

April 13, 1965

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3,178,138

DISPLAY DEVICE

Filed Jan. 13, 1964

3 Sheets-Sheet 2

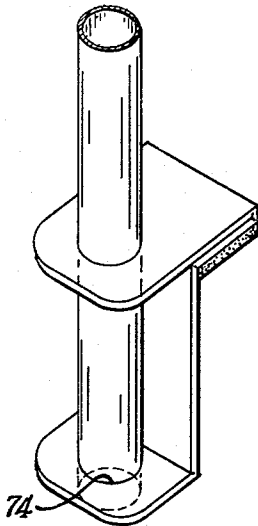
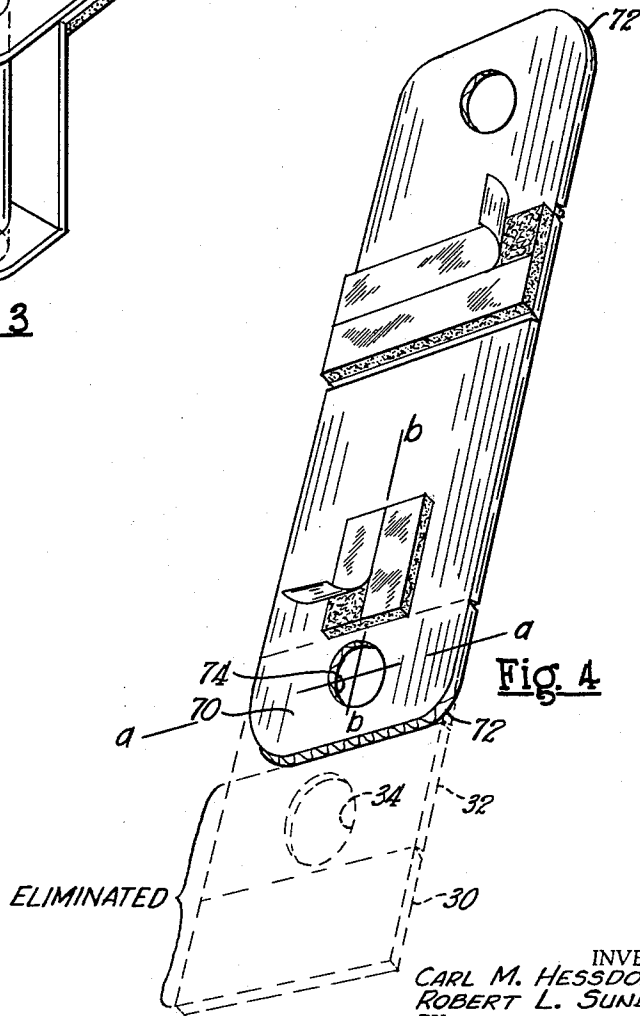


Fig. 3



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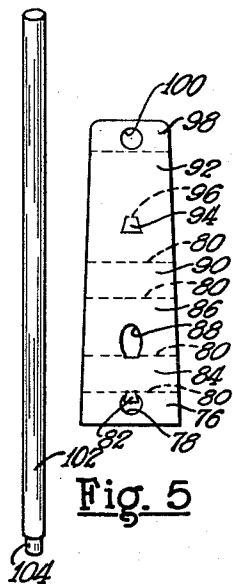


