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Thorpe

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[54] **CANTILEVER-TYPE DISPLAY UNITS**

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[52] **U.S. Cl.** ..... **248/205 A;** 211/59

[51] **Int. Cl.**[2] **A47F 3/14**

[58] **Field of Search** ..... 248/205 R, 205 A, 309, 248/310, 311; 211/86, 87, 88, 96, 59; 40/125 A

[56] **References Cited**

UNITED STATES PATENTS

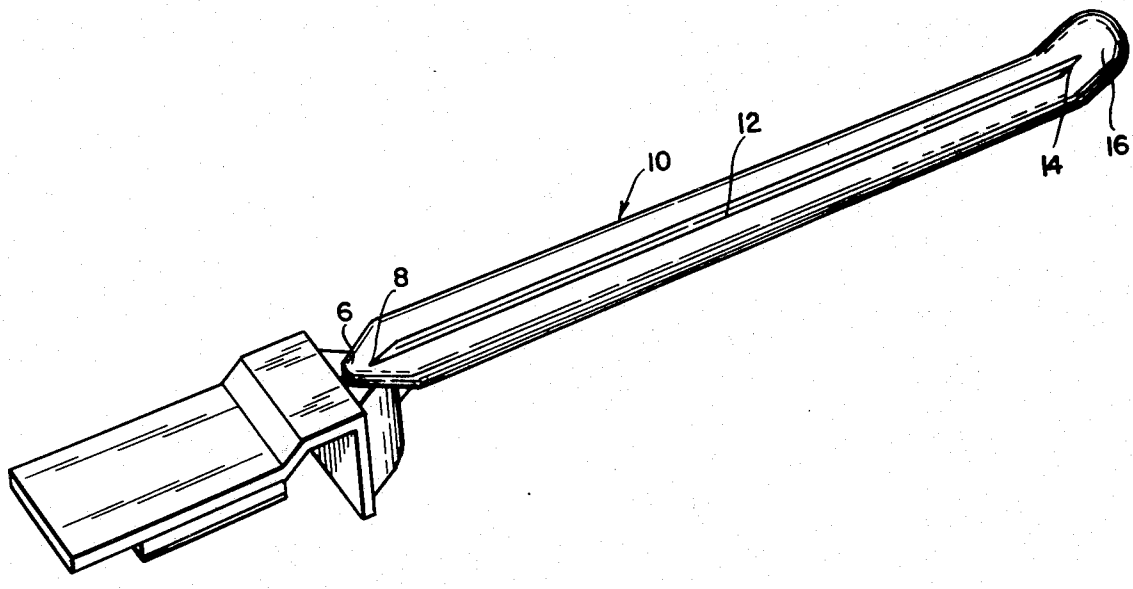
644,993	3/1900	Merton	248/208 X
2,695,712	11/1954	Kolander	211/86 X
2,868,387	1/1959	Rucker	211/96
2,985,312	5/1961	Pantek et al.	211/96
3,178,138	4/1965	Hessdoerfer	248/40
3,259,348	7/1966	Dann	248/205 A
3,494,584	2/1970	Dubey	248/221
3,661,271	5/1972	Fisher	248/DIG. 3 X

Primary Examiner—J. Franklin Foss

[57] **ABSTRACT**

Novel display units comprising base and movable support attached thereto are disclosed. The base unit has an adhesive means for attachment to horizontal shelves. The display units are prepared by injection molding using high impact polystyrene.

