Aug. 15, 1950 R. J. HENNESSEY 2,518,779

DISPLAY CARTON

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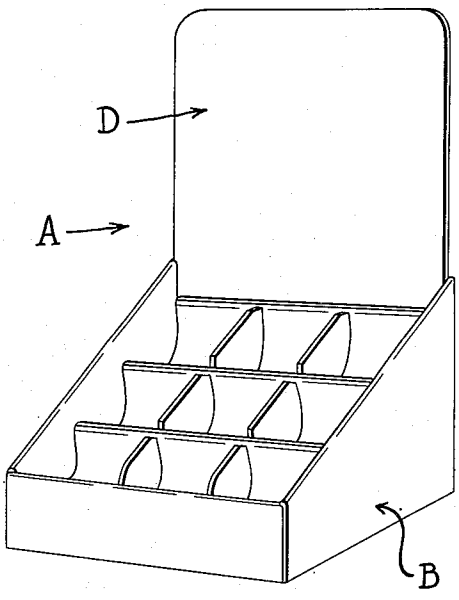


Fig. 1

Fig. 2

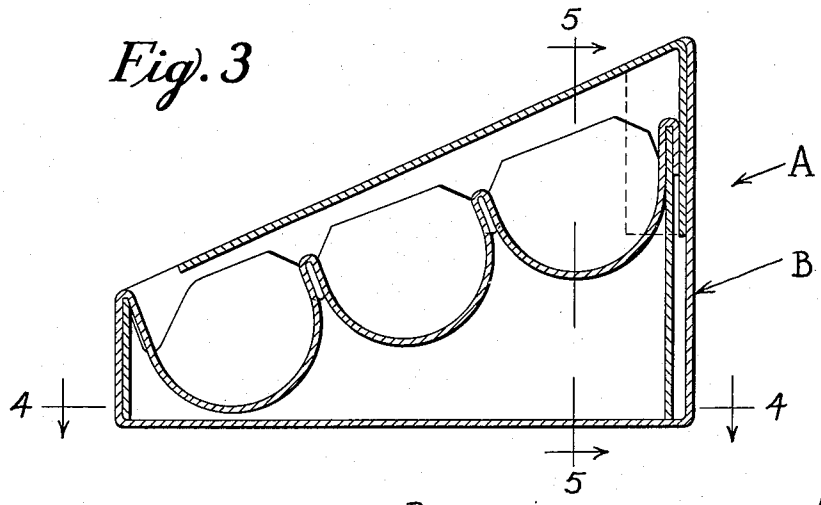
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DISPLAY CARTON

