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[54] **DISPLAY TABLE**
21 Claims, 10 Drawing Figs.

[52] U.S. Cl..... 312/140.4
 [51] Int. Cl..... A47b 96/18
 [50] Field of Search..... 312/140.4

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ABSTRACT: A display table having compartmented sections on its top surface. Partitions, which are preferably transparent, are used to form the sections on the top of the table. A novel bracket is provided for securing the partitions in place. The bracket is formed of plastic and includes a pair of spaced legs in which the partition will be held. The base of the bracket includes a nib having a camming surface. The base is inserted in the track with the nib being received in a groove within the track, thereby resiliently holding the bracket in place.

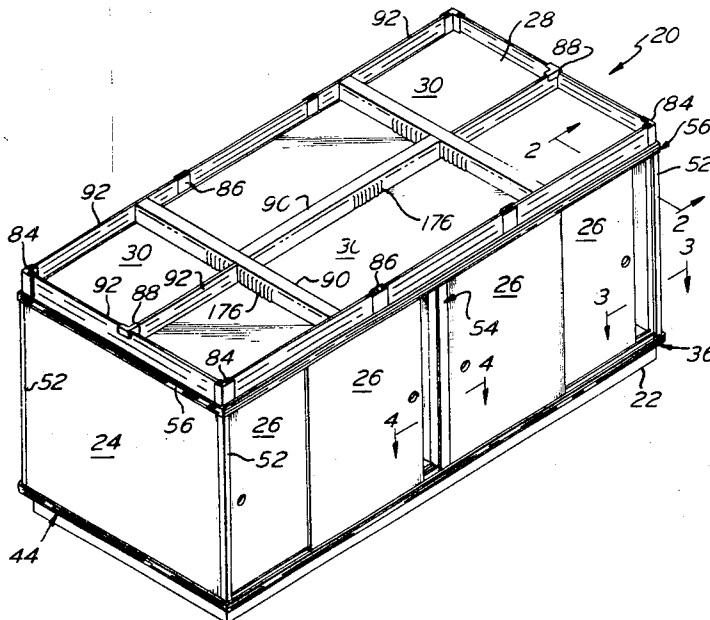


FIG. 1

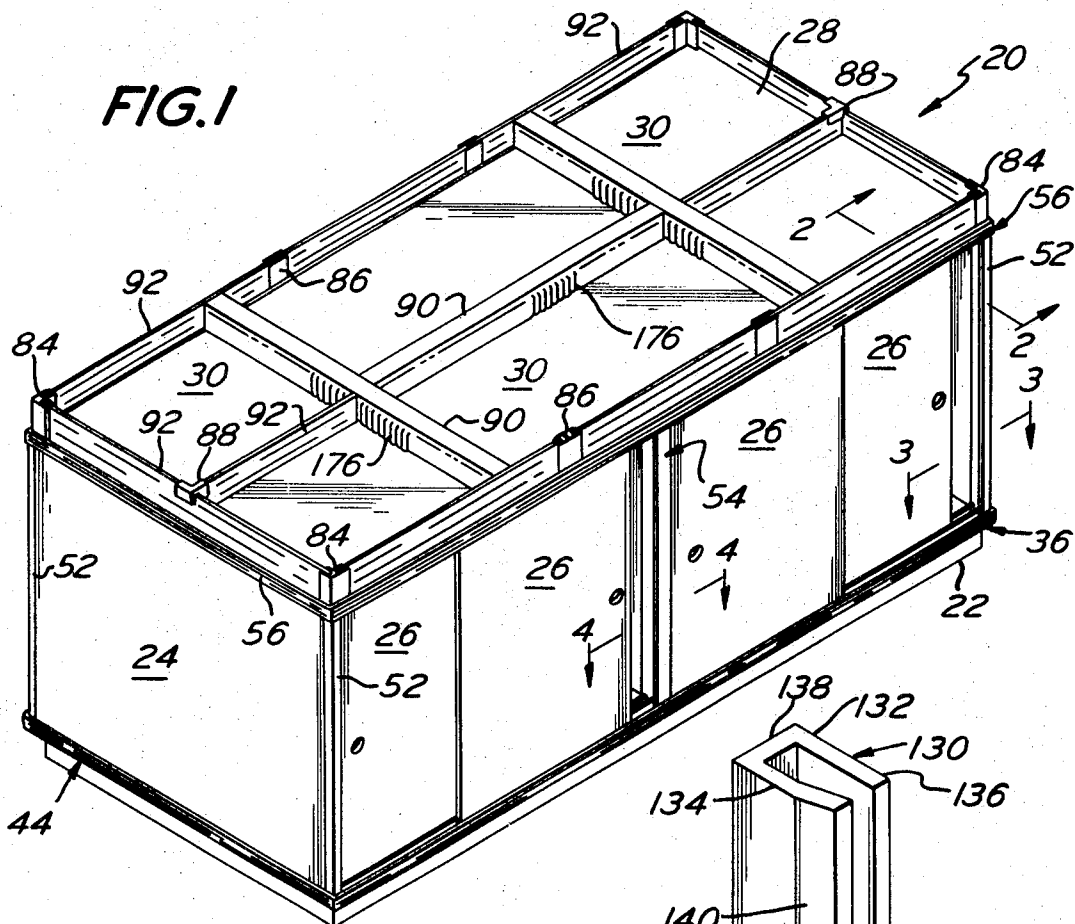


FIG. 5

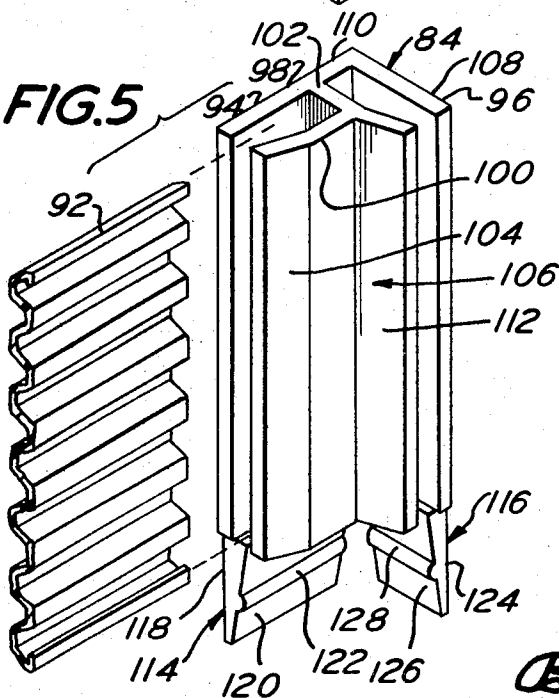
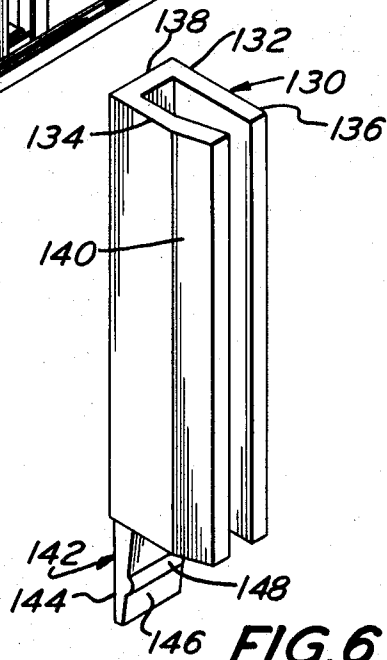


