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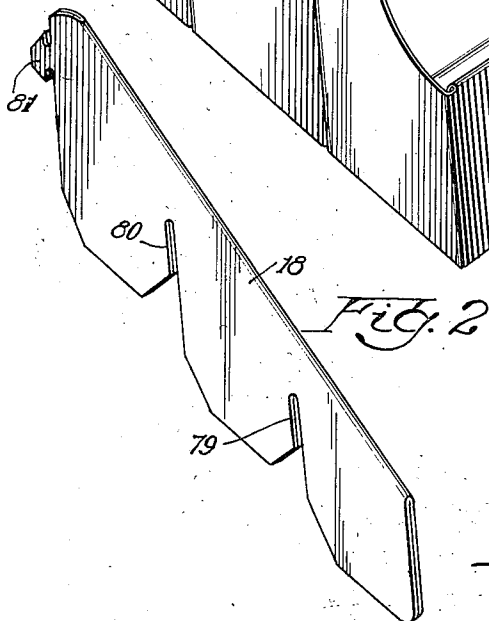
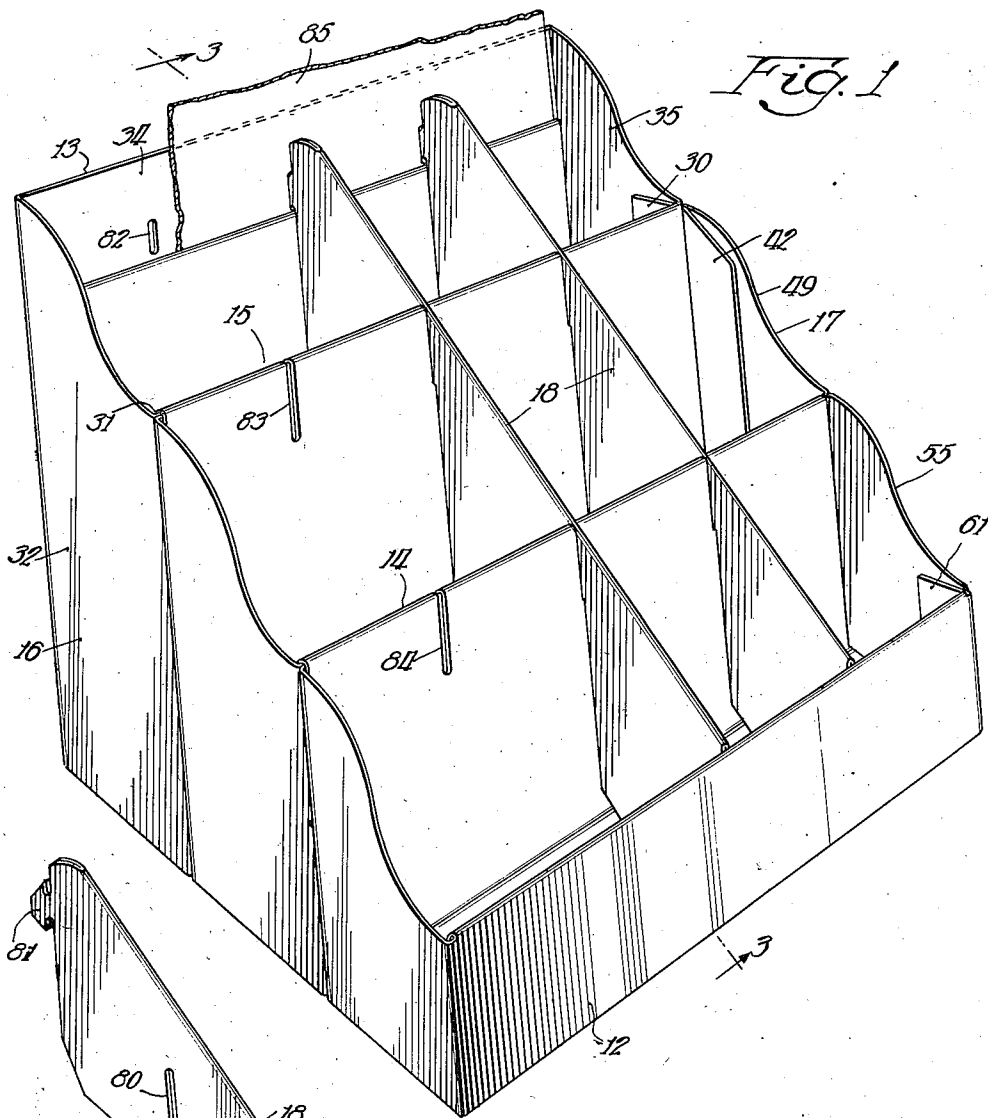
M. A. SMITH ET AL

