Nov. 24, 1959 F. CONLEY 2,914,146

BASE PANEL FOR PARTITION STRUCTURES

Filed May 31, 1955

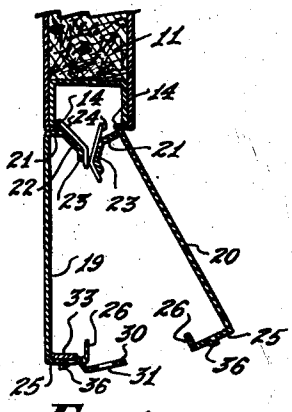


FIG. 3.

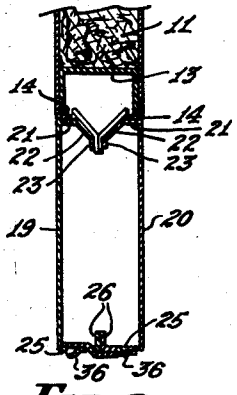
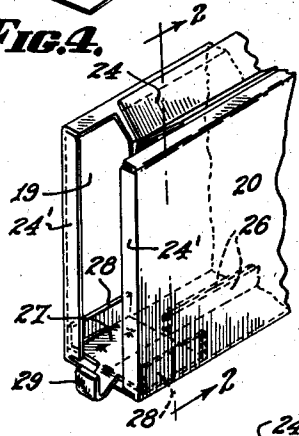


FIG. 2.

FIG. 4.

FIG. 1.



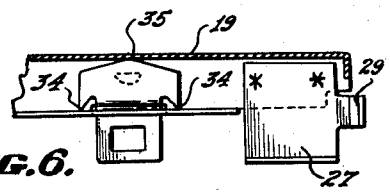


FIG. 6.

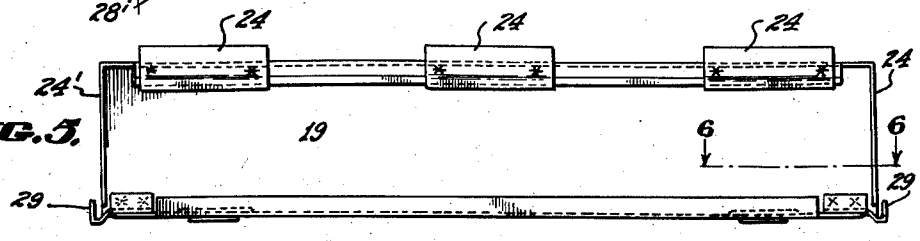


FIG. 5.

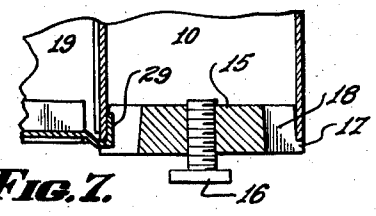


FIG. 7.

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BASE PANEL FOR PARTITION STRUCTURES

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Application May 31, 1955, Serial No. 511,877
6 Claims. (Cl. 189—34)

This invention relates to a base panel for partition structures. In the copending application of Steve G. Budai, Serial No. 243,261, filed August 23, 1951, now Patent No. 2,746,109, for "Flexible Office Work Space and Partition Structure," there are disclosed various posts and panels together with desk and table structures which may be assembled into substantially any desired arrangement of L-shaped work spaces. The structure disclosed in said application is simple to erect and simple to disassemble, so that rearrangement may be accomplished without great difficulty from time to time if the need for space varies. No special tools and no special skilled labor is required either for assembly or disassembly.

The partition structure disclosed in said application included panel members which terminated above floor level leaving a space of perhaps six inches or thereabouts above the floor and beneath the partition. In many cases, such a space at the floor level is desirable to enhance ventilation. There are, however, situations in which it is desirable to have the partitions extend all the way to the floor, for example to prevent drafts.

With the foregoing considerations in mind, it is an object of the present invention to provide a base panel for use with structures of the type disclosed in said copending application whereby a base panel may be placed in position speedily and simply without special tools or skills and which can be removed, if desired, with equal facility. Such a readily removable base panel is desirable because if the partition structure is rearranged or moved, the requirements may be different and a base panel may be required where none was required before, or a base panel which was required in the original position may be removed in the new position.

It is another object of the invention to provide a structure as above outlined which is simple and inexpensive to produce and which will not adversely affect the appearance of a panel when in position.

These and other objects of the invention which will be described in more detail hereinafter or which will become apparent to one skilled in the art upon reading these specifications, I accomplish by that construction and arrangement of parts of which I shall now describe an exemplary embodiment.

Reference is made to the drawing forming a part hereof and in which:

Figure 1 is a fragmentary perspective view with parts broken away showing a post and a panel secured thereto and illustrating how the base panel is positioned.

Figure 2 is a cross-sectional view taken on the line 2—2 of Figure 1 showing the base panel in assembled condition.

Figure 3 is a view similar to Figure 2 showing a step in the assembly of the base panel.

Figure 4 is a perspective view of a spring clamp member used in locking the portions of the base panel together.

