May 13, 1958 C. A. LEE, JR., ET AL 2,834,460

COLLAPSIBLE SHOE BOXES

Filed March 11, 1955 2 Sheets-Sheet 1

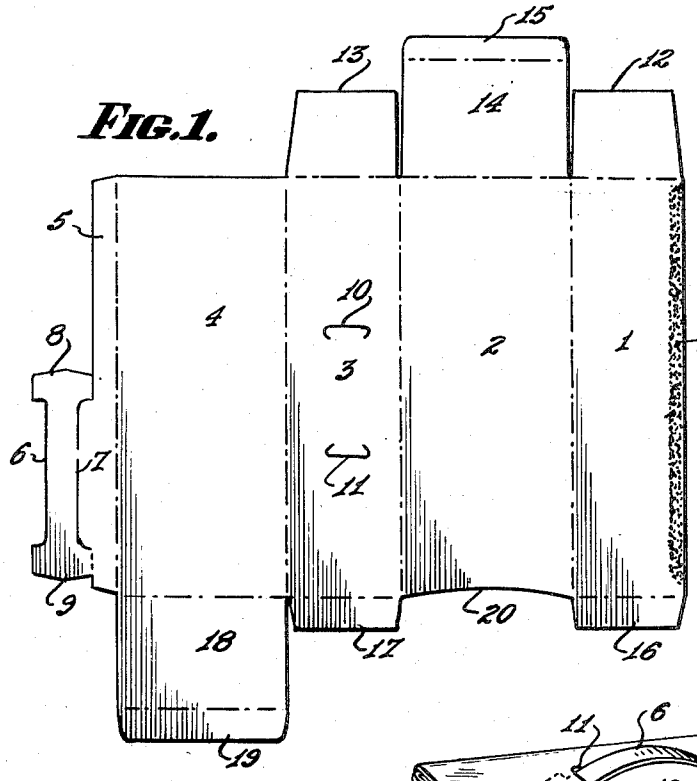


FIG. 1.

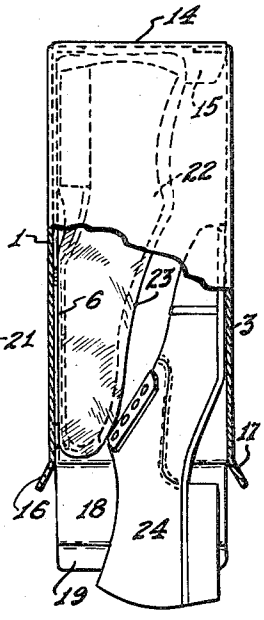


FIG. 4.

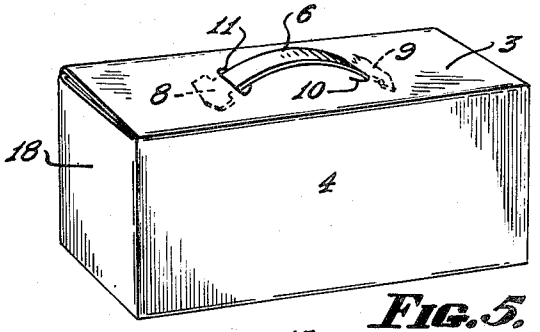


FIG. 5.

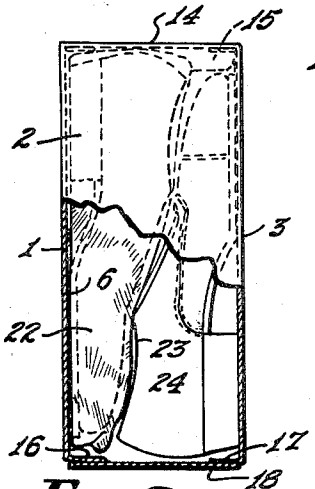


FIG. 2.

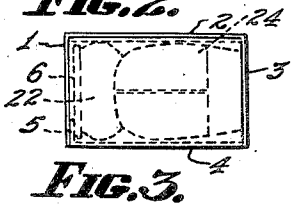


FIG. 3.

