April 21, 1959 A. E. McKENZIE 2,883,064

SEED DISPLAY STANDS WITH TIERED SHELVES

Filed Nov. 2, 1956 2 Sheets-Sheet 1

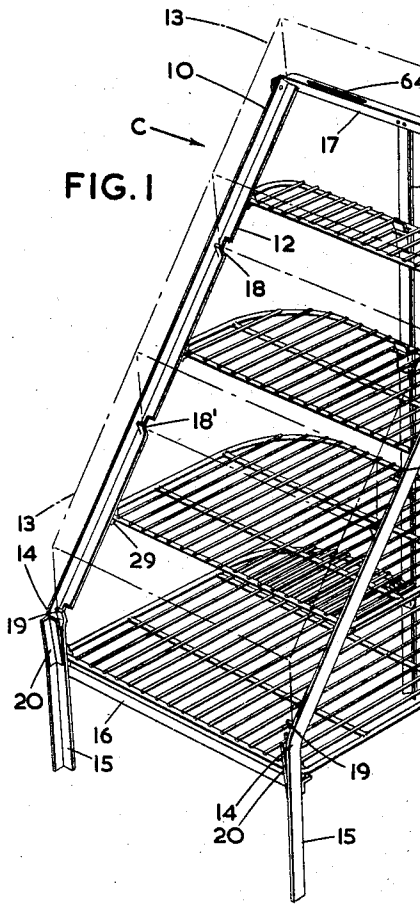


FIG. 1

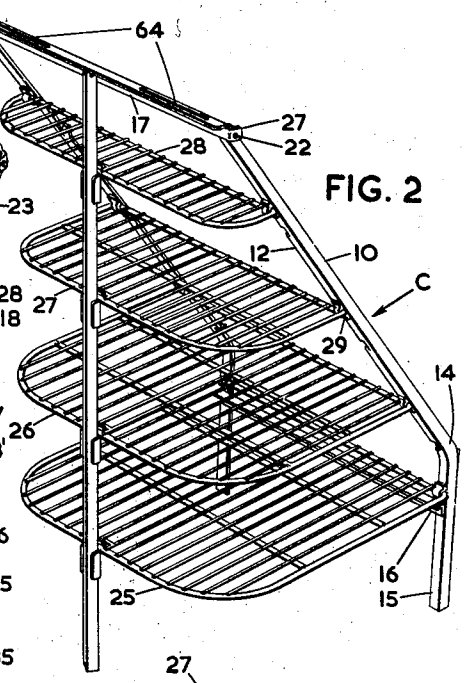


FIG. 2

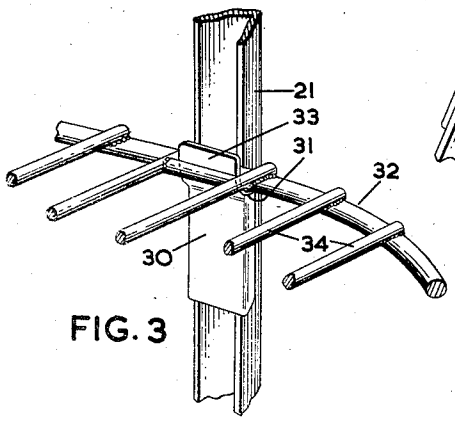


FIG. 3

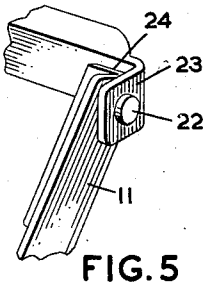


FIG. 5

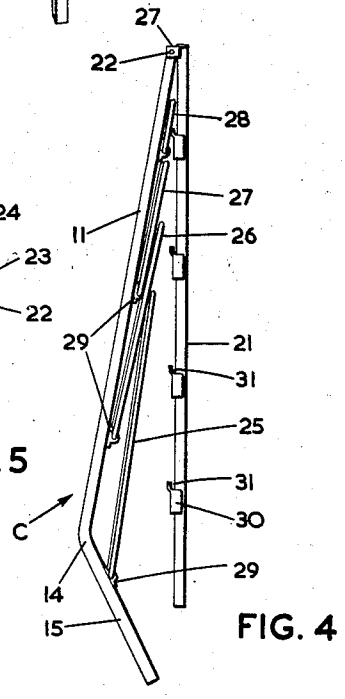


FIG. 4

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SEED DISPLAY STANDS WITH TIERED SHELVES

