

April 2, 1957

J. C. WILLIAMS
MERCHANDISE DISPLAY FIXTURE OF THE
KNOCK-DOWN, SECTIONAL TYPE

2,787,382

Filed Aug. 23, 1954

4 Sheets-Sheet 1

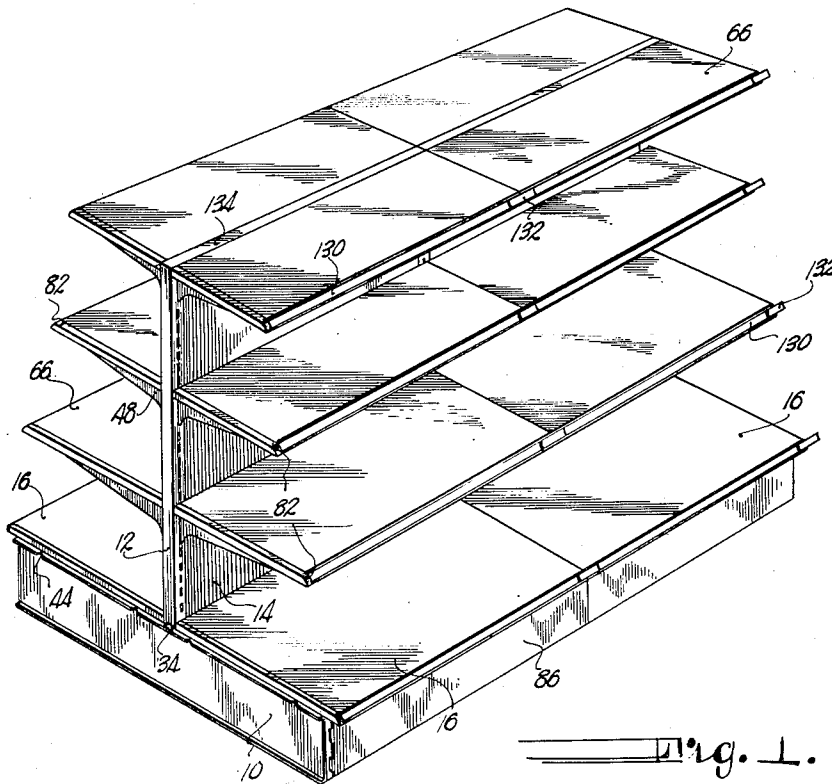


Fig. 1.

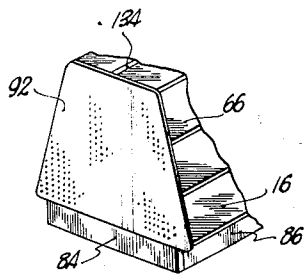


Fig. 9.

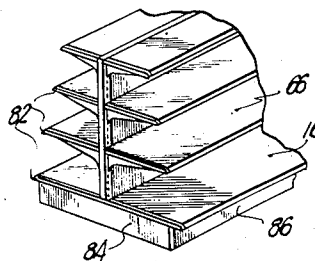


Fig. 10.

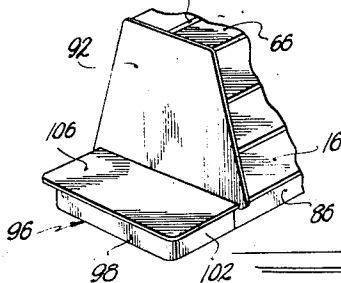


Fig. 11.

