

April 18, 1939.

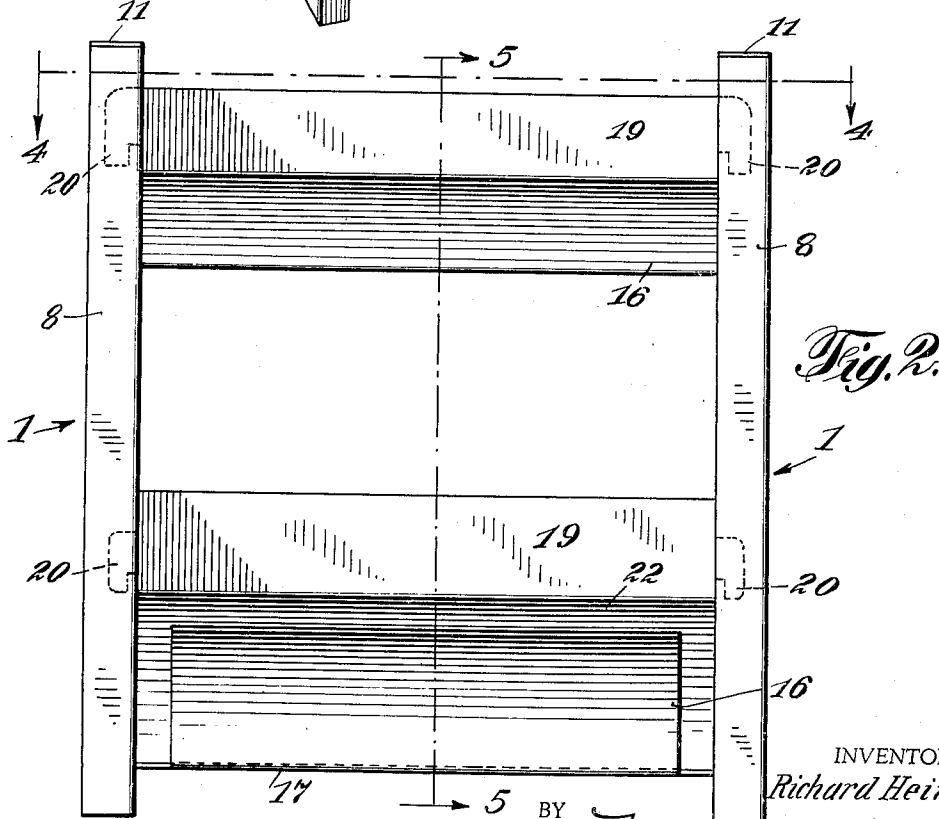
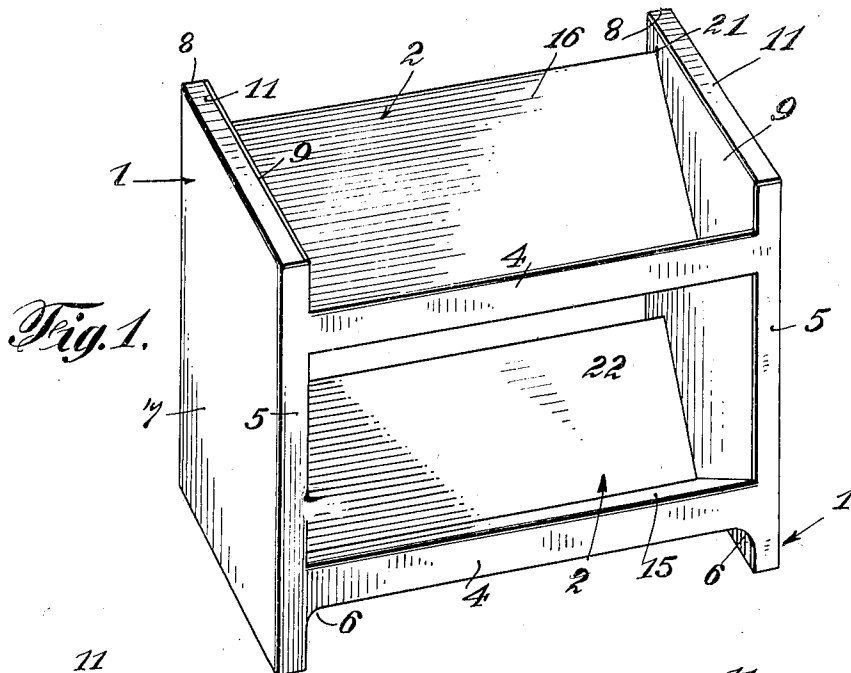
R. HEINZ

2,155,190

DISPLAY DEVICE

Filed April 8, 1937

3 Sheets-Sheet 1



INVENTOR.