Fig. 5

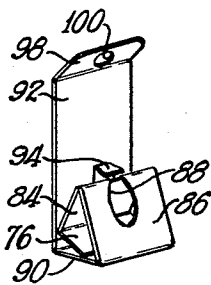


Fig. 6

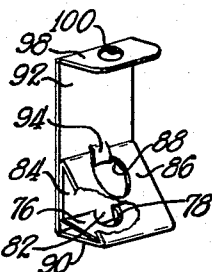


Fig. 7

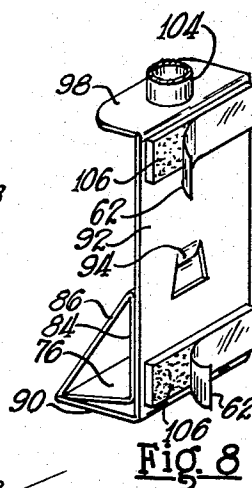


Fig. 8

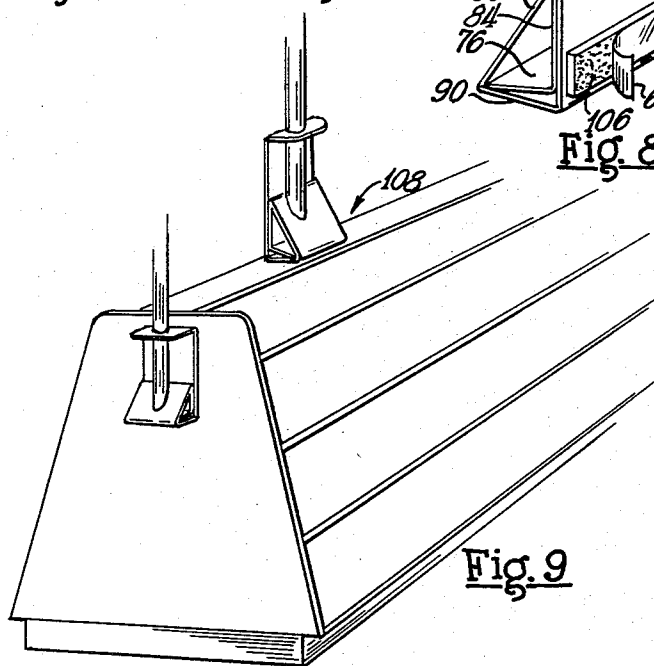


Fig. 9

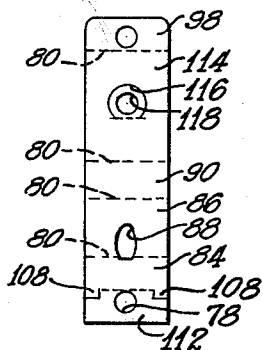


Fig. 10

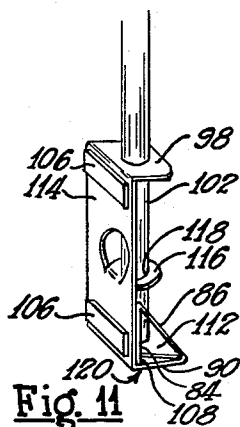


Fig. 11

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3,178,138 DISPLAY DEVICE

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2 Claims. (Cl. 248-40)

This invention relates to display devices of the type used in supermarkets and the like; and more particularly, to a pole-holding device, the pole which the device supports being used to mount a display banner or the like.

The problem

In the past, pole-holding display structures have been characterized by having a plurality of associated feet, or a pedestal, whereby they are adapted to stand upon the floor of a store or supermarket. It is a fact that these devices must necessarily be made of low-cost materials. Thus, they are usually fabricated of cardboard or the like; and these are easily damaged by moisture. Accordingly, when the floor is cleaned by wet-mopping, the displays are ruined by contact of the cleaning solution with the base. Hence, they must be discarded.

Since floors are customarily cleaned at least once a week, it will be evident that display costs and maintenance by required replacement become overly burdensome. One week is a very short life for any display. Accordingly, a substantial advance to the art would be provided by a pole-holding display device of economical construction that would mount displays off the floor, and thus increase the life of displays substantially to produce appreciably improved economy of use.

It is, accordingly, an important object of the present invention to provide a pole-holding display device of extremely economical construction.

A further object is to provide a pole-holding display device characterized by unexpectedly high strength and capable of attachment to a gondola display counter in a position clearly off the floor.

A further object is to provide a pole-type display device that utilizes a unique arrangement of pressure-sensitive attachment pads whereby it can be attached to a gondola and thus be entirely up off the floor for substantially increased life.

It is a further object to provide an attachable pole-holding display device that is strong enough for use with motion displays.

A further object is to provide a pole-holding display device that can be used repeatedly with new and different displays and without dismounting the support standard of invention.

A further object is to provide a pole-holding display device that will save entirely the cost of feet and half the cost of poles.