Figure 5 is an elevational view of one of the complementary pieces of base panel.

Figure 6 is a fragmentary cross sectional view on an enlarged scale taken on the line 6—6 of Figure 5, and

Figure 7 is a fragmentary cross sectional view on an enlarged scale taken on the line 7—7 of Figure 1.

Briefly, in the practice of my invention I provide a base panel composed of two complementary pieces which together are of the same thickness as the partition panel with which they are to be used and which are of a height to extend between the floor and the bottom of the partition panel. For the purpose of securing the base panel in place, I slightly modify the bottom of the partition panel of the Budai application above referred to and I modify the foot of the post.

Referring in greater detail to the drawings, a typical post member is indicated at 10 and a typical partition panel member is indicated at 11. The partition member terminates at 12 above the level of the floor. I modify the partition panel 11 by inserting the inverted channel element 13 and turning in the flanges 14 as best seen in Figures 1, 2 and 3. I also modify the foot of the post member 10 by providing the foot piece, generally indicated at 15 in Figures 1 and 7. The piece 15 is centrally drilled and threaded to accept the leveling screw 16. Bottom flanges 17 are provided on the member 15 and on each of its four faces a clearance slot 18 is provided. The post 10 is simply passed down over the member 15 so that at the bottom it rests on the various flanges 17. From Figure 7 it will be clear that the member 15 is slightly tapered to facilitate its assembly to the post 10.

The base panel proper consists of two complementary pieces 19 and 20. These pieces are substantially duplicates with minor exceptions which will be pointed out hereinafter. Each of the pieces 19 and 20 is generally channel shaped in cross section, as best seen in Figures 2 and 3. At the top, the sheet metal with which these pieces are made is bent inwardly as at 21, then downwardly at an angle as at 22 and finally down parallel to the body of the pieces 19 and 20 as at 23. To the sloping portions 22 and the parallel portions 23 are secured the hanger elements 24. These may be secured by spot welding or the like. It will be clear from a consideration of the figures that the members 24 extend upwardly beyond the right angle portions 21, so that when the base panel is assembled as in Figure 2, the extending portions of the hanger elements 24 engage over the flanges 14 so as to suspend the base panel from the partition panel 11. Insofar as the pieces 19 and 20 have been described thus far, they are identical and they are preferably also provided with the end flanges 24'.

At the bottom, the panel pieces 19 and 20 are bent inwardly at right angles as at 25 and upwardly as at 26, so that the flanges 26 abut each other in the assembled condition of the pieces as seen in Figure 2.

The piece 19, but not the piece 20, has secured to it, as by spot welding or the like, the member 27 which may be in the form of a channel having the flanges 28 which, in the assembled condition of the pieces, abut the inner surfaces of the panels 19 and 20. A member 27 is secured to the piece 19 at each end thereof and each of the pieces 27 is provided with the extension 29 in the form of an upwardly directed hook. It will be noted that the width of the hook element 29 is of a size to fit snugly in one of the slots 18 in the foot piece 15 of the post. The engagement of the hook portion 29 over the bottom of the post member 10 and its location in the slot 18, as perhaps best seen in Figure 7, locates the panel piece 19 in a vertical position so that it cannot swing.

The complementary panel piece 20, as has been pointed out above, is identical with the piece 19 except that it is not provided with the members 27 just described. Additionally, slots are provided in the flange 26 of the piece 19, as best seen in Figure 1, for the passage of the fastening clips of Figure 4. These clip members comprise a flat lock portion 30 having an aperture 31, a sloped intermediate portion 32 and a securing portion 33 parallel to the portion 30 and provided with the sharp corners 34 and 35. The spring clip member is made of suitable spring steel and it is assembled to the piece 19 by passing

the portion 30 through the slot in the flange 26 from the inside, as best seen in Figures 1 and 6, and then jamming the portion 33 into position whereby the corners 35 and 34 dig into the material of the body portion 19 and flange 26, respectively, as seen in Figure 6.

The complementary panel piece 20 is provided in the flange portion 25 with the abutments 36 which are punched outwardly from the material of the flange 25. As a matter of expediency in production, the abutments 36 are punched out on all pieces as may be seen in Figures 1, 2 and 3 but the abutments 36 in the piece 19 are not used. In the assembled condition of the pieces 19 and 20 the abutments 36 in the piece 20 engage in the aperture 31 of the spring clip to lock the two panel pieces together.

It is believed that the manner of assembling and disassembling the structure will now become clear. When it is desired to provide a base panel, a base panel piece 19 is positioned with the hook elements 29 engaged under the respective posts 10 and confined within the respective slots 18 of the foot pieces 15, and the element 24 engaging over the flange 14 of the partition panel. The panel piece 20 is then inserted in the manner shown in Figure 3, so that its portion 24 engages over the respective flange 14 of the partition panel and the piece 20 is then rotated from the position of Figure 3 to the position of Figure 2 until the abutments 36 engage in the apertures 31 of the spring clip members. The base panel is now securely in place. If it is desired to eliminate the base panel, the reverse procedure is followed and the portions 30 of the spring clip members are depressed with the fingernails or a screw driver or the like, whereupon the piece 20 may be rotated outwardly at the bottom and disengaged as clearly shown in Figure 3. The piece 19 can then be simply removed by unhooking the portion 24 from the flange 14 and unhooking the hooks 29 from under the post members 10.

