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Macioge et al.

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[54] **MODULAR SHOWCASE**

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[73] Assignee: **Cantebury Tales, Inc.,** Washington, D.C.

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[52] **U.S. Cl.** **312/245,** 312/111, 312/140, 312/247, 312/257

[51] **Int. Cl.**.....**A47b 67/02,** A47f 5/08, A47f 3/00

[58] **Field of Search**.....312/245, 247, 257, 140; 182/150; 52/39, 644, 243, 238; 248/317 T; 5/10; 108/149; 211/113, 114

[56] **References Cited**

UNITED STATES PATENTS

472,469	4/1892	Baum	312/247
2,475,079	7/1949	Clouse et al.	312/257 SK
2,528,238	10/1950	McDaid	108/149
2,560,513	7/1951	Lyon	248/320
2,632,620	3/1953	Hurley	248/343
2,936,988	5/1960	Bodian	248/228
3,043,642	7/1962	Nelson et al.	312/111
3,104,737	9/1963	Fork	52/39 X
3,224,823	12/1965	Schulze	312/111
3,411,735	11/1968	Hurd	211/113 X
3,560,067	2/1971	Stieg	312/247

FOREIGN PATENTS OR APPLICATIONS

1,153,330	3/1958	France	312/257 SK
60,309	11/1954	France	312/257 SK

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[57] **ABSTRACT**

A suspended showcase is developed from modular components including telescoping pole supports that project from a fixed structure such as a ceiling. Frame members key into slots that are formed in the pole supports, and a base panel is lowered into the frame. Side glass panels slide into channels formed in the frame members thereby completing the suspended showcase.

