Jan. 31, 1961 E. M. LEVY 2,969,565

MERCHANDISE SUPPORTING AND DISPLAY BACKGROUND WALL CONSTRUCTION

Filed Aug. 1, 1956

Fig. 1.

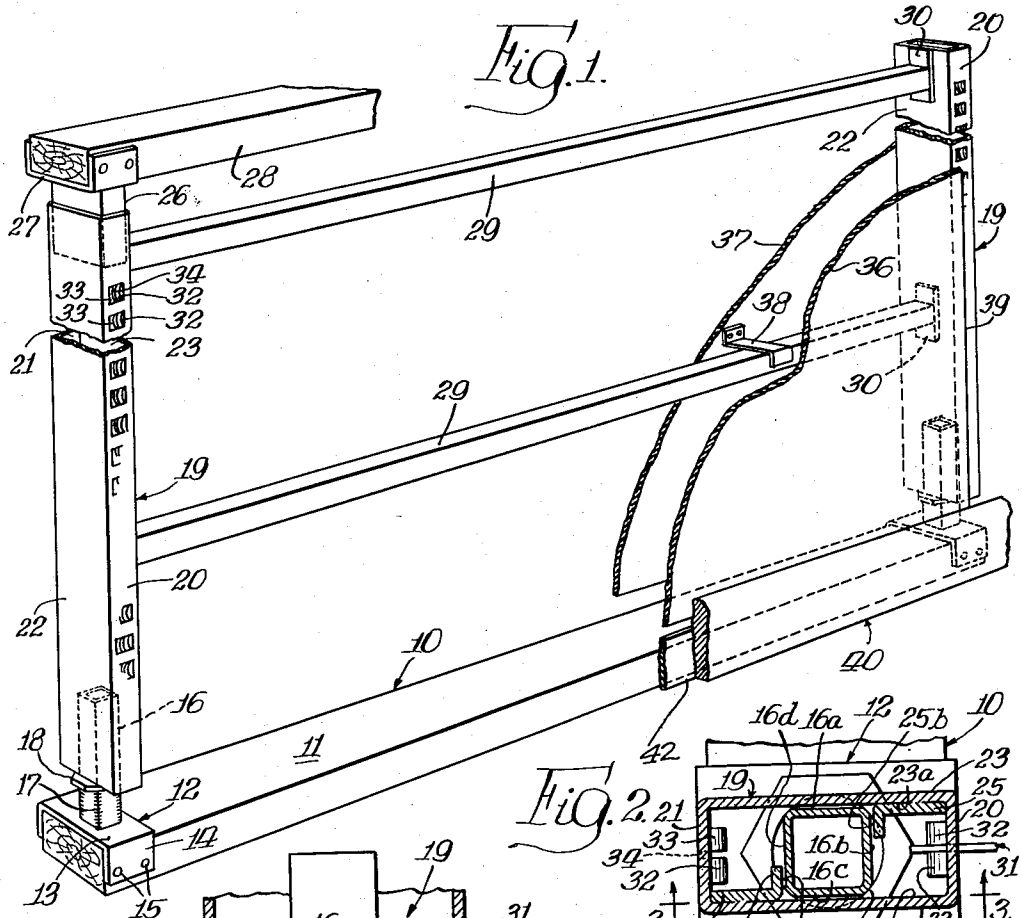


Fig. 2.

Fig. 3.

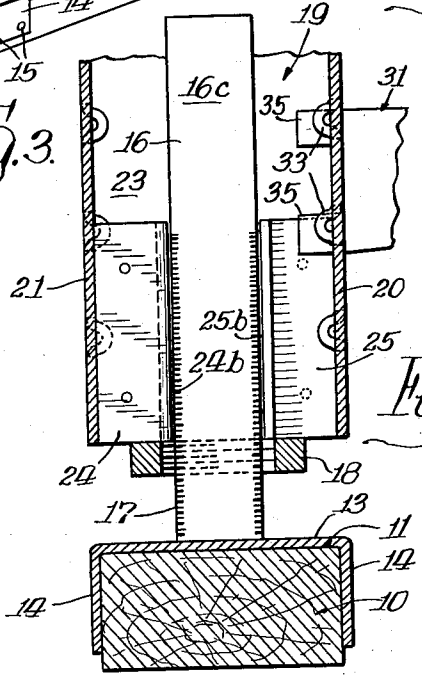


Fig. 4.