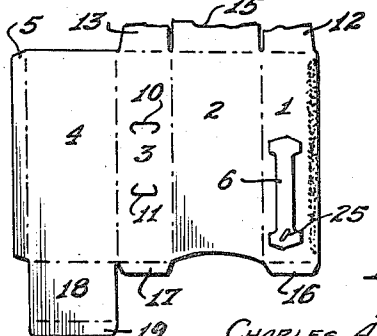


FIG. 6.

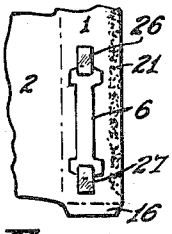


FIG. 7.

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COLLAPSIBLE SHOE BOXES

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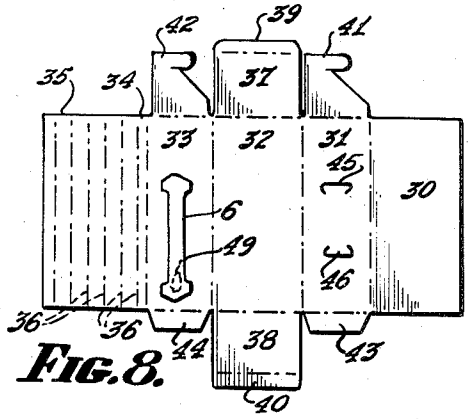


FIG. 8.

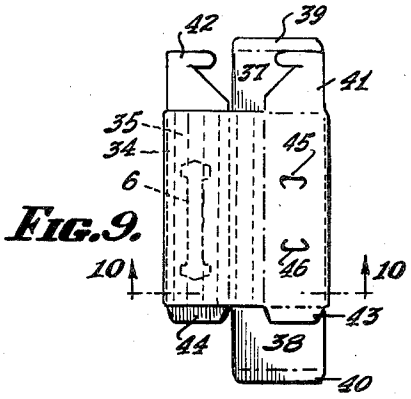


FIG. 9.

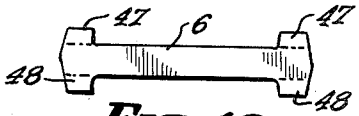


FIG. 12.

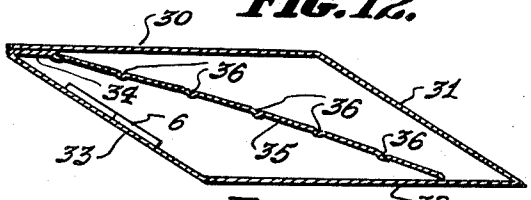


FIG. 10.

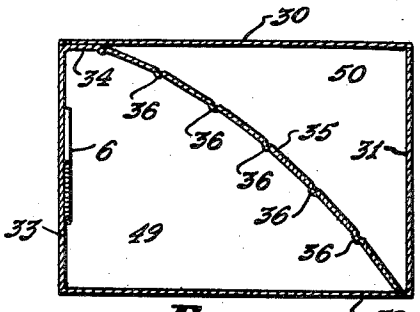


FIG. 11.

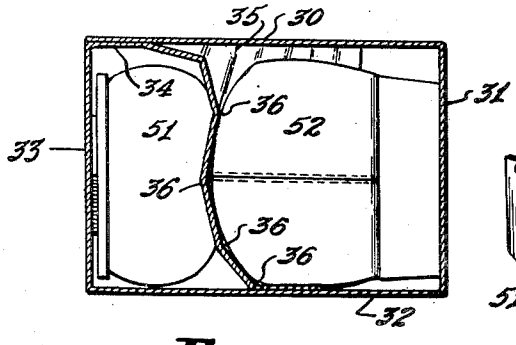


FIG. 13.

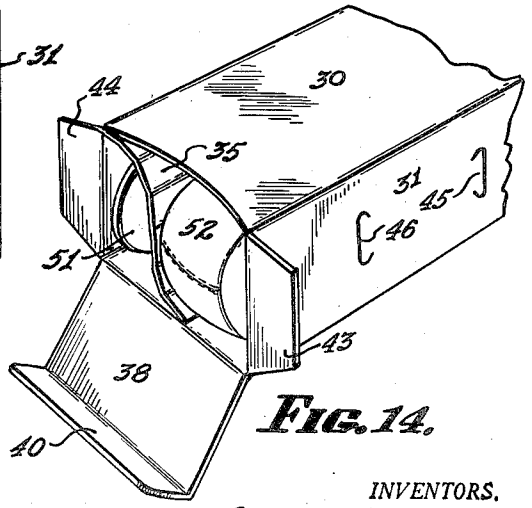


FIG. 14.