FIG. 6



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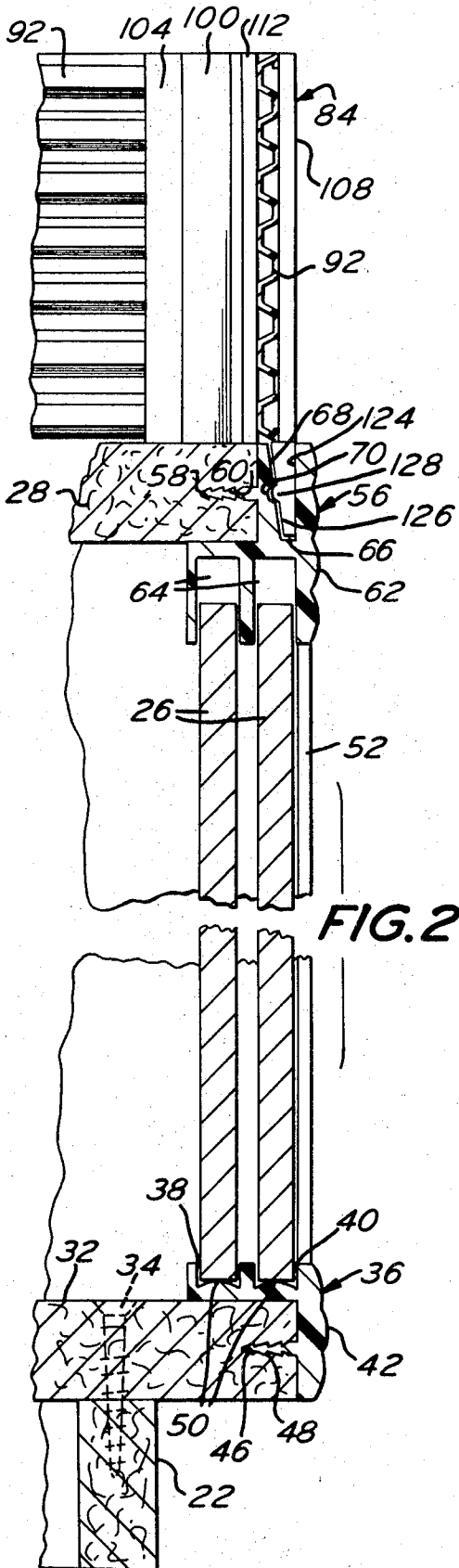


FIG. 2

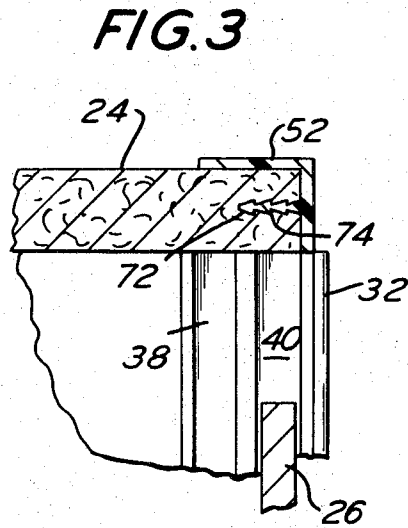


FIG. 3

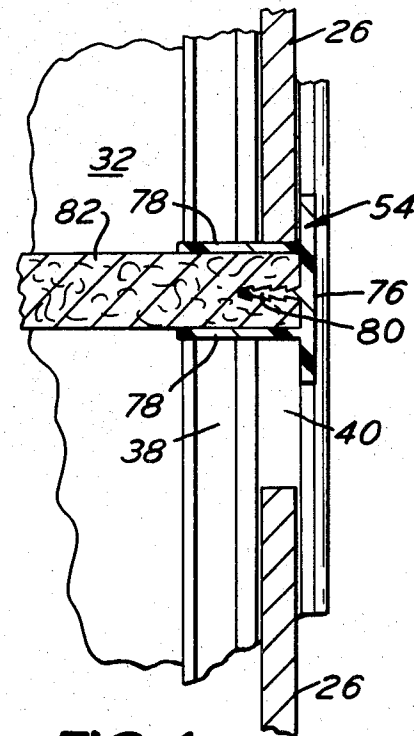


FIG. 4

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DISPLAY TABLE

This invention relates to a display table, and more particularly, to a display table wherein the top surface is divided into a plurality of compartments or bins through the use of movable partitions.