Richard Heinz

BY *Norman A. Holland*
ATTORNEY.

April 18, 1939.

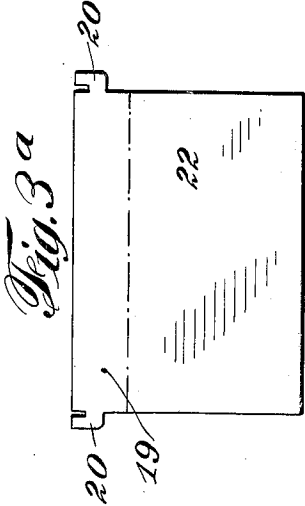
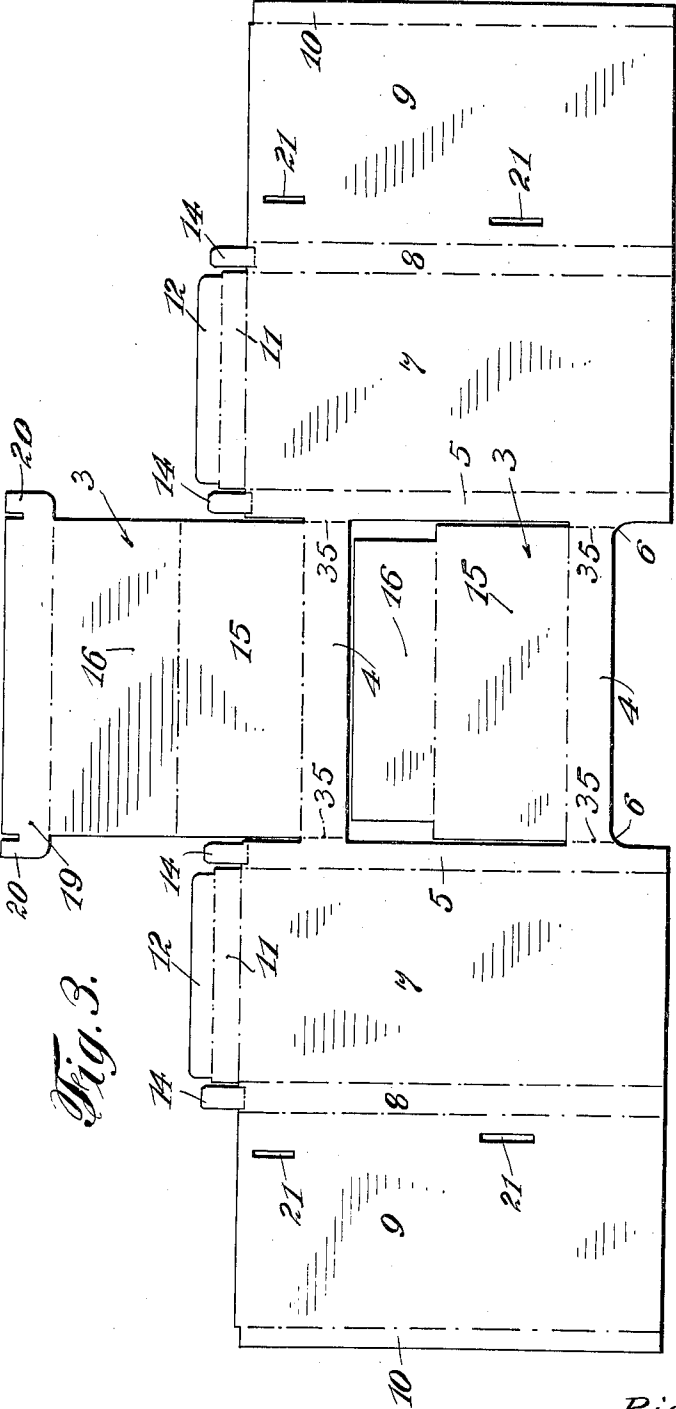
R. HEINZ

2,155,190

DISPLAY DEVICE

Filed April 8, 1937

3 Sheets-Sheet 2



INVENTOR.
Richard Heinz
BY *Norman J. Holland*
his ATTORNEY.