7 Claims, 4 Drawing Figures

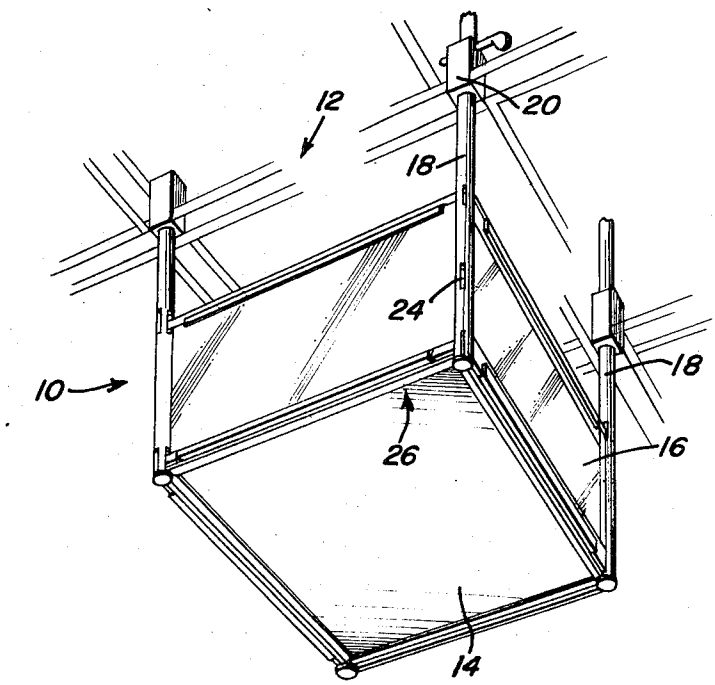


FIG. 1

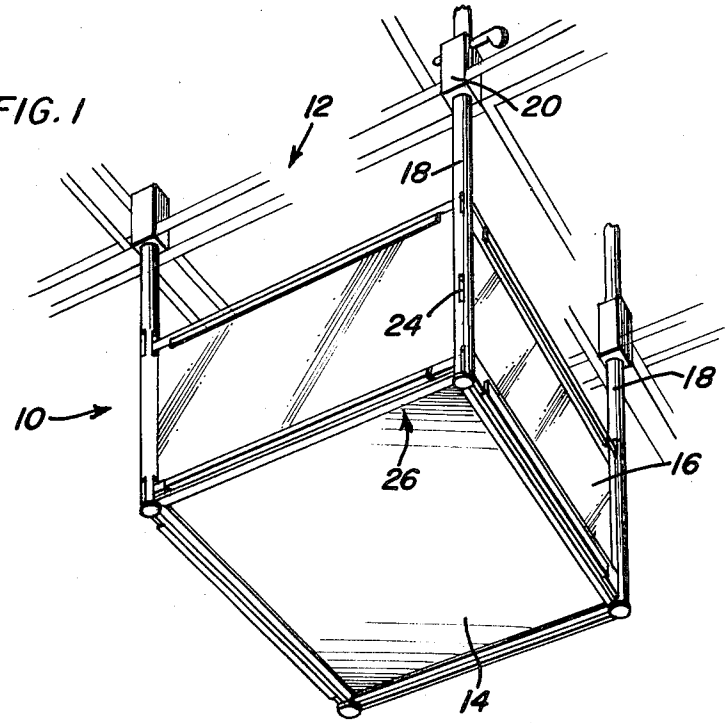