2 Claims, 10 Drawing Figures



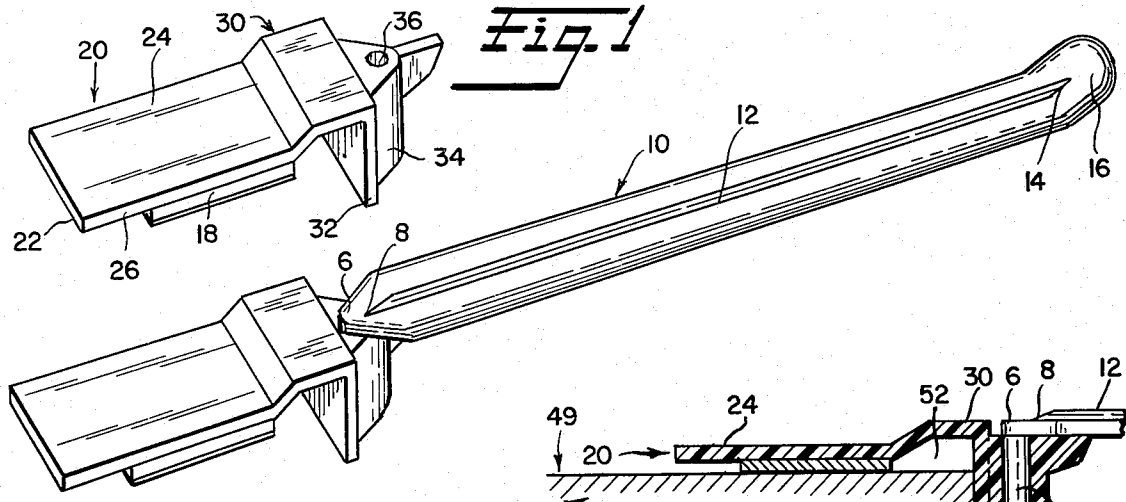


Fig. 1

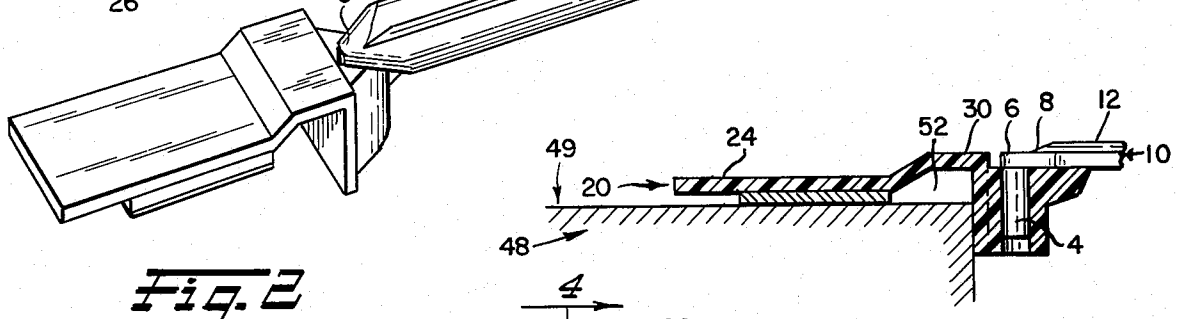


