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3,148,638

ACCESSORY MERCHANDISING EQUIPMENT

Filed May 16, 1962

2 Sheets-Sheet 1

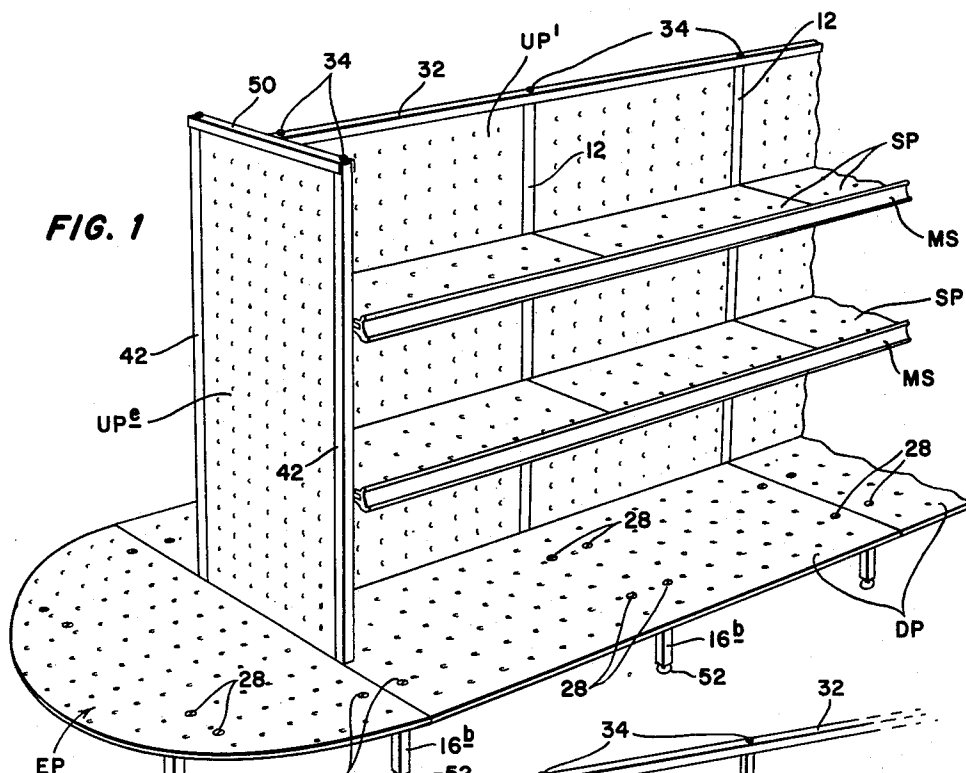


FIG. 1

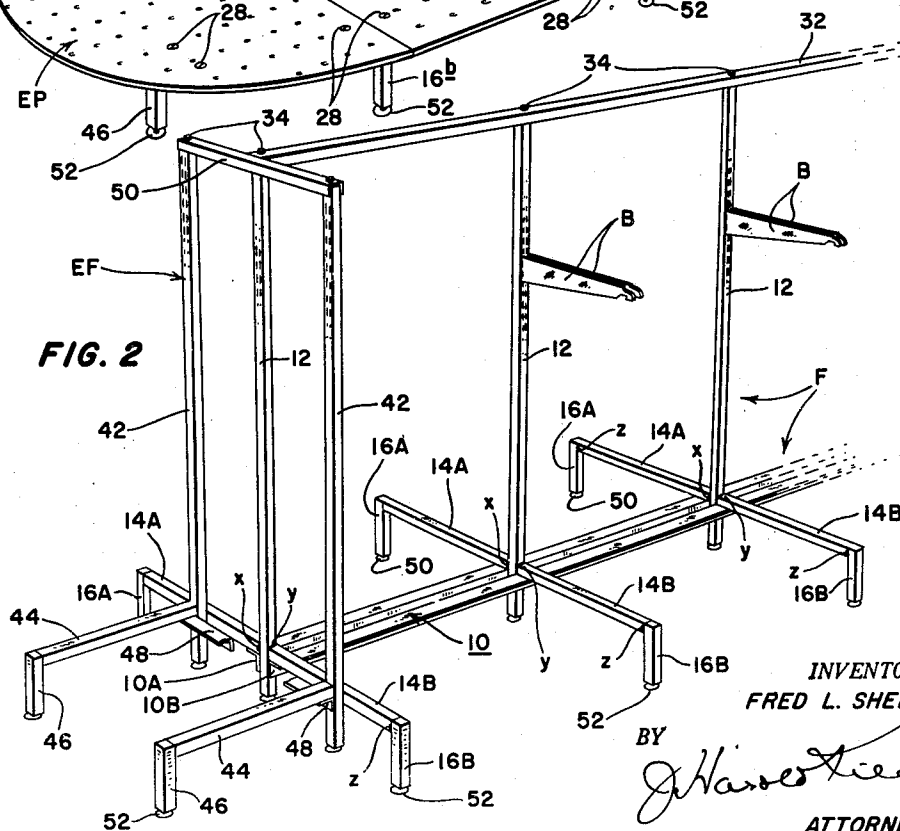


FIG. 2

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FIG. 4

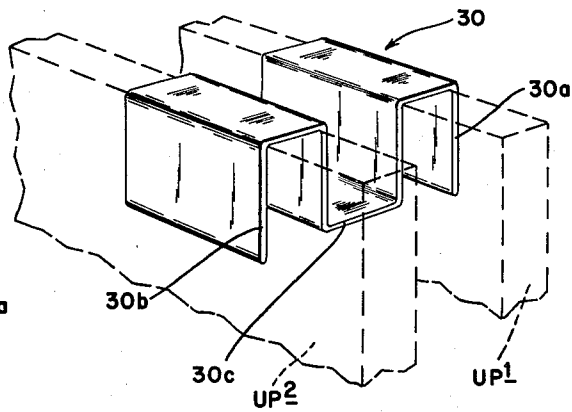


FIG. 3

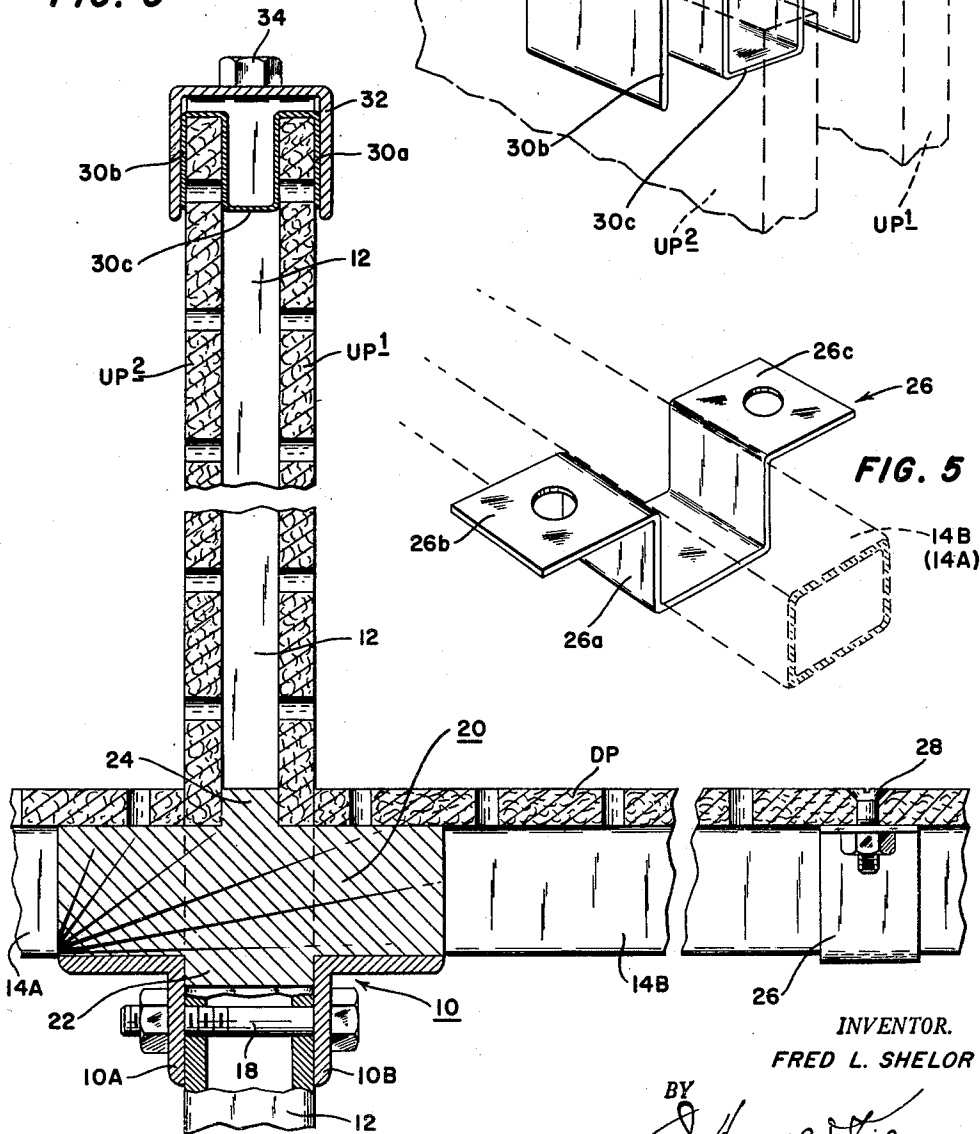
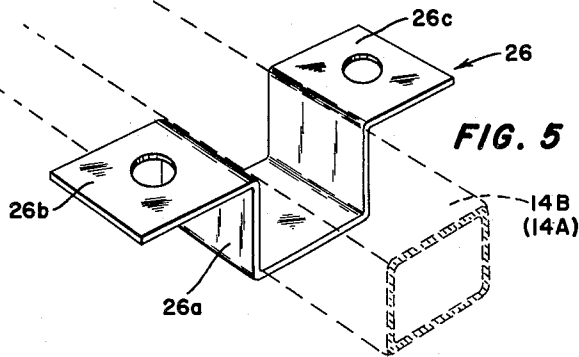


FIG. 5



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ACCESSORY MERCHANDISING EQUIPMENT
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11 Claims. (Cl. 108—108)

This invention relates to improvements in accessory merchandising equipment, and more particularly in a merchandise display stand of the type variously known in the trade as a "merchandiser," a "store-fixtured gondola," or simply a "gondola."