The present method of forming partitions in the tops of display tables is to utilize transparent sheets of glass that are held in place by metal brackets. Although the metal brackets are generally chrome plated, they are not very attractive in appearance, and their use is solely functional, rather than aesthetic. Another problem with the use of the metal brackets is that the adjustability of the position of the brackets is limited. Thus, the brackets are generally only usable by inserting pins in the bottom of the brackets into holes which are spaced along the length of tracks secured on the top of the table surface. The tracks are also unsightly in appearance, and usually dirt will collect in the holes formed in the tracks, thereby adding to the problem.

The display table of this invention utilizes tracks and brackets that are formed entirely of plastic. The plastic can be pigmented in order to have the tracks and brackets color coordinated with the remainder of the table. Furthermore, various ornamental surfaces can be molded onto the tracks and brackets to add to the pleasing appearance of the tables.

Structurally, the display table of this invention varies from the prior art display tables in that the tracks provide a continuous groove which is easily cleaned. The brackets can be snapped into the tracks at any desired position, at which they are frictionally held in place. Means are provided on the brackets for sliding them within the tracks to adjust the position of the brackets, thereby permitting the ready adjustment of the positioning of the partitions on the table top.

It is therefore an object of this invention to provide a novel display table.

It is another object of this invention to provide a display table having partitions on the upper surface thereof, with the position of the partitions being adjustable through the utilization of a novel system of tracks and brackets.

It is a further object of this invention to provide a novel bracket for use in holding partitions on a display table.

These and other objects of this invention are accomplished by providing a bracket for securing partitions comprising a substantially U-shaped member, said member including a pair of spaced legs, a base projecting downwardly from said U-shaped member, said base having one surface thereof tapering outwardly in going from the bottom toward the top of said base, and a nib on said tapered surface.

Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIG. 1 is a prospective view of the display table of this invention;

FIG. 2 is an enlarged sectional view taken along the line 2-2 of FIG. 1;

FIG. 3 is an enlarged sectional view taken along the line 3-3 of FIG. 1;

FIG. 4 is an enlarged sectional view taken along the line 4-4 of FIG. 1;

FIG. 5 is an exploded perspective view showing a corner bracket embodying this invention and a partition insertable in the corner bracket;

FIG. 6 is a perspective view of a second bracket embodying this invention;

FIG. 7 is an exploded perspective view of a third bracket embodying this invention and a section of the track molding utilizable in the display table of this invention;

FIG. 8 is a perspective view of a clip utilizable in the display table of this invention;

FIG. 9 is a perspective view showing the use of the clip of FIG. 8 on two partitions; and

FIG. 10 is a perspective view of a modification of the track of this invention.

Referring now in greater detail to the various figures of the drawings wherein like reference characters refer to like parts, a display table embodying the present invention is generally shown at 20 in FIG. 1. Display table 20 basically comprises a base 22, sidewalls 24, front sliding doors 26, a top surface 28 and a plurality of bins or compartments 30 formed on the top surface.

The structure of the table 20 is best seen in FIG. 2. As seen therein, a floor 32 is secured to the base 22 by any suitable means such as screws 34. The top surface 28 is supported by vertical posts within the walls of the table. The specific structure for forming the table forms no part of this invention and any supporting means known to the art can be used. Additionally, the table can be constructed of any materials known to the art, such as wood, fiberboard, or a combination of the two. A lower track 36 is mounted on floor 32 at the front edge thereof. Track 36 includes a first channel 38, a second channel 40 and a front ornamental surface 42. As seen in FIG. 1, track 36 extends along the entire length of table 20. Likewise, a similar track 44 will extend along the sides 24 of the table and along the back of the table. A tongue 46 having protuberances 48 extends for the entire length of track 36. The tongue 46 is received within a groove formed in floor 32, and is frictionally held in place by engagement of the protuberances 48 with the top and bottom surfaces of the groove. This in turn holds the lower track 36 in place. Raised arcuate portions 50 are formed in channels 38 and 40 to facilitate the sliding of doors 26 in the channels. Thus, there will be less frictional contact between the bottom edges of the doors and the top surface of the arcuate portions 50 than there would be if the bottoms of the channels were flat.