Fig. 2

Fig. 4

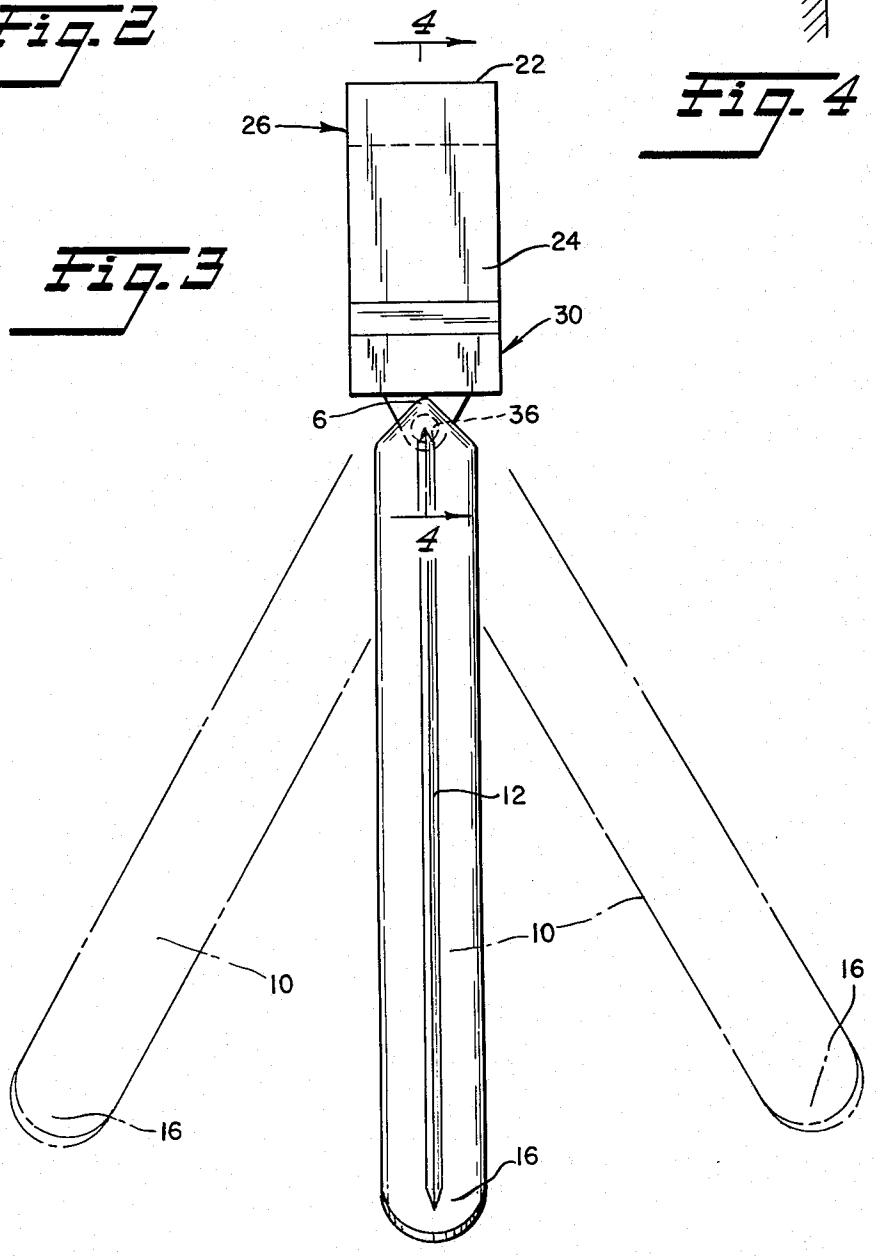


Fig. 3

Fig. 5

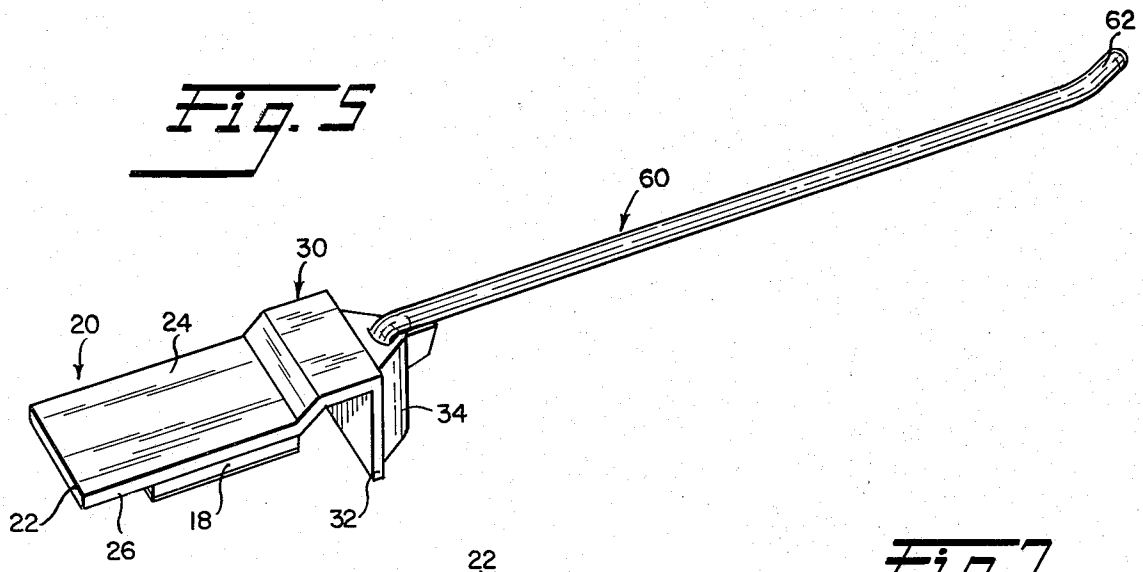


