

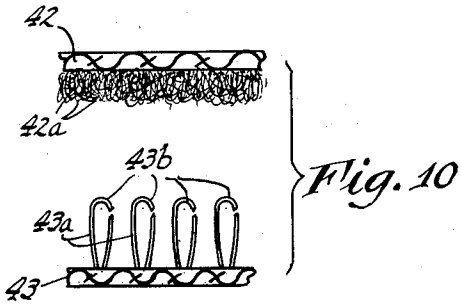
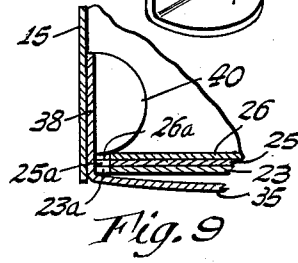
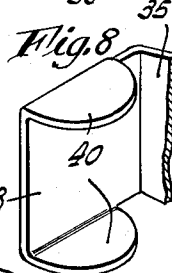
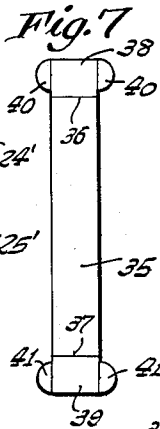
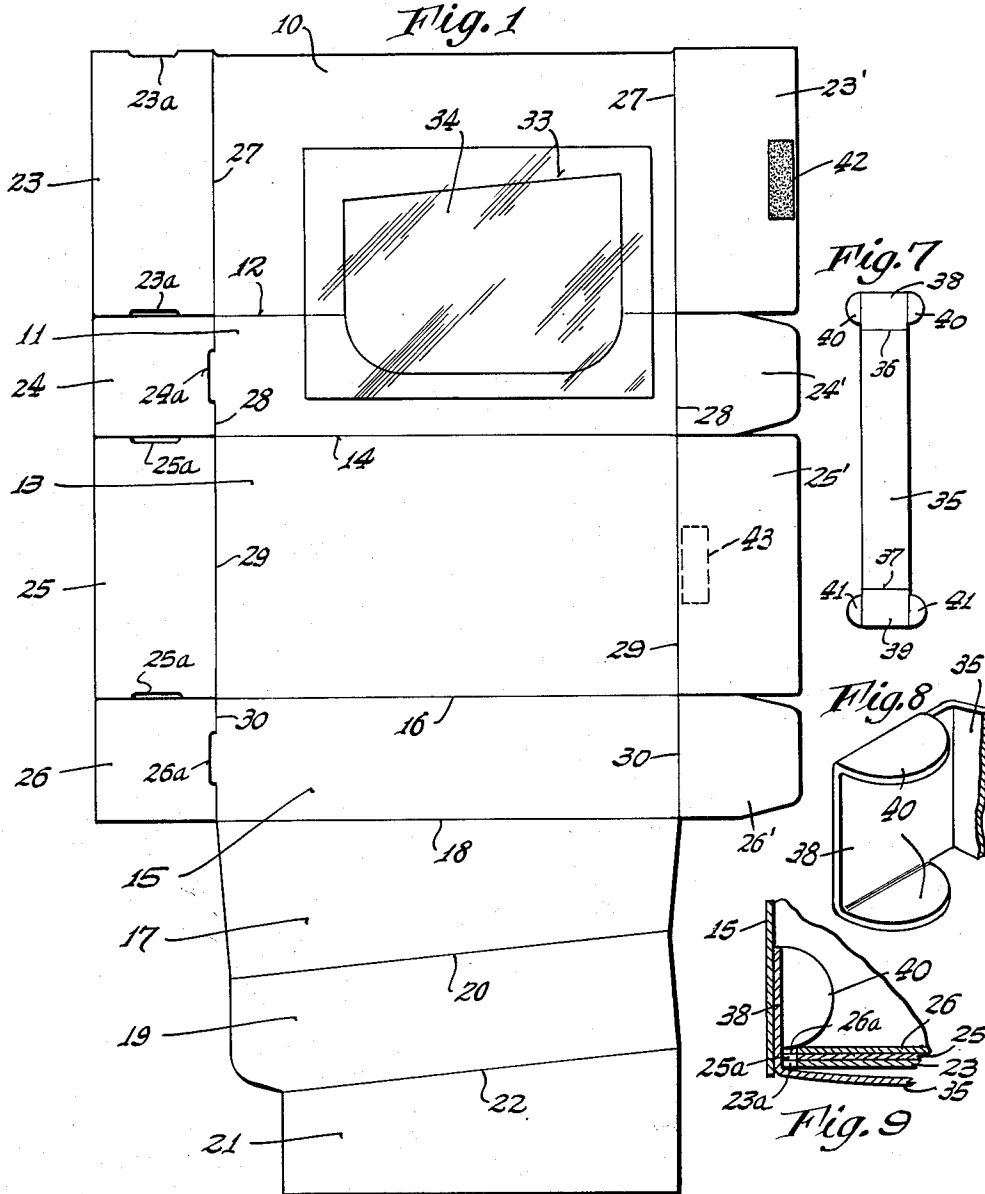
March 17, 1964