Ornamental corner posts 52 are positioned at each of the four corners of display table 20. A center post 54 is positioned between each pair of sliding doors 26. An upper track 56 (FIG. 2) is secured to the top surface 30 of the display table by a tongue 58 having protuberances 60. Accordingly, the tongue 58 is frictionally held in a groove in top surface 28 by the protuberances. As seen in FIG. 1, the top track 56 will extend entirely around the four sides of the table. The top track 56 also includes an ornamental rib pattern 62 on its outer surface, and a pair of dependent channels 64. Doors 26 have their top edges received in channels 64, and are slidable between the lower channels 38 and 40, and the upper channels 64.

Upper track 56 includes a groove 66 that extends the full length of the track. As seen in FIG. 2, the groove includes one vertical wall and a second inclined wall that tapers toward the vertical wall in going from the top to the bottom of the groove. The inclined wall 68 includes an arcuate notch 70 that extends for the full length of track 56.

Referring to FIG. 3, it is seen that each corner post 52 is substantially L-shaped. The corner post includes a tongue 72 having protuberances 74. The tongue 72 is received in a groove in sidewall 24.

Referring to FIG. 4, it is seen that center post 54 includes a vertically extending front face 76 having a pair of vertically extending flanges 78 projecting perpendicularly therefrom, and toward the interior of table 20. A tongue 80 projects inwardly from front face 76 and is received within a groove in central divider wall 82 of the display table.

Although only one sidewall 24 and front wall of the display table have been shown in FIG. 1, it is to be understood that the other sidewall 24 and the backwall of the display table are identical in structure to the shown sidewall and front wall, respectively. Accordingly, sliding doors 26 are also provided on the rear wall of the display table. However, if desired, the backwall of the display table can be a solid sheet of wood or fiberboard; rather than sliding doors.

The compartments 30 formed on the top surface of the table 20 are formed through the use of corner brackets 84, connecting brackets 86, clips 88, divider bars 90 and partitioning sheets 92. As seen in FIG. 5, each corner bracket 84 comprises a pair of U-shaped members 94 and 96 projecting at right angles to each other. U-shaped member 94 includes a pair of legs 98 and 100 and a bridging section 102. Leg 100 includes a lip 104 that is inclined toward leg 98.

U-shaped member 96 includes a pair of legs 106 and 108, and a bridging section 110. Leg 106 includes bridging section 102 of U-shaped member 94 and lip 112 that is inclined toward leg 108. U-shaped member 94 includes a base 114 at the bottom thereof and U-shaped member 96 includes a base 116 at the bottom thereof. Bases 114 and 116 lie in planes which project at right angles to each other. Base 114 includes an outer vertical wall 118 and an inner wall 120 that is inclined toward wall 118 in going from its top to its bottom. A nib 122 having a rounded outer surface is formed on inclined wall 120.

Base 116 is similar in structure to base 114 and includes an outer vertical wall 124, an inner inclined wall 126 and a rounded nib 128 formed on wall 126. The entire bracket 84 is a unitary molded item and all of the elements thereof form an integral unit.

A portion of a partitioning sheet 92 is shown in FIG. 5. As seen therein, sheet 92 is a corrugated plastic sheet. The corrugations add attractiveness and rigidity to the partition 92. Instead of having the corrugations, sheet 92 can be completely planar, or can be planar with longitudinally extending reinforcing ribs on its outer surface.

In FIG. 6 another bracket usable in carrying out this invention is generally shown at 130. Bracket 130 includes a U-shaped member 132 having legs 134 and 136, and a bridging section 138. Leg 134 includes an inwardly projecting lip 140. A base 142 projects downwardly from bridging section 138, and includes a vertical leg 144, an inclined leg 146, and a rounded nib 148 on the inclined leg.

