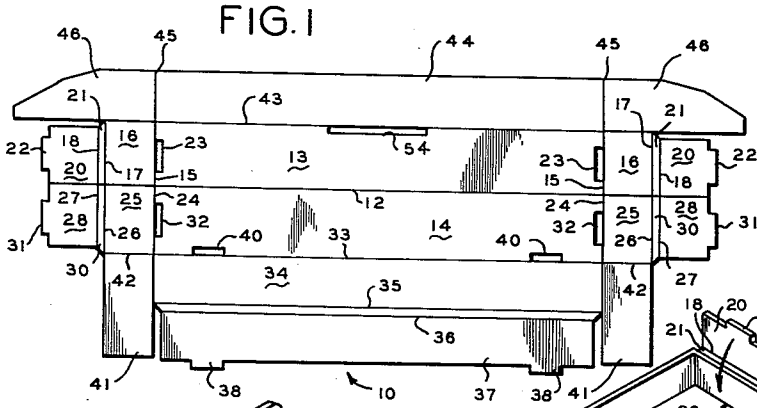
Aug. 22, 1961 H. O. SPERRY 2,997,222

DISPLAY UNIT

Filed July 30, 1959

FIG. 1



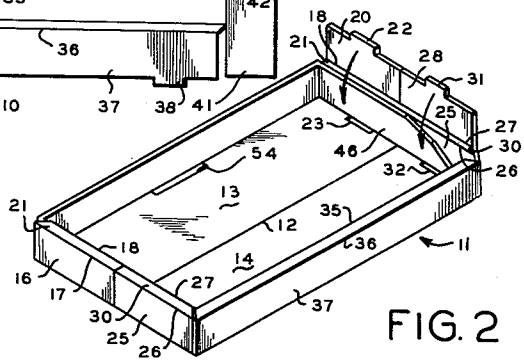


FIG. 2

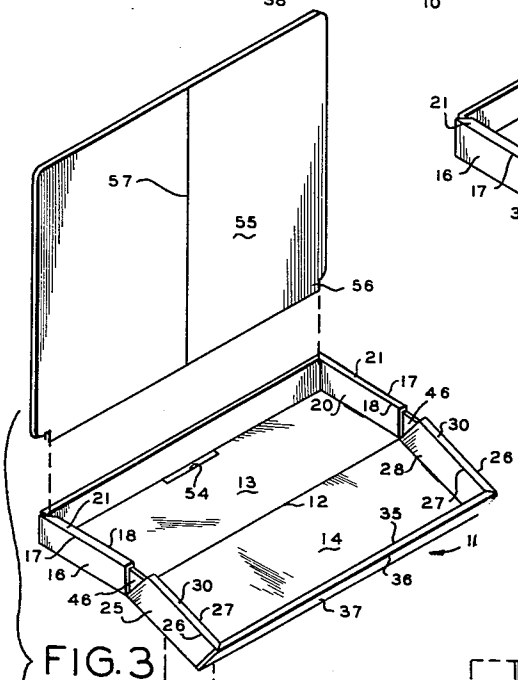


FIG. 3

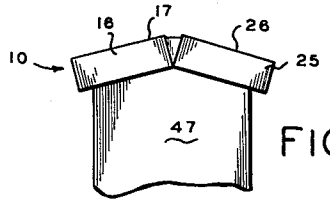
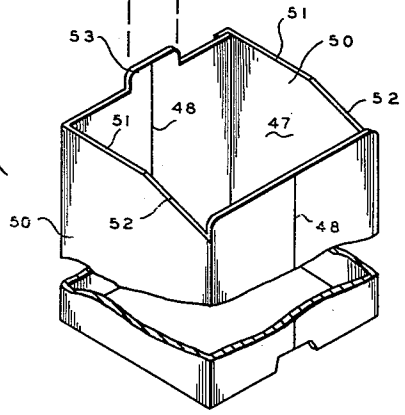


FIG. 5



FIG. 4



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DISPLAY UNIT

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2 Claims. (Cl. 229—34)

The present invention relates to display units for merchandise and more particularly to a novel merchandise receiving tray.