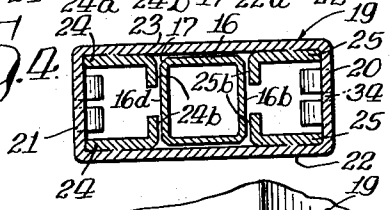
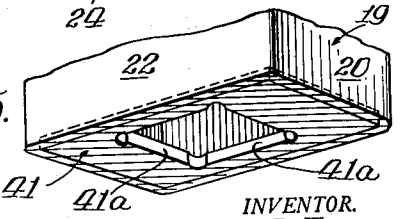


Fig. 5.



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MERCHANDISE SUPPORTING AND DISPLAY BACKGROUND WALL CONSTRUCTION

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1 Claim. (Cl. 20—4)

This invention pertains to merchandise display equipment, and more particularly to improvements in merchandise supporting and display background wall constructions of the type that are useful, for example, in department stores and in other establishments where it is desirable to display merchandise in front of an attractive upright background wall.

Background wall structures for mechandise and the like have long been employed in high grade retail establishments so as to permit the display of goods in its most attractive manner and, 6 broadly speaking, great strides have been made during the last few decades in the art of decorating such displays and in the art of remodeling them so as to give the different departments or sections of a store a new and fresh appearance from time to time. Heretofore, however, such background wall structures have been for the most part, of conventional construction and the building of new display background walls and new partitions and false walls has been an expensive operation requiring a great amount of carpentry and plaster work and the use of other highly skilled labor. For this reason, only the larger stores have been able to afford extensive use of the most modern display techniques, and only the larger stores have been able to afford the expense of periodic or frequent remodeling of displays requiring the movement or erection of walls and the like.

One of the principal objects of the present invention is to provide a new and inexpensive wall construction that may be easily and quickly assembled by unskilled or semi-skilled labor in any location desired and is ideally suited for use in department stores and elsewhere as a background wall for the display of merchandise. Another object of the invention is to provide a wall structure of the character just stated that may be quickly and easily disassembled and reerected in another location, thereby permitting frequent and relatively inexpensive rearrangement or remodeling of mechandise displays in which the construction is employed. Yet another object of the invention is to provide a wall structure that may be interchangeably and repeatedly used as a background wall, as an actual support for mechandise, as a partition upon which merchandise may be supported on its opposite sides, or as a false wall. Still another object of the invention is to provide a wall structure of the above character having simple and inexpensive means by which the wall is supported and by which the wall may be adjusted vertically either for the purpose of leveling the wall with respect to the horizontal or for the purpose of wedging the upper portion of the wall structure against a ceiling or against some other fixed overhead construction. Yet another object of the invention is to provide a wall structure, having the aforesaid characteristics, which comprises a plurality of relatively short upright posts of polygonal horizontal cross section that may be quickly mounted in fixed position along the line of a proposed wall, the posts having interrupted thread segments on their exterior vertical edges for rotatably receiving nuts that encompass the posts and adjustably support upright pilasters that are telescopically received upon the posts, rotation of the nuts serving to raise and lower the pilasters as desired. Still another object of the invention is to provide in the interior of the pilasters, planar surfaces that slidably engage the corresponding exterior planar surfaces of the posts, the coaction between the planar surfaces being such as to prevent the pilasters from rotating with respect to the posts when the supporting nuts are rotated.

These and other objects and advantages of the present invention will be apparent from the following description of a preferred embodiment thereof, taken with the accompanying drawing, wherein:

Fig. 1 is a perspective view of a longitudinal section of a mechandise supporting and display background wall structure constructed in accordance with the present invention, certain portions of the wall structure being cut away so as more clearly to illustrate the details of its construction;

Fig. 2 is an enlarged horizontal cross-sectional view taken through the lower portion of one of the upstanding pilasters of the wall, showing a fragmentary portion of a merchandise supporting member in mounted position in one side of the pilaster and showing an upstanding post, of polygonal cross section, upon which the lower end of the pilaster is slidably received;

Fig. 3 is a vertical cross-sectional view taken substantially along the line 3—3 in Fig. 2;

Fig. 4 is a horizontal cross-sectional view similar to Fig. 2, but showing a modified form of the construction of the lower interior portion of the pilaster that forms a socket by means of which the pilaster is slidably received upon the polygonal post; and

Fig. 5 is a fragmentary perspective view, on an enlarged scale, showing a further modification of the lower end of one of the pilasters.