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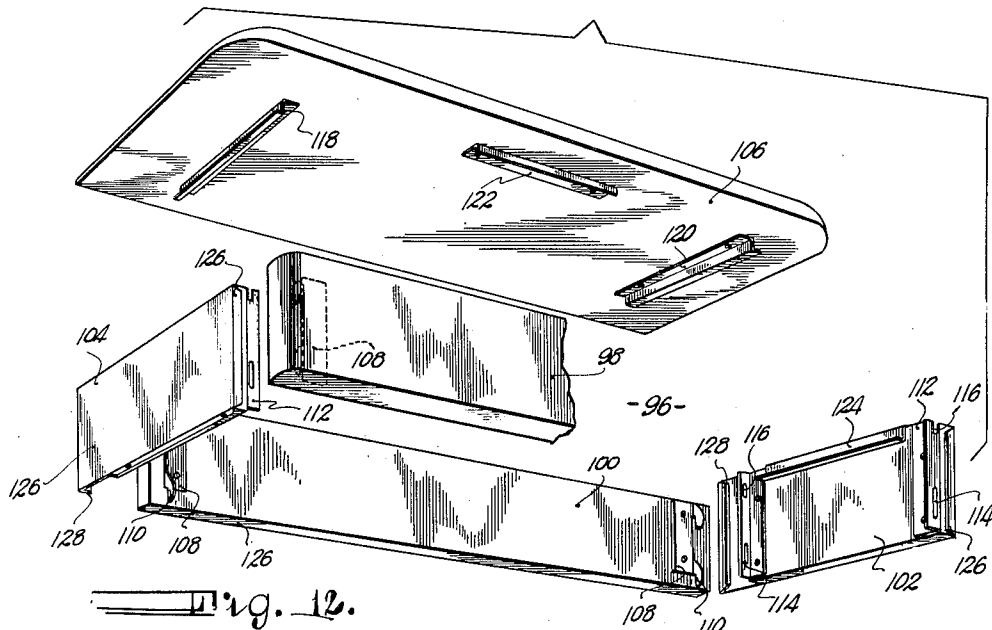
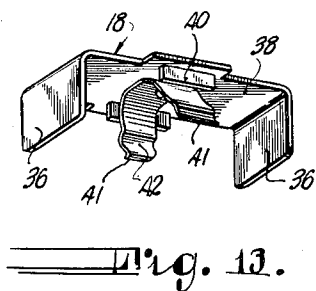
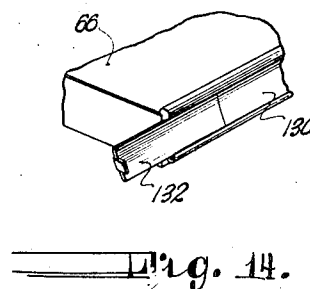
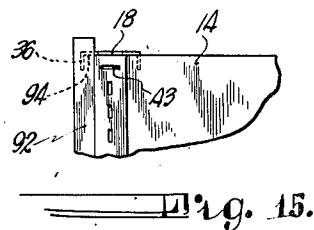
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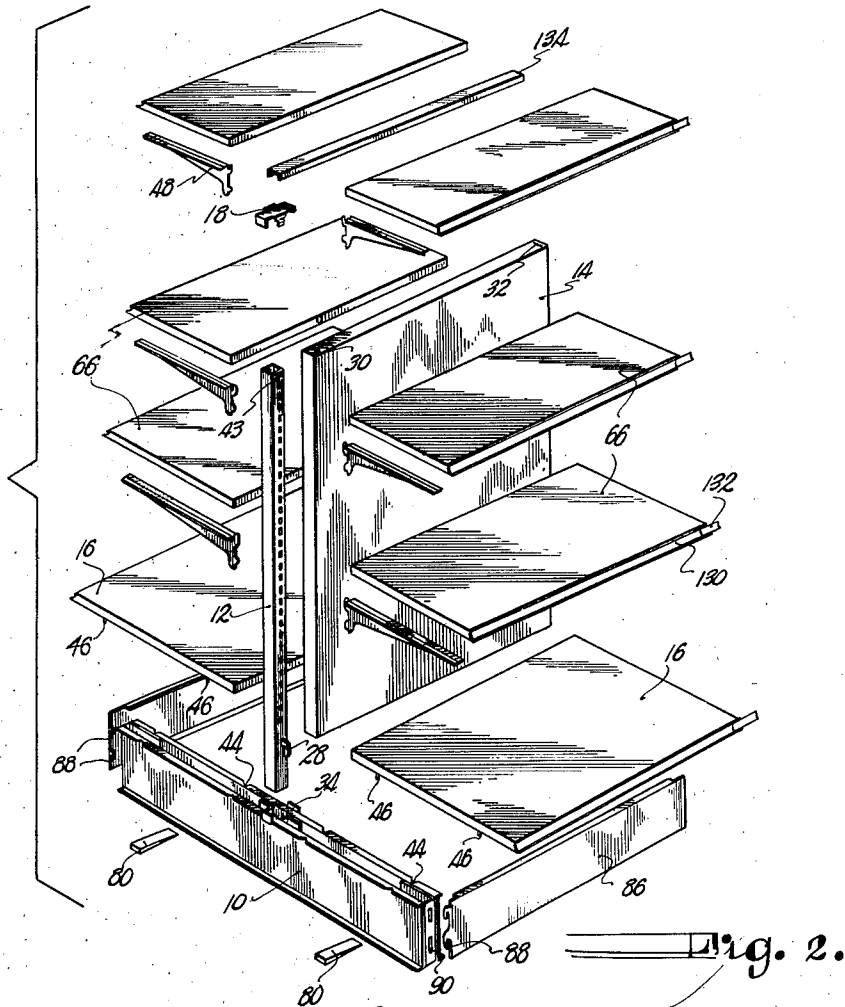
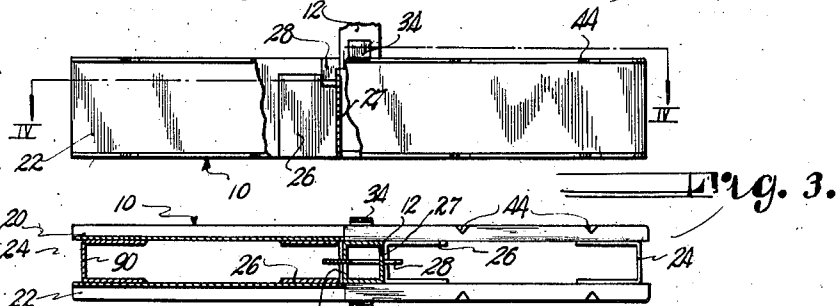
