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STORE FIXTURE

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2 Sheets-Sheet 1

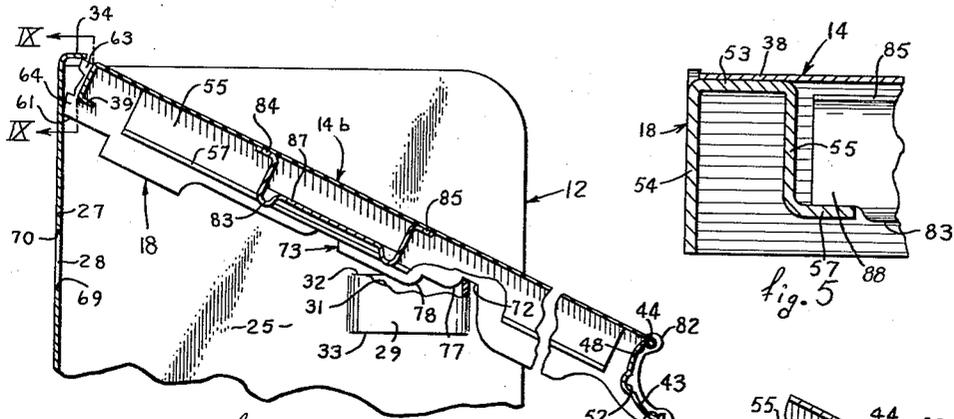


fig. 2

fig. 5

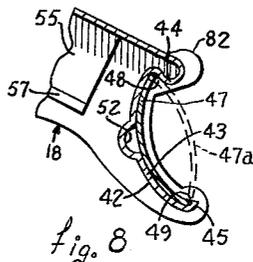


fig. 8

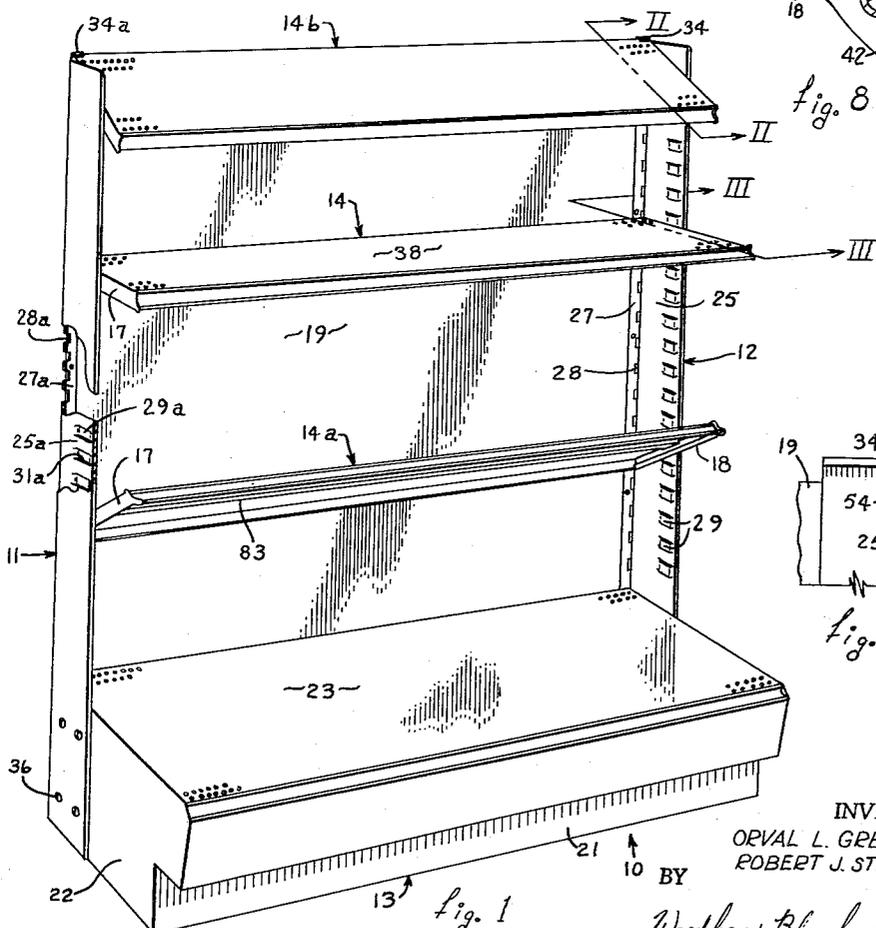


fig. 1

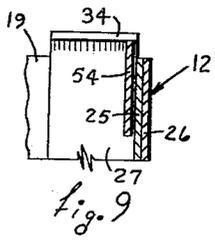


fig. 9

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STORE FIXTURE

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This invention relates in general to a shelf and standard construction and, more particularly, to adjustable mounting structure whereby the shelf can be supported upon and between a pair of said standards in a variety of locations lengthwise of said standards and whereby said shelf can be arranged in a variety of different positions at each such location.

There are a great many uses for inexpensive and lightweight shelving constructions which are easily adjustable, durable and pleasing in appearance. One of the most common uses is often found in the form of a store fixture which is used to display merchandise. Accordingly, applicants' shelf and standard construction is herein disclosed in terms of a unit particularly suited for displaying merchandise. However, it will be recognized and understood that such disclosure is for illustrative purposes only since such fixtures are equally adaptable to other uses.

Merchants in general, and especially those who operate grocery drug or variety stores, have found that changes in shelving and display arrangements are very effective in maintaining, or increasing, sales primarily because such changes produce a different appearance in the store. These changes are usually best made within the shelving units themselves, as by changing the shelf positions, but are often made, where possible, by changing the positions of the entire units. Needless to say, it is essential that this type of change be made with a minimum of effort and cost to the merchant.

While earlier shelving construction of all kinds was usually of a permanent nature, often of the so-called "built-in" type, more recent developments in this field have brought about various forms of metal shelving of which some designs are at least partially adjustable. However, in many of these units the adjustability is limited to mere vertical adjustment of the shelves and even where adjustment of the angular position of the shelves is possible it is often difficult to make, sometimes requiring at least partial disassembly of the shelving unit:

In a continuing effort to improve the design of equipment of this sort, it has been recognized that such shelving units must have a wide diversity of possible specific arrangements, particularly in the vertical as well as angular adjustment of the shelves both with respect to each other and with respect to the supporting means, and must have an attractive appearance in any of their adjusted positions. It is further necessary while providing such versatility and attractive appearance, that the shelving construction be maintained at an inexpensive cost level and that the changes to be made in the shelving units be possible without the presence of skilled mechanical help and without the need for special tools.

It is further desirable, for reasons of convenience, that such a shelving structure include a basic unit which contains, as initial elements, all of the parts which are necessary to provide the various arrangements. That is, the basic unit can be used both in a conventional shelving arrangement as well as in unusual shelving arrangements without special accessories and parts which would otherwise need to be stored and could be lost when not in use.

To meet these needs, the shelving construction contemplated by this invention includes shelves which are both adjustable upon, and removable from, the standards

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for supporting them. In doing this, it is essential that the means for mounting the shelves upon the standards be such that no shelf will be dislocated from its selected position by a load placed thereon regardless of the point at which the load is placed. That is, each shelf must be capable of supporting isolated loads at any point thereon without being tipped, loosened or otherwise dislocated from its desired position by such loads. It is also important that the shelves will be held in their desired positions between the standards, with or without a load, by the force of gravity.

Accordingly, a primary object of the invention has been the provision of a store fixture including a shelf and standard construction whereby said shelf can be supported upon and between a pair of standards in a variety of locations lengthwise thereof, whereby said shelf can be arranged in a variety of positions with respect to said standards in each of said locations.

