June 15, 1937. L. H. ZIMMERMAN 2,083,973

DISPLAY DEVICE

Filed March 20, 1933 2 Sheets-Sheet 1

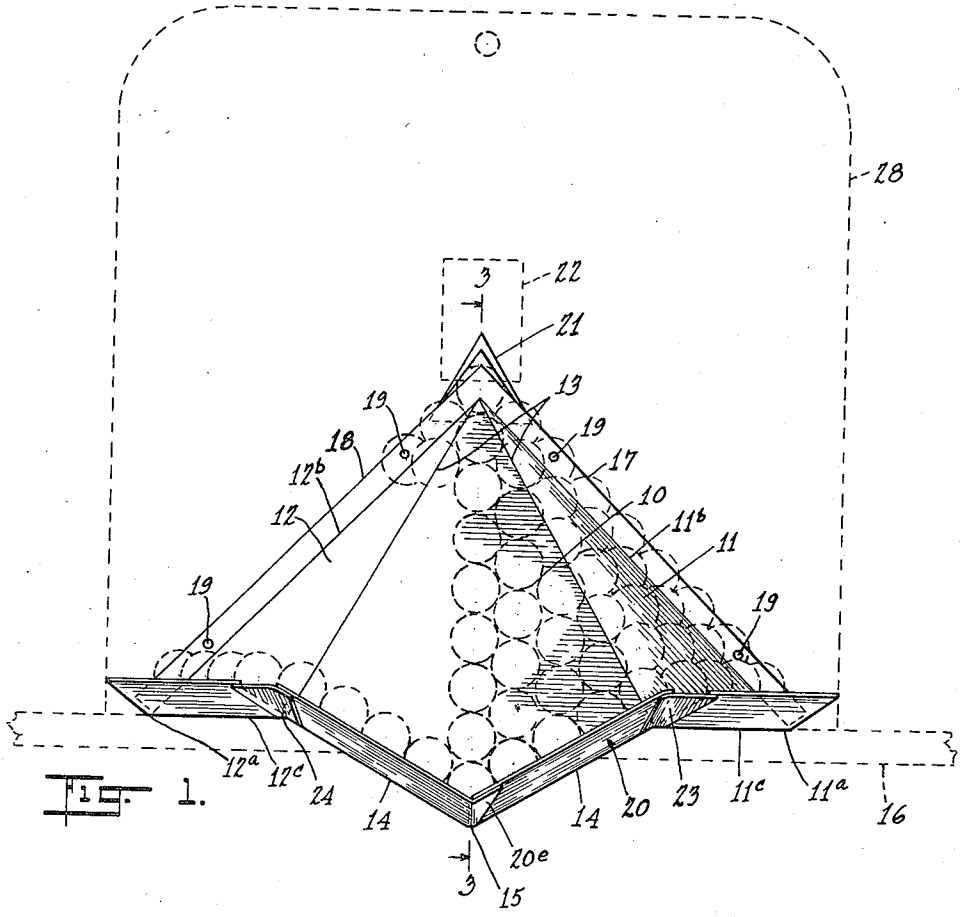

Fig. 1.

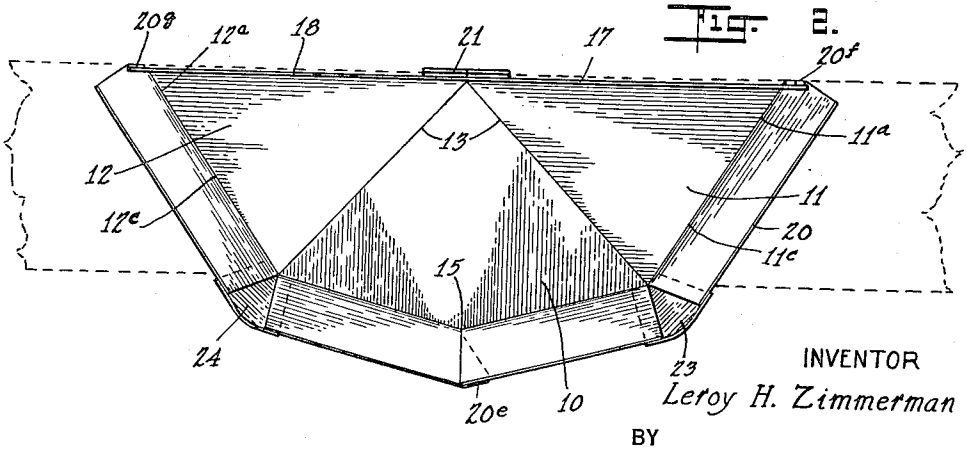

Fig. 2.