2,312,594

DISPLAY STAND

Filed Sept. 9, 1940

3 Sheets-Sheet 1



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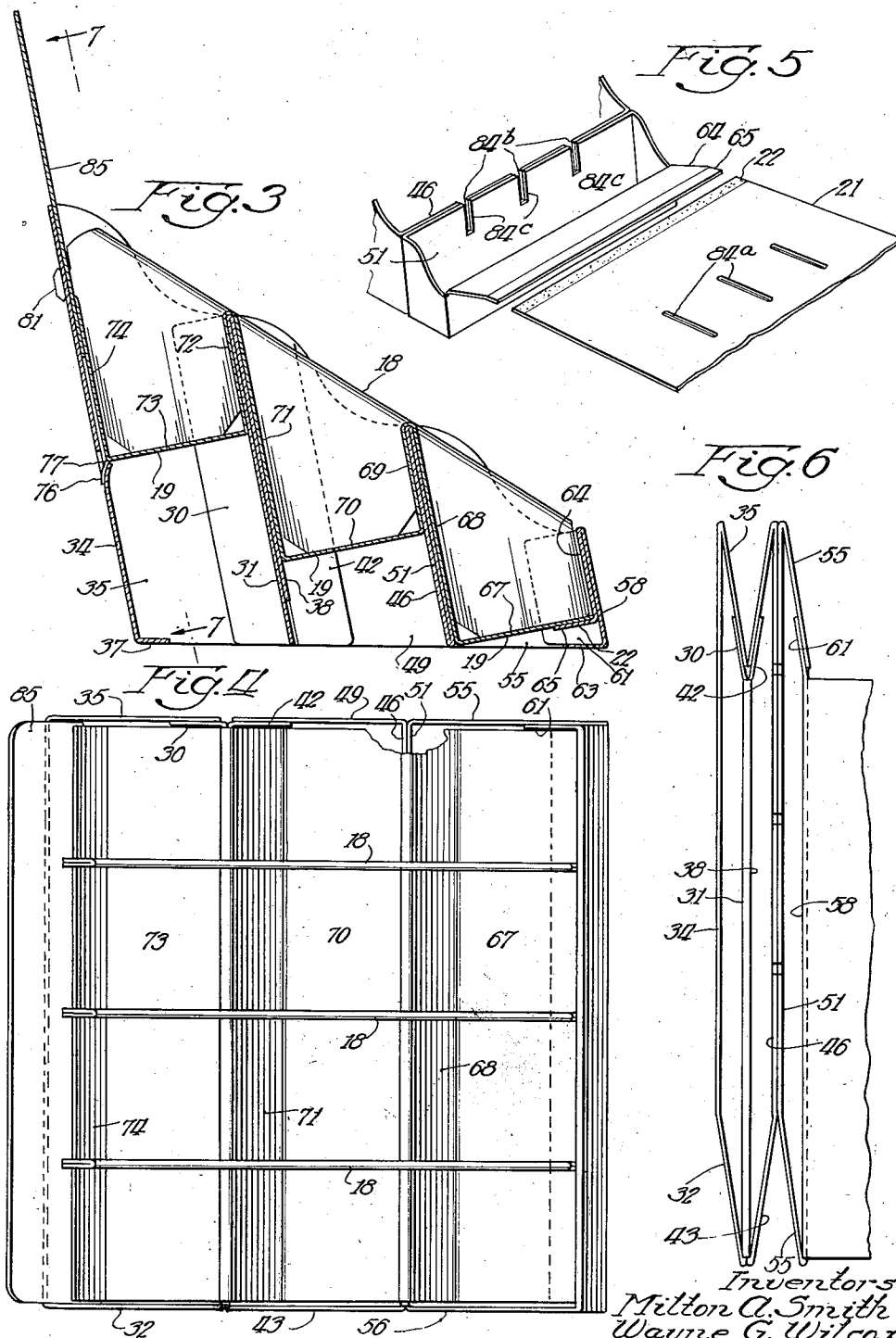
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3 Sheets-Sheet 2