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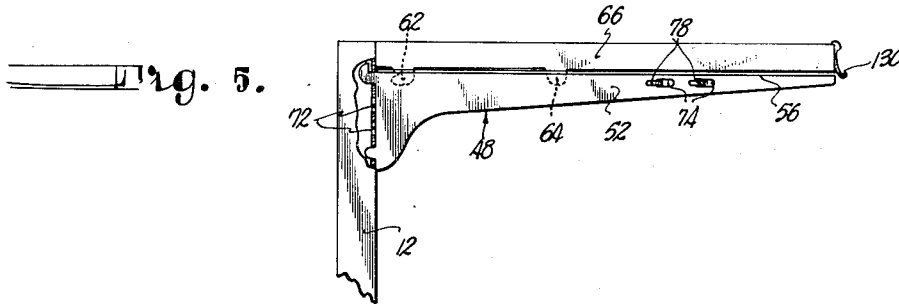
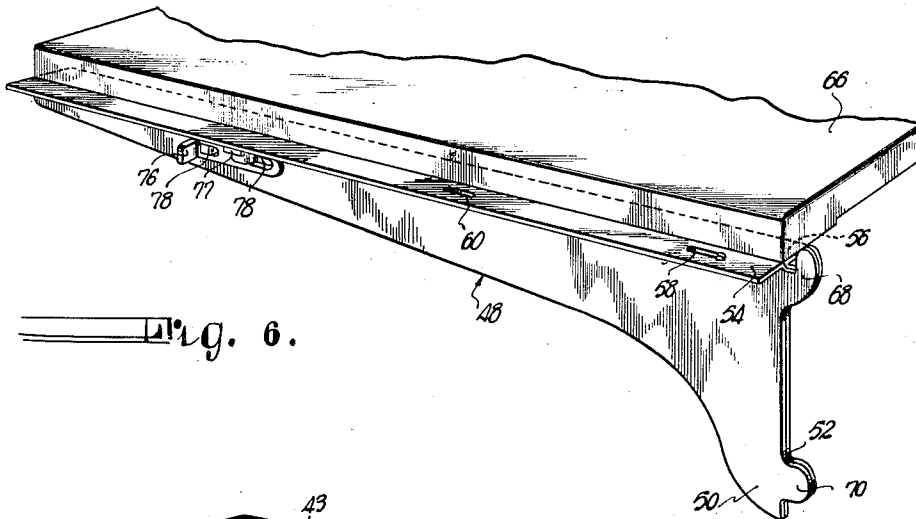
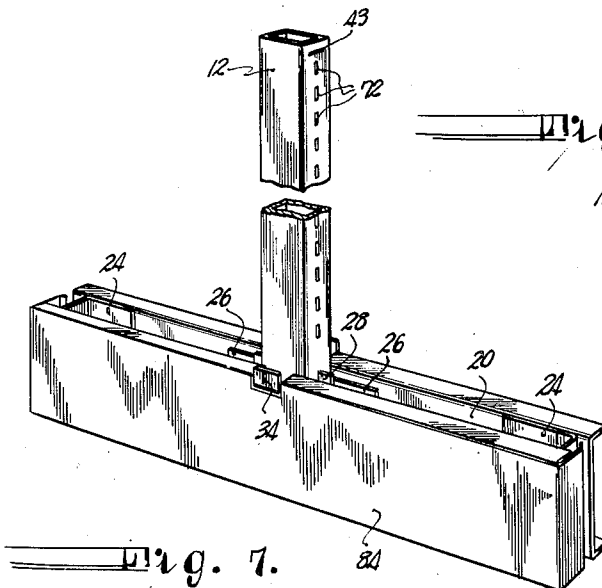
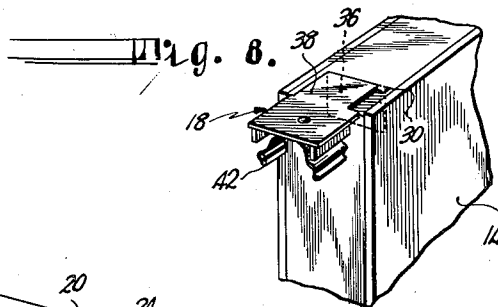
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MERCHANDISE DISPLAY FIXTURE OF THE KNOCK-DOWN SECTIONAL TYPE