E. C. KOZLOWSKI
BOX AND CLOSURE THEREFOR

3,125,277

Filed May 12, 1961

2 Sheets-Sheet 1



INVENTOR.
Edward C. Kozlowski
BY
Johnson and Kline
ATTORNEYS

March 17, 1964

E. C. KOZLOWSKI

3,125,277

BOX AND CLOSURE THEREFOR

Filed May 12, 1961

2 Sheets-Sheet 2

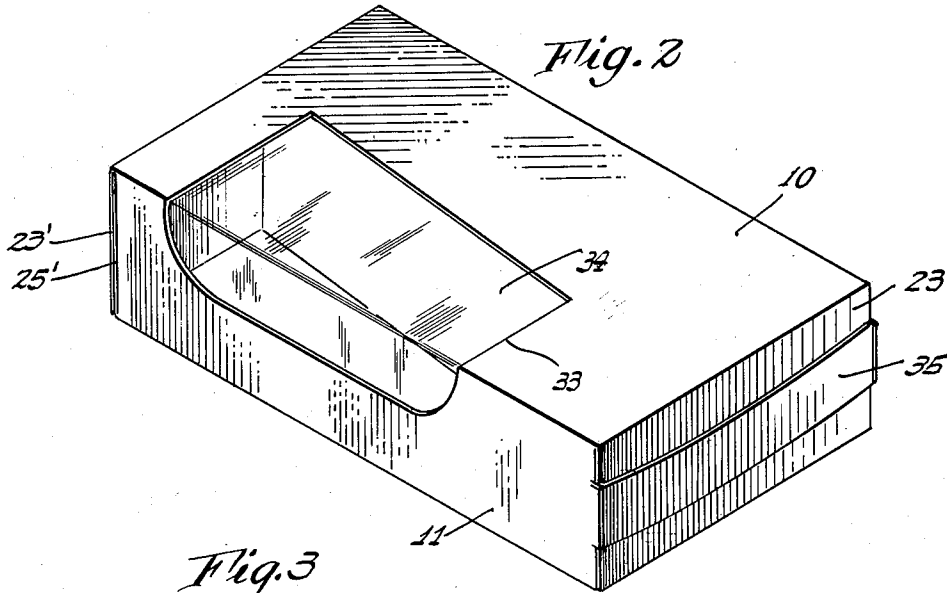
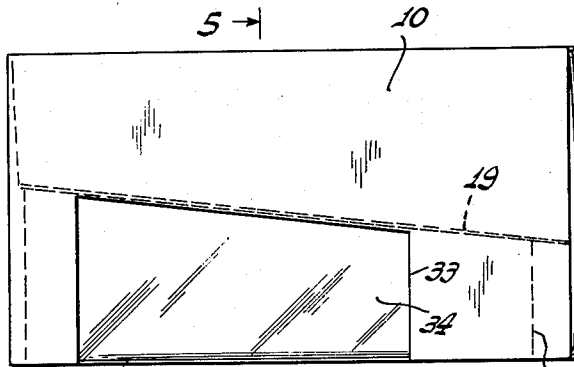
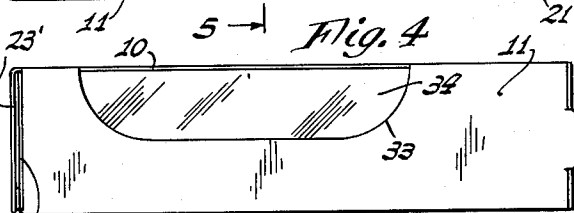
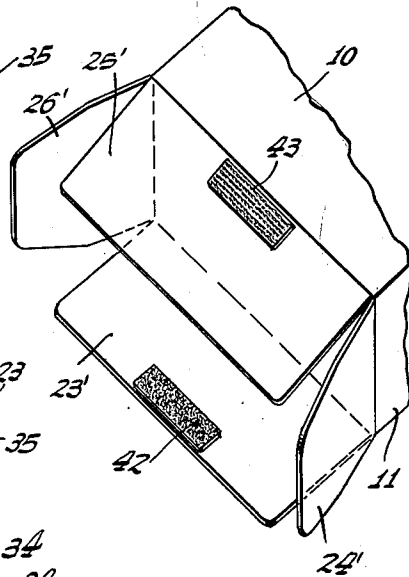