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COLLAPSIBLE SHOE BOXES

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Application March 11, 1955, Serial No. 493,740

6 Claims. (Cl. 206—65)

Our invention relates to shoe boxes and more particularly to collapsible shoe boxes which may be readily manufactured employing conventional folding and gluing equipment.

It is a principal object of our invention to provide collapsible shoe boxes which, as initially shipped to the user, are provided with a carrying handle detachably secured to the interior of the box, the arrangement of parts being such that the handle element may be conveniently detached from the interior of the box and reassociated with the box in carrying position.

Yet a further object of our invention is the provision of a knocked down or collapsible shoe box structure incorporating an integral divider serving to divide the interior of the box into two compartments to receive the shoes packaged therein.

Yet a further object of our invention is the provision of a shoe box package incorporating a carrying handle detachably secured to an interior wall of the package, the shoes being packed in such fashion that the left shoe, which is usually not withdrawn from the box during fitting, protects the handle element from accidental disengagement until such time it is desired to remove the handle and associate it with the box structure for carrying purposes.

Yet another object of our invention is the provision of a shoe box package which eliminates entirely the use of tissue paper for preventing the shoes from rubbing against each other, or which requires that only one of the shoes be wrapped in tissue paper as opposed to the complete wrapping of both shoes as heretofore practiced.

These as well as other objects of our invention which will hereinafter appear or which will be apparent to the skilled worker in the art upon reading these specifications, we accomplish by those constructions and arrangements of parts of which we shall now describe certain exemplary embodiments.

Reference is now made to the accompanying drawings, wherein:

Figure 1 is a plan view of a box blank in accordance with our invention.

Figure 2 is a plan view with parts broken away and others in dotted lines showing the box of Figure 1 in erected and filled condition.

Figure 3 is an end elevational view of the filled box illustrated in Figure 2.

Figure 4 is a plan view with parts broken away similar to Figure 2 but showing one of the shoes partially removed from the box.

Figure 5 is a perspective view of the erected box illustrating the carrying handle in carrying position.

Figure 6 is a plan view of a modified form of blank in accordance with our invention.

Figure 7 is a fragmentary plan view of yet another form of blank in accordance with our invention.

Figure 8 is a plan view of yet another form of blank incorporating an integral divider.

Figure 9 is a plan view similar to Figure 8 showing the blank in tubed condition.

Figure 10 is a sectional view with parts somewhat expanded taken along the line 10—10 of Figure 9.

Figure 11 is a sectional view similar to Figure 10 showing the blank in erected condition.

Figure 12 is a plan view of a handle element suitable for use with the blank of Figure 8.

Figure 13 is a sectional view similar to Figure 11 but showing the box with the contents in place therein.

Figure 14 is a partial perspective view of the erected and filled box.

Referring first to Figure 1, we have therein illustrated a box blank comprising body walls 1, 2, 3 and 4 in articulation in the order named, the body wall 4 carrying a glue flap 5 on its free side edge. A handle strap 6 is integrally formed with the glue flap 5 and severably connected thereto along the cut score line 7. The handle strap 6 is provided with enlarged ends 8 and 9 which are adapted, when the handle strap is detached from the glue flap, to be engaged through the generally U-shaped cutouts 10 and 11 in the body wall 3.

End closure flaps are provided at the ends of the body walls. It will be understood that the type of closure flaps employed do not constitute a limitation on our invention, although tuck-in flaps are preferred so that the carton may be readily opened. In the embodiment illustrated the body walls 1 and 3 are provided with intermediate closure flaps 12 and 13 at one end and the body wall 2 is provided with a full width closure flap 14 carrying a tuck flap 15. At the opposite end of the carton, the body walls 1 and 3 are provided with narrow closure flaps 16 and 17, respectively, and the body wall 4 carries a full width closure flap 18 having a tuck flap 19. The carton will be preferably opened from the end last described and to facilitate its opening the body wall 2 is cut back at its end, as at 20, to facilitate the removal of the tuck flap 19.

