

Feb. 27, 1934.

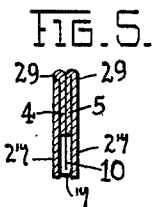
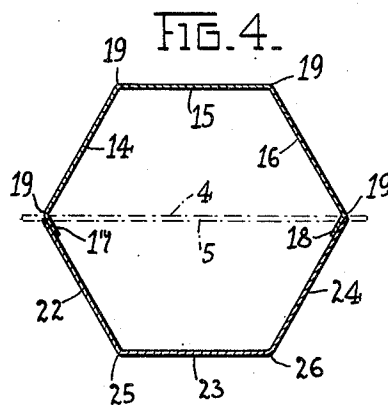
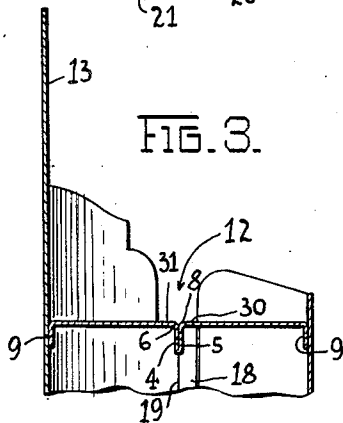
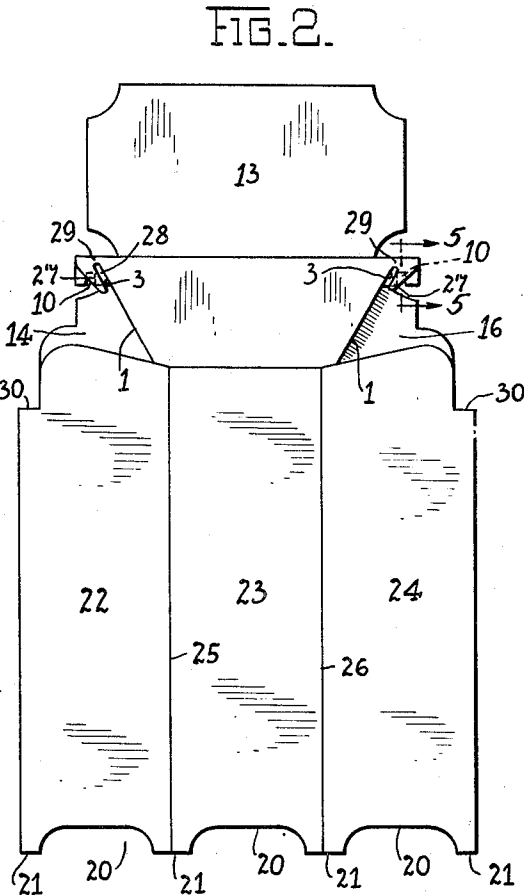
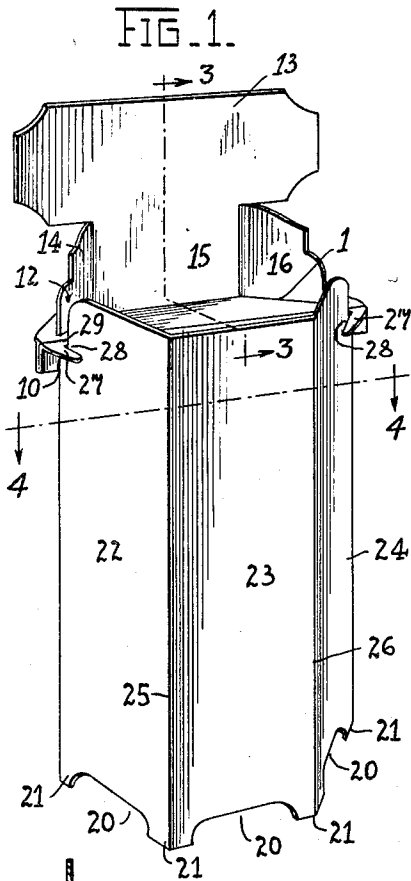
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1,948,902