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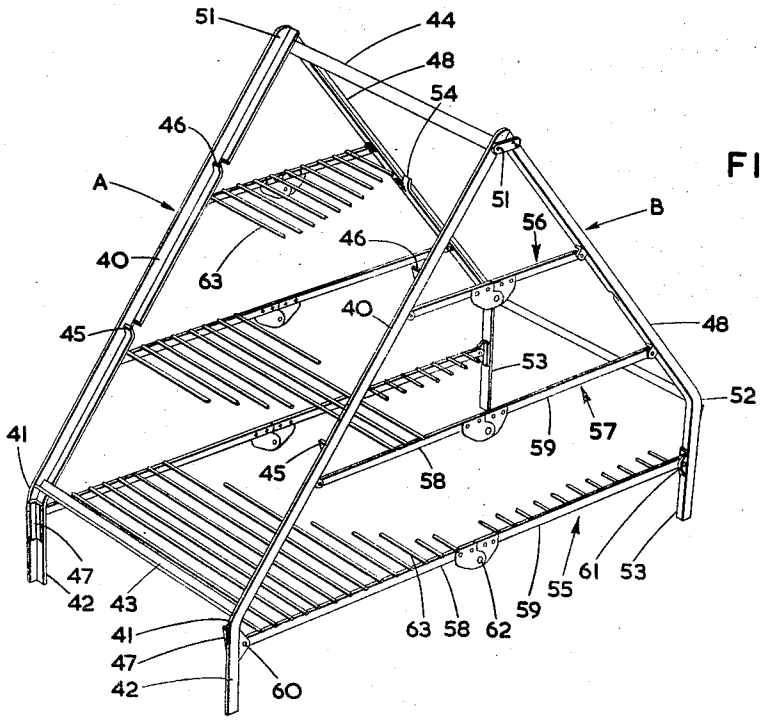


FIG. 6

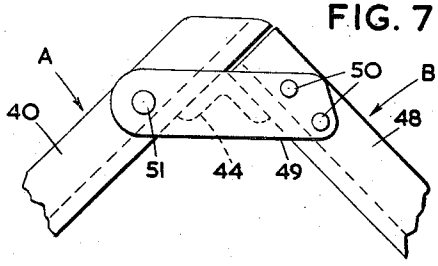


FIG. 7

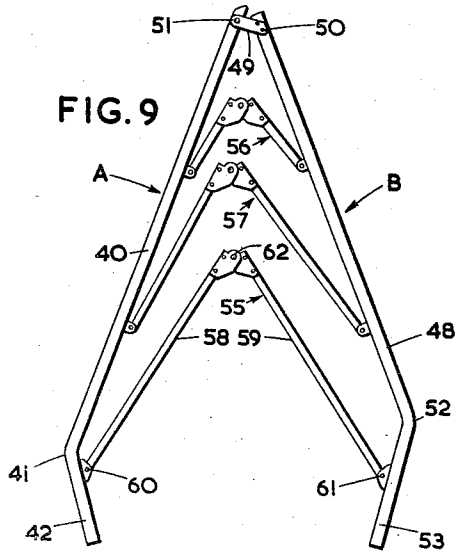


FIG. 9

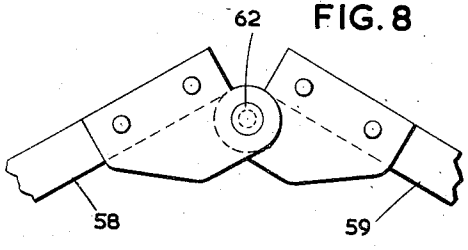


FIG. 8

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SEED DISPLAY STANDS WITH TIERED SHELVES