A further object of this invention has been the provision of a shelf and standard construction, as aforesaid, which provides for positive support of said shelf upon and with respect to the standards regardless of where the load is supported thereon.

A further object of this invention has been the provision of a shelf and standard construction, as aforesaid, wherein the movement and positioning of shelf with respect to the standards can be effected easily, quickly and positively, by the use at the most of only simple tools and preferably without the use of any tools whatsoever, without special instructions and without regard to the particular location of the shelf lengthwise of the standards.

A further object of the invention has been the provision of a shelf and standard construction, as aforesaid, which is simple and uniform in arrangement, which is relatively inexpensive to produce, which requires a minimum of different parts to produce a maximum of variety in their assembly and arrangements, and which can be easily adapted to both permanent and portable installations.

A further object of this invention has been the provision of a shelf and standard construction, as aforesaid, including base structure thereof, which can be fabricated entirely from metal parts, which can be shipped in a knock-down condition and assembled easily and quickly by the user at the place and time of such use.

Other objects and purposes of this invention will become apparent to persons familiar with this type of equipment upon reading the following specification and examining the accompanying drawings in which:

FIGURE 1 is an oblique view of a shelf and standard construction embodying the invention.

FIGURE 2 is an enlarged sectional view taken along the line II—II in FIGURE 1.

FIGURE 3 is a broken, enlarged, sectional view taken along the line III—III in FIGURE 1.

FIGURE 3a is a broken, enlarged, sectional view substantially as taken along the line III—III in FIGURE 1 with the shelf in a different position.

FIGURE 3b is a broken, enlarged, sectional view substantially as taken along the line III—III in FIGURE 1 with the shelf in another position.

FIGURE 4 is a broken, sectional view taken along the line IV—IV in FIGURE 3.

FIGURE 5 is a sectional view taken along the line V—V in FIGURE 4 and rotated 90 degrees counterclockwise.

FIGURE 6 is an enlarged fragment of FIGURE 3a.

FIGURE 7 is an enlarged fragment of FIGURE 3b.

FIGURE 8 is an enlarged fragment of FIGURE 2 including an information tag.

FIGURE 9 is a sectional view taken along the line IX—IX in FIGURE 2.

For convenience in description, the terms "upper," "lower," "front," "rear" and derivatives thereof will have reference to the shelf and standard construction in its normal position of operation, as appearing in FIGURE 1. The terms "inner," "outer" and derivatives thereof will have reference to the geometric center of said shelf and standard construction and parts thereof.

General Description

The objects and purposes of the invention, including those set forth above, have been met by providing a pair of similar, elongated standards which are held in an opposed, upright arrangement by any suitable means, such as by means of a base member and a back panel which extend between and are connected to said standards. The standards are preferably substantially parallel with each other. The standards are provided with supporting and positioning structure which is engageable by end brackets on a plurality of shelves whereby said shelves may be supported upon and between said standards. The supporting and positioning structure of the standards as well as the corresponding brackets on the shelves are arranged so that each shelf can be supported in a variety of locations lengthwise of and perpendicular to the standards and, moreover, so that each shelf can be arranged in a plurality of positions with respect to said standards in each of said locations.

Detailed Construction

The display fixture 10 (FIGURE 1), which includes a preferred embodiment of the invention, is comprised of a pair of shelf standards or support posts 11 and 12 and a base member 13 which extends between and is secured to the lower ends of the standards 11 and 12. A plurality of shelves 14, 14a and 14b, each having end brackets 17 and 18, are removably and adjustably supported upon and between the standards 11 and 12. A back panel 19 is secured to and extends between the two standards and the base member for both bracing and enclosure purposes. This structure is preferably, but not necessarily, fabricated from metal and metal parts.

The base member 13 has a front wall 21, a pair of end walls, one of which is shown at 22, and a substantially horizontal top wall 23 in this embodiment.