Other objects of this invention will appear in the following description and appended claims, reference being had to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

FIGURE 1 is a perspective view of a merchandise gondola, showing a prior art display unit at the floor; and a display unit of the present invention at the top and operatively attached to the gondola;

FIGURE 2 is a perspective view of the display device of invention in flattened position, as cut from sheet stock, and having the attachment tabs applied;

FIGURE 3 is a perspective, operational view of a display device made according to a second embodiment of the invention;

FIGURE 4 is a view similar to FIGURE 2, showing a comparison between the second and first embodiments;

FIGURE 5 is a plan view of a display device made according to a third embodiment of the invention;

FIGURE 6 is a perspective view illustrating the manner of folding the unit of FIGURE 5;

FIGURE 7 is a perspective view showing the unit of FIGURE 5 fully folded and ready to receive the pole of FIGURE 5;

FIGURE 8 is an opposite side perspective view of FIGURE 7, with the pole installed and adhesive pads in place for a vertical application, as shown in FIGURE 9;

FIGURE 9 is a view showing both vertical application according to FIGURE 8 and, additionally, a horizontal application;

FIGURE 10 is a plan view similar to FIGURE 5 of a fourth embodiment of the invention; and

FIGURE 11 is a rear perspective view showing the embodiment of FIGURE 10 assembled and the pole applied.

Before explaining the present invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also, it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

The environment and the prior art

Typical environment for the present invention and a representative prior art device in this field of endeavor are both shown in FIGURE 1.

A display counter or gondola 10 comprises end support members 12 having shelves 14 extending therebetween. In FIGURE 1, the shelves are shown empty; however, it is to be understood that merchandise is duly displayed for sale.

The prior art problem

The problem of the prior art alluded to above is vividly illustrated in FIGURE 1 of the drawings. Thus, the prior art unit 16 has a base or pedestal 18 of folded cardboard or the like. This base 18 is configured to support a pole 20 in upright fashion with a suitable fitting 22 at its upper end to mount a display banner of indicia member 24.

As will be evident, the base 18 is badly deteriorated by the pool of water 26. The pool 26 could result from any of the following:

- (a) Mopping the floor;
- (b) Breakage of a bottle of milk or glass-canned goods or the like;
- (c) Snow being tracked into the store in winter and melting;
- (d) Rain blowing through the door, as in inclement weather, or being tracked in; or
- (e) any of several similar factors.

The whole point is that the base, the most important part of the prior art unit 16, has been ruined.

Presuming that the unit 16 has at least a nominal cost factor resulting from manufacturing, transporting, and installing, even though made of a very low-cost material such as cardboard, it is nevertheless evident that this has been completely lost or wasted.

The improvement of the present unit of invention

By contrast, note the unit 28 of the present invention as being "high and dry" on the gondola 10. After weeks or even months of use, it is still in "like new" condition. It is above the level where customers will contact and damage it; it is above the level where stockboys will bump or damage it in moving merchandise about the store. Further, merchandise can still be stacked at the

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end of the gondola 10 or on the top of the gondola 10 without damaging the unit, and without the unit interfering with most advantageous merchandise display.

The advance to the art is therefore believed to be vividly self-evident from the foregoing.

The specific construction of the first embodiment shown in FIGURES 1 and 2

Figure 2 is a view looking at the back side of the unit 28 of invention, in its knocked-down condition. The unit 28 is suitably fashioned of smooth-faced, corrugated cardboard. The manner of fashioning is, for example, by die cutting from sheet stock. The facing is suitably of a white or light cream stock having an aesthetic eye appeal.

Reading first from the left-hand end of the unit, it will be noted to comprise the following component parts:

30 is a fold-over or spacing tab; and, as will be noted in FIGURE 1, lies near the bottom of the unit, with the unit in an upright installed position.

32 is a pole lock tab with an oblong pole hole 34 formed therein. Note in FIGURE 1 the slanting manner in which the pole 23 at its bottom end passes through hole 34; thus, the reason for the oblong shape of the hole.

To facilitate accurate folding of tab 30 relative to tab 32, a fold crease 36 of generally V-shaped configuration is formed in or applied to the stock of the unit 28 on the front side 38.

Continuing to refer to FIGURE 2, it will be observed that a bottom tab 42 is next provided to space the lower end of the pole lock tab 32 away from the gondola 10 in proper pole-supporting position. A fold crease 36 is provided between tabs 32 and 42, as previously described.

Adjacent bottom tab 42, there is next formed a main support body tab 44. As best shown in FIGURE 2, this tab 44 has a pressure-sensitive adhesive pad 46 strategically located at the lower end and on the back side 40 of the unit. As will become evident as the description proceeds, this operates in sheer stress and thus is capable of supporting high loading; and also functions to keep the bottom end of the unit from swinging away from the end of the gondola 10.