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3 Claims. (Cl. 211—148)

This invention relates to merchandise display fixtures and particularly to a new and improved, sectional, center island fixture.

The most important object of the present invention is the provision of a display fixture having self-locking component parts throughout, thus rendering the fixture easily and quickly assembled or disassembled without the use of the usual nails, bolts, screws and other fasteners.

Another important object is to provide a knockdown, sectional fixture having inter-changeable shelves, brackets, end sections and the like which permit complete flexibility in the arrangement of shelves and merchandise.

A further object of the present invention is the provision of a display fixture having end-to-end, modular sections which, when assembled, are positively and securely locked together to present a sturdy fixture which is so designed as to withstand maximum weight and load requirements.

A still further object of the present invention is the facility with which various end constructions, shelf arrangements and the like may be chosen and integrated in the fixture by virtue of the novel self-locking features of all the component parts.

With these and other objects in view, the display fixture of the present invention comprises generally a base which consists of a plurality of spaced cross-joists, each having an open top socket thereon; an upright standard in each socket respectively, each provided with a pair of opposed, vertical series of slots or openings; an upright, center panel spanning the distance between each pair of standards; a number of split brackets positioned in the slots on the standards; shelves connected to the brackets and to the joists; and various finish pieces which may be attached to the fixture in accordance with the desires of the purchaser.

Other objectives include the provision of interlock means joining the upright standards and the cross-joists which prevents swaying in the fixture when the latter is assembled and loaded with merchandise; split shelf brackets having novel interlock means permitting the removal of either half of the bracket while the other half remains in place; interlock means on various of the component parts for receiving filler blocks and finish pieces after the desired number of sections have been assembled; and many, more minor objects which will become apparent in the specification which follows.

In the drawing:

Figure 1 is a perspective view of a display fixture made in accordance with the teachings of the present invention, showing two sections only partially assembled.

Fig. 2 is a perspective, exploded view of the component parts of a single section of the display fixture of the present invention.

Fig. 3 is an end elevational view of the cross-joist shown in Figs. 1 and 2, parts being broken away and in section to reveal details of construction.

Fig. 4 is a top, plan view of the cross-joist of Fig. 3.

Fig. 5 is a fragmentary, side elevational view, illustrating

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ing the manner of attaching the split brackets and the shelves to one of the upright standards.

Fig. 6 is an enlarged, fragmentary, perspective view, illustrating details of construction of the bracket of Fig. 5.