12
20
18
24
18
10
26
16
14

FIG. 2

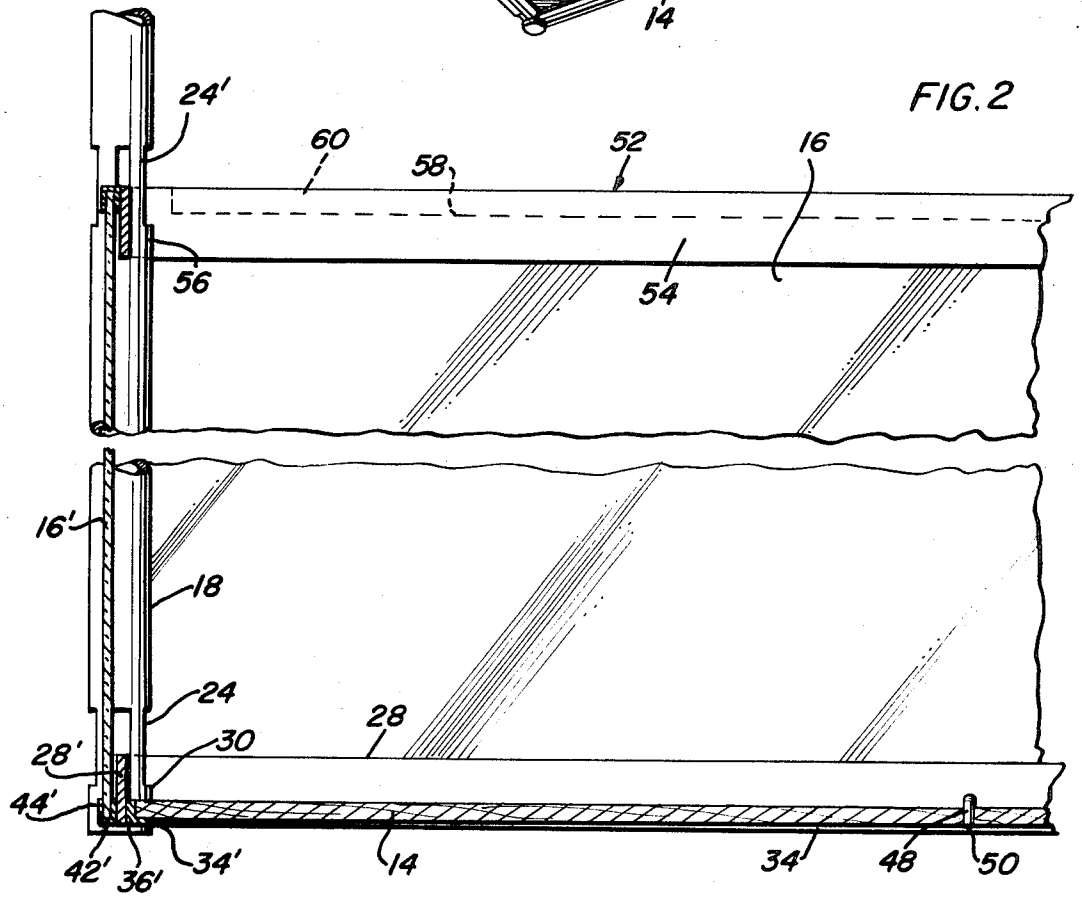
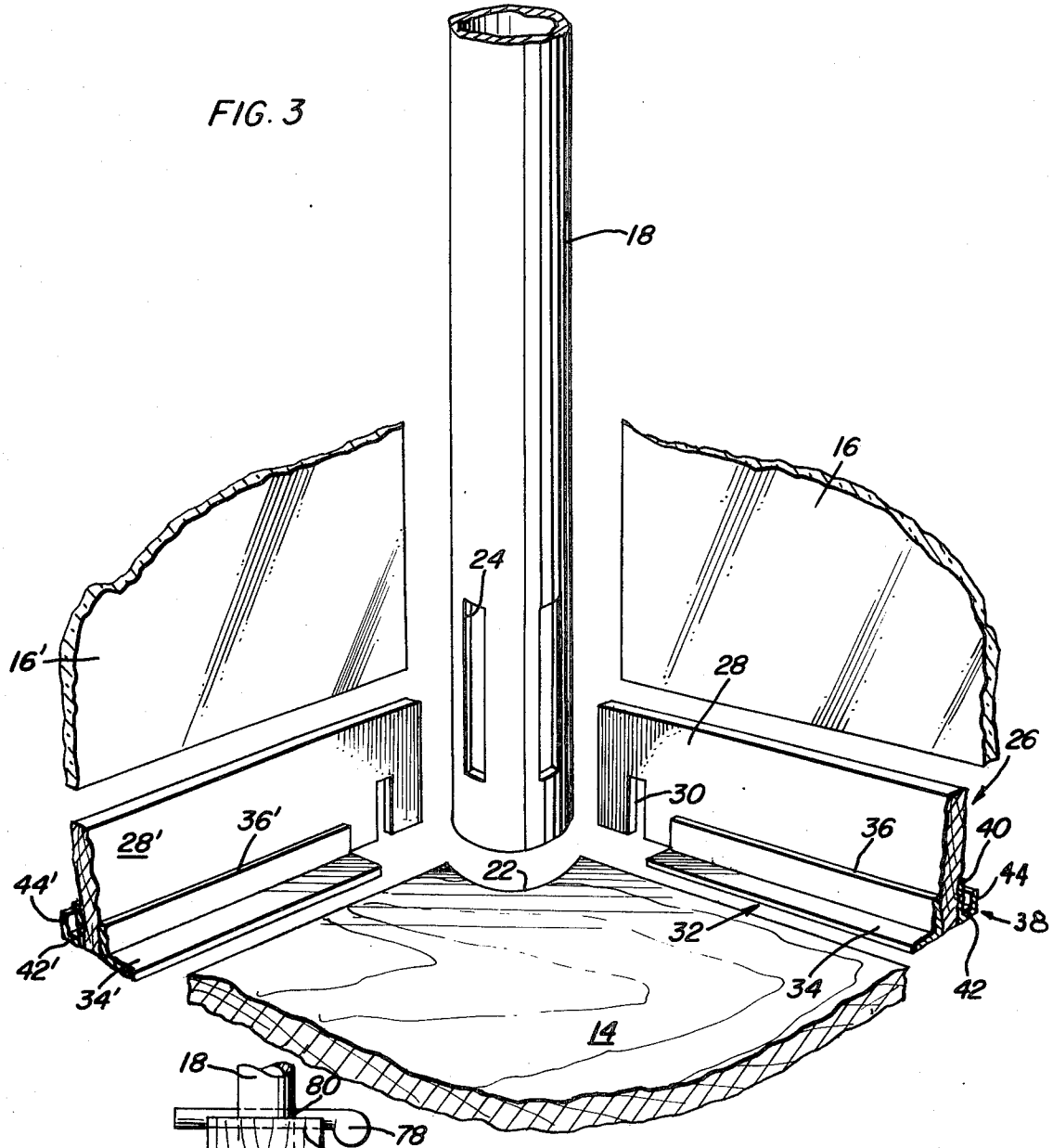