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DISPLAY STAND

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3 Sheets-Sheet 3

Fig. 7

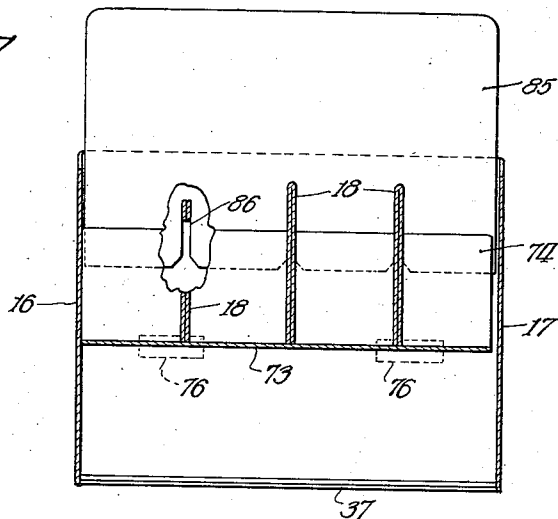


Fig. 8

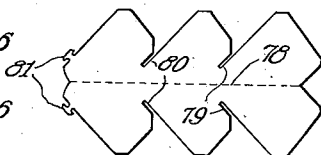
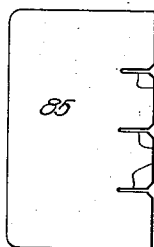
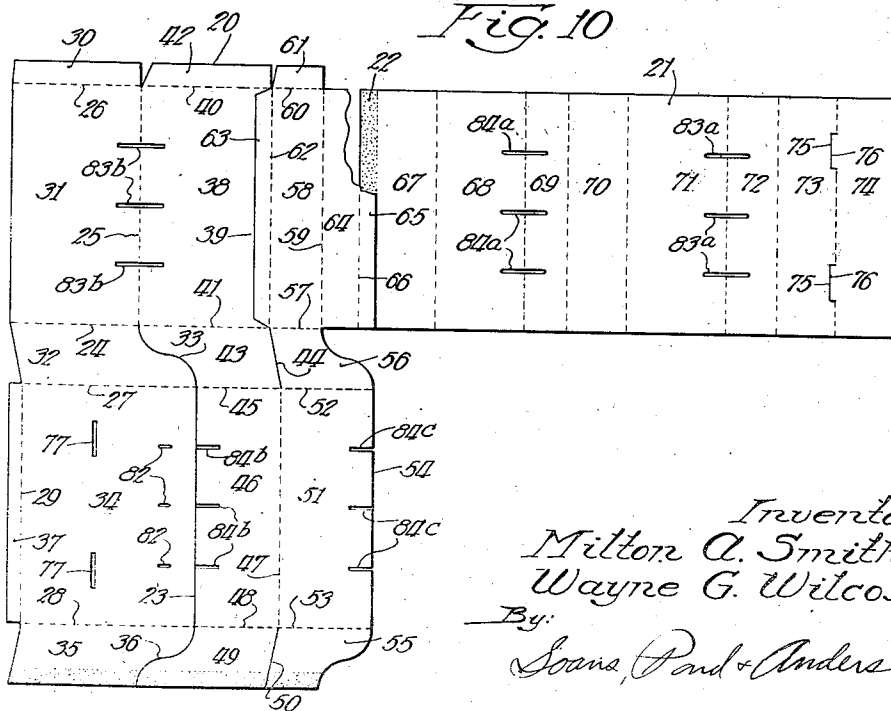