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Fig. 3



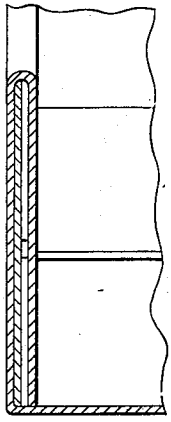


Fig. 5

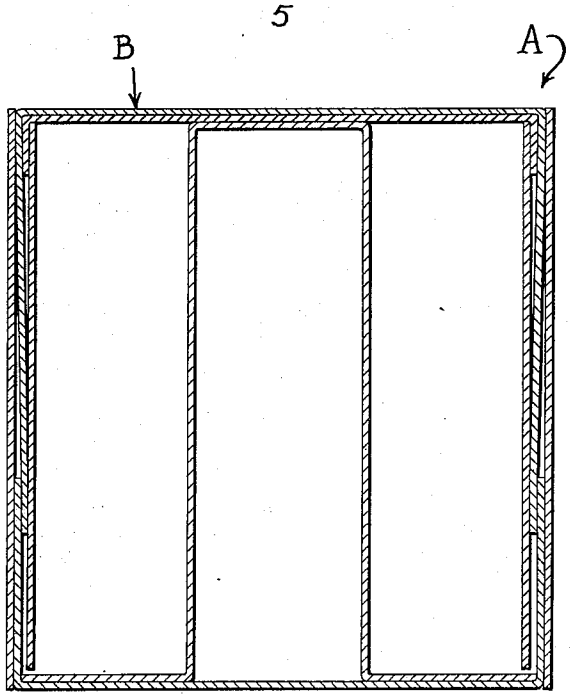


Fig. 4

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DISPLAY CARTON

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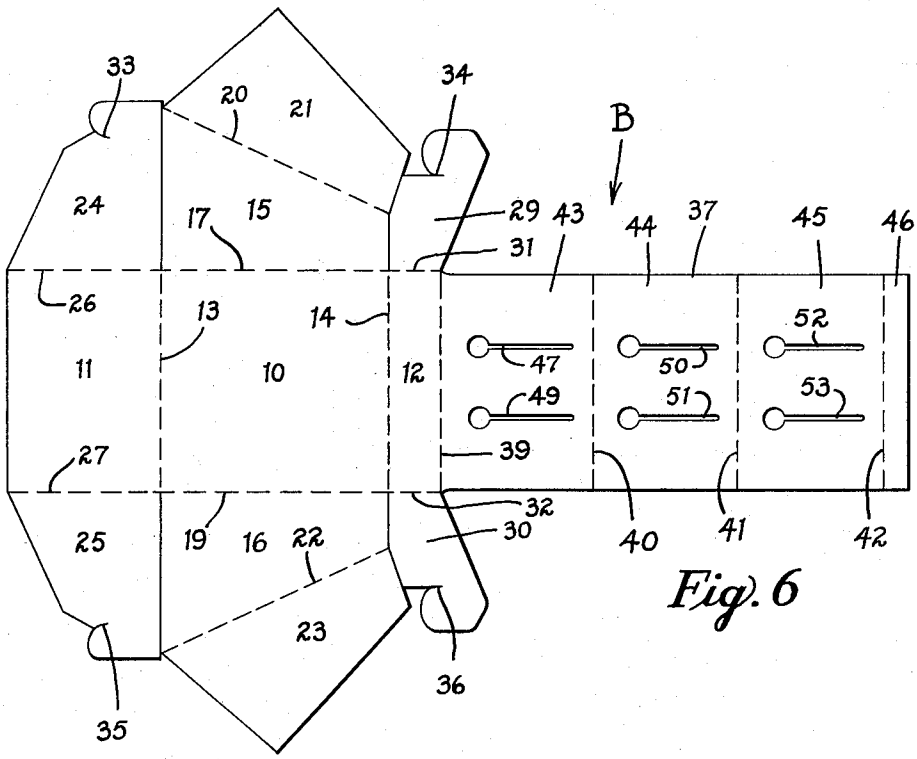