Fig. 3



5 →

Fig. 6



5 →

Fig. 4

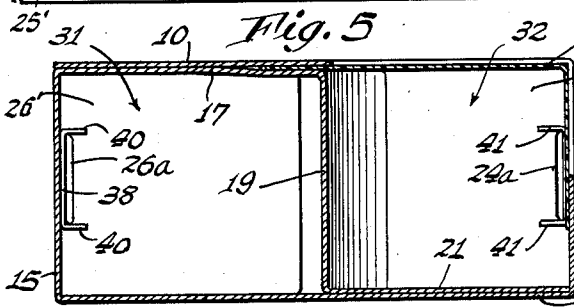


Fig. 5

INVENTOR.
Edward C. Kozlowski
 BY
Johnson and Kline
 ATTORNEYS

1

3,125,277

BOX AND CLOSURE THEREFOR

Edward C. Kozlowski, Trumbull, Conn., assignor to The Warner Brothers Company, Bridgeport, Conn., a corporation of Connecticut

Filed May 12, 1961, Ser. No. 109,609

2 Claims. (Cl. 229—27)

This invention relates to folded boxes and particularly to boxes for footwear having flexible interlocking elements for releasably connecting the closure therefor.

Shoe boxes and the like boxes for footwear have been formed heretofore with a bottom receptacle and a separate removable lid which when removed makes the shoes or the like available for removal and return to permit the shoes to be tried on and/or displayed.

It is an object of the present invention to provide a unitary folded box which can be easily made and stored and is provided with a novel releasable means connecting the closure parts for the box.

It is another object of the invention to provide a folded box for footwear which can be readily stacked and from which the footwear can be quickly removed and returned without damage to the box.

A feature of the invention is the provision of transparent means in the folded box whereby the shoes or the like can be readily displayed without the necessity of removing them from the box.

A further feature of the invention resides in the novel divider which maintains the shoes separate and also provides reinforcement for the box when stacked which is particularly effective when the transparent means is employed.

Other features and advantages of the invention will be apparent from the specification and claims when considered in connection with the accompanying drawings in which:

FIGURE 1 shows a blank for forming the box of the present invention.

FIG. 2 is a perspective view of the box.

FIG. 3 is a top view of the box.

FIG. 4 is a side view of the box.

FIG. 5 is a sectional view taken along line 5—5 of FIG. 3.

FIG. 6 is a detailed view of the releasable closure.

FIG. 7 is the manipulating handle for the box.

FIG. 8 is a detailed view of the end of the handle.

FIG. 9 is a detailed sectional view of the end of the handle in position.

FIG. 10 is an enlarged detailed view of the flexible fastener strips.

While the present invention may be embodied in various types of boxes, it is particularly useful in, and is illustrated as applied to, a box for use with shoes, slippers and the like footwear. Such boxes have heretofore been made with a bottom receptacle to receive the shoes and a flat removable lid. Although the box can be readily stacked and stored, the lid must be removed from the box to afford access to the shoes so that they may be tried on or displayed.