Fig. 6

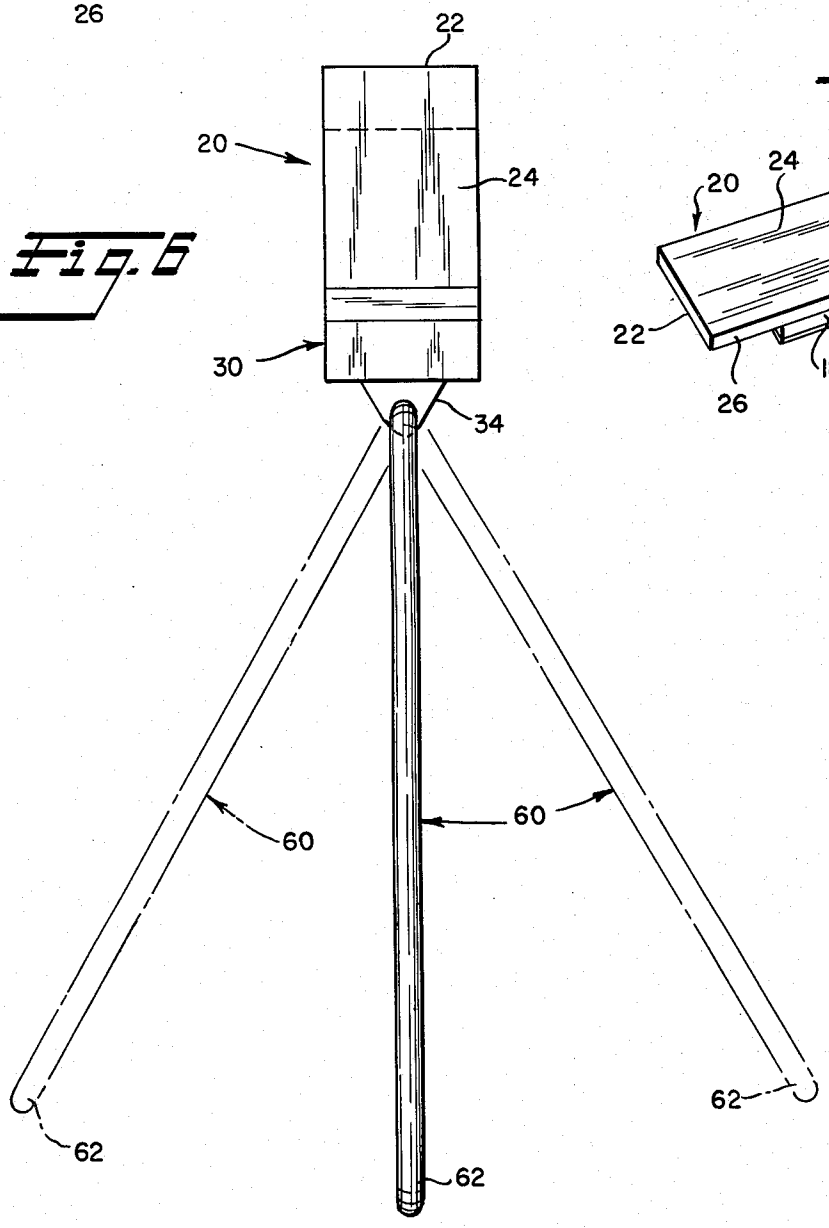
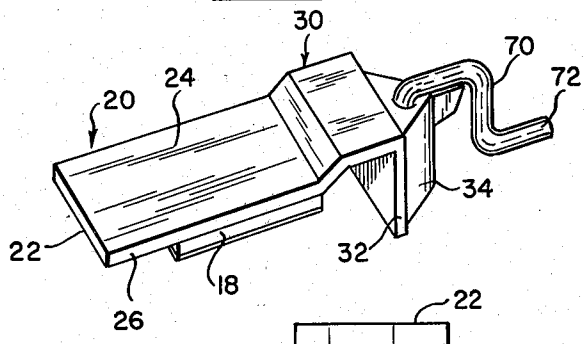