Fig. 6

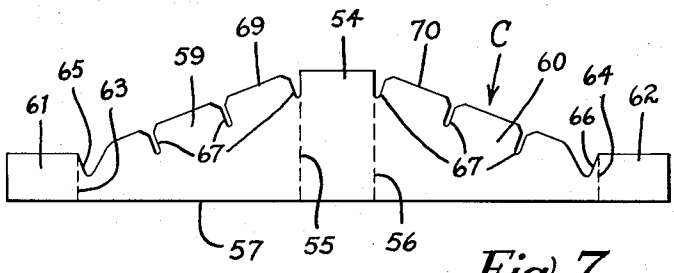


Fig. 7

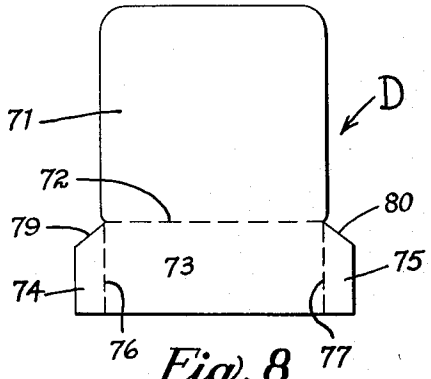


Fig. 8

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DISPLAY CARTON

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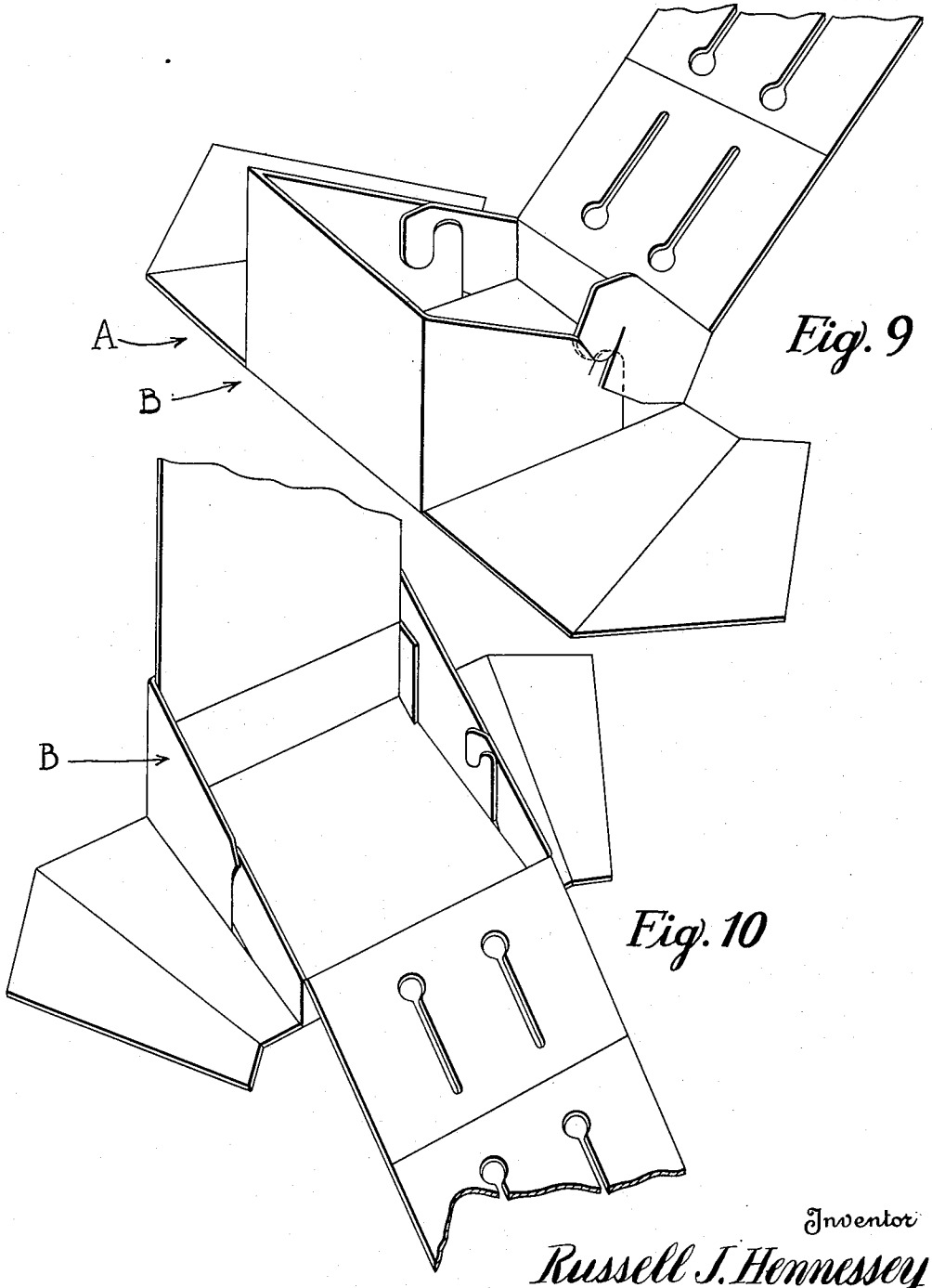


Fig. 9

Fig. 10

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UNITED STATES PATENT OFFICE

2,518,779

DISPLAY CARTON

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Application January 26, 1946, Serial No. 643,656

1 Claim. (Cl. 206—45)

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My invention relates to an improvement in display carton wherein it is desired to provide a carton which will support rolls of tape or other material in display position.

In selling rolls of tape or similar articles, it is desirable that the tape be supported so that it may be easily seen and so that it may be easily removed from the display carton. At the same time, it is desirable that the carton provide an enclosure for the tape during the shipping operation.

It is the object of the present invention to provide a carton which will support a series of rolls of tape or similar material in a series of stepped rows so that each roll of tape is readily visible when the carton is in open or display position. As the rows are arranged in stepped relation, the tape may be viewed from various angles and each roll of tape may be seen equally as well as the remaining rolls.

A feature of the present invention resides in the provision of a carton having inwardly folded side walls which form a recess for slidably supporting a display card at the rear of the carton. This display card, when in elevated position, may be folded down to overlie the rolls of tape. When the card is folded into vertical position and pressed downwardly, the card is held in vertical position at the rear of the carton to form an attractive display.

A feature of the present invention resides in the provision of a series of spaced stepped trays which are formed from a single strip of carton stock bent into successive trays or corrugations.

A feature of the present invention resides in the provision of a carton which includes front and rear walls which are connected by interlocking tabs. The side walls fold to enclose these tabs in set up condition of the box.