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Fig. 4.

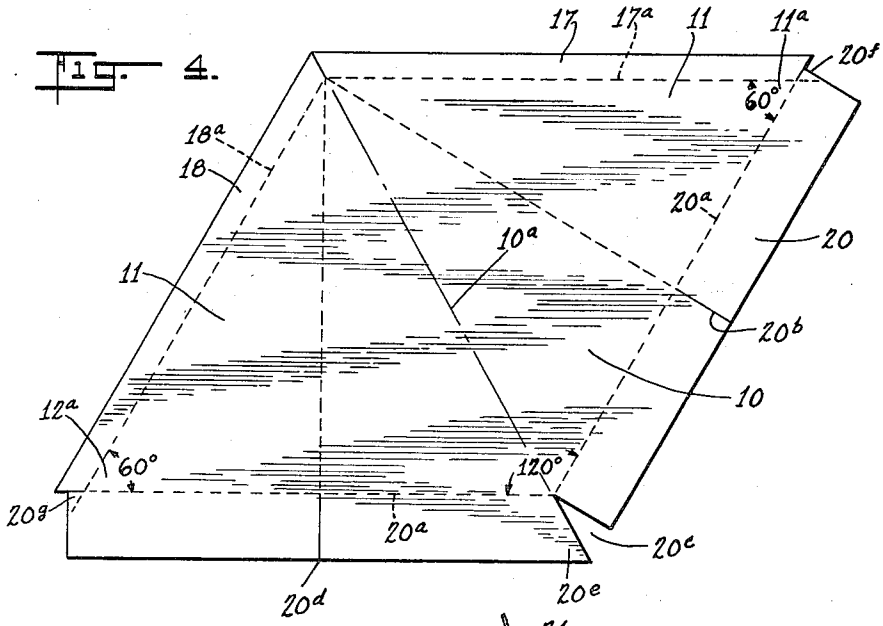


Fig. 3.

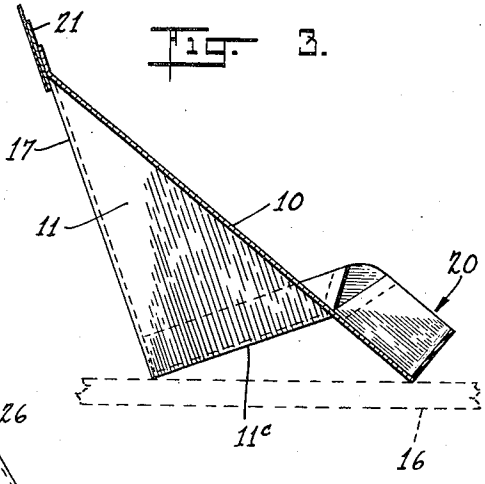
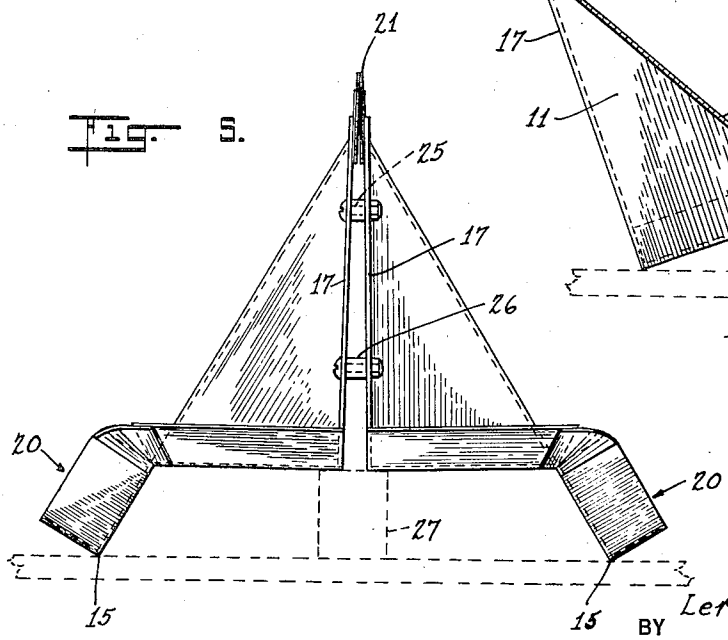