Fig. 7



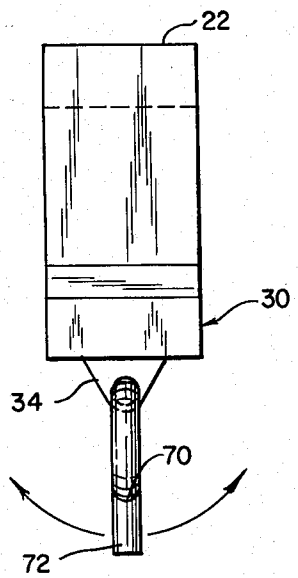


Fig. 8

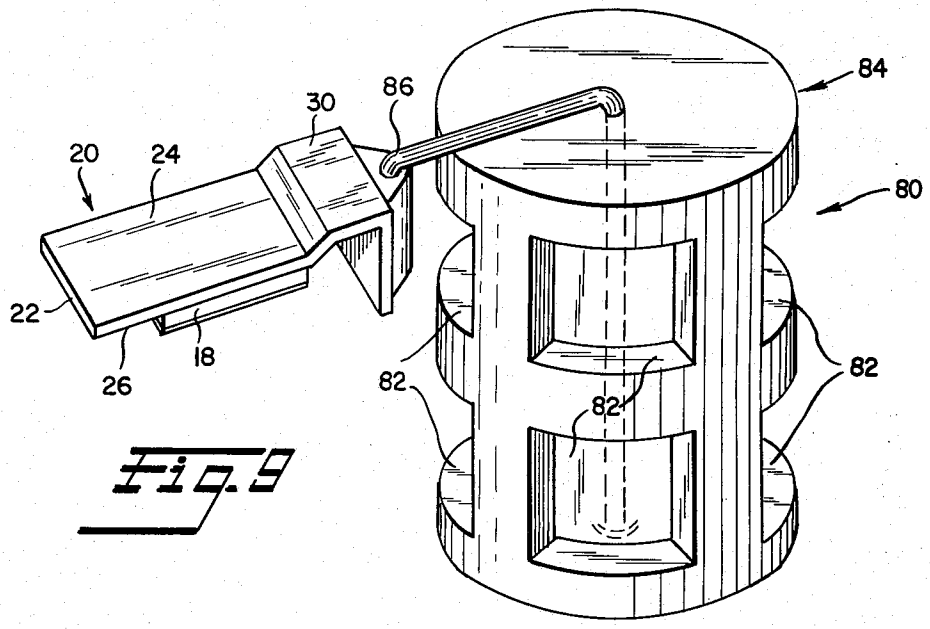


Fig. 9

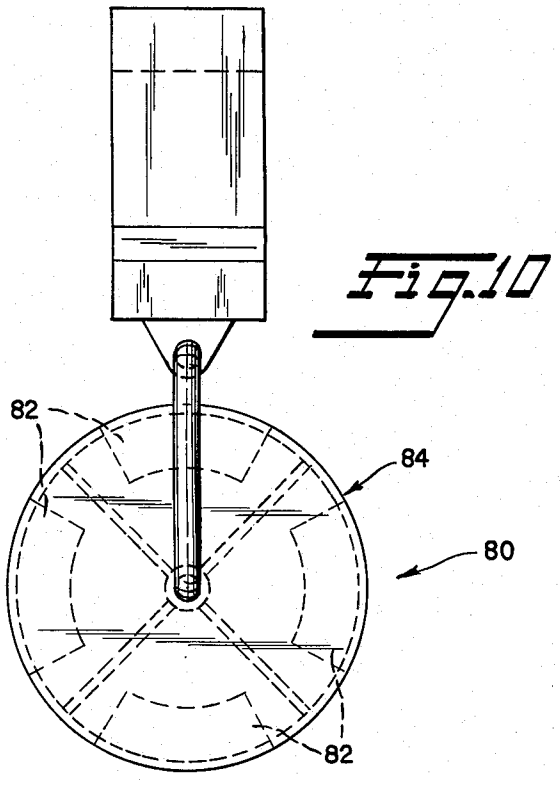


Fig. 10

CANTILEVER-TYPE DISPLAY UNITS

The present invention relates to novel display units comprising a base and a movable support attached thereto for use on horizontal shelves and is more particularly concerned with display units comprising a base member and one or more movable support members which are readily attachable to the base.