In FIG. 7, a connecting bracket 86 is shown. As seen therein, connecting bracket 86 includes a pair of U-shaped members 150 and 152. U-shaped member 150 includes lip 160 that is inclined toward leg 154. In bracket 86, U-shaped members 150 and 152 are aligned, and have a bridging section 158 in common. U-shaped member 152 also includes a pair of legs with an inwardly projecting lip on one of the legs. Bracket 86 also includes a base 162 having a vertical outer wall, an inclined inner wall and a nib on the inclined inner wall.

In FIG. 8, a clip 88 is shown. Clip 88 basically comprises a pair of U-shaped members 164 and 166 which project at right angles to each other. U-shaped member 164 includes legs 168 and 170, and bridging section 172. Leg 170 includes a lip 174 that is inclined toward leg 168. U-shaped member 166 is identical in structure to U-shaped member 164, and includes a pair of legs, with one of the legs having a lip inclined toward the other and a bridging section. Clip 88 is a unitary molded item.

The use of clip 88 is shown in FIG. 9. As seen therein, the clip will hold one partitioning sheet 92 at right angles to a second partitioning sheet 92 on the display table. The inwardly inclined lips, such as lip 174, resiliently hold the partitioning sheets in place.

Divider bars 90 (FIG. 1) comprise a solid base, such as wood, having a plastic coating on its outer surface. The plastic coating can be color matched to the brackets used on the top surface of table 20. The entire length of each lateral side of a divider bar 90 is provided with a plurality of outwardly extending, spaced lips 176. Lips 176 are spaced a distance slightly less than the thickness of partitioning sheets 92, whereby the partitioning sheets are resiliently held between a pair of lips.

The top surface of display table 20 is assembled by first applying the divider bars 90 in the desired configuration. Thereafter, the corner brackets 84 and the connecting brackets 86 are inserted into the top track 56. The manner of insertion is illustrated in FIG. 7. Thus, as seen therein, the vertical wall 162 of the base of the bracket is slid into contact with the vertical wall of the channel 66 formed in the top track 56. The tapering wall of the base aids in the insertion of the base into the channel of the track. The nib 178 of the base acts as a cam surface, and forces the walls of the channel apart until the nib is snapped into the arcuate notch 70 of the track. This holds the bracket resiliently in place. The bracket can then be slid to any position along the track by applying a lateral force against the upper part of the bracket. The fric-

tional engagement between the base 162 and the channel 66 of the top track is such as to provide a sufficient force to hold the bracket in place against inadvertent movement but sufficiently light to permit the deliberate sliding of the bracket in the track to a desired position. The engagement of nib 178 in notch 70 serves as a guide for the sliding movement of the bracket.

The corner brackets 84 are snapped into a corner where two tracks meet in the same manner as the connecting bracket 86 is inserted. Thus, the bases 114 and 116 of the corner bracket serve to spread the channels of the meeting top tracks 56 in order to permit the engagement of the nibs 122 and 128 in notches 70. The assembled condition of a corner bracket 84 in the top track is shown in FIG. 2. Here again, the engagement of the nibs in the notches 70 is sufficient to resiliently hold the corner brackets in place against inadvertent removal. However, whenever it is desired to remove any of the brackets, they can be removed by lifting the brackets vertically from the associated tracks. In this connection, the rounded top surface of the nibs serves as a cam against the rounded notches of track 56, thereby permitting the spreading of the walls of the channels to facilitate the removal of the brackets.

After the brackets and the divider bars 90 have been placed on the table top 28, the partitions 92 are added. Referring to FIG. 5, it is seen that a partition 92 is placed between the legs 98 and 100 of a corner bracket 84. The inclined lip 104 provides a resilient grip on the partition sheet 92, and resiliently holds it in place. The partition sheets are easily inserted between any pair of legs on adjacent brackets, in the same manner. As seen in FIG. 1, clips 88 are used for securing a partition sheet 92 between an outside partition sheet and a divider bar 90. Thus, one end of the partition sheet 92 is held by one of the U-shaped members of clip 88, as seen in FIG. 9, and the other end of the partition sheet is held between a pair of adjacent lips 176 on the divider bar 90.