Heretofore, the standard store-fixtured-type gondola utilizing a steel frame has been designed around the concept of a unitized frame of fixed construction utilizing strongly welded joints throughout which latter, being largely exposed, must be cleaned and polished before either plating or painting of the frame to provide it with its final finish. Obviously, such represents expensive construction and the unitized-frame gondola is also open to the objection that it lacks versatility, in the sense that its fixed, welded-type frame limits the center-to-center distance between shelving brackets to a factory-set distance that cannot be changed to meet varying conditions or requirements which a particular gondola may be called upon to meet in service.

Stated broadly, a major object of the present invention is the provision of a store-fixtured type of gondola for displaying merchandise in mass characterized by an improved design which not only greatly reduces constructional costs as compared to those of known gondolas, but also renders the final gondola structure extremely versatile and flexible as respects shelving-bracket spacing.

More particularly, the present invention contemplates and provides a gondola in the nature of a store fixture serving as a merchandise display stand, which differs from gondolas as previously known in departing from the aforesaid unitized frame concept, and which instead achieves the requisite structural strength and rigidity in the finally assembled gondola by combining frame and panel components making up the same in such a way that they complement one another to a degree largely overcoming the requirement for welded joints and fixed construction.

Another important object of the invention is the provision of a store fixture gondola of a design which not only reduces the requirement of welded joints to a minimum but also disposes or locates the joints so that they are completely out of sight and thus can be left unfinished, thereby providing a simpler and much less expensive construction than heretofore.