April 18, 1939.

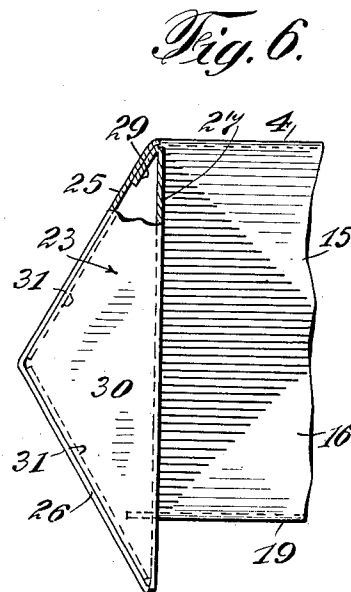
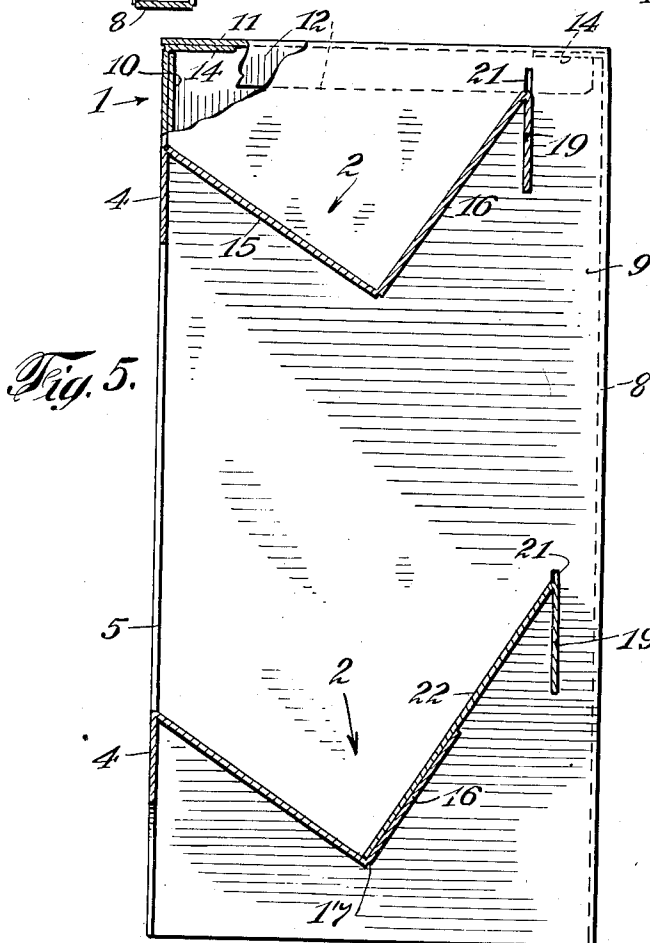
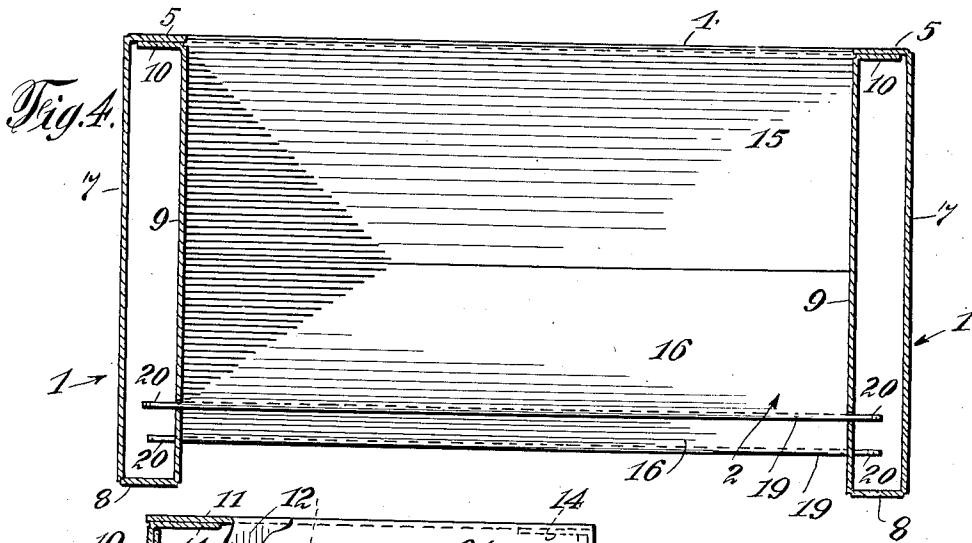
R. HEINZ

2,155,190

DISPLAY DEVICE

Filed April 8, 1937

3 Sheets-Sheet 3



INVENTOR.
Richard Heinz
BY *Norman A. Holland*
his ATTORNEY.