Albert E. McKenzie, Brandon, Manitoba, Canada

Application November 2, 1956, Serial No. 620,050

4 Claims. (Cl. 211—85)

My invention relates to improvements in display easels or stands for merchandise and in particular for exhibiting packet seeds in retail stores as is well known to the trade. More essentially my invention concerns certain new and useful improvements in the type of display easel or stand disclosed in my co-pending patent application Serial No. 573,725, now abandoned, in which there is disclosed a frame for the support of seed trays in an upward and rearward angle one above another and containing benches on which packages of seeds rest, the arrangement being such that vignettes of the foremost packets of seeds belonging to each tier are mainly visible to a remarkable degree, and of pleasing appearance. Such display easels or stands are well adapted for use in stores for the retailing of package garden seeds in that they afford an opportunity for a purchaser to readily make a selection from the displayed merchandise with ease and facility.

Floor space in retail stores is at a premium and the retail merchandiser must utilize his floor space to the best advantage. In my co-pending application there is disclosed an easel display stand possessed of an exceptionally large display capacity while occupying a minimum of floor space which enables a far greater number of packet seeds to be effectively displayed in a given space than has hitherto been possible.

According to my present invention I have greatly improved upon the display stand or easel by the provision of an arrangement of shelves which vastly improve the utility and the appearance of the stand as a whole. According to my present improvement the shelves are arranged in tiers inwardly of the easel or stand and at the rear of the seed trays. The shelves do not increase the overhaul dimensions of the easel or stand so that there is provided an easel display stand which not only is possessed of an exceptionally large display capacity while occupying a minimum of floor space, but also provides storage shelves for the merchandise which greatly increases the utility of the display easel or stand.

The invention enhances the appearance of the seed display stand and at the same time enables the merchandise to be stored at a most convenient location either for replenishing packages that have been removed or for storing seeds which may be put up in pound packages for example. The multiple shelf structure possesses the advantage of a seed display stand capable of displaying a large number of seed packages within the given space, and moreover enabling the vignettes on each package to be exposed to view.

A highly desirable feature is that the shelves are hinged to the support frame for the seeds for collapsing to folded condition for storage of the display stand. In the unfolded condition of the shelves they serve to render the display stand more sturdy and reliable and the arrangement is such that they do not interfere with the compact folding of the stand. The improved display stand provides for the support of announcement cards, or the like, containing appropriate advertising matter. The announcement cards form a part of the assembly without obstructing visibility of the displayed merchandise, but at the same time serving to enhance the appearance of the display stand in making it of a more pleasing appearance.

The invention consists in the novel combination and arrangement of parts as described in the ensuing specification and shown in the accompanying drawings forming a part thereof. In the drawings:

Figure 1 is a perspective view of the easel type of stand viewed from the front and incorporating the improvements of the present invention;

Figure 2 is a similar view thereof but viewing the stand from the rear;

Figure 3 is a detail in perspective showing the rear leg or prop member of the stand fitted with a latching element for supporting the swinging edge of one of the trays;

Figure 4 is an edge view of the stand in folded condition;

Figure 5 shows the hinge connection of the leg or prop with the frame;

Figure 6 is a view in perspective of a modified form of display stand of the duplex type for exhibiting the packet seeds from both sides of the stand;

Figure 7 shows the hinge connection by which the two tray supporting frames are connected at the top;

Figure 8 is a detail in side elevation of the jack-knife hinge by which two parts of a shelf are connected for folding together with the frame structure; and

Figure 9 is an edge view showing the stand in nearly collapsed condition.