The box of the present invention is essentially a unitary construction folded from a blank of cardboard, chipboard or the like shown in FIG. 1 which has a top panel 10 connected to a first side panel 11 by a fold line 12. The side panel 11 is connected to a bottom panel 13 by a fold line 14. The bottom panel 13 is connected to a second side panel 15 by a fold line 16. The side panel 15 is connected to a mounting panel 17 by a fold line 18. Preferably the divider means is formed as extensions of the mounting panel. The divider comprises a second portion 19 of a height similar to that of the side panels connected to the panel 17 by a fold line 20. The

2

second portion 19 is connected to a bottom engaging portion 21 by a fold line 22. Each of the panels 10, 11, 13 and 15 have closure flaps 23, 24, 25, 26 at one end and 23', 24', 25', and 26', said flap being connected to each end thereof by fold lines 27, 28, 29 and 30.

The blank is folded along the fold lines and the mounting portion 17 is secured by adhesive or the like to the undersurface of the top panel. This produces an elongate box of rectangular cross-section as shown in FIGS. 2 to 5. The box is sectionalized as shown in FIG. 5 by the divider means with the second portion 19 extending between the top and bottom panels and dividing the interior into two receptacles 31 and 32. As shown in FIG. 5 the portion 19, in addition to dividing the box, provides a further support for the box to permit the boxes to be stacked and stored. The third portion of the divider is slidably supported on the inner surface of the bottom panel 13 and permits the desired deflection of the second portion 19 to permit shoes or the like footwear to be inserted into the receptacles 31 and 32.

If desired, the box can be provided with an opening 33 therein which is partially located in the top panel 10 and side panel 11 and which is closed by a transparent sheet 34. Preferably the opening, as shown in FIG. 5, terminates adjacent the panel 19 so that the edge is supported thereby and is disposed to expose the shoe in receptacle 32 from both the top and side making it unnecessary to open the box and remove the shoes for displaying them as is presently done.

The ends of the box are closed by first folding in the side closure flaps 24, 26 and then folding the top and bottom closure flaps 23, 25 into overlapped relation.

While both ends can be provided with the novel releasable connecting means for the closure flaps, in the illustrated form of the invention one end is normally closed and provided with a handle to facilitate the handling of the box. As shown in FIG. 1 the closure flaps 23 and 25 at one end are provided with notches 23a, 25a at opposite sides and the flaps 24, 26 are slit at 24a, 26a on the fold lines 28, 30 so that, when the flaps are in superposed relation as shown in FIG. 9, and held together by adhesive or other suitable means, the notches and slits provide means for mounting ends of a manipulating handle 35 therein.

As shown in FIGS. 7 and 8, the handle 35 has fold lines 36, 37 adjacent each end forming mounting portions 38, 39. The portions 38, 39 have foldable wings 40, 41 projecting laterally therefrom. The wings are folded into superposed relation with the mounting portion to permit them to be inserted through the aligned notches and slits after which they move to interlocked relation as shown in FIG. 9, which permits the box to be readily withdrawn from a stack or storage, and carried or otherwise handled with great facility.

The other end of the box is provided with releasable interlocking means for holding the closure flaps closed but permitting the flaps to be opened as desired to afford access to the shoes so that they can be readily removed for close inspection and trying on and can be replaced if desired and the box reclosed. While various types of flexible interlocking fasteners may be used, it is at present preferred to use a flexible fastener comprising cooperating woven strips 42, 43 secured to the engaging surfaces of closure flaps 23' and 25', and having cooperating surfaces provided with releasable interconnecting portions. Such a fastener, which is the type known as a "Velcro" fastener, comprises a fabric strip 42 woven to provide a plurality of sockets or loops 42a therein to receive and cooperate with a plurality of stiff barbed splines 43a projecting from the surface of the strip 43. One method of making the spines is disclosed in U.S. Patent No. 2,717,437. The spines which are formed as elongate

3

loops of nylon or the like during the weaving of the strip project from the surface of the strip and are provided with barbs 43b or the like portions which interlock with the sockets or loops and securely hold the strips together. The plurality of spines on strip 43, when the strips are brought into face to face engagement with the sockets or loops on strip 42 will interlock and hold the strips together and securely hold the closure flaps 23' and 25' in closed position. They will however, upon a predetermined separating pull, deform sufficiently to release and permit the closure flaps to be moved to open position.