Still another object of the invention is the provision of a store-fixtured type of gondola comprising a metallic framework made of structural members of simple sections and of horizontal deck and upright center or divider panels of inexpensive, readable available panel material, characterized by a design according to which said components may, if desired, be assembled to one another on the site and which also provides that said panels combine with one another and the framework in imparting structural strength and rigidity to the final structure.

Yet another object of the invention is the provision of a store-fixtured type of gondola as last stated, wherein the framework consists of spaced-apart combined upright and leg units connected together by a central longitudinal member, and wherein the spacing between the combined upright and leg units may be altered to any desired center-to-center distance simply by providing holes in said longitudinal member on the desired spacing and thereupon cutting the divider panels to proper size so as to fit tightly between the adjacent uprights of said units, should such cutting be necessary.

The above and other more detailed objects and fea-

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tures of advantages of the invention will appear from the following description thereof, in which reference is had to the accompanying illustrative drawings, wherein:

FIG. 1 is a fragmentary perspective view of a typical store-fixtured type of gondola constructed according to the present invention;

FIG. 2 is a similar fragmentary perspective view illustrating the basic metallic framework employed in the gondola shown in FIG. 1;

FIG. 3 is a broken-away section taken on line 3—3 of FIG. 1, with shelving removed;

FIG. 4 is a perspective view illustrating the constructional details and the mounting of a preferred form of the spacer clips employed to space the upper ends of the upright divider panels of the gondola shown in the previous views, for use when front and rear divider panels are employed; and

FIG. 5 is a similar perspective view illustrating the constructional details and manner of use of the preferred clip means employed to secure the horizontal deck panels in place on the horizontal connecting arms of the combined upright and leg units.

Referring to the drawings in greater detail, a store-fixtured type of merchandise gondola according to the invention comprises a basic non-unitized and to a degree non-rigid metallic framework F generally as shown in FIG. 2, with which deck panels DP and upright divider panels UP (the latter extending longitudinally-centrally of the gondola for the length thereof) are combined in such a way as to provide structural strength and rigidity to the final structure. More particularly, the framework F which preferably is of the type which is capable of being assembled in situ, consists of a central longitudinal "spine" member 10 made up of two longitudinal L-angles 10A, 10B disposed in spaced, inverted and back-to-back relation and thus with their vertical flanges parallel and their horizontal flanges, which are upwardly disposed because of the inversion, extending away from one another but in the same plane. As best seen in FIG. 2, the space between the vertical flanges of said L-angles provides accommodation for the lower ends of the upright posts (hereinafter for convenience referred to as "uprights") of a plurality of spaced-apart combined upright and leg units, preferably of square tube construction throughout. More particularly, each said unit consists of an upright 12, forwardly and rearwardly extending horizontal arms 14A, 14B rigidly joined at their inner ends to the front and rear faces of said upright by welding indicated at X, Y and being disposed at a level such that their under sides rest flush on the horizontal flanges of said L-angles 10A, 10B making up the longitudinal member 10, and a pair of short-length vertical legs 16A, 16B joined to the outer ends of said arms by welding designated Z. While by virtue of the welded joints between the uprights and their associated connecting arms and between said arms and their associated legs, said combined upright and leg units themselves have unitized construction, it is a feature of the invention that said units are not welded or otherwise affixed rigidly to said longitudinal member 10, but instead are simply bolted thereto as by bolts 18, which as seen in FIG. 3 are projected through registering holes provided in the vertical flanges of said L-angles 10A, 10B making up said longitudinal member and the uprights 12 accommodated in the space therebetween. Thus, as distinguished from prior store-fixtured gondolas employing unitized metallic frame structure throughout and which accordingly are objectionable in that the center-to-center spacing between the uprights 12 of the framework (and accordingly between the shelving brackets for the shelves S1, S2 (FIG. 1) which are conventionally attached at their rearward ends to said uprights) is factory set, the metallic framework according to the invention permits

the center-to-center spacing between the uprights and thereby between shelving brackets to be changed at will by merely providing one or more holes in the vertical flanges of the L-angles 10A, 10B for the passage of the securing bolts 18 on the particular spacing desired for the shelving brackets, and then by cutting the divider panels to the proper size, if such cutting is necessary.