UNITED STATES PATENT OFFICE

2,155,190

DISPLAY DEVICE

Richard Heinz, Queens Village, N. Y., assignor to
Carl Percy, Inc., New York, N. Y., a corporation
of New York

Application April 8, 1937, Serial No. 135,633

4 Claims. (Cl. 211—135)

The present invention relates to display devices and more particularly to a foldable display of the basket or shelf type for displaying articles of merchandise.

A difficulty with foldable devices, provided with a basket portion or the like for displaying articles of merchandise, is that they are not sufficiently strong and rugged to withstand the rough usage to which they are subjected. Usually, they cannot be utilized for displaying relatively heavy articles because cardboard, the preferred material for such devices, under heavy loads bends or tears very easily. Manufacturers of these display devices have attempted to strengthen them by using reinforcing parts, but the use of such parts increases the manufacturing costs and makes the manufacturing and assembling operations more difficult and complicated. While thicker or heavier sheet material has also been tried, its use is generally undesirable due to the increased cost thereof.

The present invention aims to provide a simple inexpensive foldable device for displaying articles of merchandise which is made of a minimum number of parts arranged to strengthen the device. In addition, the device is pleasing in appearance, can be of any desired size, and is provided with pockets or troughs of increased capacity for displaying a greater amount of merchandise.

An object of the present invention is to provide a display device, the major part of which is formed from a single sheet of material.

Another object of the invention is to provide a display device having reinforced upright portions for supporting merchandise displaying portions which are formed integral therewith.

Another object of the invention is to provide a display device having substantially hollow or tubular columns for supporting the merchandise displaying portions.

Another object of the invention is to provide a display device having integral article displaying portions which are trough-shaped to increase their capacity and strength.

Another object of the invention is to provide a display stand which is readily set up and when folded together for shipment occupies a minimum amount of space.

A further object of the invention is to provide an attractive display stand adapted to be made in any desired size.

Other and further objects of the invention will be obvious upon an understanding of the illustrative embodiment about to be described, or will

be indicated in the appended claims, and various advantages not referred to herein will occur to one skilled in the art upon employment of the invention in practice.

A preferred embodiment of the invention has been chosen for purposes of illustration and description and is shown in the accompanying drawings, forming a part of the specification, wherein

Fig. 1 is a perspective view illustrating a preferred embodiment of the invention;

Fig. 2 is a rear elevational view of the device illustrated in Fig. 1;

Fig. 3 is a plan view of a sheet of material utilized for providing the display device illustrated in Fig. 1;

Fig. 3a is a plan view of a second sheet of material adapted to be attached to the sheet shown in Fig. 2;

Fig. 4 is a sectional view taken along the line 4—4 on Fig. 2;

Fig. 5 is a sectional view taken along the line 5—5 on Fig. 2; and

Fig. 6 is a fragmentary top plan view, partly in section, illustrating a modification of the invention.

Generally described, the display device illustrated herein comprises a pair of substantially upright columns or legs 1 (Figs. 1 and 2) and two or more suitable trough-shaped shelves or basket portions 2 for displaying articles of merchandise supported by the columns or legs. The present device is of the type which may be placed in store windows to exhibit articles of merchandise or may be placed on counters to permit the articles displayed to be taken therefrom when they are purchased by the customers. Preferably, it is constructed of sheets of any suitable type of cardboard, corrugated paper or the like.

Referring to the drawings and more particularly to Fig. 3 there is shown a sheet of material cut or stamped out to provide the portions of the finished display device. The sheet preferably is provided with two or more front panels 4 which are spaced vertically with respect to each other any desired distance and are integral or merge at each end with substantially upright front panels 5 forming the front portions of the columns or legs 1 about to be described. Preferably, the lower panel 4 is spaced upwardly from the bottom of the columns while the upper panel 4 is spaced downwardly from the top of the columns to give the display a well balanced pleasing appearance. If desired, the lower edges of the panels 4 may be joined with the upright panels 5 by rounded por-

tions 6 adapted to facilitate cutting the material without leaving rough edges or corner portions. The lower edges may be straight or provided with suitable angular or curved configurations adapted to ornament the device.