FLOOR DISPLAY STAND

Filed April 26, 1932

2 Sheets-Sheet 1



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FIG. 6

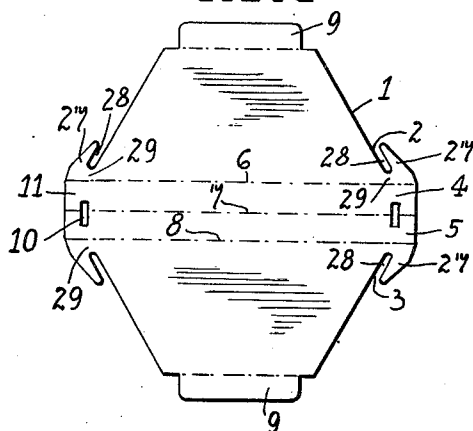


FIG. 7.

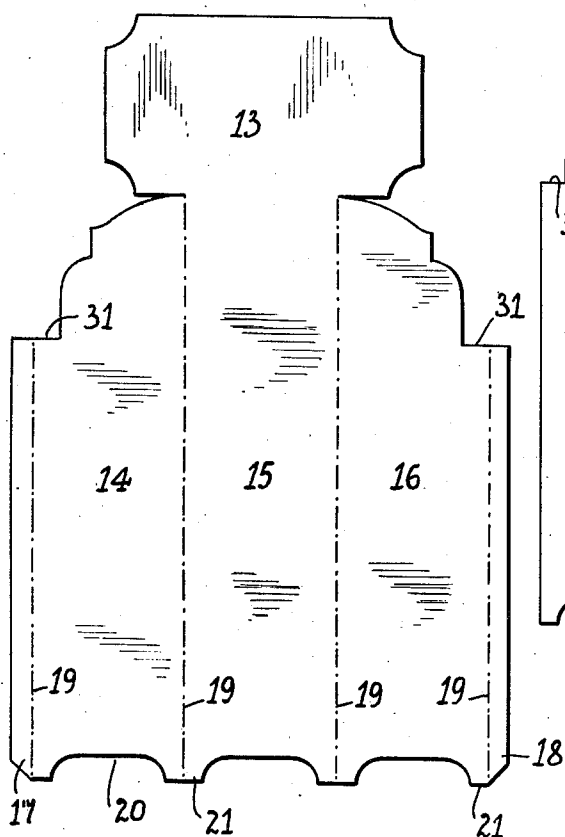
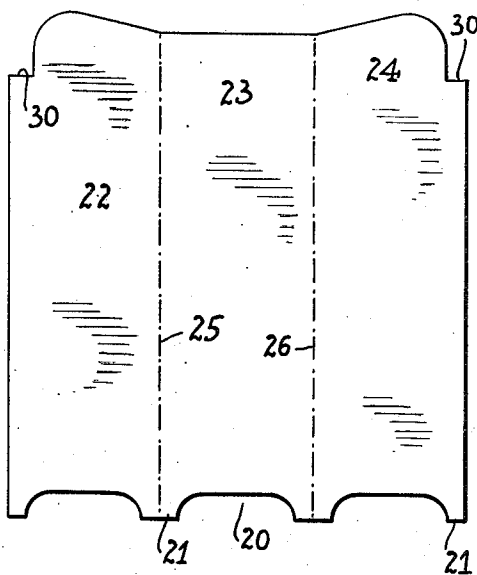


FIG. 8.



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FLOOR DISPLAY STAND

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Application April 26, 1932. Serial No. 607,626

5 Claims. (Cl. 211—156)

This invention relates to improvements in display stands and has more particular relation to improvements in so-called "knock down" floor display stands.

5 One of the several objects of the invention is to provide a floor display stand made up of inseparable parts which by instant and unskilled adjustment may be "knocked down" or flattened out for mailing or as quickly set up in position
10 as a display stand after having been so "knocked down".