Fig. 5.



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Patented June 15, 1937 2,083,973

UNITED STATES PATENT OFFICE

2,083,973

DISPLAY DEVICE

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Application March 20, 1933, Serial No. 661,737

2 Claims. (Cl. 206—44)

This invention relates to improvements in display devices.

One object of the invention is to provide a display device for use in fruit or grocery stores, for example, for displaying fruit or vegetables such as apples, oranges or the like, in pyramidal or semi-pyramidal form, which device renders the stacking of the fruit in such form very convenient, requiring less skill and fruit or articles stacked than a solid pyramid formed thereof, and which can be transported or moved from place to place as desired without displacing the stacked articles.

Another object of the invention is to provide a display device upon which spherical articles of fruit, for example, can be stacked in pyramidal or semi-pyramidal form over the face of the device which is provided with angular supporting shelf so disposed as to cause the spherical articles placed thereon to converge at the apex in simulation of a solid pyramidal stack of such articles.

An additional object of the invention is to provide a display device having a plurality of supporting panels, flanges, and a shelf which can be formed largely from a single sheet of material, such as cardboard or sheet metal, for example, conforming strictly to the proportions of a parallelogram having opposing angles of 60 degrees and 120 degrees and being in fact two equilateral triangles having one side in common.

A further object is to provide display devices which may be used singly or in combinations and which, when not in use, or during shipment, may be stacked or nested together in a minimum storage space.

Other objects relate to various features of construction and arrangement of parts which will be apparent from a consideration of the following specification and accompanying drawings, wherein

Figure 1 is a front elevation of a display device embodying the present improvements,

Figure 2 is a top plan view of the device,

Figure 3 is a vertical sectional view taken on line 3—3 of Figure 1,

Figure 4 is a development illustrating the manner of cutting and folding a single sheet of material in forming the device, and

Figure 5 illustrates two of the display devices secured together back to back to provide a complete pyramid.

In the drawings, the device comprises a central polygonal panel 10 and two right triangular panels 11 and 12. The margins 13 of the panel 10 converge at their upper ends in the apex of the device, while the edges 14 converge at the point 15 as shown clearly in Figure 1.

The panel 10 as shown in Figure 4, comprises in effect two right triangles having coincident hypotenuses indicated by the line 10*a*.

The panels 11 and 12 have corners 11*a* and 12*a* forming angles of 60 degrees in the form of the invention illustrated. The side panels 11 and 12 are disposed on angles of 135 degrees with respect to the plane of the panel 10. This particular angularity of the side panels 11 and 12 effects the disposition of the rear edges 11*b* and 12*b* of the panels 11 and 12 respectively in a vertical plane when the device rests on the edges 11*c* and 12*c* on a horizontal support 16.

The panels 11 and 12 are provided with rear flanges 17 and 18 which may be provided with openings 19 either for receiving screws and bolts for securing the device to a wall or for securing two of the devices together as shown in Figure 5 and as will be more fully described hereinafter.

A shelf 20 extending forwardly approximately at right angles to the plane of the respective panels is formed integrally therewith along the lower edge of the panels and follows the angular disposition of the side panels 11 and 12 as shown in Figure 2. Fruit, such as oranges or apples, or other like commodities may be placed on the shelf 20 in regular formation as indicated in dotted circles in Figure 1, to represent a portion of the pyramid of such articles. The fruit is placed in successive layers on the device and due to the particular angular disposition of the shelf with respect to the flanges 17 and 18, the fruit, if substantially uniform in size, can be disposed in layers of decreasing length and will converge at the top in simulation of a solid stack of such fruit. The device may be provided with two upwardly projecting members 21 electric welded to the back of the device as shown in Figure 1, to provide a clip open at the top for receiving a price card 22, if desired.