It has been mentioned earlier that the present invention is an improvement upon the seed display stand disclosed in the said co-pending application wherein there is provided a frame designed to hold a plurality of seed trays in upward tilted disposition one above another with benches in the trays disposed in stepped relation whereby seed packages have their vignettes rendered substantially visible. Accordingly the vignettes of the foremost packages are displayed to a maximum degree, the optimum of exposure being obtained by the sharpness of the angle at which the trays are supported in conjunction with the arrangement of the benches within the trays and the pocket formation whereby the packages of seeds are arrayed one above another in an uninterrupted manner.

Figures 1 to 5 inclusive illustrate a single type of display easel, in which there is a sloping frame for support of seed trays. This frame is generally indicated at C. It comprises a pair of inturned angle arm members **10** and **11**, which are sharply inclined for the major part of their length, the inturned flanges thereof provide sustaining ledges **12** for seating trays indicated in phantom lines at **13**, Figure 1. Near the lower ends, the side members **10** and **11** of the frame are bent downwardly at knee portions **14** to provide the vertically arranged front legs **15**, which are fairly short.

In my improved frame structure I arranged the frame members **10** and **11** with their lower parts rigidly tied together by the lower cross bar **16** and an upper cross bar **17**, both of angle iron and preferably welded in place. The lower cross bar **16** is not used as a stop for the bottom tray as described in my earlier application but is arranged at a lower level at a point slightly below the knees **14** of the side frame members preferably subjacent the lowermost shelf presently to be described. Cross bar **16** is thus rendered less conspicuous and the arrangement enhances the appearance of the stand as a whole.

The side members **10** and **11** sharply incline at an upward angle and are of a length to support three transversely disposed trays one above another as denoted in phantom lines in Figure 1. These trays fit between the upright flanges of the angle iron members **10** and **11** and the middle tray is retained at a desired elevation by means of the struck-up lugs **18'**, one on each side mem-

ber. The upper tray abuts similar lugs indicated at **18**, while the lower tray is maintained at its level by means of lugs **19**. The lugs form abutments and it will be manifest that such abutments need not necessarily be struck-up from the frame parts **10** and **11**, but could be otherwise provided without departing from the spirit and scope of the invention.

The trays are, of course, conventional in construction and are supplied with the usual benches and pockets for package seeds.

Suitable holding members denoted at **20** are supplied at the front of the frames and attached to the leg parts **15** such as by welding or otherwise in order to supply slots receptive to an announcement card not shown since it does not form a part of the present invention.

Adverting to the cross bar **17** this is rigidly connected medially of its length to a leg or prop **21** which is shown as vertically arranged at the rear of the frame to support the upper end thereof. The leg is an angle iron member and may be riveted or otherwise firmly attached to the cross member **17** according to dictates of manufacture. Cross bar **17** has its ends pivotly attached as at **22** to the upper ends of the side bars **10** and **11** to permit the leg or prop **21** to swing inwardly to a collapsed position as shown in Figure 4 when the frame is to be folded for storage. The ears **23** form a part of the hinged connection of the cross bar **17** and the upper terminal part **24** of the side members **10** and **11** are devised to act as stop elements for eliminating outward movement of the leg **21**.

The shelves are novel and are arranged in tiers one above another to the rear of the members **10** and **11** to which they are pivotly connected to fold upwardly to collapsed position as shown in Figure 4.

The shelves denoted at **25**, **26**, **27**, and **28** are individually hinged as at **29** and extend rearwardly to meet the vertical leg **21**. The shelves are of equal width, but diminish in breadth progressively in upward direction. The swinging or free edge of each shelf is supported on the leg **21** in approved manner. In the present instance it is accomplished by an upturned latching element **30** for each shelf which is secured to the leg **21** and has a seat forming element **31** on which the respective shelf rests. Each shelf has a marginal frame **32** which drops over the lip part **33** of the respective latch and thereby retains the leg against unwanted movement. The shelves are desirably reticulate members and are formed in part by the wires **34** brazed to the cross elements **35**. It will be understood, of course, that the shelves could be imperforate if so desired, or otherwise fashioned according to dictates of manufacture.