It will be clear that numerous modifications may be made without departing from the spirit of my invention and I therefore do not intend to limit myself otherwise than as set forth in the claims which follow.

Having now fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a partition structure comprising a spaced pair of posts and a panel extending therebetween, said panel terminating above floor level in inwardly turned flanges; a base panel comprising a pair of complementary pieces, each generally channel shaped in cross section, the upper flange of each said piece extending inwardly at a right angle to said piece and then downwardly at an angle and finally parallel to said piece, and having an engaging strip secured to the angular portion thereof and extending above said right angle portion, said engaging strips engaging over the respective flanges of said first named panel, one of said pieces having a spring lock at the bottom, and the other of said pieces having an abutment engaged by said spring lock to releasably secure said pieces together, said base panel in the assembled condition of said pieces being thus hangingly supported by said first named panel.

2. In a partition structure comprising a spaced pair of hollow posts and a panel therebetween, said panel terminating above floor level in inwardly turned flanges, and said posts each having a filler plug at the bottom provided with a leveling screw; a base panel comprising a pair of complementary pieces, each generally channel shaped in cross section, the upper flange of each said piece extending inwardly at a right angle to said piece and then downwardly at an angle and finally parallel to said piece, and having an engaging strip secured to the angular portion thereof and extending above said right angle portion, said engaging strips engaging over the respective flanges of said first named panel, one of said pieces having extensions at the bottom, said filler plugs having recesses snugly accommodating said extensions, one of said pieces having a spring lock at the bottom and the other of said pieces having an abutment engaged by said spring lock to releasably secure said pieces together, said base panel in the assembled condition of said pieces being thus hangingly supported by said first named panel, and fixed in a vertical position by the engagement of said extensions in said recesses.

3. In a partition structure comprising a spaced pair of hollow posts and a panel therebetween, said panel terminating above floor level in inwardly turned flanges, and said posts each having a filler plug at the bottom provided with a leveling screw; a base panel comprising a pair of complementary pieces, each generally channel shaped in cross section, the upper flange of each said piece extending inwardly at a right angle to said piece and then downwardly at an angle and finally parallel to said piece, and having an engaging strip secured to the angular portion thereof and extending above said right angle portion, said engaging strips engaging over the respective flanges of said first named panel, one of said pieces having hook-like extensions at the bottom engaged over the bottom edges of the respective posts, said filler plugs having recesses snugly accommodating said hook-like extensions, one of said pieces having a spring lock in the bottom and the other of said pieces having an abutment engaged by said spring lock to releasably secure said pieces together, said pieces in assembled condition being thus hangingly supported by said first named panel and fixed in a vertical position by engagement of said hook-like extensions in said recesses.

4. A structure according to claim 1, wherein one at least of said pieces has an upwardly extending flange at the bottom providing a bottom channel, a slot in said bottom channel, said spring lock comprising a lock portion and a securing portion connected by an intermediate portion, said securing portion being longer than the inside width of said bottom channel and having at least one sharp point, said spring lock being mounted on said piece with its intermediate portion passing through said slot, and with its securing portion in jamming relation within said bottom channel.

5. A structure according to claim 2, wherein one at least of said pieces has an upwardly extending flange at the bottom providing a bottom channel, a slot in said bottom channel, said spring lock comprising a lock portion and a securing portion connected by an intermediate portion, said securing portion being longer than the inside width of said bottom channel and having at least one sharp point, said spring lock being mounted on said piece with its intermediate portion passing through said slot, and with its securing portion in jamming relation within said bottom channel.

6. A structure according to claim 3, wherein one at least of said pieces has an upwardly extending flange at the bottom providing a bottom channel, a slot in said bottom channel, said spring lock comprising a lock portion and a securing portion connected by an intermediate portion, said securing portion being longer than the inside width of said bottom channel and having at least one sharp point, said spring lock being mounted on said piece with its intermediate portion passing through said slot, and with its securing portion in jamming relation within said bottom channel.

References Cited in the file of this patent

UNITED STATES PATENTS

1,093,023	Alta	Apr. 14, 1914
1,706,924	Kane	Mar. 26, 1929
1,960,077	Balch et al.	May 22, 1934
2,202,881	Winslow	June 4, 1940
2,273,276	Grotta	Feb. 17, 1942
2,302,047	Olsen	Nov. 17, 1942
2,459,953	Mills	Jan. 25, 1949
2,486,723	Thompson	Nov. 1, 1949
2,676,483	Nelsson	Apr. 27, 1954
2,735,517	Peterson	Feb. 21, 1956
2,799,890	Stavich	July 23, 1957