There are various types of display units for attachment to gondola or wall shelves known to the art generally as "J" hooks, but having several disadvantages, however. For example, most are constructed to fit only one type of shelf, display only one type of product or fit a limited number of product packaging designs, usually being rigid single body construction and, therefore, inflexible and incapable of adaptation to different shelve constructions or other display conditions. In addition, all known display "J" hooks are made of metal and are, therefore, somewhat expensive and are difficult to attach to shelves, and being metal and rigid, frequently present a potential hazard to customers walking nearby.

The display units of the present invention overcome the disadvantages of the hooks presently available and described above by providing elements constructed for inexpensively molded plastic and comprising a base member adapted to be conveniently fixed to the top surface of a shelf and having a movable support member extending outwardly from the shelf, which can swing out of the way when accidentally contacted. In its preferred form, the base member requires no clamps or price rails for attachment, and it can be attached to the top surface of a straight shelf or a shelf having a raised lip at its leading edge. The display units of the present invention with their support and base member allows normal stocking of the shelf to which it is affixed, while also permitting the support arms or members to pivot horizontally up to about 180 degrees in relation to the leading edge of the shelf to which they are attached, thereby minimizing the risk of personal injury and damage to the movable support members if accidentally forcefully contacted.

The primary object of the invention is to provide a novel display unit having a base member and one or more movable support members, novel means for attaching the same together and novel means for attaching the display unit to the top surface of a shelf. Another object is to provide a base member having a raised portion from the horizontal to provide an adequate area so that said member can be attached in a horizontal manner to shelves that have a raised lip at the leading edge.

Another object of the present invention is to provide novel display units which can be inexpensively molded, using high impact polystyrene, for example, by injection moulding for use on horizontal shelving and which can be attached to the top surface of a shelf by an inexpensive satisfactory adhesive means such as that provided by a pressure sensitive tape.

A still further object is to provide novel display units which can be readily attached to a shelf and yet are strong enough to support a plurality of display articles.

Other objects and advantages of the present invention will be apparent to one skilled in the art from the appended claims and following description of the best mode of carrying out the invention, and various examples thereof, made in connection with the drawings wherein;

FIG. **1** is a perspective view of the preferred base member of the display unit embodying the invention;

FIG. **2** is a perspective view of one of the novel display units comprising the preferred base member and one of the movable members;

FIG. **3** is a plan view of FIG. **2** illustrating the pivotable relationship of the movable member;

FIG. **4** is a side elevation view in section taken along line **4—4** of FIG. **3**, showing the relationship of the preferred base member attached to the top surface of a shelf, and of a portion of a movable support member attached thereto;

FIGS. **5**, **7** and **9** are perspective views of various novel display units comprising modifications of the invention; and

FIGS. **6**, **8** and **10** are plan views of FIGS. **5**, **7** and **9** illustrating the pivotable relationship of the movable members.

Referring to the drawing, and more particularly to the preferred embodiment shown in FIG. **1**, the base member **20** is essentially of a rectangular shape body **22** having a top surface **24** and a bottom surface **26**. Attached to bottom surface **26** is an adhesive strip **18**. The latter has double contact adhesive surfaces, one of which is attached to bottom surface **26** while the other is covered by a protective covering plastic film until used to secure the base member to a shelf as shown in the drawing. The base is preferably provided with a raised portion **30** which can be of any suitable configuration to provide clearance for attachment to a shelf having a raised lip at the leading edge. The forward wall **32** of adjacent to and down below body **22** and is adapted to supportingly abut against the leading edge of a shelf to which it is attached as shown below in FIG. **4**. The angular configuration of the base as a whole with adhesive contact and abutment of the forward wall against the forward edge of the shelf, resist turning movement produced by a load applied to the unit.