According to a further feature of the invention, filler blocks 20, preferably fashioned from wood and which are of length as to snugly fit in between the uprights 12 of each two adjacent combined upright and leg units and preferably also having section as to interfit with the aforesaid L-angles 10A, 10B, provide support for the inner edges of the deck panels DP and a supporting ledge or rest for the vertical divider panels UP. More particularly, and referring to FIG. 3, the body of each said filler block 20 has width substantially greater than the spacing between the vertical flanges of the L-angles 10A and 10B, and thus the block is well bottomed as the horizontal top flanges thereof, and its vertical dimension equals the distance between the top face of the horizontal flanges of said L-angles and the plane containing the top faces of the horizontal connecting arms of the combined upright and leg units. Although not shown, the ends of the filler blocks 20 abut the side faces of the uprights 12 and the connecting arms 14A and 14B between which they extend. Thus, the deck panels DP resting on the connecting arms outwardly of the upright divider panels are supported along their inner edges by said filler blocks 20 whose exposed upper surfaces are at the same level as the top surfaces of said connecting arms.

FIG. 3 also shows that according to the preferred section of said filler blocks each is provided with a relatively wide rib or tongue 22 projecting downwardly from its under face, whose width corresponds to the spacing between the vertical flanges of the L-angles 10A, 10B. Such arrangement provides that the filler blocks are held in place upon tightening of the bolts 18, consequent to the bottom rib 22 being in effect clamped between the vertical flanges of said L-angles. Each of the filler blocks 20 is also provided with a centrally disposed, upper-face rib 24 serving as a spacer rib which fixes the spacing between the front and rear upright divider panels, where two such panels (here designated UP¹ and UP²), rather than a single upright divider panel, is employed. It will be observed from FIG. 3 that the disposition and thickness of the upper-face ribs 24 of said filler blocks is such as to set back the vertical front and rear faces of the ribs from the front and rear face lines of the upright 12 by amounts corresponding to the thicknesses of the upright divider panels. Accordingly, when the structure is fully assembled, the front and rear face lines of the divider panels will be in the same vertical plane as those containing the front and rear faces of said uprights 12, i.e. the outer faces of the panels will be flush with the outer faces of the uprights between which they extend.

FIG. 3 also illustrates that according to this invention final placement of the horizontal deck panels DP locks the lower edges of the upright divider panels UP¹ and UP² in place, such of course assuming that said upright divider panels have been first positioned as shown with their said lower edges resting on the top surfaces of the filler blocks just outwardly of the upper-face ribs 24 thereof and that the deck panels DP have been pushed home, i.e. moved against said upright panels by an amount so as to clampingly secure the supported lower edges of the latter panels against the side faces of the upper-face ribs 24.

Both to secure the deck panels DP in place on the connecting arms 14A and 14B of the combined upright and leg units and in such a relatively inward position which is such that they lock the lower edges of the upright divider panels UP¹ and UP² in place as aforesaid, securing clips 26 whose constructional details and manner of use are best shown in FIGS. 3 and 5. More particularly, said clips each preferably comprises a strap bent to U-form

so as to provide a channel portion 26a dimensioned so as to snugly embrace a connecting arm and spaced, laterally extending attaching ears 26b and 26c which are apertured for the passage of deck-panel securing bolts 28 shown in FIG. 3, this view further illustrating that in the final structure, the heads of said bolts are flush with the top surface of the deck panels so as not to interfere with merchandise placed thereon or with movement of said merchandise therealong.

It is contemplated that the deck panels DP will have width which is a multiple of the spacing between the connecting arms 14A or 14B of adjacent combined upright and leg units, so that they (the panels) can be supported at both their side edges and at intermediate locations of their width on at least three connecting arms lying to the same side of the uprights. In such case, clips 26 will be employed to secure each panel to the intermediate connecting arms and also to the connecting arms underlying its side edges. In the case of two adjacent deck panels arranged in adjacency with their adjacent side edges abutting one another along a line corresponding to the center line of a connecting arm, an arrangement which is shown in FIG. 1, a single clip extending under said arm and having its attaching ears secured one to one panel side edge and the other to the other panel edge, will suffice to secure both edges in place.