The shelf standards 11 and 12 are preferably, but not necessarily, mirror images of each other. Thus, one of said standards, here the standard 12, is described in detail and such description will be understood to apply in substance to the structure of the standard 11. As shown in FIGURE 4, the standard 12 is preferably, but not necessarily, comprised of a pair of elongated, substantially rectangular plates 25 and 26 which are superimposed and rigidly secured to each other. In this particular embodiment, the two plates 25 and 26 are formed from a single, elongated sheet of material which is folded along a lengthwise line midway between the edges thereof.

The inner plate 25 has a flange 27 which is secured to, and may be integral with, the rearward free edge of said plate and extends inwardly and perpendicularly therefrom. Said flange 27 has a plurality of elongated slots 28 (FIGURE 1) arranged at uniform intervals along a line lengthwise of the flange 27 and preferably adjacent to the plate 25.

The inner plate 25 (FIGURES 1 and 2) has a plurality of uniformly spaced, inwardly projecting support members 29 aligned along a row parallel with and spaced from the flange 27. In this particular embodiment, each support member 29 is formed by lancing the plate 25 (FIGURE 2) along a pair of parallel lines 32 and 33 which are near to, but spaced from, each other. At least the upper lance line 32 extends in a direction substantially perpendicular to the flange 27. The portion of the inner plate 25 disposed between each pair of lance lines 32 and 33 is offset inwardly a short distance to form a socket or open-

ing 31 (FIGURE 4) between each support member 29 and the adjacent surface of the inner plate 25.

The intervals of space between corresponding parts of the slots 28 (FIGURE 3B) and corresponding parts of the support members 29 lengthwise of the standard 12 are preferably identical. The slots 28 are arranged to cooperate with corresponding support members 29 for the purpose of supporting and positioning a shelf 14, in a manner discussed in detail hereinafter. More specifically, an extension of the upper lance line 32 of a given member 29 passes through a slot 28 near the center thereof and an extension of the lower lance line 33 passes below the same slot. Ordinarily, the lancing and offsetting of the plate 25, whereby the support members 29 are formed, is accomplished before the plates 25 and 26 are placed in their superimposed, adjacent positions and secured to each other.

The upper end of the flange 27 (FIGURE 9) is bent forwardly into a substantially horizontal position to form the hook 34 which is spaced slightly upwardly from the upper edge of the standard 12. The hook 34 and its counterpart 34a on standard 11 (FIGURE 1) are utilized to hold the top shelf 14b in its downwardly and frontwardly sloping position at the upper ends of the standards 11 and 12.

The standard 11 (FIGURES 1) may be, and preferably is, a mirror image of the standard 12. Accordingly, parts of the standard 11 may be identified by the same numerals as those applied to the corresponding parts of the standard 12 in addition to the suffix "a." The lower end of the standard 11 may be secured to the end wall 22 of the base member 13 by means including the cap screws 36. The lower end of the standard 12 may be secured to the opposite end of the base member 13 in a similar manner. In this particular embodiment, the back sheet 19 is secured to, and extends between, the flanges 27 and 27a on the standards 12 and 11, respectively. The flanges 27 and 27a are preferably, but not necessarily, snugly against the rearward edge of the top wall 23 on the base member 13 and they extend vertically upwardly therefrom.

The shelves 14, 14a and 14b are preferably, but not necessarily, identical in basic construction, the only material difference being in the width of the shelf and the amount of bracing required to give the shelf the proper rigidity. Accordingly, the structure of the shelf 14 will be described in detail and it will be understood that such description applies in substance to the other shelves 14a and 14b shown in FIGURE 1.