A further object of the invention is to provide a "knock down" type display stand in the form of an ornamental pedestal having an upper shelf or top for displaying articles which top when held extended by the weight of the article thereon holds the side panels in their assembled positions so that the displayed article must be removed before the device can be collapsed.

15 The invention also has other objects, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings forming part of the specification,

25 Figure 1 represents a perspective view of the devices embodying my invention set up and ready for use.

Figure 2 represents a front elevation of said devices in the "knock down" condition.

30 Figure 3 represents a detail vertical section on the line 3—3 of Figure 1.

Figure 4 represents a horizontal section on the line 4—4 of Figure 1.

35 Figure 5 represents a detail vertical section on the line 5—5 of Figure 2.

Figure 6 represents a top plan view of the die-cut blank for the reinforced shelf or top of the display stand.

40 Figure 7 represents the die-cut blank for the back of the display, and

Figure 8 represents the die-cut blank for the front.

Described in general terms, the invention comprises a number of panels flexibly connected together to form a hexagon standard or pillar having an angularly collapsible top portion or shelf so formed as to hold the several panels in their proper adjusted positions as long as the shelf occupies a horizontal position in which it is held
50 by the weight of the article displayed on the shelf.

The weight of this article naturally forces the center of the shelf downward and this forcing action causes the flexibly connected sections of the shelf to spread laterally and thus force all of

the panels forming the hexagon into their proper positions.

Suitable side extending handles or hooks are provided for starting the upward collapsing movement of the shelf when desired. Such hooks also
60 by engaging the walls of slots in the side panels assist in limiting the downward movement of the shelf. A T-beam structure for bracing the middle of the shelf against excessive weight is also a part of the collapsible structure. 65

Referring to Figure 6, the top or shelf 1 is formed with two sections 2 and 3 with two intermediate narrow sections at 4 and 5. In order that these narrow folds may readily flex or assume the positions shown in Figure 3, they are scored laterally
70 as at 6, 7 and 8, the scored part 7 being down and the scored parts 6 and 8 being up, making a V-formation or truss as shown in the aforesaid Figure 3.

Each of the sections 2 and 3 is provided with a gluing tab 9 and each of the sections 4 and 5 is extended at each end and has slots 10 formed therein near said ends, these slots when the strips 4 and 5 are doubled side by side forming downwardly facing slots. When the strips 4—5 are
80 lying side by side in vertical positions, they form a vertical V-truss for preventing any sagging of the top under excessive weight. These strips are partly supported by the hooks 11 passing through slots 12 formed between the front and back sections of panels to assist in holding the back and front panels in position from lateral spreading as shown in Figure 1.

These front and back sections, however, are primarily held from spreading and the shelf held
90 from sagging by the hooks 27 formed on the shelf sections 2 and 3. These hooks 27, of course, assume an angular position when the parts 2 and 3 assume such positions upon being collapsed and when these shelf sections are forced down into horizontal positions, the hooks 27 which have previously been inserted in the vertical slots 10 changed from vertical to horizontal positions so that the hooks extend back of the panel sections.

Slots 28 formed by the hooks 27 receive the
100 respective vertical panels of the front and back sections during this operation. Solid sections 29 which connect the shelf sections 2 and 3 with the hooks 27, rest firmly upon shoulders 30 and 31 formed respectively on the front and back
105 sections and thus support the middle of the shelf without throwing undue strain on the flexible connection at the scoring between the front and back sections. If the sections 4 and 5 resting in the bottoms of the slots 10 were the sole support for 110

the middle of the shelf, the excessive weight of the articles on the shelf would cause the edges of the sections 4 and 5 to cut down upon the weakened flexing line between the front and back sections of the display.