Fig. 9

Fig. 10



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UNITED STATES PATENT OFFICE

2,312,594

DISPLAY STAND

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Application September 9, 1940, Serial No. 355,932

6 Claims. (Cl. 211—72)

This invention relates to improvements in display stand and more particularly to a display stand of paper board construction and of relatively large size for displaying for sale an assortment of packaged or other merchandise.

The main objects of the invention are to provide a paper board display stand of the character indicated wherein there is provided means for displaying a plurality of differently sized, colored or otherwise differentiated lots of merchandise, especially when the same is in packaged form and all of the packages are the same size and shape; to provide a display stand of the character indicated which may be completely fabricated by a carton manufacturer and readily set up by the dealer without the use of adhesives, staples or other independent fastening devices; to provide a display stand which, although of substantial size when set up, may be collapsed to flat form of such size that it may be conveniently handled either in respect of storage or shipment; to provide a paper board display stand of the character indicated, which when set up, will be strong, rigid and durable so as to adequately withstand the handling and treatment to which such devices are normally subjected; and in general it is the object of the invention to provide an improved paper board display stand of the character set forth.

Other objects and advantages of the invention will be understood by reference to the following specification and accompanying drawings (3 sheets) wherein there is illustrated a paper board display stand embodying a selected form of the invention.

In the drawings,

Figure 1 is a perspective of the display stand in set up condition, one partition element being omitted and a display panel being only partially shown;

Figure 2 is a perspective of a partition element;

Figure 3 is a section on the line 3—3 of Figure 1;

Figure 4 is a top plan;

Figure 5 is a fragmentary perspective illustrating certain details of construction and a partially collapsed condition of the structure;

Figure 6 is a top plan showing the structure partially collapsed;

Figure 7 is a section on the line 7—7 of Figure 3;

Figures 8 and 9 are plans of blanks forming certain elements of the structure; and

Figure 10 is a plan of a composite blank forming the main body of the structure.

Referring now to the drawings, the display stand illustrated comprises a relatively low front wall 12, a substantially higher rear wall 13, intervening partitions 14 and 15, side walls 16 and 17, and intervening partitions such as indicated at 18. A suitable bottom structure is also provided for the various compartments formed by the various walls and partitions referred to and, by reference to Figure 3, it will be seen that the bottoms which are designated 19 are progressively stepped up toward the back of the display stand so that the merchandise in the rearwardly disposed compartments will have substantial portions thereof extended above the merchandise in the forward compartment so as to be, at least, partially visible.

The main body of the display stand is formed from a composite blank such as illustrated in Figure 10, the same embodying a blank designated 20 and another one designated 21, the two being adhesively or otherwise suitably united as indicated at 22, suitable flap portions being provided for this purpose. The blank section 20 is suitably scored and slitted to form the front, rear, and side walls and portions of the partitions 14 and 15 and the blank 21 is suitably formed to form the bottoms 19 and portions of the partitions 14 and 15.

The blank section 20 is provided with a line of slitting 23, which extends from one free edge of the panel up to a fold line 24 and is then continued in the form of a fold line 25. The fold line 24 extends from said line of slitting 23 to the adjacent free edge of the blank. Parallel with the fold line 24 are other fold lines 26, 27, and 28 and parallel with the main body of the slit 23 is another fold line 29. The blank section 20 is first folded by bending the flap section 30 disposed outwardly of the fold line 26 to approximately right angular relation to the panel 31 which is defined by the fold lines 24, 25 and 26 and the contiguous free edge of the blank. Thereafter the panel 32 which is defined by the fold lines 24, 27, the curved portion 33 of the line of slitting and the contiguous free edge of the blank 20 is folded to right angular relation to the panel 31 in the same direction that the flap 30 was folded. The panel 34 which is defined by the fold lines 27 and 28, the slitting 23, and the fold line 29 and adjacent free edge of the blank is then folded on the fold line 27 into parallel relation to the panel 31. The panel portion 35 which is defined by the fold line 28,