In the drawing the numeral **10** represents a longitudinally extending base member that forms a foundation for the wall structure, the base member ordinarily being fixedly secured in any suitable fashion to a floor or to another fixed supporting structure. The longitudinally extending base member **10** defines the line occupied by the wall structure and its upper surface **11** supports, at spaced intervals, bracket-like, inverted U-shaped foot members **12** that may be formed of sheet metal and may comprise a web **13** resting upon the upper surface **11** of the base member, with downwardly extending legs **14** that engage the opopsite sides of the base member and are secured thereto as by nails or screws **15**. A relatively short upstanding post **16** is welded or otherwise secured to the central portion of the web **13** of each of the foot members **12**. The posts **16** are preferably fabricated of sheet metal and, as shown in the drawing, each is of hollow construction, having a polygonal or square exterior cross section defined by outer vertical planar walls **16***a*, **16***b*, **16***c* and **16***d*. The vertical corner edges of each of the upstanding posts **16** have interrupted thread segments **17** formed thereon for rotatably receiving a nut **18** that encompasses the post and is thus, upon rotation, adapted to ride upwardly and downwardly about the post on the thread segments.

A vertical pilaster **19** is provided in conjunction with each of the posts **16**. These pilasters, like the posts **16**, are preferably formed of sheet metal and each has a hollow, rectangular cross-section defined by front and rear walls **20** and **21** and by vertical side walls **22** and **23** which respectively have opposite inner surfaces **22***a* and **23***a* that are spaced apart a distance slightly greater than the lateral dimension between the surfaces **16***a* and **16***c* of the posts **16**. The lower end of each pilaster is adapted to be slidably received in telescopic fashion

vertically downwardly, onto the upper end portion of a post 16, with the surfaces 16*a* and 23*a* and the surfaces 16*c* and 22*a* being in loose sliding contact with each other. As shown in Figs. 2 and 3, an angle member or bracket 24, having an L-shaped cross-section, is welded or otherwise secured to the surface 22*a* within the lower portion of each pilaster so that one of its legs 24*a* provides a surface 24*b* for sliding engagement with the surface 16*d* of the post 16. A similar angle member 25 is welded or otherwise secured to the surface 23*a* of the pilaster in a position diagonally opposite the member 24 so as to provide a surface 25*b* for slidable contact with the surface 16*b* of the post. Thus, the angle members 24 and 25, together with the interior side wall surfaces 22*a* and 23*a* of the pilaster proper, provide or form an internal socket at the lower end portion of each pilaster that is slidably received upon a post 16, with the lower end extremity of each pilaster resting freely upon the upper surface of one of the nuts 18. This socket construction is such that rotation of the pilasters is prevented with respect to the posts 16 when the nuts 18 are rotated. Thus, the vertical position of the pilasters may be controlled or adjusted with respect to the posts 16 by simple manipulation of the nuts 18 without any tendency for the pilasters to turn about their vertical axes.

The upper end portion of each of the pilasters is open and each may telescopically receive a downwardly extending stub member 26 of rectangular cross-section that conforms substantially to the interior dimensions of the pilaster. Each of these stub members may be welded or otherwise mounted upon the underside of a top plate 27 that may be anchored directly to a ceiling or may be anchored to a longitudinally extending upper base member 28, which in turn may be anchored to a ceiling or any other fixed overhead structure.

The number of pilasters 19 employed in the construction of any particular wall structure embodying the present invention will depend upon the length of the wall desired. Each pilaster is spaced from the next adjacent pilasters, and each pilaster may be joined to the next adjacent one by means of a plurality of horizontally extending frame members 29, the opposite ends of which are joined to the inner faces of the pilasters in any suitable fashion. For example, the ends of the frame members 29 may be provided with vertical plates 30 that may be secured to the surfaces of the pilasters by screws or the like (not shown).