Integrally attached to the base is boss **34** having a socket **36** which can receive a pivot pin of the movable support member. This convenient pivotal connection alone is sufficient to carry any normal load without distorting the base or support member and, in addition, the attachment of the movable support member to the base member allows in this manner the former to describe up to about a 180 degree arc as shown in FIGS. **3**, **6**, **8** and **10**. Other pivotal connections between the base and support member are contemplated although the foregoing has been found most economical and efficient in operation. In addition, it is further contemplated that for some applications of the invention the connection need not be pivotal where, for example, the support arm is not intended to be utilized in such a manner as to extend into or be near customer walking lanes in stores. In fact, in such cases the arm and base may be connected by any rigid means or be formed integrally.

FIG. **2** of the drawing shows the preferred type of movable support member which can be attached to the base member. The movable rectangular support member **10** has a rigidifying rib **12** located centrally in said member and extending above and below the plane thereof, said rib terminating at **14** near the inclined terminal lip **16** of said member and at **8** near the interior end **6** of said member. The member has at end **6** a cy-

lindrically shaped pivot pin **4** integrally attached vertically to the member so that said member when attached to the base member **20** is substantially coplanar with the shelf **48.**

FIG. **4** of the drawing shows the attachment of the base member **20** to the top **49** of a shelf **48.** A portion of the movable support member **10** is shown attached to said member by engagement of the cylindrically shaped pivot pin **4** of the member **10** in the cylinder **36.** The area **52** between the top **49** of the shelf **48** and the raised portion **30** of the base **20** provides for the leading edge of a shelf which has a raised lip.

FIG. **5** of the drawing is a perspective view of a novel display unit comprising the base member **20** and a movable support member **60,** said movable member being cylindrically shaped and having an inclined tip **62.**

FIG. **7** of the drawing is a perspective view of a novel display unit comprising the base member **20** and a movable support member **70,** said movable member being cylindrically shaped and having an inclined tip **72.** The movable support member **70** is molded as shown in FIG. **7** in the form of a short J-type hook.

FIG. **9** of the drawing is a perspective view of a novel display unit comprising the base member **20** and a rotating drum type movable support member **80.** The member **80** has recessed areas **82** in relation to the exterior surface **84** of the drum in which items can be displayed. The movable support member is attached to base member **20** by arm **86,** said arm having a connecting means **88** to allow the drum to rotate freely.

Having thus described the invention by means of several illustrative structural examples thereof and by means of a preferred method for manufacturing the same, modifications and changes wherein will become apparent to those skilled in the art, what is claimed as novel and sought to be protected by United States Letters Patent is:

1. A display unit consisting of a base member and a movable support member adapted to extend from said base member for supporting objects, said base member having an attachment surface adapted to engage a horizontal support surface and an adjacent vertical surface integral therewith adapted to simultaneously engage a vertical support surface with said base member having a portion vertically offset above attachment surface to provide space to permit attachment of said base member to a support surface having a raised lip at the leading edge, adhesive means for securing said base to said horizontal support surface and means located on said vertical surface for pivotally connecting said base member and movable support member together whereby said movable support member is adapted to swing about said pivot means in a substantially coplanar relationship with said horizontal surface.

2. A display unit consisting of a base member and a display support arm member which unit is adapted to conform to a shelf or like fixed structure having horizontal and vertical surfaces intersecting on a corner, said display support member having an integral reinforcing element extending lengthwise of said member, said base member having adjacent horizontal and vertical surface portions adapted respectively to engage the corresponding surface of said fixed structure, wherein said horizontal surface of said base member is relieved to permit attachment of said base to fixed structure having a bead at said corner, a pressure sensitive tape for securing together said horizontal engaging surfaces and means on said base member for pivotally supporting arm member in a substantially coplanar relationship with said horizontal surface.

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