A fold crease 36 is also provided between tabs 42 and 44.

Next, adjacent the main support body tab 44, there is provided the top mounting tab 48, having a second pressure-sensitive adhesive pad 50 attached thereto, also on the back side of the unit 40. This, as will become apparent later, is a very important part of the present invention. As will be brought out, it is also used in a sheer stress relationship on the unit and is a primary factor in holding the unit in place. The sheer force imposed on this pressure-sensitive adhesive pad 50 is converted into a tensile holding force by transfer into the main support body tab 44, see FIGURE 1. It will also be noted that all of the gravitational or weight forces involved in the present invention are ingeniously transferred into sheer forces and, as well, into forces at least slightly tending to force the pressure-sensitive adhesive pads 46 and 50 into transverse or compressing relation relative to the support surface or surfaces to which attached.

Between main support body tab 44 and the top mounting tab 48, there is provided a fold crease 52 on the back side 40 of the unit. This enables the corner 54 of the gondola 10, as shown in FIGURE 1, to be traversed.

Next adjacent the top mounting tab 48, there is provided the top pole-holding tab 56. As shown in both FIGURES 1 and 2, this is provided with a pole guide hole 58. A median part of the pole 20 rests in hole 58; and thus the pole 20 is maintained in an upright position.

Hole 58 is of a size slightly larger than the outside diameter of pole 20 to permit the pole to be slidably positioned in the unit. As will be understood, the clearance may be greater, but is preferably kept small for minimum swag movement of the pole 20.

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Referring now to FIGURE 2, note the manner in which the top pole-holding tab 56 is turned back. Thus, a double fold crease 60 is provided between tabs 48 and 56 on the front side 38 of the unit.

Installation of the unit of invention

As noted from FIGURE 2, pressure-sensitive pads 46 and 50 are each provided on their adhesive surfaces, i.e., their functional surfaces, with protective cover films 62. In the conventional manner of the art, these are coated one side with a release agent and thus can be stripped from the functional surface in the manner indicated by the turned back portions, FIGURE 2.

Presuming now that the unit is in its flat form in FIGURE 2, having been removed from a shipping carton containing several of the units and the mechanic is ready to fold and apply the piece to an advertising situs.

First, the tab 30 is turned back in the arrow direction 64, pulling tab 32 with it, and positioned with the rear side 40 against the front side 38 of the bottom portion of the main support body tab 44, as indicated in FIGURE 1. This brings the bottom tab 42 to a position transverse to main support body 44.

Next, end tab 56 is folded forward toward the front side 38 of the unit in the arrow direction 66, doubling flat on top of and into face-to-face contact with the front face of top mounting tab 48. Next, tab 48 is then folded back 90 degrees in the arrow direction 68 relative to main support body tab 44. The unit is now as shown in FIGURE 1; however, looking at FIGURE 2 and visualizing what has been done, it would be upside down.

At this point, while the unit 28 is hand held, the pole 20 is inserted to hold the parts in operative array.

Next, the protective cover films 62 are stripped off and the entire assembly in operative configuration is placed on the corner 54 of gondola 10, with the pad 50 in surface contact with the top face 70 of top shelf 14 and with the functional surface of the pad 46 against the vertically exposed side of the end support 12.

By this simple expedient, the unit is automatically locked in operative position and is there to stay.

The adhesiveness of the pads 46 and 50 is very substantial and a very tight grip to a support surface is instantaneously achieved.

The advantages of keeping the display up off the floor, including long life; economy of production, as being stamped and formed from sheet stock; high holding power; and others, will be readily evident from the foregoing.

The second embodiment of Figures 3 and 4

While the embodiment shown in FIGURES 1 and 2 is preferred in accordance with the concept of the present invention, it should be pointed out that there is a second version within the scope of invention; and this is shown in FIGURES 3 and 4.

Referring to these figures, particularly FIGURE 3, it will be noted that the bottom part of the unit is of one-tab construction, using a slightly undersized and out-of-round hole for pole-gripping purposes in lieu of the three tabs used in the embodiment of FIGURES 1 and 2.

If FIGURE 4 will be referred to now, it will be noted that the tabs 30 and 32 have been omitted. This removes the oblong pole hole 34; therefore, provision is made in this embodiment for a pole hole in the adjacent tab, here numbered 70 because of its slightly different configuration.