curved portion 36 of the slitting 23 and the adjacent free edge portions of the blank, is then folded into parallel relation to the panel 32 in which position it will overlap the flap 30 to which it is preferably adhesively attached. The narrow flap 37 which is disposed outwardly of the fold line 29 may be folded inwardly from the panel 34 as best shown in Figure 3.

The panel sections 31, 32, 34 and 35 thus form a tubular compartment which constitutes the rearmost transverse compartment of the display stand.

Another panel portion 38 of the blank section 20 is defined by the score line 25, a line of slitting 39 which is, in the main, parallel to the score line 25 and transverse score lines 40 and 41 which constitute, in effect, continuations of the score lines 26 and 24 respectively. Said panel 38 is folded downwardly along the fold line 25 into face to face relation to the panel 31 (see Figure 3) so that said panels 31 and 38 together constitute a two-ply wall. Thereafter an end flap 42 formed at the free end of the panel 38 is folded forwardly into substantially right angular relation to the panel 38. A side wall forming panel 43, defined by the curved portion 33 of the line of slitting, another inclined or angularly disposed line of slitting 44, the fold line 41 and a fold line 45 (which is in effect a continuation of the fold line 27) is then folded forwardly into right angular relation to the panel 38. A further panel 46 defined by the slitting 23, a line of scoring 47 which is substantially parallel to the slitting 23, the scoring 45 and a corresponding line of scoring 48 at the other end of the panel 46 is then folded on the fold line 45 into substantially parallel relation to the panel 38. The end panel 49, defined by the curved portion 36 of the slitting, another angularly disposed line of slitting 50, the fold line 48 and the adjacent end of the blank is then folded rearwardly and adhesively or otherwise joined to the forwardly extending flap portion 42. The panels 43, 46 and 49, together with the panel 38 form another tubular compartment extending transversely of the display stand.

A panel 51 defined by the fold line 47, end fold lines 52 and 53 (which are in effect continuations of the fold lines 45 and 48 respectively) and the free edge 54 of the blank is then folded upwardly on the fold line 47 into face to face relation to the panel 46. Thereafter an end panel 55 defined by the slitting 50, the fold line 53 and the adjacent free edge of the blank is folded forwardly from the panel 51 on the fold line 53. Similarly, a panel 56 defined by the slitting 44, the fold line 52, a fold line 57 and the adjacent free edge of the blank is folded forwardly on the fold line 52 into substantially parallel relation to the panel 55.

A panel 58 defined by the slitting 39, the fold line 57, a fold line 59 and a fold line 60 is then folded on the fold line 57 into parallel relation to the panel 51. An end flap 61 is then folded rearwardly into overlapping relation to the side panel 55 and suitably joined thereto thereby to effect the formation of a third transversely extending compartment within the walls formed by the panels 51, 55, 56 and 58. A line of scoring 62 is provided in the panel 58 to form a flap 63 between such line of scoring and the slitting 39. Such flap 63 is folded inwardly from the wall 58 into approximately parallel relation to the previously mentioned flap 37 (see Figure 3).

Extending beyond the fold line 59 is a further

panel section 64, the same being extended by a relatively narrow flap part 65 which is foldable relative to the panel 64 on a fold line 66. Said flap 65 is adhesively secured as previously indicated at 22 to a marginal portion of the blank member 21. Joining of the two blank portions 20 and 21, as mentioned, although not necessary, is preferred in that it simplifies the handling of this construction and makes it almost impossible to improperly set up the construction. Said blank section 21 comprises panel sections 67, 68, 69, 70, 71, 72, 73 and 74, respectively, separated from each other by intervening scoring or other suitable fold lines as indicated. For a purpose which will presently appear, slitting is provided as indicated at 75 to form short tongues 76 integral with the panel 74.