Display units of the type now generally upon the market consist of an open top, relatively deep rectangular box which is filled with merchandise and placed upon a counter in easy reach of a customer. In some instances these boxes may have accompanying bases to support the box in some more convenient place than upon a counter. Whatever the support, the customer must reach into the bottom when the supply is low and may not even be able to see whether there are any remaining articles. When such boxes are mounted upon makeshift or fragile supports, the boxes are often upset and the contents scattered.

An object of the present invention is to provide a novel display tray and support therefor wherein the foregoing disadvantages are overcome.

Another object is to provide a tray wherein the merchandise is more effectively displayed for selection and removal.

Another object is to provide a tray formed from a novelty scored paper board material in combination with a stable pedestal base.

A further object is to provide a merchandising display tray wherein one portion of the tray is movable to an angular position with respect to the other portion for better viewing of the contents.

A further object is to provide a display tray having an angular display part in combination with a pedestal having a tray supporting top which is complemental in contour to the angularity of the bottom of the tray.

A still further object is to provide a scored blank of corrugated paper for folding into a novel display tray.

In the accompanying drawings,

FIGURE 1 is a plan view of a blank ready for folding to form the merchandise receiving tray of the invention;

FIGURE 2 is a perspective view of the completed tray but broken at one end to show the interlocking construction of the end flaps;

FIGURE 3 is an exploded perspective of the tray and its associated supporting base;

FIGURE 4 is a side view of the unit ready for shipment; and

FIGURE 5 is a side elevation view of a modification of the invention.

Referring to FIGURE 1 of the drawings, a preshaped stamped-out blank 10 is shown formed of corrugated paper or other suitable material which is scored for folding into a novel merchandise receiving tray 11. That portion of the blank 10 which is to form the bottom as well as the ends of the tray is formed with a substantially medial, lengthwise score 12 to define a bottom support part 13 and a second support part 14. Opposite ends of the part 13 are respectively provided with scores 15 to permit end walls 16 to be turned to a vertical position and each such wall terminates in two spaced apart transverse scores 17 and 18 to define respectively locking flaps 20. The space 21 between each pair of scores 17 and 18 provides in each case a clearance for interlocking purposes as will be hereinafter described. Each of the flaps 20 has an outwardly disposed tab 22 so dimensioned (when folded to position) to enter an end slot 23 in the bottom part 13 as a flap retaining means.

The bottom part 14 is provided with like scoring and subdivided parts similar to those described for the part 13, namely, transverse scores 24, respectively aligned with the scores 15, to permit upturning of end walls 25. Likewise parallel spaced apart scores 26 and 27 are formed across each wall 25 to define the respective flaps 28. The spacing between these scores 26 and 27 form a clearance 30 as a continuation of the clearance 21 as will later appear. Also each flap 28 has an outwardly disposed tab 31, dimensioned (when folded to position) to enter an end slot 32 in the bottom part 14 as a retaining means.

In order to form one side of the tray, a score 33 extends, parallel to the score 12, throughout the length of the part 14 as a fold line for the side wall 34 and this wall 34, in turn, is provided with two lengthwise disposed, spaced apart scores 35 and 36 which parallel the side score 33. The outer score 36 provides a fold line for a locking flap 37 having a pair of projecting tabs 38 to respectively seat in slots 40 along the score line 33 in the bottom part 14. The space between the scores 35 and 36 makes a clearance to permit the locking flap 37 to fold over in flat contact with two inwardly folded interlocked flaps 41. These flaps 41 are arranged to fold along scores 42 which are respectively common to the end walls 25. As so folded the two flaps 41 extend vertically from the end walls 25 and seat against the side wall 34 to be clamped by the locking flap 37 during assembly.

In order to form the opposite side of the tray, the bottom part 13 has a lengthwise score 43 paralleling the score 12 as a fold line for the side wall 44. At each end the wall 44 has a transverse score 45, aligned with its adjacent score 15, to form a fold line for a closure tongue 46 which extends outwardly beside an end wall 16 but is not attached thereto. The length of each tongue 46 is such as to have face contact with both end walls 16 and 25 when finally folded to operative position. The outer end of each tongue 46 has an arcuate top margin to permit one or both of the bottom parts to swing downwardly without being obstructed by these inwardly folded tongues.