In order to provide sturdy and rugged supporting columns or legs 1, each of the upright portions 5 has portions 7, 8, 9 and 10 foldably connected thereto. These portions may be of any desired dimension, but preferably are shaped so that, when they are folded and secured, they provide tubular or hollow supporting columns substantially rectangular in cross-section. For example, as shown in the preferred embodiment, the portion 7 provides the outer side of the column, the portion 8 provides the back thereof, the portion 9 provides the inner side thereof, and the portion 10 provides a strip adapted to overlap with the back of the front upright panels 5 and be secured thereto by adhesive or in any other suitable manner (Fig. 4). The portions 5, 7, 8, 9 and 10 may be foldably connected respectively with each other by creasing the sheet of material, by scoring or by perforating the crease as indicated by the dot and dash lines in Fig. 3 or in any other suitable manner. Other foldable portions referred to hereafter may be articulated in a similar manner.

The upper ends of the columns or legs preferably are closed to conceal the raw edges of the material, thus improving the appearance of the device. This may be accomplished by providing foldable top portions 11 each having a depending portion 12 adapted to be inserted into the column and by providing tabs 14 at the upper ends of the front portions 5 and the back portions 8 adapted to underlie the top portions 11 to form neat corners. As illustrated in the preferred embodiment, the top portions 11 are preferably carried by the outer side portions 7 of the column, but, if desired, may be carried by the inner side portions 9 of the column as will be described in connection with a modified embodiment.

The basket or shelf portions 2 preferably are provided by the portions 3 (Fig. 3) of the sheet intermediate the front upright portions 5 and are integral and foldable with the upper edges of the front panels 4. Preferably, these portions when folded are V-shaped in section (Fig. 5) to provide suitable trough or basket portions for receiving articles of merchandise, but, if desired, may have a flat bottom with flared front and back sides or any other desired configuration. However, it has been found that V-shaped troughs or basket portions are relatively stronger and more rugged and are adapted to support relatively heavy articles without bending or sagging.

As illustrated in the preferred embodiment, the troughs comprise a downwardly flared front portion 15 foldable with respect to the front panel 4 and an upwardly flared rearwardly extending portion 16 foldably connected to the front portion at 17. Preferably, the back portion 16 of the troughs extends upwardly further than the upper edge of the front panels 4 to increase the capacity of the troughs; and the downwardly extending portions of the troughs are either entirely or partially concealed by the front panels 4 (Fig. 1) to improve the appearance of the device.

The upper trough of the device preferably is connected to the inner sides of the columns by providing a back panel 19 which is foldably connected to the back portion 16 of the trough (Figs. 2, 3 and 5) and has notched locking tabs 20 at the ends thereof adapted to be inserted into recesses

or slots formed in the inner side portions 9 of the columns. When the display device is set up, the tabs are concealed within the column and do not mar the appearance of the device. Preferably, the recesses or slots 21 extend vertically so that the tabs bear vertically downwardly therein and are not subjected to transverse bending when articles are placed in the trough portion. The rear of the trough portion 16 may also be formed without the back panel 19, and in that case the recesses are provided on the portion 16 and fit into inclined recesses. It will be understood that other suitable locking or attaching means may be utilized, for example, the trough portions may be adhesively secured to the columns.

The lower trough preferably is secured to the column by attaching a second sheet 22 (Fig. 3a) of material to the trough portion 16 (Figs. 2 and 5). This sheet is provided with a back panel 19 carrying notched locking tabs 20 adapted to be inserted into slots or recesses 21 in the column portions 9. If such a second sheet is provided, the lower trough is substantially enlarged and extends upwardly a greater distance to increase the capacity of the trough. The second sheet does not increase the cost of the device materially and, if desired, can be omitted by substituting other securing means for attaching the lower trough to the columns.

In Fig. 2 the display device is illustrated when viewed from the back thereof. It will be noted that the back panels 19 of the troughs improve the appearance of the device and that all raw edges of the material and the locking means, such as the tabs 20, are concealed. The present device is, therefore, attractive as viewed from any side. This enables the device to be placed in front of a mirror without reflecting objectionable seams, supporting easels or locking connections.