The shelf 14 (FIGURE 1) includes an elongated and rectangular panel 38 which is secured to, and extends between, a pair of parallel end brackets 17 and 18 (FIGURE 2). The panel 38 has an integral, downwardly projecting flange 39 extending along its rearward edge and an integral, downwardly and forwardly curving flange 42 (FIGURE 8) which extends along the front edge of the panel 38. The flanges 39 and 42 serve primarily to brace and strengthen the front and rear lengthwise edges of the panel 38. The front flange 42 (FIGURE 8), which also serves to hold a card 47, is shaped so that it has a concave wall 43 extending between upper and lower integral lips 44 and 45, which lips project toward each other. As shown in FIGURE 8, the card 47 is wider than the straight line distance between the recesses 48 and 49, which are defined by the lips 44 and 45, respectively, and the adjacent portions of the wall 43. Thus, when the card 47 is urged into a curved position adjacent to the concave wall 43, it is held in such position by the lips 44 and 45.

The concave wall 43 (FIGURE 8) has a groove 52 preferably midway between the recesses 48 and 49 which extends lengthwise of said wall 43. The groove 42 permits the insertion of a sharp instrument, such as the tip of a pencil, between the wall 43 and the card 47 for the purpose of urging said card into an outwardly curving position as indicated at 47a (FIGURE 9) where said

card can be easily and manually grasped for removal from the flange 42.

The end brackets 17 and 18 are preferably, but not necessarily, mirror images of each other. Accordingly, the end bracket 18 (FIGURES 2, 4 and 5) will be described in detail, and such description will apply in substance to the bracket 17.

Said bracket 18 consists of an elongated, channel-shaped member having a web 53 and a pair of substantially parallel, downwardly extending, flanges 54 and 55. The inner flange 55 has a portion 57 which is bent outwardly at right angles to the remainder of the flange 57 for the purpose of strengthening the flange 55 and also for engaging brace structure as appearing hereinafter.

Both ends of the outer flange 54 (FIGURE 3) extend somewhat beyond the web 53 and inner flange 55 and the rear end 61 of flange 54 projects slightly beyond the rear flange 39 on the panel 38. The projection 61 is slidably receivable into any one of the slots 28 when the bracket 17 is substantially perpendicular to the flange 27.

Said projection 61 (FIGURES 7 and 8) has between its upper and lower edges a recess 62 which is disposed between the upper and lower, rearwardly extending fingers 63 and 64, respectively. The recess 62 is defined by the lower edge 66 of the upper finger 63, the upper edge 67 of the lower finger 64 and an inner wall 68 extending between the edges 66 and 67. Said inner wall 68 is divided into two sections which are angled with respect to each other, the lower being substantially parallel with the forward surface of the flange 27 when the shelf is in its downwardly angled (FIGURE 7) position and the upper portion thereof being approximately parallel with said flange 27 when the wall is in its upwardly tilted (FIGURE 3a) position. The slots 28 in flange 27 and the fingers 63 and 64 are arranged with respect to the lanced out portions 29 so that the lower edge 66 of the upper finger 63 engages the lower edge 69 of a slot 28 when the shelf 14 slopes downwardly and rearwardly, and the upper edge 67 of the finger 64 engages the upper edge 70 of a slot 28 when said shelf 14 slopes downwardly and frontwardly.

The outer flange 54 has a pair of spaced notches 71 and 72 (FIGURE 3) between the lengthwise ends thereof defining therebetween a downwardly extending locating blade 73 lying substantially within the plane defined by said outer flange 54. The locating blade 73 has a recess 74 in the lower edge thereof adjacent to the notch 72 which forms in the lower edge of the blade 73 a downward extending portion 76 of reduced length. Accordingly, the front edge of the blade 73 has an upper shoulder 77 which curves downwardly and rearwardly into a lower shoulder 78 provided by the front edge of the blade portion 76. The front edge of the lower shoulder 78 is spaced from the front surface of the rear flange 39 (FIGURE 3) a distance slightly less than the distance from the flange 27 to the front end of the socket 31 formed by a support member 29. Thus, when the panel 38 is in a substantially horizontal position (FIGURE 3) the portion 76 of the blade 73 will be received into the upper end of the socket 31 and the projection 61 will extend into but not materially through that one of the slots 28 which is slightly above the one of the sockets 31 in which the locating blade 73 is positioned at a given moment. Similarly, the front edge 77 of the locating blade 73 is so spaced from the wall 68 (FIGURE 3b) that when the finger 64 is extending through the opening 28a, namely, the opening next above the opening nearest the socket 31 in which the locating flange 73 of a given shelf is received, the lower part of the wall 68 will engage the inner surface of the flange 27 and the rounded edge 77 will engage the rearward surface of the forward portion 30 of the lanced out section 29. The rounded edge 77 acts as a cam to urge the bracket solidly against the flange 27. While in FIGURE 3b the bracket is shown as having an exact fit between the flange 27 and the part 30, it will be recognized that normal manufac-