According to yet another feature of the invention, which assumes the use of spaced-apart front and rear upright divider panels UP¹ and UP² as in FIG. 3, the upper edges of said panels are maintained in properly spaced relationship (corresponding to that of their lower edges which are spaced by the spacer ribs 24 of the filler blocks) as by means of spacer clips 30 whose construction and manner of functioning are seen in FIGS. 3 and 4. More particularly, each said spacer clip comprises two downwardly opening channel portions 30a, 30b which are spaced apart by an integral connecting web 30c of width corresponding to the width of the aforesaid spacer ribs 24. Said channel portions are dimensioned to snugly receive the top edges of two companion spaced panel members and when assembled thereto as in FIG. 3, the connecting webs 30c of the clips will then space said top edges the proper amount. Preferably, two such clips will be employed for each panel width, and they are applied by simply clipping over the top edges of the upright panels at spaced locations therealong.

Since the clips 30 are of relatively narrow width as compared to the full width of the upright panels, a longitudinal cap member 32 of inverted channel section serving both to close off and frame the top edges of said panels is provided. As seen in FIG. 3, the width of the channel is slightly greater than the distance between the outer faces of the upright panels, thus to accommodate for two thicknesses of the material from which said clips 30 are fashioned. Accordingly, said longitudinal cap member 32 may be applied simply by fitting same over the upper edges of the upright divider panels and intervening uprights 12 of the combined post and leg units, it being understood that said uprights have the same front-to-rear dimension as the spacing between the relatively front and rear faces of the spaced upright panels. In a final operation, the cap member or channel 32 is preferably secured to the upper ends of the aforesaid uprights 12 by expansion-type bolts 34 extending into uprights, as seen in FIG. 1, whereupon said member 32 not only caps and seals off the upper edges of both uprights and upright panels, but also frames the top edge of the entire structure thus giving it a finished appearance.

Store-fixtue gondolas are usually formed or provided with upright end panels serving to close off the ends of such shelving as is employed and also to provide additional display space or area. The present gondola design lends itself to the incorporation of such end panels and their supporting framework. More particularly, each upright end panel framework (designated EF in FIG. 2)

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comprises two combined upright and leg units each consisting of an upright 42, connecting arm 44 and leg 46 corresponding in all respects to the aforesaid uprights and leg units 12-16B, but minus one said arm and its associated leg thereof. Said end frame is secured to the main framework, as previously described, by bolting the uprights 42 thereof to the connecting arms 14A and 14B of the endmost of the combined upright and leg units 12-16B of said main framework. Preferably the two end framework units are also tied together adjacent their lower ends by an end L-angle iron 48 which is disposed in spaced parallel relation to the connecting arms 14A and 14B of said endmost unit, with the uprights 42 of the end frames extending through said space. The uprights 42 of said end framework units 42, 44, 46 are tied together at their upper ends by a cap channel 50 corresponding to the aforesaid cap channel 32 of the main framework.

As seen in FIG. 1, an end upright panel UP^e is fitted into the space between the two uprights 42 of the end frame and is supported on edge by an end filler block (not shown) corresponding generally to the aforesaid filler blocks 20 but extending at a right angle thereto, and which extends between the said two uprights 42 and is supported on and fitted to the space between said connecting arms 14A, 14B of the endmost, combined upright and leg unit and said end L-angle iron 48. An end deck panel or slab EP supported on the horizontal connecting arms 44 of the end frame 42, 44 and 46 may be secured in place thereon as by the previously described clips 26. When so secured, the end deck panel will bear tight against the lower end of the end upright panel UP^e and thus lock it in place, in a manner similar to that shown in FIG. 3.