Utilizing the divider bars, partition sheets and brackets of this invention, innumerable compartments of varying sizes and shapes can be formed on the top of the table 20. The brackets and partition sheets can all be color coordinated or harmonized, and an attractive appearance can be obtained. The bracket of FIG. 6 can be used in place of a clip 88. Thus, the bracket of FIG. 6 will be used for securing one end of a partition sheet at a position other than a corner.

Other modifications can be made in the brackets of this invention while still embodying the concepts of this invention. For instance as seen in FIG. 7, the connecting bracket 86 can be further modified by providing a third U-shaped member projecting perpendicularly outward from the two aligned U-shaped members shown. Thus, a T-shaped bracket will be formed. The T-shaped bracket can be used for connecting two aligned partition sheets, and a third partition sheet which will have its other end secured between two lips of a divider bar 90. The T-shaped bracket can be used to replace a clip 88 when two short aligned partition sheets are used.

The brackets of this invention are preferably molded from a resilient plastic. Any of the molding techniques known to the art can be used, but injection molding is preferred. The preferred plastic for making the brackets is acrylonitrile-butadiene-styrene (A.B.S.). Other plastics that may be used are high-density polyethylene, polystyrene, polyvinyl chloride, polycarbonates and acrylic resins.

The tracks, corner posts 52, and center post 54 are also molded from the same plastics as the brackets. However, the tracks are molded by an extrusion process, rather than injection molding. Here again, however, any of the molding techniques known to the art can be used in making the tracks.

The partition sheets 92 are also molded from plastic, preferably by an extrusion process. The partition sheets are preferably transparent, but can be made from a pigmented plastic. One preferred plastic for the partition sheets is polystyrene, but any of the plastics used to make the brackets or glass can also be used to make partition sheets. The plastic

coating on the divider bars 90 is also of the same plastic as the plastic used for the brackets. If desired, all of the plastic materials used in the display table of this invention can be pigmented.

In FIG. 10, a modified embodiment of the top track is generally shown at 180. Top track 180 can be used in place of the top track 56. This track includes a horizontal lower surface 182, with a channel 184 formed on the surface 182. Channel 184 includes a longitudinally extending notch 186. A tongue 188 projects outwardly from the inner wall of channel 184, and is received within a groove in table top 28.

An inclined wall 190 extends longitudinally along the entire outer surface of track 180. A lip 192 projects downwardly from the top of wall 190 and extends for the entire length of the wall. A lip 194 extends upwardly from the bottom of wall 190 and also extends for the entire length of the wall. The purpose of wall 190 and its associated lips 192 and 194 is to provide a locking channel for placing prices for the merchandise in the adjacent compartments formed on the table 20. Thus, resilient plastic number cards are easily inserted between the lips 192 and 194 by flexing them and then seating them between the lips. In this way, the price for any given item of merchandise can easily be ascertained from the associated price placed on the wall 190.

The modified top track 180 is used in the same manner as track 56 insofar as the insertion of the brackets is concerned. The principle modification is the provision of the price channel. The track 180 is preferably molded by an extrusion process, and can be formed from the same plastic as the other tracks.

One feature that all of the brackets of this invention have in common is that they are all unitary. Thus, the U-shaped members of the brackets are unitary with the bases of the brackets, and all of the brackets are integrally molded. The user of the brackets need make no further adjustments in the brackets in order to use them, as they are complete and ready to use in their molded form. The adjustment of the brackets as to position on the table is easily accomplished by the sliding of the brackets in their associated tracks.

Without further elaboration, the foregoing will so fully illustrate my invention, that others may, by applying current or future knowledge, adopt the same for use under various conditions of service.