turing tolerances will sometimes cause variations in each direction and accordingly the rounding nature of the edges 77 will compensate for ordinary variations and still hold the shelf 14 solidly against the flanges 27.

The rounded edges 78 provide similar take-up to compensate for manufacturing variations between the flange 27 and the part 30 in connection with the horizontal position of the shelf (FIGURE 3) and the upwardly tilted (FIGURE 3a) position of the shelf.

Inasmuch as the bracket 17 is a mirror image of the bracket 18 in this embodiment, parts of bracket 17 will be indicated herein by the same numerals applied to the corresponding parts of the bracket 18 in addition to the suffix "a." The panel 38 is secured, as by welding, to the webs 53 and 53a of brackets 18 and 17 so that the front end portions 82 and 82a of the outer flanges 54 and 54a, respectively, snugly engage the opposite ends of the curved front flange 42 on the panel 38. The front end portions of said flanges 54 and 54a are shaped to follow the contour of the front flange 42 while preventing endwise removal of a card 47 from within the flange 42, as shown in FIGURE 8.

The panel 38 is braced and strengthened by means of an elongated, channel-shaped brace member 83 having flanges 84 and 85 which are secured, as by welding, to the lower surface of the panel 38. Accordingly, the web 87 (FIGURE 4) of the brace member 83 is substantially parallel with and spaced downwardly from said panel 38. The opposite ends of the web 87, of which one appears at 88, are engaged by the edge portions 57 and 57a of the brackets 17 and 18, respectively, and are supported thereby.

As stated above, the shelves 14a and 14b may have substantially the same structure as shelf 14. Accordingly, parts thereof may be identified by the same numerals as those applied to the corresponding parts in shelf 14.

Operation

Generally speaking, the operation of the shelf and standard construction to which this invention relates will be apparent from the above description. That is, a shelf 14 can be supported upon and between the standards 11 and 12 in any one of the three positions shown in FIGURES 3, 3A and 3B at substantially any location along said standards, such location being represented by a support member 29 and an associated slot 28.

More specifically, a shelf 14 (FIGURE 3) is placed in the horizontal position by sliding the shelf between the standards just above the support member 29 and 29a on the inner plates 25 and 25a of the standards 12 and 11 at the desired level. The rear ends 61 and 61a of the flanges 54 and 54a are then inserted into those slots 28 and 28a, respectively, which are only slightly above the level of the support members 29 and 29a at said desired level. The lower end portions 76 and 76a of the blades 73 and 73a are then inserted into the sockets 31 and 31a (FIGURE 4) so that the lower shoulders 78 and 78a are bearing snugly against the front ends of the support members 29 and 29a and the rear flange 39 of the panel 38 is closely adjacent to the flanges 27 and 27a. Accordingly, the rear end of the shelf 14, when in the horizontal position, is positively prevented by the walls of the slots 28 and 28a from moving upwardly (if a load is placed at the extreme outer edge of the shelf) or downwardly and the support members 29 and 29a positively prevent downward movement of the front end of the shelf 14. The rear flange 39 and lower shoulders 78 and 78a positively prevent any appreciable amount of rearward and frontward movement of the horizontal shelf 14, with the curved character of the edges 78 and 78a, as above set forth in more detail, acting to urge the shelf 14 solidly against the flanges 27 and to compensate for manufacturing variations existing in the parts within the limit of acceptable tolerances.