It will be manifest that the arrangement of shelves not only enable the stand to store merchandise as well as to display it, but also provides a very strong and serviceable structure which has a decidedly pleasing appearance.

It will be obvious from the preceding description that the shelves can be individually disengaged from the latching members **30** and folded upwardly against the side members **10** and **11** of the frame which permits the leg **21** to be folded inwardly in the collapsing of the stand for storage purposes.

This easel stand is adapted to display seed packages contained in the trays and at the same time seeds may be stored on the shelves without increasing the floor space occupied by the stand.

In the modified construction of the seed display stand depicted in Figures 6 to 9 inclusive the stand structure comprises a front frame generally indicated at A, and a similar but rear frame generally indicated at B. The frames A and B slope upwardly at a sharp angle to meet each other and are pivotally connected together at their upper ends as at **51**. Accordingly the frames may be folded together when not in use.

The front frame comprises a pair of inturned angle iron members **40** uniformily spaced apart throughout their

length and co-extensive. These members are inclined upwardly and rearwardly at a sharp angle each from a knee portion **41** at which there is a vertical downward continuation **42** constituting a stub leg element. The angle iron members **40** are inturned and are rigidly connected together at their lower ends by means of a cross member **43** and suitably braced by the upper cross member **44** which desirably is an angle iron element. The members **40** are all of the same length for supporting the trays, the lower one of which may abut the cross bar **43** while the intermediate tray abuts the lugs **45** on the members **40**. The upper tray is similarly supported by abutment with the lugs **46**. The lugs **45** and **46** may be struck up from the angle iron members **40** or otherwise fashioned according to dictates of manufacture. It will be understood that the mode of supporting the trays is similar to that previously described.

A card holder is provided on the leg portion **42** of each of the members **40** and consists of a short length of angle iron vertically arranged at the front of a leg element and welded to it in spaced relation to the adjacent plans so as to provide a card receiving slot whereby a suitable announcement card (not shown) may be inseted. The card holding elements are indicated at **47**.

The rear frame B is likewise composed of two angle iron members which are indicated at **48**. These angle iron members are inturned and are inclined at a similar angle to the tray support elements of the frame A, and they meet respective members **40** at an apex. Each of the iron members **48** is provided at its top with a hinged plate **49** which is riveted as at **50** or otherwise secured thereto. The hinged plate forms a part of the hinge connection between the frames A and B, the pivot pin being denoted at **51**. The pivotal connection enables the frames to be swung toward each other for folding. The knee portions of the members **48** are denoted at **52**, and the short legs at **53**. It will be understood that the leg parts **53** will be supplied with card holders similar to the card holders **47** on the frontal legs **42**. Trays are supported on the inclined parts of the members **48**, in a manner as described in connection with the frontal members **40** and for this purpose there is an arrangement of similar lugs as at **54** arranged in sets to serve as abutments or stop elements for the trays.

Between the frames A and B there is a complement of trays arranged in tiers which are novel. Three such trays are shown in the drawings, there being a lower tray **55**, an upper tray **65**, and an intermediate tray **57**.

These trays are of identical construction and each comprises a pair of arms **58** and **59** at each side of the stand and horizontally arranged to extend between the corresponding frame members **40** and **48**. The arm **58** is pivoted to the leg part **42** of the frame member **40** as at **60**. The arm **59** is pivoted at **61** to the leg **53** of the frame member **48**, the arms are pivotly connected at **62** with a jack knife joint which restrains them to an upward folding movement as illustrated in Figure 9, whereby they may fold to enable the frame as a whole to collapse to a compactly folded condition as will be gathered from an inspection of Figure 9. The corresponding arms **58** of each tray are rigidly united by cross bars **63** which may be welded or otherwise secured. Similarly the corresponding arms **59** of the tray are united by similar cross bars. The arrangement is simple and efficient, and it will be manifest that the shelves are not only sturdy but enable the entire space between the frames to be utilised for storage of merchandise or even for displaying merchandise as may be desired.