What We claim as the invention is:

1. A bracket for securing partitions comprising a substantially U-shaped member, said member including a pair of spaced legs, a base projecting downwardly from said U-shaped member, said base having one surface thereof tapering outwardly in going from the bottom toward the top of said base, and a nib on said tapered surface.

2. The bracket of claim 1 wherein said base and said U-shaped member are unitary, and molded from a plastic.

3. The bracket of claim 2 wherein said plastic comprises acrylonitrile-butadiene-styrene.

4. The bracket of claim 1 wherein a pair of U-shaped members is provided.

5. The bracket of claim 4 wherein said pair of U-shaped members is aligned and an elongated base projects downwardly from both of said U-shaped members.

6. The bracket of claim 4 wherein said U-shaped members lie in planes perpendicular to each other, with a base projecting downwardly from each of said U-shaped members, and said bases lie in planes perpendicular to each other.

7. The bracket of claim 1 wherein the forward portions of said space legs are spaced a smaller distance than the rear portions of said spaced legs, whereby the forward portions are adapted to resiliently grasp one of said partitions.

8. The bracket of claim 7 wherein one of said legs includes a forward lip that is angled toward the other of said legs thereby reducing the spacing between the legs at the forward portions thereof.

thereof.

9. The bracket of claim 1 wherein said nib has a camming surface thereon to enable the insertion of said bracket into a channel formed by a resilient material, whereby the camming surface on said nib will spread the walls of the channel to facilitate the insertion and removal of the bracket from said channel.

10. The bracket of claim 9 wherein the camming surface on said nib is rounded.

11. In combination, a track and a bracket secured in said track, said track comprising an elongated channel having a longitudinally extending notch which extends the length of said channel, said channel having a pair of walls, with said notch being formed in one of said walls, said bracket comprising means for securing a partitioning sheet therein, and a base depending from said securing means, said base being positioned in said channel, and said base having a nib which is received in said notch.

12. The combination of claim 11 wherein said securing means comprises a U-shaped member having a pair of convergent legs, with said partitioning sheet adapted to be received between said convergent legs and resiliently held therebetween.

13. The combination of claim 11 wherein said nib has a camming surface thereon to enable the insertion of said bracket into said channel, whereby the camming surface of said nib will spread the walls of said channel to facilitate the insertion and removal of the bracket from said channel.

14. The combination of claim 13 wherein said camming surface is rounded, and said notch is concave and has a rounded surface which complements the rounded surface of said nib.

15. The combination of claim 11 wherein said base is slidably mounted in said channel, but is frictionally held within said channel by a force sufficient to prevent the inadvertent movement of said bracket relative to said channel, which force is sufficiently small to permit the intentional sliding of said base in said channel.

16. The combination of claim 11 wherein said base is slidably mounted within said track and the engagement of said nib in said notch serves as a guide for the sliding movement of said base within said track.

17. The combination of claim 11 wherein said track and said bracket are molded from a plastic.

18. A display table comprising a table having a top thereon, said top being divided into a plurality of compartments, a track mounted on said table top, said track comprising an elongated channel having a longitudinally extending notch which extends the length of said channel, said channel having a pair of walls, with said notch being formed in one of said walls, a plurality of brackets secured in said track, each of said brackets comprising means for securing a partitioning sheet therein, and a base depending from said securing means, said base being positioned in said channel, said base having a nib which is received in said notch, and a plurality of partitioning sheets secured in said brackets, said partitioning sheets forming said compartments.

19. The display table of claim 18 and further including a plurality of divider bars on said top, said divider bars having a plurality of spaced legs, and at least one additional partitioning sheet having one end received between a pair of one of said divider bars.

20. The display table of claim 19 wherein the other end of said additional partitioning sheet is received in a clip, said clip having a pair of convergent legs which resiliently receive said additional partitioning sheet.

21. The display table of claim 18 wherein some of said brackets are slidably mounted in said tracks, whereby the position of said brackets may be adjusted, thereby adjusting the size of the compartments on said table top.