A further feature of the present invention resides in the provision of a tray support which acts as a divider to space the rolls into sections to facilitate removing the rolls.

These and other objects and novel features of my invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of my specification:

Figure 1 is a perspective view of my carton in set up form.

Figure 2 is a perspective view of the carton with the tray forming sheet folded outwardly therefrom.

Figure 3 is a cross-sectional view from front to back of the carton in closed condition thereof.

Figure 4 is a cross-sectional view through the carton, the position of the section being indicated by the line 4—4 of Figure 3.

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Figure 5 is a cross-sectional view through a side wall of the carton, the position of the section being indicated by the line 5—5 of Figure 4.

Figure 6 is a diagrammatic view of the blank of the carton body.

Figure 7 is a plan view of the blank forming the tray supporting portion of the body.

Figure 8 is a plan view of the blank forming the display card of the carton.

Figure 9 is a perspective view of the carton in partially folded form showing the method employed in setting up the carton.

Figure 10 is a perspective view of a later step in the method of setting up the carton.

The carton A is formed of three separate parts, illustrated in Figures 6, 7, and 8 of the drawings. As the construction of the carton may be readily understood from an examination of the carton blanks, these blanks will first be described.

The carton body blank is best illustrated in Figure 6 of the drawings, and is designated generally by the letter B. The body B includes a bottom panel 10, a rear wall panel 11, and a front wall panel 12. The rear wall 11 and the front wall 12 are foldably connected to opposite sides of the bottom 10 along substantially parallel fold lines 13 and 14, respectively. Side wall panels 15 and 16 are foldably connected to the remaining sides of the rectangular bottom 10 along substantially parallel fold lines 17 and 19, respectively.

The rear wall 11 is substantially higher than the front wall 12, and the side walls 15 and 16 taper along their upper edges to connect the front and rear walls. The panel 15 is connected along a fold line 20 to a similar panel 21. The side wall panel 16 is connected along a fold line 22 to a panel 23 substantially similar in shape and size to the panel 16. Therefore when the panels 21 and 23 are folded to lie inwardly of the panels 15 and 16, respectively, they substantially cover the panels to which they are connected.

The rear wall panel 11 is provided with a pair of ears 24 and 25 connected along the side edges thereof by fold lines 26 and 27. Tabs 29 and 30 are foldably connected to the side edges of the front wall panel 12 along substantially parallel fold lines 31 and 32. The tab 24 is provided with a hook slot 33 which is inter-engageable with a hook slot 34 on the tab 29. The tab 25 is provided with a hook slot 35 which interlocks with a hook slot 36 on the tab 30. Thus the tabs

24 and 29 may be interlocked together and the tabs 25 and 30 may be interlocked together to hold the front and rear walls 11 and 12 in vertical position.

Foldably connected to the front wall panel 12 I provide a tray forming strip 37 which may be folded to provide a series of transversely extending troughs or trays. The strip 37 is connected to the front wall 12 along the fold line 39. Spaced fold lines 40, 41, and 42 separate the strip 37 into three trough forming sections 43, 44, and 45, and an anchoring flange portion 46.

A pair of slots 47 and 49 are provided in the strip section 43. Similar slots 50 and 51 are provided in the strip section 44. Slots 52 and 53 are provided in the tray section 45. The slots 47, 50, and 52 are aligned and the slots 49, 51, and 53 are aligned.

The tray supporting member is constructed from the blank C, best illustrated in Figure 7 of the drawings. The blank C includes a central section 54 which is connected by substantially parallel fold lines 55 and 56 extending at right angles to the lower edge 57 of the blank to inclined tray supporting sections 59 and 60. At the ends of the sections 59 and 60, a pair of flanges 61 and 62 are connected along substantially parallel fold lines 63 and 64. A notch 65 is provided in the section 59 adjacent the fold line 63, and a similar notch 66 is provided in the section 60 near the fold line 64. Spaced substantially parallel downwardly and rearwardly inclined notches 67 are provided in the inclined upper edges 69 and 70 of the sections 59 and 60 respectively.

The display card blank D is formed as best illustrated in Figure 8 of the drawings. The blank D includes a display panel 71 which is substantially rectangular in shape and which is connected along a transverse fold line 72 to an anchoring panel 73. The anchoring panel 73 is provided with a pair of anchoring flanges 74 and 75 thereupon connected thereto by substantially parallel fold lines 76 and 77. The upper edges of the flanges 74 and 75 are inclined as best indicated at 79 and 80, respectively. The panel 71 is preferably printed with an advertisement or description of the goods displayed.