As shown in FIGS. 1 and 6, the strip 42 is located on and adhered or otherwise secured to the undersurface of closure flap 23 adjacent the edge thereof and engages the strip 43 adhered or otherwise secured to the outer surface of flap 25' when in closed position to releasably maintain the closure flaps in connected relation. Because of the plurality of interlocks between the two strips, the closure flaps can be closed without requiring a precise lining up of the strips or the elements thereof.

In modern merchandising, the shoes, slippers or the like can be displayed through the covered opening 33 and the selected box removed from the stack by the handle 35. The releasable connector strips 42, 43 are separated without substantial effort and the closure flaps opened whereupon the shoes can be readily removed, through the aid of the displaceable separator, for trying on. If the shoes are not wanted they can be easily returned to their compartments and the box again closed. The invention therefore produces a new and unique unitary box for footwear which is reliable, strong and simple in operation and which is a substantial improvement over the receptacle and lid construction now in use.

The box of the present invention can be readily made on a blank forming and folding machine and the transparent sheet and fabric strips can be applied as an incident to the blank making thereby providing a simple and reliable method of making the box without substantially increasing the cost thereof. The box, when empty, can be folded into a flat relation to save space for shipment and storage and can be quickly and easily set up to receive the shoes when required.

While the box disclosed herein is formed from cardboard, chipboard and the like, it is to be understood that in the broader aspects the box can be formed of other material such as plastic materials, capable of being so shaped and formed.

Variations and modifications may be made within the scope of the claims and portions of the improvements may be used without others.

I claim:

1. A box for footwear folded from a blank having folds producing a top panel, a first side panel, a bottom panel, a second side panel, a separator means extending

4

from the second side panel, said blank having closure flaps extending from the ends of the top, bottom and side panels, said top and first side panels having a transparent portion therein adjacent the fold therebetween, said separator means being divided into three portions, a first mounting portion extending from the fold between the second side and separator means to be secured to the undersurface of the top panel and terminate adjacent the edge of the transparent portion in the top, a second portion having a height approximately the height of the side portions to extend between the top and bottom panels to provide support therebetween for said top adjacent the transparent portion whereby said boxes can be stacked without damage to the transparent portion and to divide the box longitudinally, and a third portion to slidably overlie the inner surface of the bottom panel and permitting the second portion to be laterally deflected to receive the footwear on either side thereof, the closure flaps being folded into overlapped relation with the closure flaps at least one end being secured together by cooperating surfaces on flexible strips carried thereby, said strips being woven to provide a plurality of releasably interlocked members whereby the closure can be readily opened and closed to provide access to the box.

2. A box for footwear folded from a blank having folds producing a top panel, a first side panel, a bottom panel, a second side panel, a separator means extending from the second side panel, said blank having closure flaps extending from the ends of the top, bottom and side panels, said top and first side panels having a transparent portion therein adjacent the fold therebetween, said separator means having a first portion secured to the undersurface of the top panel and terminating adjacent the edge of the transparent portion in the top and a second portion having a height approximately the height of the side portions to extend between the top and bottom panels to provide support therebetween for said top adjacent the transparent portion whereby said boxes can be stacked without damage to the transparent portion and to divide the box longitudinally, the second portion being laterally deflectable to enable the footwear to be inserted on either side thereof, the closure flaps being folded into overlapped relation with the closure flaps at least one end being secured together by cooperating surfaces on flexible strips carried thereby.

References Cited in the file of this patent

UNITED STATES PATENTS

50	2,348,551	La Place -----	May 9, 1944
	2,611,529	Currivan -----	Sept. 23, 1952
	2,643,811	Bolding -----	June 30, 1953
	2,717,437	De Mestral -----	Sept. 13, 1955
	2,792,981	Grammer -----	May 21, 1957

UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,125,277

March 17, 1964

Edward C. Kozlowski

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 2, line 47, for "29" read -- 39 --; line 69, for "splines" read -- spines --; column 3, line 15, for "otheriwse" read -- otherwise --; column 4, line 9, for "transperent" read -- transparent --; line 20, after "flaps" insert -- at --.

Signed and sealed this 21st day of July 1964.

SEAL)

Attest:

STON G. JOHNSON
Attesting Officer

EDWARD J. BRENNER
Commissioner of Patents