24'
60
58
52
16
56
54
16'
18
24
28
28'
30
44'
42'
36'
34'
14
34
48
50

FIG. 3


18
16
16'
24
28
26
30
28'
36'
36
40
44'
22
44
38
32
42'
34'
34
42
14

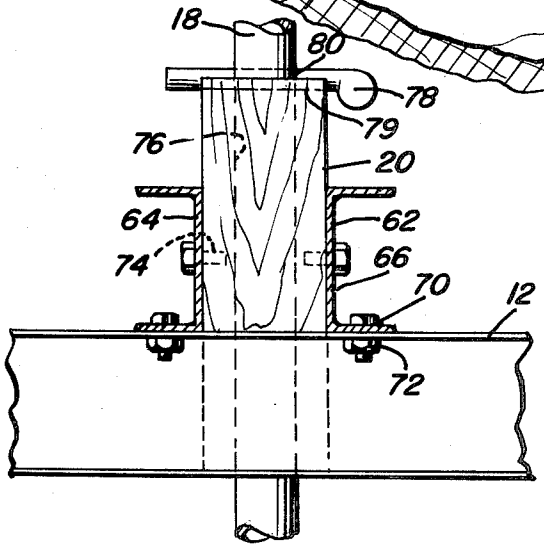

18
80
78
79
76
20
64
62
74
66
70
12
72

FIG. 4

MODULAR SHOWCASE

FIELD OF THE INVENTION

The present invention relates to showcase construction, and more particularly, to a modular showcase design that is suspended from telescoping support poles.

THE PRIOR ART

Attractively exhibited merchandise in the entry area of a shop demonstrates to the passing patron the type of merchandise carried by the proprietor. Psychologically, an effective showcase of goods attracts the passing customer and increases the likelihood of his shopping there.

To date, showcase designs have been conventional. Generally, they consist of large showcase windows filled with a display of goods such as carried in stock. The fixed showcase design offers little flexibility in creating different environments at the store entrance. The showcase itself offers no dramatic appeal, and therefore, a window dresser must rely upon the arrangement of merchandise to attract the customer. As a result, needless expenditures for space and expensive window dressing are encountered by the proprietor whose shop has a conventional store front.

Even with interior merchandise displays, conventionally, a flat fixed table or rack is employed to attract the customer's attention. The position of the table or rack remains fixed and offers a frequent shopper no variation. Accordingly, the shopper is less likely to become attracted to stocked merchandise.

BRIEF DESCRIPTION OF THE INVENTION

The present invention takes into consideration the fact that a good deal of dead space is present in most shops in such areas as ceilings, basements, or behind vertical walls. This unused space situation resembles that of theater stages. The present invention was inspired by recognizing that theaters make use of free space above a stage for movable props. In the theater industry, this free space above the stage is referred to as "fly-space." The concept of the present invention is to utilize the "fly-space" of a store to house hardware for a modular showcase that can be constructed to appear suspended. Thus, telescoping support poles can be lowered into the interior of a store, and modular members can be removably fastened thereto until a showcase is developed. The "fly-space" that is above, below, or adjacent the store shopping area is fitted with a plurality of journal blocks in a matrix pattern thereby enabling the removable insertion of telescoping poles at a plurality of preselected positions. As a result, the showcase designer has sufficient flexibility to periodically change the physical position of the "suspended" showcase and therefore effects a physical change in the appearance of the showcase to passing customers. Therefore, although the shop itself remains a fixed structure, the showcase therein can be altered in horizontal and vertical position from time to time thereby creating variations in the physical appearance of the establishment.

In addition to an enhancement of the aesthetic appearance of a shop, inclusion of the present showcases effects cost savings as compared to the installation of conventional showcases.

Still further, by suspending the showcase, additional space becomes available to the shop proprietor which can then be used to create greater spaciousness which allows the shopper a greater view of merchandise within the shop.

The above-mentioned objects and advantages of the present invention will be more clearly understood when considered in conjunction with the accompanying drawings, in which:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view illustrating the modular showcase as suspended from a ceiling.

FIG. 2 is a partial sectional view illustrating the disposition of modular members around one pole of the showcase.

FIG. 3 is a partial assembly view depicting the mechanical means of the showcase members that enable interlocking engagement to form a showcase.