The carton blank will be tubed in conventional fashion, being infolded along the lines of articulation separating the body walls 1 and 2, and 3 and 4, thereby bringing the outermost edge of the body wall 1 in overlying contact with the glue flap 5. A stripe of adhesive, indicated at 21, will be applied to the marginal edge of body wall 1, or in the alternative the adhesive stripe will be applied to the outer surface of the glue flap 5, care being taken in either event to prevent the adhesive from contacting the handle strap 6. When the structure is tubed, the handle strap 6 will lie along the inner surface of the body wall 1, in the position best seen in Figures 2 and 3. In this connection, it will be noted that the handle strap is articulated to the end of the glue flap 5 adjacent the front end of the carton, i. e. the end which is designed to be readily opened, thereby making it easily accessible when it is desired to detach the handle strap for use.

In packing shoes into the carton just described, the carton will be erected and the closure flaps of the rear end of the carton closed, whereupon the left shoe, indicated at 22, will be wrapped in tissue paper 23 or other similar wrapping material and inserted into the carton heel first with the bottom of the shoe adjacent the body wall 1, in the manner illustrated in Figures 2 and 4. It will be understood that the shoe will be inserted from the front end of the carton. When this is done, it will be apparent that the sole of the shoe will overlie and contact the handle strap 6, thereby serving to protect it and prevent its accidental disengagement. Subsequent to the positioning of the left shoe, the right shoe, indicated at 24, will be inserted toe first with its bottom contacting the opposite wall 3 of the carton. Due to their general shape, the shoes will nest together in the manner illus-

trated, thereby substantially filling the rectangular area of the box. Since the sole purpose of wrapping shoes in tissue paper is to prevent them from scuffing against each other, the tissue paper may be eliminated completely from the right shoe **24**, the tissue paper surrounding the left shoe serving effectively to prevent the two from rubbing together.

Since in fitting a customer with a pair of shoes, it is customary for the clerk to try on only the right shoe, it is a simple matter for the clerk to open the shoe box and remove the exposed and unwrapped right shoe 24. To do this, the box need not even be removed from the shelf. As illustrated in Figure 4, the removal of the right shoe in no way affects the left shoe which remains wrapped in the box and in a position in which it covers and protects the detachable handle strap **6**. If the particular shoe selected is not satisfactory to the purchaser, it may be conveniently returned to the box and the end closure flaps reinserted. On the other hand, if a sale is made, it is customary for the clark to also fit the left shoe, in which event the entire box may be removed from the shelf and the left shoe **23** removed and unwrapped. Even if the left shoe is not fitted on the customer, it may be readily removed so as to expose the handle strap, whereupon the clerk may easily remove the handle strap by breaking it away from the glue flap **5** whereupon it may be fitted through the cutouts **10** and **11** in the body wall **3**, and the package readied for the customer to carry home, the box thereupon assuming the condition illustrated in Figure 5.

While the handle member could be attached to the box in the position illustrated in Figure 5 at the factory, this has been found undesirable because it impedes the stacking and handling of the shoe boxes, the handles having a tendency to become engaged with other objects, which is an undesirable condition. Too, there are instances wherein the handle is not required, in which event it need not be removed from its position inside the box. Similarly, it has been found undesirable to provide the handles as separate elements apart from the box since the shoe store personnel does not like to search for a handle when one is desired and the maintenance of a separate supply of handles becomes a nuisance. With our construction, all of these difficulties are eliminated and the handle is always ready and available for use when needed. Furthermore, the arrangement facilitates the shipping and storage of the boxes since additional space need not be provided for separate handle elements.

In Figure 6 we have illustrated an alternative arrangement wherein the handle element **6** is formed apart from the carton blank but is associated with the blank prior to its tubing, being detachably secured to the body wall **1** as by means of a removable staple **25**. Similarly, as seen in Figure 7, the handle strap may be detachably secured to the inner surface of the body wall **1** as by means of strips of pressure sensitive tape **26** and **27** or other similar material. As yet another alternative, a small spot of adhesive may be applied directly to the handle strap for securing it to the wall of the box. In all cases, however, the handle will be held in position until it is positively removed for use.