The forward and rear walls 20 and 21 of the pilasters are provided with means by which merchandise support members 31 may be detachably secured directly to the pilasters. In the present instance, these walls at regular intervals are provided with inwardly extending arcuate segments 32 and 33 that are struck inwardly from the bodies of the walls 20 and 21. The inwardly projecting arcuate segments are disposed in side-by-side position with a space therebetween providing a slot 34 for receiving one of a pair of blade-like hook-shaped elements 35 (Fig. 3) formed on the rear end of each of the merchandise supporting members 31. This particular structure for receiving and mounting the merchandise supporting members upon the pilasters is fully disclosed and claimed in my copending application Serial No. 580,301, filed April 24, 1956, but it will be understood that other means may be employed for anchoring the merchandise supporting members to the pilasters. Each pair of rearwardly projecting arcuate segments 32 and 33 in the present embodiment is equally spaced from adjacent similar segments so that the pair of hook-shaped elements 35 on the rear end of the merchandise support members may be received in and be hooked over the lower edges of adjacent slots 34. The mechandise support members may thus be secured to the pilasters at any elevation desired.

In the construction of a wall structure of the present invention, the line of the wall desired is first determined and the base member 10 is laid along that line and secured to the floor. The foot members 12, with their upstanding posts 16, are then secured to the base member, as by the nails or screws 15, whereupon the upper base member 28 with the downwardly extending stub elements 26 thereon is secured to a ceiling or other overhanging structure directly above the base member 10 and the posts 16. With the nuts 18 in their lowermost positions on the posts 16, the pilasters 19 are placed upon the posts with the socket structure in the interior of the lower portion of each pilaster being slidably received downwardly upon a post. The nuts 18 are then rotated about the posts 16 gradually to raise the pilasters and cause their open upper ends telescopically to be received upon the corresponding downwardly extending stub members 26. This operation secures each pilaster in place and the several frame elements 29 may then be secured between the adjacent pilasters. If desired, of course, these horizontally extending frame members 29 may be attached to adjacent pilasters before the pilasters are placed upon the posts 16.

With the pilasters and the frame members 29 erected as just described, the internal structure of the wall is complete, and panel members 36 and 37 may then be applied to this structure in any of several ways. For example, the inner surfaces of the panels 36 and 37 may each be provided with a plurality of hook members 38 which project inwardly and are adapted to be removably hooked over the frame members 29 so as not only to support the panels, but also to secure the panels in fixed but easily removable position with respect to the internal frame of the wall. The vertical edges 39 of the respective panels preferably overlap the forward and rear walls 20 and 21 of the pilasters, but a space is left between the adjacent edges of adjacent panels so as not to interfere with the insertion of the hook elements 35 of the mechandise support members 31 into the slots 34 provided in the pilasters.

After the panels 36 and 37 have been installed, a base board 40 may be applied to opposite sides of the structure in any suitable fashion and, if desired, each base board may have an underlying strip 42 therebeneath so that the rear surface of the base board will lie flush with the forward surface of the panel 36 or 37, as the case may be.

Prior to the application of the panels 36 and 37 to the frame work of the wall, the nuts 18 may be rotated upon the posts 16 so as to level the entire frame work with respect to the horizontal or, if desired, so as to bring the uppermost end of each pilaster into forceful engagement with the stationary upper plate 27, thereby effectively wedging the pilasters firmly in fixed upright position. During the rotation of the nuts, and during the consequent vertical movement of the pilasters, it will be observed that the cooperation between the external surfaces of the polygonal posts 16 and the corresponding internal surfaces which define the sockets in the lower interior portions of the pilasters, effectively prevents any tendency on the part of the pilasters to rotate with respect to the posts 16. The socket structure shown in Fig. 2 is sufficient to accomplish this purpose in most instllations but, if desired, that socket structure may be varied by the use of an additional pair of angle members 24 and 25, as shown in Fig. 4, thereby giving additional surfaces 24*b* and 25*b* for cooperation with the surfaces 16*b* and 16*d* of the posts 16. Fig. 5 shows still another variation in the socket structure provided at the lower end of each of the pilasters. In this latter variation, a rectangular plate 41 is welded or otherwise secured in the lower end of each pilaster and each plate is provided in its central portion with a substantially square opening defined by surfaces 41*a* which slidably cooperate with the exterior planar surfaces 16*a*, 16*b*, 16*c* and 16*d* of the posts 16. This latter construction

is particularly desirable when both internal transverse dimensions of the pilaster are greater than the corresponding dimensions of the posts **16**, as indicated in Fig. 5.