As will be further seen from FIGS. 1 and 2, all uprights and legs are provided with leveling type feet designated 52, and thus the gondola may readily be levelled when finally assembled at its site of use.

FIG. 2 also generally shows the manner in which the brackets employed to support the shelving panels SP illustrated in FIG. 1 are arranged. Preferably, such brackets B are constructed similarly to the shelf-supporting brackets disclosed and claimed in my prior application, Serial No. 178,659, filed March 9, 1962, now U.S. Patent No. 3,102,499 entitled "Shelf Construction," and accordingly the shelving panels SP will be provided with a front edge molding strip MS of the type also disclosed and claimed in said application.

Without further description, it will be appreciated that a store-fixture type of gondola as described achieves the objectives of the invention as explained in the foregoing in simple yet effective manner. More particularly, by departing from the accepted concept of the factory unitized frame of initially fixed and rigid construction, and by instead interrelating upright divider panels with a series of individual upright and leg units in such a way that said panels square up and brace the units against sidewise movement, to a degree imparting rigidity to the final structure, not only are construction costs kept low, but also the structure is versatile and flexible as respects spacing of said upright and leg units, on which shelving-bracket spacing depends. Thus, the present gondola design permits the spacing between the upright and leg units to be altered to any desired center-to-center distance between units, simply by providing holes for the securing bolts employed in place of welding in the longitudinal member which ties said upright and leg units together.

Another notable advantage accruing from the present gondola design is that, whereas the unitized frame as heretofore constructed requires welded joints at locations which are exposed and open to view, which welds must be ground off and polished prior to either plating or painting the frame to give same its final finish, a gondola according to the invention employs relatively few welded joints, and since these are all located below the hori-

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zontal deck panel or slab and hence completely out of sight, they require no grinding or smoothing, thus resulting in a much simpler and much less expensive construction.

With respect to the panels employed for the deck or base slab or slabs, and also for the upright panel members, and which it is to be understood can be made of hardboard, fiberboard including peg board, plywood, and such other suitable panel-material, it is observed that the cutting thereof to proper size at the site of assembly or use represents the only fabrication required to enable them to play their part in the structural arrangement contemplated, and since this cutting is inexpensive, as compared to the cost of unitizing the frame, the advantages of the invention was realized at very low cost.

As many changes could be made in carrying out the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

I claim:

1. A store-fixture gondola for displaying merchandise comprising, in combination, a metallic framework including a longitudinal spine member and a plurality of combined upright, horizontal arm and leg units non-rigidly secured to said longitudinal member in spaced-apart relation and in such manner as to support the longitudinal member at a fixed raised level, said longitudinal member comprising two L-angles disposed in inverted, oppositely turned and spaced-apart relationship thereby to provide a vertical through space between the vertical flanges thereof, the uprights of said units extending vertically through said space, cross bolts passing through said vertical flanges and uprights and non-rigidly securing the uprights to said longitudinal member, filler blocks extending between said uprights and being supported on the oppositely disposed horizontal flanges of said L-angles, said blocks having underface portions fitted to and extending into the space between the vertical flanges of said L-angles and upper-face edge portions providing longitudinal supporting surfaces, and horizontal and upright panels assembled to said framework with the bottom edges of said upright panels and the inner edges of said horizontal deck panels resting on said supporting surfaces, said upright panels extending between and having width substantially equal to the spacing between the uprights of said units and coacting therewith in manner as to supply rigidity to said framework.

2. A store-fixture gondola according to claim 1, wherein said upright members are affixed to said vertical flanges of the spaced L-angles making up the longitudinal member by bolts on any desired center-to-center distances between upright members, and said horizontal panels are supported on the horizontal arms of said units and with their inner edges resting on said upper-face edge portions of the filler blocks as aforesaid resting on said upper-face edge portions of the filler blocks.

3. A store-fixture gondola according to claim 2, wherein the filler blocks each has a vertical abutment surface disposed just inwardly of its said upper-face edge portion and defining therewith a right-angled, outwardly facing corner, the bottom edges of the upright panels seating in said corner and the inner edges of the horizontal deck panels bearing against and locking the lower edges of the upright panels in said corner.