As shown in Figure 4 the device can be formed almost entirely of a single sheet of metal. Thus the flanges 17 and 18 are formed by bending the metal upwardly along the lines 17*a* and 18*a* and the shelf 20 is formed by bending the metal upwardly along the lines 20*a*. The shelf material 20 is slit at 20*b*, 20*c* and 20*d* to accommodate the angular disposition of the contiguous portions of the shelf.

In Figure 1 small patches 23, 24 are shown covering the V-shaped opening formed at the slits 20*b* and 20*d*. The slit 20*c* shown in Figure

4 is self closing in that the point 20*e* of the shelf is bent over the adjacent portion of the shelf and secured thereto. Similarly at the juncture of the shelf and the flanges 17 and 18, portions 20*f* and 20*g* of the shelves may be bent to overlie a side of the respective flange and secured to the same. In securing the various parts together, spot welding is preferably used, but any other suitable means of attachment, such as riveting, may of course be employed.

The display device may be used singly as indicated in Figures 1 and 2, and may rest on a plane surface in inclined position as indicated in Figure 3. If desired, the device may rest with the lower portion of the central panel 10 extending beyond the edge of the shelf 16 as shown in Figure 1, or the edges 11*c*, 12*c* may be supported above a horizontal surface with the flanges 17 and 18 vertical and edge 15 resting on the surface as suggested in Figure 5. If desired the device may be attached to a wall by screws through upper openings 19 in flanges 17 and 18.

Even when loaded with fruit, the device can be moved from place to place without dislodging the fruit, as will be seen.

Two of the devices shown in Figure 1 may be secured back to back as illustrated in Figure 5 by means of bolts 25 which pass through the openings 19 previously referred to. It is preferred to use small spacers 26 on the bolts between the flanges to space the same slightly apart. This permits the fruit, for example, to project over the flanges 17 and 18 slightly, without crowding, in the same manner that the fruit may project beyond the flanges 17 and 18 slightly when a single device is employed.

When two of the devices are secured together as shown in Figure 5, they may rest upon the corners 15 and be held in stable relation by intermediate supporting members 27 such as small cans of canned goods, for example, or they may be supported or suspended by brackets or other suitable means.

It will be seen that the display device facilitates the stacking of fruit or like products in pyramidal or semi-pyramidal form, but requiring less skill and fruit than would a solid stack of the same, and without imposing the entire weight of the super-imposed fruit on the lower layers thereof.

The device may be mounted also on a supporting panel of material or cardboard 28 as indicated by dotted lines in Figure 1, and be hung on a wall or otherwise suspended. The panel 28 could, of course, be utilized for carrying printed advertising matter.

While I have shown and described certain embodiments of my invention for the purpose of illustration, I do not wish to be restricted thereto except as so limited by the appended claims.

I claim:

1. A display device comprising a central upwardly inclined quadrilateral panel having a V-shaped lower edge and composed of two right triangles having a common hypotenuse, a triangular shaped side panel extending rearwardly from each inclined side edge of said central panel, side flanges on the free inclined edges of said side panels extending substantially at right angles to the planes of the respective side panels, and a V-shaped shelf extending outwardly from the base of said central panel and having extensions along the bases of said side panels for supporting articles stacked upon the surfaces of said panels.

2. A display device for substantially spherical articles comprising a central upwardly inclined quadrilateral panel formed of two right triangles having a common hypotenuse, two right triangular panels extending rearwardly from the inclined edges of said central panel and each having the side edges thereof merging in the apex of said central panel, outwardly extending flanges on the inclined free edges of said side panels, and a continuous shelf at the bases of said panels conforming to the angular disposition of said bases for supporting articles stacked on the outer faces of said panels.

LEROY H. ZIMMERMAN.