In FIGURE 3a, there is shown a shelf 14a which has

been placed in a downwardly and rearwardly sloping position by inserting the upper finger 63 of the projection 61 into the slot 28, which is only slightly above the corresponding support member 29, so that the lower edge 66 of finger 63 rests upon the lower edge of the slot 28.

At this point the upper part of the wall 68 will be substantially parallel with the adjacent surface of the flange 27. The lower end portion 76 of the blade 73 is inserted into the socket 31 with the curved edge 78 acting as a cam against the forward portion of lanced out member 29 urging the lower finger 64 snugly against the flange 27 and preferably causing its point 65 to bite into flange 27. By having the point 65 bite into the forward surface of the flange 27, the rearward edge of the shelf 14a is prevented from moving upwardly and the shelf will effectively withstand a load placed on its forward edge, forwardly of the point of support of the locating blade 73 by the forward part 30 of the support member 29. Therefore, the shelf in this position also is enabled to carry a load placed thereon in any position even though the load is localized on the forward, overhanging, edge of the shelf. The bracket 18 is accordingly engaged with the standard 12 for supporting the adjacent end of the shelf 14a. In a similar manner the corresponding parts of the bracket 17 on shelf 14a (FIGURE 1) are mounted upon the standard 11. Thus, the rear end of the shelf 14a is prevented from moving upwardly or downwardly by engagement of the flange 27 by the fingers 63 and 64. Downward movement of the front end of the shelf 14a and horizontal movement of said shelf 14a are prevented in the same manner as set forth above with respect to the shelf 14 appearing in FIGURE 3.

FIGURE 3B shows a shelf 14b, in an upwardly and rearwardly sloped position. The bracket 18 of the shelf 14b has its lower finger 64 extending into the slot 28a which is the slot next above the slot 28 normally associated with the support member 29. The upper flange 63 is disposed adjacent to the inner surface of the flange 27. The upper shoulder 77 is disposed within the socket 31 so that it engages the front end 30 of the support member 29 defining said socket.

Accordingly, downward movement of the rear end of shelf 14b is prevented by the cammed surface 77 acting against the forward ends 30 of the lanced out portion 29 holding the lower part of the wall 62 snugly against the forward surface of the flange 27 immediately above the slot 28a. Upward movement of the rearward end of said shelf in response to a load placed at the forward, overhanging end of the shelf is prevented by the engagement of the finger 61 with the upper edge of the slot 28a.

The bracket 17 at the left end of the shelf 14b is mounted upon the standard 11 in substantially the same manner as set forth above with respect to the bracket 18 and standard 12.

When it becomes desirable to place the shelf 14b (FIGURES 1 and 2) in the downwardly and frontwardly sloping positions at the extreme upper end of the standards 11 and 12, where it may serve as a canopy, said shelf 14b is mounted upon said standards as shown in FIGURE 2. That is, the upper shoulder 77 is received into the socket 31 in the upper support member 29, and the upper finger 63, hence the upper edge of the projection 61, bears against the lower surface of the hook 34. The lower edge of the lower finger 64, hence the lower edge of the projection 61, bears against the front surface of the flange 27. While the shelves in each of the positions above mentioned are maintained by gravity solidly in the positions shown, it will be apparent that removal of a shelf 14 from any one of the selected positions disclosed herein can be accomplished quickly and easily merely by raising the front end of the shelf and then moving the shelf frontwardly from its position between the standards 11 and 12.

Although a particular preferred embodiment of the invention has been disclosed above in detail for illustrative purposes, it will be understood that variations or modifi-

cations of such disclosure, which do not depart from the scope of the appended claims, are fully contemplated.