Referring now to Figure 8 of the drawings, we have therein illustrated a blank comprising body walls **30**, **31**, **32** and **33** in articulation in the order named and a glue flap **34** to which is articulated an integral internal divider **35**. This divider will be preferably traversed by a plurality of spaced apart parallel score lines **36** acting to weaken the divider and render it readily flexible. Full width end closure flaps **37** and **38** are provided at opposite ends of the body wall **32** and these end closure flaps carry tuck flaps **39** and **40** respectively. At the end of the body walls which is to be the rear of the carton, the body walls **31** and **33** are provided with interlocking closure flaps **41** and **42**, whereas at their opposite ends these body walls are provided with narrow closure flaps **43** and **44**. The narrow body wall **31** is provided with U-shaped lines of cut **45** and **46** for receiving the ends of the handle strap **6**, which in this case are provided with articulated wing portions **47** and **48**, as best seen in Figure 12. The handle strap **6** is adhesively secured, as by means of a spot of adhesive **49**, to the inner surface of the body wall **33**.

The blank will be tubed in conventional manner with the free edge portion of the body wall **30** adhesively secured to the glue flap **34**, the divider **35** extending inwardly and overlying body walls **33** and **32**. The joint width of the glue flap **34** and the divider **35** will be such that upon erection of the carton body walls to the position illustrated in Figure 11, the divider will bow upwardly, i. e. toward the body walls **30** and **31**, in the manner illustrated. The adhesive securement of the glue flap 35 to the outer edge of the body wall **30**, together with the score lines **36** in the divider, tend to deflect or bow the divider in the direction indicated rather than in the opposite direction. The bowing of the divider in this fashion is desirable since it initially makes the cell **49** effectively larger than the cell **50**, thereby facilitating the entry of the left shoe **51** which enters the box heel first. The relatively narrow toe of the right shoe **52** may be then inserted in the smaller cell **50**, the act of inserting the right shoe **52** serving to flex the divider **35** so that its ultimate position will be determined by the contour of the shoes, the divider assuming a position such as that illustrated in Figure 13. The score lines **36** in the divider facilitate its flexing to conform to the contour of the shoes.

In the embodiment just described, it will again be noted that the bottom of the left shoe **51** overlies and protects the removable handle strap **6**. In addition, the divider effectively prevents the shoes from rubbing against each other and consequently the tissue paper wrapping for the left shoe may be omitted.

It will be apparent that modifications may be made in our invention without departing from the spirit of it. Having, however, described our invention in certain exemplary embodiments, what we desire to secure and protect by Letters Patent is:

1. In a package comprising a collapsible paperboard box having a tubular body and end closure flaps and a pair of shoes contained in said box, a flat self-sustaining handle element detachably secured to the inner surface of one of the box body walls, said shoes being arranged in the box with the sole of one of said shoes juxtaposed to said handle element, whereby said last named shoe will overlie and protect said handle element from accidental disengagement, one of the body walls including means contactable from the exterior surface thereof for receiving the handle element in package carrying position upon its removal from the interior of the box and the engagement of the ends thereof with said handle receiving means.

2. In a package comprising a collapsible paperboard box having a tubular body and end closure flaps defining the front and rear of said box and a pair of shoes contained in said box, a flat self-sustaining handle element detachably secured to the inner surface of one of the body walls adjacent the front of the box, said shoes being arranged in the box with the toe of the left shoe at the front of the box with the sole of the left shoe contacting the wall of the box to which said handle element is secured, the right shoe being arranged in the box with its heel to the front of the box and its sole contacting the wall of the box opposite the wall to which said handle element is secured, one of the box body walls including external means for receiving the handle element in package carrying position upon its removal from the interior of the box and the interengagement of the ends thereof with said handle receiving means.

3. The package claimed in claim 2 wherein said left shoe only is wrapped in tissue paper.

4. The package claimed in claim 2 wherein said box body is formed with an interior glue flap, and wherein

said handle element is formed as an integral extension detachably secured to the free side edge of said glue flap.

5. The package claimed in claim 2 wherein said box body is formed with an interior glue flap, and wherein a partition element is articulated to the free side edge of said glue flap, said partition element being of a width sufficient to extend diagonally across said box to define two cells into which the individual shoes are received.

6. The package claimed in claim 5 wherein said partition element has a plurality of longitudinally extending spaced apart lines of score therein to permit flexing of the partition element to follow the contour of the shoes.

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