The effect of the above construction is such that when the strips 4 and 5 are doubled together, the top or shelf has approximately a horizontal hexagonal shape, this also being the cross sectional shape of the completed stand when it is set up for use. The back blank shown in Figure 7 is provided with an advertising display card 13 and with 3 panels 14, 15 and 16 and gluing strips 17 and 18; scored lines 19 being formed between the panels and between the panels and strips so that the parts may flex easily at these points. The bottom of this back panel is formed with a recess 20 at the lower end of each panel; these recesses forming ornamental legs 21 which contact with the floor to support the stand, the whole structure being from 3 to 4 feet high. The front blank shown in Figure 8 is also formed into three panel sections 22, 23 and 24 separated by score lines 25 and 26 so that they may be easily flexed. These latter panels are formed at their lower ends with legs 21 similar to the back section.

The back section is glued to the front section by the glue strips 17 and 18 and when the gluing strips 9 of the shelf are similarly glued to the back and the front, the whole forms a completely assembled inseparable structure.

When the hooks 11 are raised and the continuity of the shelf broken and the front section forced towards the back section, all of the respective vertical panels straighten out against each other, the shelf sections forming an up and down extending inverted V and the entire structure lying perfectly flat for wrapping to be mailed or shipped.

When the device is to be set up, the front set of panels is pulled forward and the hooks 11 forced down in the slots 12 until the parts 29 of the shelf sections come to rest upon the shoulders or supports 30 and 31. The weight of the article resting upon the shelf holds the shelf perfectly flat and prevents its bowing upward accidentally. At the same time the hooks 11 and the hooks 27 prevent the side walls from spreading as long as they are hooked over these side walls, but just as soon as they are raised slightly and pressure exerted upon the front section, the side walls will move laterally and allow the whole display to be collapsed as above described and as shown in Figure 2.

When the display is set up, it forms a perfect hexagon shape column with a sturdy, braced and trussed shelf at the top upon which very heavy articles may be set for display, the weight of the article tending to firmly hold the display in its set up position against any accidental displacement.

One of the several features of advantage in the present invention is the fact that just as soon as the weight is removed from the shelf, a slight upward movement of the hooks 11 will allow the whole device to be instantly collapsed without any adjustments whatever, but will leave it in condition to be instantly set up again by an in-

experienced operator by simply drawing the front wall forward and forcing the hooks 11 down again through the slots 12.

It will be understood that in a large floor display of this type, the cardboard material employed is of very heavy gauge, to properly support the heavy displays placed on the top of the column.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. The combination with a series of vertical panels flexibly connected together so that they may be collapsed upon themselves, of a shelf inseparably connected to the panels and comprising sections hinged together and to the panels to hold the panels extended when the sections are brought into the same horizontal plane, and means engaging the vertical panels and holding the shelf in a horizontal position when weighted by the articles thereon.

2. The combination with a front, back and sides, the latter formed with supporting shoulders, means hinging the front, back and sides together so that they may collapse upon themselves, a shelf for holding the sides and front extended and comprising a structure having an upwardly opening V fold at the middle to form a strengthening truss and horizontal extensions at the end of this truss with hooks to rest upon the side shoulders to support the shelf in position, and hold the sides from spreading.

3. The combination with a panel structure having a front, a back and sides, the latter each comprising a plurality of panels, of flexible connections between the side panels, the front panel and the back panel so that the front may be collapsed upon the back in a plane at right-angles to the back, a supporting display shelf comprising a plurality of collapsible sections hinged together and also to the front and the back in such position as to pass within the back, the front and the sides and force the same into extended position when the shelf is forced down with its sections in the same horizontal plane.

4. The combination with columnar structure comprising a vertical back, front and sides hinged together, of a supporting display shelf comprising two sections hinged together, means inseparably and flexibly connecting the edges of the shelf to the back and front so that the shelf may pass within the column to force it into extended position, and extensions on the shelf sections for raising or lowering the shelf along its hinged line to allow the front to be collapsed or extended at right angles to the back.

5. The combination with hinged front, back and sides arranged to be extended to form a display column, of a display shelf having an upwardly hinged V fold at the middle and arranged to pass within the column to force it into extended position, laterally extending vertical hooks on the shelf to hook over the vertical sides to hold the shelf in position and to restrain the sides from moving laterally when the shelf is moved to a horizontal position.

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