In setting up the carton A, the successive operations are indicated in Figures 9, 10, 2, and 1, in that order. The blank B is folded from the position shown in Figure 6 of the drawings to the position shown in Figure 9. The rear panel 11 is folded upwardly at right angles to the base panel and the tabs 24 and 25 folded forwardly along the fold lines 17 and 19. The front panel 12 is folded upwardly from the base and the tabs 29 and 30 folded rearwardly and interlocked with the tabs 24 and 25. In Figure 9 of the drawings, one of these tabs is shown in interlocked position, while the other tab is shown in the process of being interlocked.

When the tabs 24 and 29 and the tabs 25 and 30 have been locked together, the front and rear walls are held at right angles to the base panel 10. The display panel D is then inserted in the carton in the position shown in Figure 10 of the drawings. The anchoring flanges 74 and 75 are folded along the fold lines 76 and 77, respectively, and the display panel is positioned to lie inwardly of the rear panel 11 with the flanges 74 and 75 lying inwardly of the tabs 25 and 24, respectively. The side walls 15 and 16 are then folded up from the base panel 10 to lie outwardly of the interlocked tabs. The panels 21 and 23 are next

folded down along the fold lines 20, 22, so as to lie inwardly of the interlocked tabs. Thus a folded upper edge is presented upon the top of the carton side walls and the side walls are lined with the panels 21 and 23, thus concealing the interlocked tab structure. Incidentally, this arrangement permits a carton stock having but one finished surface to be used in the formation of the carton as the side walls are concealed by the panels 21 and 23 and the inner surface of the rear wall is covered by the display panel D.

After the panels 21 and 23 have been folded to line the side walls of the carton the tray support C is inserted into the carton. This tray support is formed into proper shape by bending the sections 59 and 60 forwardly from the central panel 54 and bending the end flanges 61 and 62 outwardly in substantially coplanar relation along the fold lines 63 and 64. When thus bent the tray support C is inserted into the carton as best illustrated in Figures 2 and 4 of the drawings. When in place the panel 54 lies inwardly of the display panel D and the end flanges 61 extend inwardly of the front wall panel 12. The tray support is held in substantially proper position by the flanges 61 and 62.

The carton A is then in the position illustrated in Figure 2 of the drawings. In order to complete the carton the tray strip is folded along the fold lines 40, 41, and 42, and the tray sections 43, 44, and 45, bowed downwardly between the spaced fold lines. The section 43 of the tray strip 37 is bowed downwardly into the carton, the portion of the strip on both sides of the fold line 40 entering the lowermost slot 67 and the upper portion of the tray supporting strip extending through the slots 47 and 49. The tray section 44 is similarly bowed downwardly and the stock on both sides of the fold line 41 is positioned in the intermediate slot 67. All of the portion of the strip 37 between the slots 47 and 50 is enclosed in the lowermost slot 67 in the tray support, while the uncut stock between the slots 50 and 52 extends in the intermediate slot 67. The uncut stock between the end of the slot 52 and the fold line 42 is positioned in the uppermost slot 67, the flange 46 folding over the upper edge of the center panel 54.

When the display panel D is in the position shown in Figures 1 and 2 of the drawings the fold line 72 is below the top of the rear panel 11, and the stock is held from folding along this fold line, as it is interposed between the tray support C and the rear panel 11. When it is desired to close the carton the panel 10 is pulled upwardly until the tapered upper edges 79 and 80 of the flanges 74 and 75 engage the folds connecting the outer side wall panels 15 and 16 and the lining panels 21 and 23. When in this position, the panel 71 may be folded down to overlie the carton and the contents therein, as best indicated in Figure 3 of the drawings.

In accordance with the patent statutes, I have described the principles of construction and operation of my display carton, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claim without departing from the spirit of my invention.

I claim:

A display carton including a bottom panel, a front wall panel, a relatively higher rear wall panel, tapered side wall panels on said bottom panel, a vertical support panel having an up-

wardly sloping edge extending between said front and rear walls, a strip foldably connected to said front wall, a series of spaced fold lines extending transversely of said strip, said strip being doubled along said fold lines and forming rounded troughs between the fold lines, spaced slots in the upper edge of said support into which the doubled stock of said strip extends to hold said stock doubled, and spaced slots in said strip between said fold lines and aligned with the upper edge of said support through which portions of said support extend.

RUSSELL J. HENNESSEY.

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