Announcement cards may be posed at the top of the stand and supported thereon in any desirable manner. Announcement cards may also be supported at the top of the varient form of stand shown in Figures 1 to 5 inclusive. In Figures 1 and 2 for instance there is a provision of slots **64** in the top cross bar **17** for receiving portions of an announcement card or cards to facilitate the attach-

ment of the same. These ancillary features may be modified according to dictates of manufacture.

Such changes and variations may be resorted to as fairly come within the scope and spirit of the invention and it will be manifest that the improved stand structure of my invention and the assembly trays present a distinct improvement in the art.

What I claim is:

1. A foldable display stand having a folded position and an upright open position comprising a pair of spaced parallel frame members having floor engaging legs and rearwardly diverging upper portions, a plurality of parallel spaced tray supporting members struck outwardly from said diverging upper portions of said frame member whereby a plurality of trays may be positioned on the front position of said frame members, a cross bar pivotly secured to said diverging upper portions at the ends thereof, a downwardly depending vertical leg rigidly secured to said cross bar for movement towards said frame members to a folded position and away from said frame members when the stand is in the upright open position, a plurality of shelves arranged in spaced relation to said frame members extending towards said vertical leg having their forward edges pivotly secured to said frame members for movement with said stand to the folded position and the upright open position, and shelf supporting means secured to said vertical leg whereby said shelves are supported horizontally when said stand is in the upright open position.

2. A foldable display stand having a folded position and an upright open position comprising a pair of spaced parallel frame members having floor engaging legs and rearwardly diverging upper portions, a plurality of parallel spaced tray supporting members struck outwardly from said diverging upper portions of said frame member whereby a plurality of trays may be positioned on the front portion of said frame members, a cross bar pivotly secured to said diverging upper portions at the ends thereof, a downwardly depending vertical leg rigidly secured to said cross bar for movement towards said frame members to a folded position and away from said frame members when the stand is in the upright open position, a plurality of shelves arranged in spaced tier formation extending towards said vertical leg having their forward edges pivotly secured to said frame members for movement with said stand to the folded position and the upright open position, each of said shelves being confined within the space between said diverging frame members and said vertical leg, and shelf supporting means secured to said vertical leg whereby said shelves are supported horizontally when said stand is in the upright open position.

3. The structure of claim 2 wherein said shelf supporting means comprises a latching member for each

shelf having a shelf seating portion and an upwardly turned lip portion and wherein said shelves have at least one opening adjacent said vertical leg through which said lip portion extends whereby said shelves are maintained in a horizontal position in the upright open position of the stand, and will be foldable upwardly when the stand is in the folded position.

4. A foldable display stand having a folded position and an upright open position comprising a pair of spaced parallel L-shaped frame members having floor engaging legs and rearwardly diverging upper portions, each of said rearwardly diverging upper portions having a hole adjacent the end thereof, said holes being in horizontal alignment, a plurality of parallel spaced tray supporting members struck owtwardly from said diverging upper portions of said frame member whereby a plurality of trays may be positioned on the front portion of said frame members, a cross bar terminating at its ends in L-shaped flange portions having a hole extending transversely therethrough registering with the holes in said upper portion of said frame members, said cross bar extending beyond the L-shaped frame members to provide a stop means for movement of said cross bar in a direction away from said frame members, means pivotly connecting said flanges of said cross bar to said upper portions of said frame through both of said holes, a downwardly depending vertical leg rigidly secured to said cross bar for movement towards said frame members to a folded position and away from said frame members when the stand is in the upright open position, a plurality of shelves arranged in spaced relation to said frame members extending towards said vertical leg having their forward edges pivotly secured to said frame members for movement with said stand to the folded position and the upright open position, and shelf supporting means secured to said vertical leg whereby said shelves are supported horizontally when said stand is in the upright open position.

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