In Fig. 6 a modified embodiment of the invention is illustrated wherein the columns 23 have a different cross-sectional shape. The present invention contemplates providing triangular columns or columns of any suitable shape. In the modification, the columns comprise a front side portion 25 integral and foldable with the front panels 4, a rear side portion 26, an inner side portion 27, and an overlapping strip 29 adapted to be adhesively secured to the back of the front side portion 25. In order to close the upper ends of the columns, a triangular top portion 30, having tabs or flaps 31 adapted to be inserted into the columns, may be foldably connected to the inner side portion 27.

The display devices described above are preferably formed by stamping a sheet of material into its desired shape, for example, as shown in Fig. 3, providing the creases and attaching the second sheet 22 by adhesive or other suitable means. Thereafter, the column portions may be folded into position and the overlapping strips may be adhesively secured to provide a substantially tubular or hollow column. In order to facilitate folding the display to place it into a flat box, the front panels 4 and upright panels 5 may be articulated at 35 in any desired manner (Fig. 3). Preferably, the display devices are shipped while in this assembled relation and are folded or set up as shown in Fig. 1 by the user thereof; however, the sheet shown in Fig. 3 with the second sheet 22 (Fig. 3a) attached, may be shipped in flat or unfolded position to the user who then assembles the device. Thereafter, the articles may be placed in the troughs and displayed either on a counter, in a window or on the floor.

It will be seen that the present invention provides an inexpensive, attractive article displaying device constructed of a minimum number of parts and adapted to receive a maximum amount of merchandise. Any number of display troughs may be provided and these may be formed integral with the supporting columns therefor and may be enlarged by an additional sheet to increase their capacity. The front panels conceal the downwardly extending portions of the troughs to improve the appearance of the device, and these may be decorated in any fanciful manner either by cutting a design at the lower edge or by lithographing or printing legends on the surface for advertising the goods displayed. The present display can be used for a number of purposes; it is easily shipped or stored when not in use and has unusual strength due to its construction. The present device is rugged in construction and can withstand any rough usage to which it may be subjected.

As various changes may be made in the form, construction and arrangement of the parts herein without departing from the spirit and scope of the invention and without sacrificing any of its advantages, it is to be understood that all matter herein is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim:

1. A display device formed of sheet material comprising an intermediate portion and foldable portions integral therewith at the respective sides thereof adapted to provide a pair of tubular columns spaced by said intermediate portion, the upper part of said intermediate portion being folded downwardly and upwardly to form a trough-like shelf intermediate said columns, the free end of said upper part being secured to the inner sides of said columns.

2. A display device formed of sheet material comprising an intermediate portion and foldable portions integral therewith at the respective sides thereof adapted to provide a pair of tubular columns spaced by said intermediate portion, the upper part of said intermediate portion being folded downwardly and upwardly to form a trough-like shelf intermediate said columns, the free end of said upper part being secured to the

inner sides of said columns, a portion of said intermediate part below the trough-like shelf being cut out and folded inwardly and upwardly to form a lower shelf, and means connecting the free end of said shelf to the inner sides of said columns.

3. In a display device formed of sheet material comprising an intermediate portion with end portions folded to provide vertical columns of substantially uniform cross-section, the inner sides of said columns having recesses therein, the upper part of said intermediate portion being folded to provide a shelf extending between said columns with the free end thereof folded downwardly to provide a vertical flap for supporting the free side of said shelf, said vertical flap being substantially edgewise disposed to forces exerted by merchandise placed on the shelf with end portions inserted in recesses of the columns, a part cut from the lower portion of said intermediate portion and bent inwardly to form a lower shelf extending between said columns, and means secured in the recesses of said columns for holding said flap in position.

4. In a display device formed of sheet material comprising an intermediate portion with end portions folded to provide vertical columns of substantially uniform cross-section, the inner sides of said columns having recesses therein, the upper part of said intermediate portion being folded to provide a shelf extending between said columns with the free end thereof folded downwardly to provide a vertical flap for supporting the free side of said shelf, said vertical flap being substantially edgewise disposed to forces exerted by merchandise placed on the shelf with end portions inserted in recesses of the columns, a part cut from the lower portion of said intermediate portion and bent inwardly to form a lower shelf extending between said columns, and a separate strip folded with one fold attached to the end of said cut part and the ends of the other fold being inserted in the recesses of said column whereby said other fold is supported in substantially vertical position and in turn supports one side of the lower shelf.

RICHARD HEINZ.