What is claimed is:

1. A store fixture, comprising: a pair of upright standards which are substantially mirror images of each other, each of said standards comprising a plate and a flange extending perpendicularly from one edge of said plate lengthwise thereof; means secured to and extending between said standards and holding said standards in opposing parallel relationship with the flanges thereof lying substantially within a single plane passing along one side of said base; means defining a plurality of uniformly spaced, vertically elongated slots through each flange adjacent to the plate associated therewith; means defining a plurality of support members integral with and offset inwardly from each said plate, said support members being uniformly spaced along two parallel rows, one row on each plate, said rows being spaced from and parallel with said flanges, each support member defining an upwardly opening socket and the distance between the upper ends of said sockets being substantially equal to the distance between the centers of said slots; an elongated, substantially flat and rectangular shelf having a pair of elongated, parallel brackets secured to the opposite ends of said shelf, each bracket having a downwardly extending blade between the ends thereof slidably receivable into a said socket and a projection at one end thereof slidably and simultaneously receivable into the nearest one of said slots when said shelf is horizontal, and means defining a shoulder in said blade spaced from said flange and receivable into said socket when said end of said bracket is disposed within the slot next above said closest slot and said shelf slopes downwardly away from said flange, said brackets each having a second projection at their respective said one ends extending in the same direction as and spaced upwardly from said first-named projection, whereby said second projection may extend through said nearest one of said slots and said first-named projection will bear against the portion of said flange immediately below said slot and thereby permit said shelf to slope upwardly away from said flange.

2. The device defined in claim 1 wherein said first-named projection has a point thereon bearing against said flange which will imbed itself within said flange sufficiently to substantially prevent upward movement of the end of said bracket adjacent to said flange upon the imposition of a load on said shelf at a point on the opposite side of said support members from said projections when said shelf is sloping upwardly away from said flanges.

3. A store fixture according to claim 1 in which the flanges each include an extension disposed above the upper end of each standard and bent substantially at a right angle toward the rows of support members for engaging said second projections on said brackets whereby said shelf slopes downwardly from said extension.

4. A store fixture according to claim 1 including means defining a further shoulder in said blade, said further shoulder being offset downwardly from the first-mentioned shoulder and being located closer to said flange, said further shoulder being receivable into said socket when said shelf is horizontal or slopes downwardly toward said flange, both of said shoulders having an arcuate edge engageable with said socket whereby the shelf is urged toward the flange.

5. An adjustable shelving structure, comprising: two spaced apart standards, each having a series of vertically spaced slots near its rear edge; a series of vertically spaced support means on each of said standards spaced forwardly from said slots; a shelf extending between said standards and having a bracket at each end thereof which engages said support means so that the shelf is supported thereby, said bracket including means for alternately supporting said shelf in a horizontal position, an upwardly inclined position and a downwardly inclined position; a first projection at the rear edge of the bracket, said first projection being slidably receivable into the nearest one of said

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slots when the shelf is in a horizontal position, said first projection including wall means extending transversely through and engageable with the lower edge of said nearest slot when said shelf is in an upwardly inclined position to prevent downward movement of the rear end of said shelf; a second projection at the rear edge of said bracket extending in the same direction as and spaced downwardly from said first projection, said second projection being slidably receivable into the nearest one of said slots when said shelf is horizontal, said second projection including wall means extending transversely through and engageable with the upper edge of the slot next above when the shelf is in a downwardly inclined position to prevent upward movement of the rear end of said shelf.

6. An adjustable shelving structure according to claim 5 in which each standard has a flange extending toward the other standard and said slots are provided in said flange; means defining a recess between said projections, said recess having an edge comprising an upper edge portion and a lower edge portion, both of which are inclined

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toward the forward edge of the shelf and which define an obtuse angle, the upper edge portion being substantially parallel with and adjacent said flange when said shelf is in its upwardly inclined position and the lower edge portion being substantially parallel with and adjacent said flange when said shelf is in its downwardly inclined position.

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