The blank section 21 is folded into assembled relation to the tubular body structure already described by first folding the panel section 64 downwardly and inwardly on the fold line 59; then folding the panel 67 and flap 65 on the fold line 66 into bottom forming position for the front compartment of the structure, and folding the panel 68 upwardly from the bottom panel 67. The panel 69 is then folded downwardly around the upper edge of the two-ply wall comprising panel sections 46 and 51. The panel 70 is folded rearwardly across the bottom of the intermediate compartment and the panel 71 upwardly in face to face relation to the two-ply partition wall comprising the panel portions 31 and 38. The panel 72 is then folded downwardly around the upper edge of said last mentioned two-ply partition wall, the panel 73 rearwardly across the rear compartment to form the bottom wall thereof and the panel 74 is then folded upwardly adjacent the back wall 34 of the display stand. The ears or tongues 76 are inserted through openings indicated at 77 provided in said back wall 34 so as to support the rearward edge of the bottom forming panel 73 in the desired position.

The partitions 18 which extend from front to rear of the structure are formed from blanks such as illustrated in Figure 9, the same being foldable on a centrally disposed fold line 78 so as to form a two-ply member with a smooth folded upper edge, such two-ply member being provided with suitable slots indicated at 79 and 80 and at its rear end with a tongue 81. The partition member 18 thus formed is associated with the main body of the structure by having its rear tongues 81 projected through suitable openings such as indicated at 82 provided in the rear wall for that purpose and by being seated in slots or notches such as indicated at 83 and 84 provided in the transversely extending partitions. As best shown in Figure 3, the partition members 18 are of such size and form that the lower ends of the sections thereof on opposite sides of the slots 79 and 80 rest on the bottoms of the respective compartments. The slots 83 are formed by providing slots 83a in the blank section 21 and slots 83b in the blank section 20, such slots registering when the structure is assembled as described. The slots 84 are formed by providing slots 84a in the blank section 21, slots 84b in the panel 46 and slots 84c in the panel 51, all of which register with each other when the structure is assembled as described.

A further panel for containing printed, illustrative, advertising or other matter is in the form of a blank 85 as shown in Figure 8, such blank being provided at its lower edge with a series of slots 86. The panel 85 is adapted to be inserted

in the back of the device between the rear wall 34 thereof and the panel portion 74 of the bottom forming structure, the slots 86 being adapted to fit around the ears 81.

The main body structure of the device comprising the blanks 20 and 21 is initially fabricated to the three compartment tubular structure described, the flaps 30, 42 and 61 being permanently united to the adjacent side wall portions. In this condition, the body structure may be collapsed to flat condition by folding as illustrated in Figure 6, the bottom forming structure being then extended outwardly. The bottom structure is of course capable of being folded to a smaller area along any of the numerous fold lines provided therein and it will be understood that when the tubular body part is collapsed as shown in Figure 6, the bottom forming blank will be folded upon itself and into overlying relation to the collapsed tubular structure. The partitions 18 and the panel 85 being in the form of flat elements may readily be packaged in face to face relation with the collapsed body and bottom structure so as to form a relatively thin package containing the collapsed or knocked down display stand. As best shown in Figure 3, the arrangement is preferably such that the compartments are inclined rearwardly and upwardly for most advantageously displaying the merchandise deposited in the compartments.

One practical embodiment of this structure measures approximately twenty inches across the front and sixteen inches from front to back while the rear wall is approximately fifteen inches in height and the front wall approximately four inches in height. These dimensions are referred to merely to indicate the general proportions of one practical embodiment of the device and it will of course be understood that the construction may be embodied in display stands of either larger or smaller sizes.