Since the terminal end of the bottom tab is exposed, the corners have been radiused off, as at 72, in a workmanlike manner. This was also done for the other end of the unit, and also for the top end of the first embodiment shown in FIGURE 2.

In this version of the invention, to provide "bottom of the pole support" the hole 74 is as follows:

(a) Slightly undersized to grip the bottom of the pole;

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(b) Slightly out-of-round to bite the pole firmly enough to grip it for support.

The pole-gripping power of the bottom hole 74 may be expressed in a different manner, as follows:

(a) It could be slightly smaller in diameter than the outside diameter of the pole; or

(b) The dimension along axis $b-b$ could equal the diameter of the pole while the dimension along $a-a$ could be less than the diameter of the pole or mast. Thus, $a-a$ would grip the mast and gravity would cause $b-b$ to grip at an angle. The combined result would be a "vice grip."

The installation of the unit is, as evidenced in FIGURE 3, analogous to the showing of FIGURE 1.

Advantages of this embodiment of the invention are the same as those inherent in the prior embodiment as regards ease of application to an advertising situs. Further, by eliminating materials and by proper use of a "grip" hole, it will be understood that improved economy of manufacture is provided.

As regards each embodiment, note the advantage of shipment in knocked-down condition. Thus, many units can be packed solid in cartons for utilization of shipping space.

The third embodiment of FIGURES 5-9 inclusive

While the embodiments shown in FIGURES 1-4 inclusive of the drawings have great utility for those applications wherein it is desired to embrace a corner of a gondola, there are applications within the extended scope of invention where a unit can well be utilized, either on a vertical flat surface or on a horizontal flat surface.

As shown in FIGURE 5, a first embodiment of this type is illustrated.

If we read from the bottom of FIGURE 5, we will note that there is included a bottom pole positioning tab 76. At the center of this tab, there is a die-cut hole 78, from which most but not all of the material has been removed. Note that the hole 78 is spaced outwardly a short distance from the fold line 80, and that a tab 82 extends from the fold line out about midway of the hole 78. This tab 82 becomes a foot when the tab 76 is folded over, as will later be described.

Next, there is a spacer tab 84 followed by a fold line 80, and then a main, lower pole holding tab 86. This has an oblong hole 88 cut therein to embrace the pole in angular relationship, as will be described relative to FIGURES 6 and 7.

Next, there is a bottom tab 90, a fold line 80, and then a body tab 92. Body tab 92 has a holding tab 94 cut therefrom on three sides and being retained in attached relationship to the body tab 92 by a fold line 96.

At the top, there is a top pole steadying tab 98 with a pole embracing aperture 100 formed therein.

The pole 102 shown is of uniform diameter, except for a reduced diameter, stepped portion 104 at the bottom.

Now having described the component tabs of the embodiments of FIGURE 5, we will proceed to FIGURES 6 through 9 for its erection and installation. Before proceeding, however, it should be pointed out that all of the tabs in FIGURE 5 are formed from a single sheet of material as described relative to the embodiments of FIGURES 1-4.

As shown in FIGURE 6, a first step in assembly comprises bending over the bottom pole positioning tab 76 90 degrees relative to the spacer tab 84. This causes the foot tab 82 to be extended in the direction of the plane of the spacer tab 84. Then the bottom tab 76 and the spacer tab 84 are folded to a triangular shape with the main lower pole holding tab 86. This puts the oblong hole 88 in properly oriented position to receive a lower portion of the pole that also extends downwardly through hole 78 in tab 76 and rests on the bottom tab 90, as shown in FIGURE 8. When the triangular array of the bottom pole positioning tab 76, spacer tab 84,

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and the main lower pole holding tab 86 are moved upwardly to bring the spacer tab 84 into contact with the body tab 92, the holding tab 94 is then slipped through the hole 88 as indicated in FIGURE 7. This locks the triangular relationship of the tabs 76, 84, 86, and 90. Thereafter, the top tab 98 is folded forwardly 90 degrees and the pole inserted through hole 100 as shown in FIGURE 8.