It will readily be appreciated by those skilled in the art that the wall construction just described is capable of a variety of uses in conjunction with merchandise displays. In the particular form shown in the drawing, the wall may be quickly erected at any location and in any desired length as a partition wall which may serve either as a mere background for displays of merchandise located on opposite sides of the wall or, if desired, merchandise may be supported upon the wall structure itself by means of the support members **31** which may be installed at any desired elevation on either side of any one of the pilasters. The construction may likewise serve as a false wall, in which case the panels **36** or **37** will be installed on only one side of the structure. In any case, it will be appreciated that the entire structure may be easily and quickly erected, or disassembled and reerected, in any desired location by ordinary workmen at minimum expense, thereby permitting merchandise displays to be changed and sections of departments to be easily varied from time to time so as to maintain new and fresh displays. It will also be understood that the panels **36** and **37** may themselves be of any texture desired and that they may be quickly exchanged for other prepared panels at any time such a change is desired.

The foregoing description has been given for clearness of understanding only and no unnecessary limitations are intended thereby, for it will be readily apparent to those skilled in the art that many variations may be made in the present wall construction without departing from the spirit and scope of the appended claim.

I claim:

A merchandise supporting and display background wall construction comprising, a lower base member having a pair of longitudinally extending side edges, a plurality of U-shaped foot members including a web mounted on said base member and a pair of downwardly extending legs engaging said side edges and secured thereto, an upwardly projecting post mounted on each of said webs, each of said posts having a plurality of vertical substantially planar exterior surfaces thereon defining for each post a substantially square exterior horizontal cross section, interrupted thread segments formed on the exterior vertical edges of said posts about axes coinciding with the respective longitudinal axes of the posts, a plurality of upstanding hollow rectangular tubular pilasters

having side walls defining a first pair of parallel spaced apart interior planar surfaces, a pair of brackets respectively secured to the interior of each of said pilasters and having arms thereon providing a second pair of parallel spaced apart interior planar surfaces substantially normal to said first pair of interior planar surfaces, the lower end portions of said pilasters being telescopically received upon the upper end portions of said respective posts with each of said posts being slidably received between said pairs of interior planar surfaces in said pilasters, an upper base member mounted parallel to and in vertical alignment with said lower base member, said upper base member having a pair of longitudinally extending side surfaces, a plurality of U-shaped top plates each including a top web mounted on said upper base member and a pair of upwardly extending legs engaging said side surfaces and secured thereto, a stationary stub member mounted on each of said top webs and being in telescopic engagement with the upper end portion of each of said pilasters, nuts rotatably mounted about said posts on the thread segments thereon, each of said nuts being in supporting engagement with the lowermost end of one of said pilasters, said nuts being rotatable on said thread segments so as to travel selectively upwardly and downwardly thereon and thereby selectively to raise and to lower said pilasters about said posts, said planar exterior surfaces of said posts coacting with said interior planar surfaces within said pilasters to prevent rotation of said pilasters with respect to said posts during rotation of said nuts, means removably connected to said pilasters for supporting merchandise, brace means extending horizontally between the adjacent ones of said pilasters, and wall panels removably secured to said brace means and extending from one pilaster to the next adjacent pilaster.

References Cited in the file of this patent

UNITED STATES PATENTS

843,163	McCarthy	Feb. 5, 1907
1,676,616	Lowy	July 10, 1928
1,798,392	Adams et al.	Mar. 31, 1931
1,990,259	Walters	Feb. 5, 1935
2,019,977	Hult et al.	Nov. 5, 1935
2,123,329	Combs	July 12, 1938
2,280,220	Crosby	Apr. 21, 1942
2,397,940	Benham	Apr. 9, 1946
2,424,376	Weikel	July 22, 1947
2,451,674	Hade	Oct. 19, 1948
2,787,382	Williams	Apr. 2, 1957