FIG. 4 is a partial elevational view illustrating the means for supporting the telescoping poles of the present showcase from a ceiling.

DESCRIPTION OF THE INVENTION

Referring to the figures, and more particularly FIG. 1 thereof, a fully constructed modular showcase of the present invention is generally indicated by reference numeral **10**. In FIG. 1, the showcase is illustrated as being suspended from a ceiling structure **12** comprising crossed beams. However, it is emphasized that the present showcase assembly can be supported from and project from any stationary structure such as a floor, or side walls. However, for purposes of convenience, the description of the invention as explained hereinafter, will be referenced to a ceiling structure.

Basically, the showcase comprises a bottom panel **14** and four transparent side panels **16**. The panels may be fabricated from glass, LUCITE, or a suitable laminate of transparent material. However, if complete exposure to the displayed goods is desired, the side panels **16** need not be included. In such event, the bottom panel **14** will provide sufficient support for exhibited merchandise. Further, although not illustrated, a top panel such as the bottom panel **14** may be included to fully encase the showcase. This would be desirable, in an environment where handling of the merchandise is not desired. As will thus be appreciated, the present showcase design offers the showcase designer great flexibility in properly and effectively exhibiting the merchandise.

In the preferred embodiment of the present invention, four parallel spaced poles **18** telescope from respective journal blocks **20**. The poles are moved to a vertical height depending upon how high off the ground the showcase **10** is to be positioned. Then, they are locked into position as described hereinafter. Next, the various modular members of the showcase are attached to the poles until a complete suspended showcase results.

Considering the detail of the present invention, reference is made to FIG. 3 wherein the corners of the base panel **14** are seen to have an arcuate cut **22** so that each corner of the base panel can conform to the curvature of the pole **18**. However, it is to be stressed that telescoping structural supports other than the poles **18** can be employed. The particular shape of these struc-

tural members is not critical. Thus, tubular members having a parallelogram cross section can be used in the same manner. Likewise, spindle shaped members can be used.

Along the length of pole **18**, pairs of transversely aligned elongated slots **24** are positioned in quadrature relationship with each other. These slots act as keepers for horizontal frame members generally indicated by reference numeral **26**. Specifically, a bar **28** has a notch **30** formed at opposite ends thereof to create latches. The bar **28** is received within an associated slot **24** and the slot mates with the notch **30** thereby preventing inadvertent removal.

In order to assemble the base panel **14** and the side glass panels **16**, framed members are provided and are suitably attached to the bar **28** by such means as welding or the like. The frame members include an angle iron **32** having flange portions **34** and **36**. The flange **34** is positioned horizontally and underlies an adjacent edge of the base panel **14** thereby rendering support thereof. A vertical flange **36** is attached to the bar **28** as previously mentioned.

A channel **38** is disposed on an opposite side of the bar **28** and is positioned outwardly therefrom. The channel **38** includes a vertical flange **40** that is suitably attached, by welding or the like, to an opposite side of bar **28**. A horizontal flange **42** appends perpendicularly from the flange **40** and supports the lower edge of glass panel **16**. A final vertical flange **44**, serving as a lip, appends from the horizontal flange **42** and completes the channel **38** that supports the glass panel **16** in position.

Referring to FIG. **2**, vertically positioned pins **48** extend upwardly from the horizontal flange **34** of the angle iron **32** (FIG. **3**). This pin passes upwardly through an aligned hole **50** in the base panel **14**. If four of these pins and associated holes were positioned on each of the angle irons **32** (FIG. **3**), it would greatly facilitate the placement of the base panel **14** during assembly of the showcase.

In order to clarify FIGS. **2** and **3**, primed numbers have been used to indicate similar components in the frame members attached to pole **18**.

Referring to FIG. **3**, assembly of the showcase is explained as follows. Initially, the pole **18** is positioned with respect to the floor at a preselected distance. Next, the frame members **26** are locked into position relative to pole **18**. Next, the base panel **14** is lowered onto the angle irons **32**. Then, the glass panels **16** are lowered into place in their respective receptacles, channels **38**.

