylindrical rod rearwardly of the head.

12. The combination of fastening means according to any one of the preceding claims together with a post characterised in that the post is formed with an elongate aperture and the projection is dimensioned to extend into the aperture and resiliently engage the edges of the post defining the aperture.

13. The combination according to Claim 12 wherein the post is provided with a panel supporting surface spaced outwardly of that part of the post in which the slot is formed to stress the projection when the projection is engaged in the slot and the panel supporting surface bears against the panel.

14. The combination of fastening means according to any one of Claims 1 to 6 together with an elongate post wherein the post has a flange to support the rear surface of the wall panel, the flange defining an elongate slot extending in the direction of length of the post, the projection has a tip remote from the locating feet sized for entry into the slot in the flange and includes first and second resilient members diverging from the tip toward the locating feet, there being a re-entrant portion intermediate the tip and the locating feet for engaging the portions of said flange that define the slot therein so as to secure the projection to said post.

15. The combination of fastening means according to any one of Claims 1 to 6 together with a post wherein the post includes at least one plate for defining a bearing surface for supporting the rear surface of abutting panels, first and second cylindrical beads rigid with said post and disposed on opposite sides of said bearing surface, the projection includes a pair of resilient walls having confronting arcuate portions that define a generally cylindrically shaped space therebetween, said cylindrically shaped space having a radius less than the radius of said beads, said resilient walls having diverging portions extending from said arcuate portions to form a mouth having a width in excess of a bead to facilitate engagement of a bead in said cylindrically shaped space.

16. The combination according to Claim 15 wherein the cylindrical beads are spaced



* C L M S *

behind said bearing surface so as to ensure stress in said resilient walls when a panel to which the fastening means is attached engages said bearing surface.

- 5 17. The combination of fastening means according to any one of Claims 1 to 6 together with an elongate post wherein the post has a flange to support the rear surface of the wall panel, said flange defining an elongate slot extending in the direction of length of the post and having resilient edges defining the boundaries of the slot in the direction of length of the post, the projection has a tip remote from the locating feet for entry into the slot in the flange and sized relative to said boundaries so as to resiliently deflect the resilient edges of the slot whereby said edges function to grip the tip therebetween and resist removal of the tip from the slot in the flange.

- 10 18. The combination of fastening means according to any one of Claims 1 to 6 together with an elongate post wherein the post has a flange to support the rear surface of the wall panel, said flange defining an elongate slot extending in the direction of length of the post, the projection comprises a fastener having an enlarged head portion and an intermediate shank portion, both of which are proportioned for extension through the slot in the flange, and a retention clip is provided to be received around the shank portion and beneath the head portion so as

to secure said head portion against removal through the slot in the flange.

19. A partition comprised of a plurality of vertically extending similar posts spaced from adjacent posts by a preselected distance and a plurality of panels of a nominal width corresponding to the distance between corresponding parts of adjacent posts wherein the panels are supported on the posts by fastening means constructed according to any one of Claims 1 to 11, and engaged in edge surfaces of the panels with the elongate slot in the plate portion of each fastening means extending substantially horizontally.

20. Fastening means for attaching a wall panel to a supporting post constructed, arranged and adapted to operate substantially as herein described with reference to Figs. 1 to 5, Fig. 6, Figs. 7 and 8, Fig. 9 or Figs. 10 and 11 of the accompanying drawings.

21. The combination of fastening means according to Claim 20 together with a post constructed, arranged and adapted to operate substantially as herein described with reference to Figs. 1 to 5, Fig. 6, Figs. 7 and 8, Fig. 9 or Figs. 10 and 11 of the accompanying drawings.

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