In this embodiment of the invention, the pressure-sensitive adhesive pads 106 can be placed on the back of the unit, as shown in FIGURE 8, for application in the vertical manner of FIGURE 9. Also, they can be placed on the bottom of the bottom tab 90 and attached to a horizontal surface, as illustrated at 108 in FIGURE 9. By pulling the covering films 62 away, as indicated in FIGURE 8, the adhesive pads 106 are exposed for application.

The third embodiment of FIGURES 10 and 11

This embodiment is generally similar to that shown in FIGURE 5, with the exception of a modification to the locking tab 96 in FIGURE 5 and the bottom foot arrangement 82 in FIGURE 5.

Turning to FIGURE 10, it will be noted that instead of the foot arrangement shown in FIGURE 5, the hole 78 is free of any projection therein. Instead of the tab 82 of FIGURE 5, tabs 108 are provided by zig-zagging the fold line. Accordingly, the bottom hole positioning tab is designated 112 because of the different configuration.

The main lower pole holding tab 86 and the oblong hole 88 and the bottom tab 90 are as described before. In the body tab 114, however, there is an intermediate tab 116 that folds out, as shown in FIGURE 11, to embrace the pole 102 and hold it in proper place, much as the effect of tab 94 in FIGURE 7 in holding the tab 86 in proper position.

The assembled configuration as shown in FIGURE 11, where the pole steadying tab 98 is extended outwardly at the top, the intermediate tab 116 is extended forward so that the hole 118 receives the pole 102. At the bottom, there is the same general configuration of parts as in FIGURE 8, with the triangular arrangement of the bottom hole positioning tab 112 held up from the bottom tab 90 by the feet 108. Forming the triangle is the spacer tab 84 and the main lower pole holding tab 86 joining around to the bottom tab 90. The body tab 114 forms a main support with the pads 106 thereon for vertical application. Also, as indicated by the arrow 120, support pads can be placed on the bottom side of bottom tab 90 for the horizontal application shown at 108 in FIGURE 9.

Extended scope of invention

Pressure-sensitive adhesive attachment pads preferred for use in the invention are made of a spongy polyurethane foam material, for example, with one surface attached to a face surface of the unit. The other surface also carries a pressure-sensitive adhesive and the strippable protectors. The utility of using a sponge-like material is that it more readily conforms into intimate engaging contact with irregular surfaces such as milled boards, metal sheets, and the like, commonly used in building merchandise gondolas. Thus, there is a greater latitude of application by so operating.

While pressure-sensitive adhesive pads have been referred to above, it is to be understood that it is well within the scope of invention to use conventional drying adhesives, such being applied at the time of installation and being clamped or held in place to set. The advantage, of course, of pressure-sensitive pads is the fact that the attachment is instantaneous; and removal can be effected without damage either to the unit or to the surface to which attached.

While laminated and corrugated cardboard sheet materials have been referred to above, it is to be understood

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that other materials are equally within the scope of invention. Cardboard has merely been recited because of its economy factor and because of the fact that substantial and durable products can be made from it.

What is claimed is:

1. In a display device,
 - a elongated body of sheet material,
 - a pole-steadying tab at the top end of said body and having a pole-receiving aperture,
 - a body tab adjacent said pole-steadying tab with a fold line therebetween,
 - a bottom tab adjacent said body tab with a fold line therebetween,
 - a lower pole-holding tab adjacent said bottom tab and having an elongated pole-receiving aperture therein, and with a fold line between said lower pole-holding tab and said bottom tab,
 - a spacer tab adjacent said lower pole-holding tab with a fold line therebetween,
 - and a bottom pole positioning tab adjacent said spacer tab and having a pole-receiving aperture, and with a fold line between the tabs.
2. In a pole-holding display device,
 - an elongated body of sheet material,
 - a pole-steadying tab at the top end of said body and having a pole-receiving aperture,

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a body tab adjacent said steadying tab with a fold line therebetween,
 means extending from said body tab to steady a pole extending therealong,
 a bottom tab adjacent said body tab with a fold line therebetween,
 a lower pole-holding tab adjacent said bottom tab with a fold line therebetween,
 an elongated pole-holding aperture in said lower pole-holding tab,
 a spacer tab adjacent said lower pole-holding tab with a fold line therebetween,
 a bottom pole positioning tab adjacent said spacer tab with a fold line therebetween,
 a pole-receiving aperture in said bottom pole-positioning tab,
 and means for securing one of said body tab and bottom tab to a support surface.

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