The two-ply transverse partition wall structure comprising the panel sections 31—38, 46—51, and 64—58 add considerably to the rigidity of the structure and this is further reenforced by the folding of the bottom forming structure around the intermediate transverse partitions so as to form the latter into four-ply walls as shown in Figure 3. The interlocking of the inclined partitions 18—18 with the intermediate transverse partitions and the interfitting relation of the said front to rear partitions with the respective compartments supplies a high degree of rigidity to the structure so that there is no material tendency for the structure to collapse under its inherent folding or unfolding forces. As indicated, the ears 81 for anchoring the rearward ends of the partitions 18 are preferably of a headed form requiring forceful projection through the respective openings 82 so that the normal tendency for the paper board material of which the device is made to resume its normal position will tend to expand the ears 81 and to contract the openings 82 to automatically anchor said rearward ends in operative position.

As shown in Figure 6, collapsing of the body of the structure involves lateral shifting of the transverse walls and partitions; wherefore it will be understood that the partitions 18, because of their folded construction, are especially effective to maintain the body structure in set up condition.

Changes in the described construction may be made without departing from the spirit of the

invention, the scope of which should be determined by reference to the following claims.

We claim:

1. In a paper board display stand of the class described, a tubular body having integrally connected front, back and side walls and a pair of two ply partitions integrally connected to said body and extending between said side walls, the plies of one of said partitions being foldably connected along the top edge thereof and the plies of the other partition being foldably connected along the bottom edge thereof, and the ends of the respective plies of both of said partitions being connected to said side walls.

2. A paper board display stand of the class described, comprising a tubular body having connected front, back and side walls, and a two ply partition extending between an oppositely disposed pair of said walls, the plies of said partition being foldably connected along one longitudinal edge and the ends of the respective plies being connected to said pair of walls, and a bottom for said body member secured at one end to one of said body walls, said bottom member being provided with fold lines defining bottom sections and partition embracing sections, and means for detachably securing the other end of said bottom member to another of said body walls.

3. A paper board display stand embodying front, back and side walls and a pair of two-ply partitions extending between said side walls in spaced relation to each other and to said front and back walls, the stand being formed from a blank creased and cut to define two rows of panels, the panels of one row having ends integrally connected to the adjacent ends of the panels of the other row, and each of said rows embodying at least three panels, one of said panels of each row being severed from the others and two thereof having adjacent edges foldably connected.

4. A paper board display stand embodying front, back and side walls and a pair of two-ply partitions extending between said side walls in spaced relation to each other and to said front and back walls, the stand being formed from a blank creased and cut to define two rows of panels, the panels of one row having ends integrally connected to the adjacent ends of the panels of the other row, and each of said rows embodying at least three panels, one of said panels of each row being severed from the others and two thereof having adjacent edges foldably connected, the foldably connected panels of one row being disposed in staggered relation to the foldably connected panels of the other row.

5. A paper board display stand embodying front, back and side walls and a pair of two-ply partitions extending between said side walls in spaced relation to each other and to said front and back walls, the stand being formed from a blank creased and cut to define two main rows of panels and an intervening row of panels, the panels of said main rows having adjacent ends foldably connected to the adjacent ends of the panels of said intervening row, and each of said main rows embodying at least three panels, one of said three panels of each main row being severed from the others and two thereof having adjacent edges foldably connected, the foldably connected panels of one main row being disposed in staggered relation to the foldably connected panels of the other main row.

6. A paper board display stand embodying front, back and side walls and a pair of two-ply

partitions extending between said side walls in spaced relation to each other and to said front and back walls, the stand being formed from a blank creased and cut to define two main rows of panels and an intervening row of panels, the panels of said main rows having adjacent ends foldably connected to the adjacent ends of the panels of said intervening row, and each of said main rows embodying at least three panels, one of said three panels of each main row being severed from the others and two thereof having ad-

5 jacent edges foldably connected, the foldably connected panels of one main row being disposed in staggered relation to the foldably connected panels of the other main row, additional panels, respectively corresponding to the panels of said intervening row, foldably connected to free ends of certain of said main row panels, and glueing flaps carried by some of said panels for uniting the same substantially as shown and described.

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