To form the complete tray the two tongues 46 are folded to rise vertically at each end of the side wall 44 whereupon this wall 44 is raised vertically while turning the tongues 46 across the bottom and in the plane of the respective scores 15. The flaps 41 are now folded to a vertical position ready to follow the upturning of the two sets of end flaps. This end flap folding brings the two sets of walls 16 and 25 against the respective tongues 46 ready to be interlocked by the flaps 20 and 28 through the medium of their tabs 22 and 31 entering the respective slots 23 and 32. As so assembled the respective tongues 46 have a telescopic relation with respect to the folded over flaps so that in any angular positive of the bottom part 41 any opening between the ends of the end walls is maintained closed by the tongues.

With side 44 and the two ends fixed in place, the other side wall 34 is folded up against the inturned flaps 41 and the locking flap 37 then folded over and its locking tabs 38 inserted in the respective slots 40. As so assembled the completed tray is shown in FIGURE 2 ready to be packed with merchandise for shipment and display thereafter.

For supporting the loaded tray in display position a collapsible pedestal base 47 is provided in the form of a blank of corrugated material which is vertically scored 48 for folding into a tubular standard with its meeting ends suitably interlocked as will be understood. Preferably the base has a width less than the length of the tray.

When the tray is to be viewed from the front, the bottom part 14 will be swung downward to a good viewing

angle to seat on the complementally shaped top margin of the base sides **50**. Thus in this case the base has two margin lengths **51** in a horizontal plane to seat the bottom part **13** and continuing margin lengths **52** downwardly inclined to seat the bottom part **14** in its angular position.

In order to anchor the tray **11** in supported position upon the base **47**, the upper margin of the rear base wall is formed with a projecting tab **53** to enter a slot **54** in the tray bottom part **13** as the tray is being lowered to its seated position upon the base **47**. This tab **53** and slot **54** forms an interlock between the members as a fixed holding means.

As a supplement to the display unit, a panel **55** is provided to rise from the rear side of the tray as a surface for advertising or the like. The lower end of this panel has side cut-outs to form an extension **56** which is dimensioned to seat snugly between the end walls of the tray. Preferably the panel has a transverse score **57** so that it can be folded for compact shipment with the associated parts. Thus as shown in FIGURE 4 the base, panel and loaded tray are stacked flat as a relatively thin assembly of a size to be fitted into and housed in a carton of convenient size for handling and shipping.

In FIGURE 5, the assembly is shown for viewing from both sides so both bottom parts **13** and **14** are swung down to an angular position and the top margin of the base diverge at the same angle to form firm seats for the angular tray bottom.

It will now be apparent that a complete unitary display unit has been devised in which merchandise can be shown in an accessible position for ready observation and removal by a customer. The unit includes a novel tray, formed from scored folded cardboard, corrugated material or the like, in which a two-part hinged bottom forms means for supporting merchandise in two planes angular with respect to the other. As a combination unit a pedestal base is provided of collapsible construction and

having a supporting surface complemental to the angular configuration of the tray bottom. In the specification and claims any reference to cardboard or corrugated paper is not to be taken as a limitation but is to be construed broadly to include any stable material capable of scoring and folding to a predetermined shape.

Having now described my invention, I claim:

1. A display unit including a tray comprising two article supporting bottoms connected in side to side relation for angularly positioning one bottom with respect to the other, a side and two end walls on one bottom, a side and two end walls on the other bottom, the pair of end walls on one bottom being aligned with the pair on the other bottom, tapered tongues projecting from the respective ends of one side to overlie both bottoms and in contact with the respective end walls, tabs on both end wall pairs overlying and slidably holding the respective tongues, whereby in any angular position of said bottoms said tongues close the space between end wall pairs, means interlocking each tab to the adjacent bottom, and means contacting both bottoms to support said tray with one bottom angularly depending from the other.

2. A display tray according to claim 1 wherein said supporting means is a pedestal having a top margin complemental to a selected angular setting of said bottoms whereby the depending bottom is held in display position.

References Cited in the file of this patent

UNITED STATES PATENTS

628,542	Kneeland	July 11, 1899
2,005,278	Trimble	June 18, 1935
2,105,953	Ouelette	Jan. 18, 1938
2,229,257	Reaume	Jan. 21, 1941
2,592,678	Fuerst	Apr. 15, 1952
2,858,059	Kitchell	Oct. 28, 1958