Fig. 7 is an enlarged, perspective view of the cross-joist and standard of Fig. 2, showing the same interconnected, and illustrating a cross-joist end cover which may be used as a finish piece.

Fig. 8 is an enlarged, fragmentary, perspective view of the center divider panel of Fig. 2, showing a panel holding bracket in place thereon.

Figs. 9-11 are perspective views of the optional, end finish constructions which may be applied to the display fixture of Fig. 1.

Fig. 12 is an enlarged, exploded, perspective view of the end base shelf of Fig. 11.

Fig. 13 is an enlarged, fragmentary view of the panel divider holding bracket of Figs. 2 and 8.

Fig. 14 is an enlarged, fragmentary, perspective view of one of the shelves of Figs. 1 and 2, illustrating details of construction of the price tag locking clip; and

Fig. 15 is a fragmentary, side elevational view, illustrating a further use of the holding bracket of Fig. 13.

In the drawings, there is illustrated a multisection, center island display structure wherein the component parts are provided with integral, interlock means permitting easy and quick assembly or disassembly of the particular arrangement chosen to fill the needs of the purchaser. As is illustrated in Figs. 1 and 2, the structure consists of any desired number of basic sections which may be interconnected to present a neat and attractive display structure.

Referring now to Fig. 2, it is noted that each of the individual sections comprises a cross-joist 10, a standard 12, a center divider panel 14, a pair of bottom shelves 16, a panel holding bracket 18, and various, optional shelves, brackets, and other finish pieces. Using these basic parts, any desired number of sections may be arranged in an end-to-end, interconnected relationship, with the joist 10 and the standard 12 of each section serving as a support for the divider panels, shelves, and brackets on either side thereof. Manifestly, an extra joist 10 and an extra standard 12 are required to complete a row of sections, regardless of the number of sections assembled.

Joist 10 includes a pair of spaced beams 20 and 22, an outer pair of U-shaped spacers 24 and an inner pair of U-shaped spacers 26 (Fig. 4). The standards 12 are polygonal in cross-section and have a pair of opposed, downwardly extending hooks 28 spaced from the lowermost ends thereof which engage the bights 27 of brackets 26 when standard 12 is inserted therebetween (Figs. 3 and 4). The close fit of standard 12 in joist 10 prevents any swinging or swaying of the standard 12 when mounted as illustrated in Fig. 3.

Center divider panel 14 spans the distance between a pair of adjacent standards 12 and is provided with a pair of slots 30-32 on the uppermost and lowermost (not shown) edges thereof. The slots 30-32 on the lowermost edge of panels 14 each receive an upstanding ear 34 on joist 10. The slots 30-32 in the uppermost edge of panel 14 each receive one of the depending legs 36 (Fig. 13) of bracket 18.

Viewing Fig. 13, each bracket 18 is U-shaped and has a pair of depending legs 36, a bight 38, flanges 40 and a spring clip 42. When a bracket 18 is inserted in the uppermost open end of a standard 12, the flanges 40 engage the standard therewithin and the outwardly flared ends 41 of the clips 42 engage the standard 12 within slots 43 provided therefor at the uppermost end of each standard 12. As shown in Fig. 8, the brackets 18 are modified by removing a portion of the bight 38 and one

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of the legs 36 when it is intended to use the bracket at one end of the display fixture.

Each beam 20—22 of the joists 10 is provided with a series of V-shaped notches 44 which receive a corresponding pin 46 depending from each bottom shelf 16 so that the latter will not slide relative to the joists 10. Upward movement of the bottom shelves 16 is prevented by the weight of the merchandise thereon.

After the basic components of a series of sections have been interconnected as detailed above, shelves may be selected and installed in accordance with the needs of the purchaser. Since each shelf and the supporting brackets therefor are identical in construction, except as to depth, only one will be described. The shelf and bracket construction is best illustrated in Figs. 5 and 6, wherein a split bracket is broadly designated by the numeral 48. Each bracket 48 has a pair of L-shaped plates 50 and 52 having laterally extending flanges 54 and 56. Each flange 54—56 is provided with a pair of slots 58 and 60 which receive a complementary hook 62 and a lug 64 on each shelf 66. The lugs 64 prevent outward sliding movement of the shelf 66 while the hooks 62 prevent swinging of the shelves 66 relative to the brackets 48. The plates 50—52 of bracket 48 are provided with upwardly extending hooks 68 and lugs 70, by means of which the bracket 48 may be mounted in a pair of spaced slots 72 on standard 12. In this manner, any selection of shelves 66 may be made for each side of the center divider panels 14.