4. A store-fixture gondola for displaying merchandise comprising a metallic framework including a centrally disposed, longitudinally extending spine member, a plurality of spaced-apart combined upright and leg units affixed to and being tied together by said longitudinal member, said units each comprising an upright member and a pair of leg members rigidly connected thereto by horizontal connecting arms extending forwardly and rearwardly from said upright member, wooden filler blocks

extending between said upright members and being supported on said longitudinal member, said blocks having upper-face side edge surfaces disposed in the same horizontal plane as that containing the top surfaces of said connecting arms and an intermediate, longitudinally extending upper-face rib, forward and rearward upright panels extending between and fitted to the space between said upright members and resting on edge on said upper-face side-edge surfaces of the filler blocks and being spaced along their lower edges by said rib, spacer clips applied to the upper edges of the panels and spacing said edges the same distance as their lower edges, and forward and rearward horizontal deck panels supported at intervals of their width by the connecting arms and resting along their inner edges on said side-edge surfaces of the filler blocks just outwardly of an associated upright panel, and means securing the horizontal deck panels to the connecting arms in position as to lock the lower edges of the upright panels in place against the upper-face rib of the filler block.

5. A store-fixtured gondola according to claim 4, which further comprises a longitudinal, downwardly opening channel member affixed to the upper ends of the upright members and extending over and capping the spaced upper edges of the upright panels, and the upper ends of said upright members.

6. A store-fixtured gondola for displaying merchandise comprising, in combination: a metallic framework including a horizontally disposed, longitudinal spine member and supporting units for supporting said spine member at a level above that of a floor surface; said units each comprising an upright disposed generally in the vertical plane of said spine member, deck-panel supporting arms extending horizontally from and symmetrically to opposite sides of said spine member and vertical supporting legs depending from the outer ends of said arms; means for securing the units to the spine member at selected locations along the length of the latter which are determinable during assembly of the framework on the site; horizontal deck panels extending outwardly from the uprights and being supported in horizontal position on said horizontal arms; and upright panels disposed above and supported on edge from the spine member and extending between the uprights of adjacent supporting units, said

upright panels each having width substantially equal to the spacing between the uprights of adjacent supporting units and disposed with its side edges abutting the facing sides of said adjacent uprights, whereby said panels supply rigidity in lengthwise direction to the framework.

7. A store-fixtured gondola according to claim 6, wherein the means for securing each said supporting unit to the longitudinal spine member comprises a bolt and a fastening nut.

8. A store-fixtured gondola according to claim 6, wherein the horizontal deck panels are secured to their horizontal supporting arms by U-clips secured to the under face of said panels and being clipped to said arms.

9. A store-fixtured gondola according to claim 6, wherein the longitudinal spine member comprises two L-angles disposed in inverted, back-to-back relation and with their vertical flanges being spaced apart a distance corresponding to the thickness dimension of said uprights, and wherein said uprights extend through the space between said flanges and are secured thereto by a bolt passing through the upright and both said vertical flanges.

10. A store-fixtured gondola according to claim 6, wherein filler members are disposed on the longitudinal spine member and extend between the uprights of adjacent supporting units, said filler members providing a bottom-edge supporting surface for the upright panels.

11. A store-fixtured gondola according to claim 6, wherein said framework includes at least three supporting units as aforesaid, of which two are disposed at the opposite ends of the longitudinal spine member, and the third is disposed intermediate said ends, and wherein at least the third supporting unit is secured to said member at a selected variable location therealong.

References Cited in the file of this patent

UNITED STATES PATENTS

2,346,150	Brown	Apr. 11, 1944
2,787,382	Williams	Apr. 2, 1957
2,803,351	Wiggeren	Aug. 20, 1957
2,872,049	Slater	Feb. 3, 1959
3,044,632	Schild	July 17, 1962
3,044,634	Oztekin	July 17, 1962
3,080,980	Gibbons	Mar. 12, 1963
3,081,718	Shoffner	Mar. 19, 1963