In order to secure the upper edges of the glass panels **16**, frame members **52** are used as indicated in FIG. **2**. These frame members are simple in construction and include a plate portion **54** having notched ends **56**, such as shown in FIG. **3**, that interlock with notches **24'** as shown in FIG. **2**. The upper edge of the frame member **52** includes a rounded end **58** that receives the upper edge **60** of the glass panel **16**. This completes the modular construction of the showcase, per se. However, ceiling hardware is employed to mount the telescoping poles **18** and to lock them at a particular position.

To better understand the ceiling hardware, reference is made to FIG. **4**. As illustrated in FIG. **1**, a grid pattern of ceiling beams **12** can be aesthetically arranged to create a warm atmosphere as well as a functional structure. However, it is to be pointed out at this point, that a solid ceiling is likewise applicable. With continued reference to FIG. **1**, it will be observed that a mounting block **20** is positioned at the intersection of crossing ceiling beams. This is shown in greater detail in FIG. **4**. To support the mounting block **20**, channel shaped brackets **62** and **64** are disposed in oppositely directed relation. Each bracket includes a central flange **66** that abuts opposite sides of the mounting block **20**. Horizontal flange **70** abuts the upper surface of a ceiling beam **12** and a threaded fastener **72** connects them. Likewise, a threaded fastener **74** clamps the center flange **66** of bracket **62** against the mounting block **20**.

An elongated axial bore **76** is formed in the mounting block and journals the pole **18** therein. In order to fix the position of pole **18**, a key **78** is received within a groove **79** along the upper edge of the mounting block **20**. The key **78** is also passed through a nearby slot **80** that is identical to the slots **24** discussed hereinbefore (FIG. **3**). The key **78** prevents the pole from falling beyond a selected point and by sliding the key out, the poles can be moved upwardly and downwardly as desired.

During non-use of particular mounting blocks **20**, the telescoping poles can be withdrawn from the blocks along with the other modular components of the showcase. These showcase components and the poles can be set up from a different ceiling location. Accordingly, it is desirable to fasten a good number of mounting blocks along a ceiling structure so that the showcase can be constructed in a great variety of positions.

Although the figures and discussion specify the utilization of a key and slot arrangement for maintaining the poles in shape, it should be appreciated that set screws in the mounting blocks and other equivalent fastener means can be employed with equal satisfaction.

From the foregoing discussion, it should be clear that the present invention offers great economies and aesthetic excellence as a showcase construction for exhibiting merchandise to customers. The present construction is extremely flexible and offers the shop environment a dramatic concept previously unknown.

To further demonstrate the variety of aethetics that the present invention offers, it is within the scope of this invention to utilize a single telescoping support which is coupled with a central point on a base panel upon which merchandise is placed. Utilization of a single pole would increase the apparent suspension of a showcase disposed at the lower portion of the pole.

It should be understood that the invention is not limited to the exact details of construction shown and described herein for obvious modifications will occur to persons skilled in the art. Furthermore, although the following claims are directed to utilization as a showcase, the claims encompass comparable use for cabinets, shelf units, and the like.

Wherefore, we claim:

1. In a modular knockdown adjustable showcase system including a stationary structure such as a wall, ceiling, floor, or the like, the system comprising:

a plurality of journal means located at preselected points in the stationary structure;

showcase support means removably and adjustably mounted in a preselected number of the journal means for varying the size and location of the knockdown showcase; and

frame means removably connected to the support means for constructing a suspended knockdown merchandise showcase.

2. The structure set forth in claim 1 together with means connected to the journal means for locking the showcase support means at a preselected position relative to the stationary structure.

3. The assembly set forth in claim 1 wherein the showcase support means comprises at least one pole having its first end received in a journal means, the remaining length of the pole having slots formed therein for receiving mating ends of the frame means.

4. The assembly set forth in claim 3 together with a base panel positioned in the frame means for supporting merchandise.

5. The assembly as defined in claim 4 together with transparent panels positioned in the frame means, the transparent panels arranged perpendicularly to the base panel thereby forming side walls.

6. The structure of claim 5 wherein the frame means include attached angle irons for supporting the base panel.

7. The assembly as defined in claim 1 wherein the frame means include channels for receiving transparent panels.

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