Should the purchaser desire to have one side of a section of the fixture devoid of shelves 66, the bracket 48 is sectional, as described above, and either the right or left-hand plate 50—52 may be removed without disturbing the shelf 66 mounted on the plate 50—52 remaining in place. The plates 50—52 of each bracket 48 are provided with a pair of opposed slots 74. A releasable latch 76 (Fig. 6) is mounted on each right-hand plate 50 and has a pair of hooks 78 extending through the openings 74 and engaging the plates 52. There is a keeper 77 on the flange 54 for maintaining latch 76 in place on plate 50 with the hooks 78 extending through the openings 74 on plate 50 when the plates 50—52 are separated. When latch 76 is released, the hooks 78 register with the openings 74 of plate 52 so that either of plates 50—52 may be removed from its standard 12 without effect on the other plate which is held against swinging by the hook 62 and the lug 64 of the shelf thereon.

When a display fixture is thus far completed, and before the finish pieces are attached, the whole structure may be leveled by driving the wedges 80 (Fig. 2) beneath joists 10 as necessary.

If the ends of the completed display structure are to be left open, as illustrated in Figs. 1 and 10, a pleasing appearance is given to the open ends of the shelves by the installation of filler blocks 82 (Fig. 1) of the same material as the shelves 66, the blocks 82 being provided with hooks and lugs similar to the hook 62 and lug 64 of the shelves 66. The joists 10 are finished by installing end covers 84 (Fig. 7) and side covers 86 (Fig. 2). Cover 84 has depending lips (not shown) on the upper edge thereof which engage the beams 20—22 to hold the cover 84 in place. Covers 86 have a pair of hooks 88 at each end thereof which engage the slots 90 in spacers 24.

Alternatively, viewing Figs. 9, 11 and 15, the shelves may be closed by a polygonal, end finish panel 92. Panel 92 is provided with a slot in its lowermost edge (not shown) which receives an ear 34 on the end joist 10. Adjacent its uppermost end, as shown in Fig. 15, panel 92 is provided with a slot 94 which receives the leg 36 of an end bracket 18.

A still further modified end construction is illustrated in Figs. 11 and 12, wherein an end base and shelf construction is broadly designated by the numeral 96. Viewing Fig. 12, it is noted that the end shelf 96 has end walls 98 and 100, side walls 102 and 104 and a shelf 106.

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Each of the end walls 98—100 has a bracket 108 adjacent each end thereof and provided with a pair of depending hooks 110. The side walls 102—104 are provided with brackets 112 which have slots 114 and 116 that receive the hooks 110 when the end shelf 96 is assembled. Shelf 106 is provided, on its lowermost side, with two substantially Z-shaped brackets 118 and 120 and an L-shaped bracket 122. Similarly, the side walls 102—104 have Z-shaped brackets 124, complementary with the brackets 118—120 on shelf 106. When the shelf 96 is assembled, the hooks 110 are interlocked in the slots 114—116, brackets 118—120 are interlocked with brackets 124, and bracket 122 bears against end wall 98 to prevent sliding of the shelf 106 relative thereto. Each of the walls 98—104 is fabricated of wood and provided with an outer, metallic covering 126 of tin or the like. The covers 126 of end walls 102—104 project outwardly therefrom and are rebent upon themselves to present tab portions 128 which resiliently engage one of the beams 20—22 when the shelf 96 is assembled and placed in use with the display structure of the present invention.

Manifestly, a variety of materials is available from which to fabricate the component parts of the display structure. The joists 10, standards 12, brackets 18 and the split brackets 48, joist covers 84 and 86, are all of metal. It is contemplated that the panels 14 and 92, the shelves 16, 66 and 106 may all be made either of a composition hardboard laminated to a solid lumber core (Fig. 8) or of any suitable plywood panels such as fir. Optionally, either side of the panels 14 and 92 may be of peg board to facilitate the handling of small items therefrom.

Each of the shelves 16 and 66 is provided with a conventional price tag mold 130 and a clip 132 (Fig. 14) which interconnect adjoining shelves when the display structure is assembled. The clips 132 serve also to hold the shelves 66 in alignment.

When the panels and shelves are of composition hardboard, the lumber core mentioned above does not match and it is necessary to provide a U-shaped, metallic finishing piece 134 (Fig. 2) for the top of panel 14. When the panels and shelves are of wood, the clip 132 is not necessary and the top edge of panel 14 and the brackets 18 remain visible. In this respect, a modified bracket 18 having one of the legs 36 and a portion of the bight thereof removed is illustrated in Fig. 8. This modified bracket is adapted for use at each end of the assembled display structure.

Thus a novel center island display structure having interlocking component parts throughout has been provided which offers the utmost in flexibility as well as in simplicity. The store owner can select as many basic sections as are necessary to provide the length desired. He then has a wide choice as to size, type and number of shelves and end constructions. Subsequently, when he desires to alter the display structure, he may procure additional sections, shelves and the like as necessary to complete the new display structure. Due to the simplicity of construction, these alterations may be made without the need of skilled craftsmen, tools or fasteners.

It is obvious that the embodiment herein disclosed is a preferred form only and that many changes or modifications may be made therein without departing from the broad principles of the present invention. Such changes or modifications are contemplated hereby and it is, therefore, desired to be limited only by the scope of the appended claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In a knock-down, merchandise display fixture, the combination of a pair of elongated, spaced, parallel joists; structure on each joist respectively presenting an open-top socket intermediate the ends thereof; an open-top, upright standard for each joist respectively, the lowermost extremity of each standard being releasably received

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within a corresponding socket; a generally rectangular, center panel spanning the distance between the standards, each panel having top and bottom edges each provided with a slot adjacent each extremity thereof; an upstanding ear on each joist respectively adjacent the socket thereof but spaced from the latter in the direction of the other joist, said ears extending under the adjacent extremities of the panel and being releasably received in the corresponding slots of the bottom edge of the panel to support the latter; and a fastener for each standard respectively, each including a clip releasably received in the open-top extremity of the standard and a bracket secured to the clip and provided with a downturned ear extending over the adjacent extremity of the panel and releasably received in the corresponding slot of the top edge of the panel.

2. In a fixture as set forth in claim 1, wherein is provided a pair of opposed, elongated, side members respectively extending between corresponding ends of the joists; slot means on each end of each joist; hook means on each end of each member releasably received by the corresponding slot means on the joists for interconnecting the joists and members to present a rectangular base; a horizontal shelf releasably resting on one side member and that portion of the joists disposed on one side of the sockets, said shelf abutting against the panel along one margin thereof; and a pin depending from the underside of the shelf adjacent each of the opposed extremities thereof overlying the joists, said joists being provided with notches for releasably receiving the pins.

3. In a fixture as set forth in claim 1, wherein is provided a third elongated joist parallel to and spaced from one of said pair of joists on the side of the latter opposite the other of said pair of joists; structure on the third joist presenting an open-top socket intermediate its ends; a third open-top, upright standard having its lowermost

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extremity releasably received within the socket of the third joist; a second generally rectangular, center panel spanning the distance between the standard on said one joist and the standard on the third joist, said second panel having top and bottom edges each provided with a slot adjacent each extremity thereof; an upstanding ear on the third joist adjacent the socket thereof but spaced from the latter in the direction of said one joist; a second upstanding ear on said one joist adjacent the socket thereof but spaced from the latter in the direction of said one joist, said second ear and said ear on the third joist extending under the adjacent extremities of the second panel and being releasably received in the corresponding slots of the bottom edge of said second panel to support the latter; a fastener for the standard on the third joist including a clip releasably received in the open-top extremity of said last-mentioned standard and a bracket secured to the last-mentioned clip and provided with a downturned ear; and a second downturned ear on the clip of the fastener for the standard of said one joist, said second ear and the downturned ear of the fastener on the standard for the third joist extending over adjacent extremities of the second panel and being releasably received in the corresponding slots of the top edge of the latter.

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