United States Patent [19]

Carpenter

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[45] **Mar. 27, 1973**

[54] CUSHIONED SHIPPING FOLDER

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[73] Assignee: **Container Corporation of America,** Chicago, Ill.

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[21] Appl. No.: **228,060**

[52] **U.S. Cl.** .....**206/46 FR,** 229/34 HW, 229/40

[51] **Int. Cl.** **B65d 85/30**

[58] **Field of Search**....206/46 FR; 229/14 C, 34 HW, 229/33, 40, 16 D

[56] **References Cited**

UNITED STATES PATENTS

3,682,370	8/1972	Rous	206/46 FR
3,289,824	12/1966	Boitel	206/46 FR
3,386,642	6/1968	Young	206/46 FR X
3,116,005	12/1963	Skaggs	229/40

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[57] **ABSTRACT**

A cushioned shipping folder is characterized by a pair of end cells of triangular cross section resistant to deformation and protecting a flat article such as a book or the like held within the folder.

3 Claims, 5 Drawing Figures

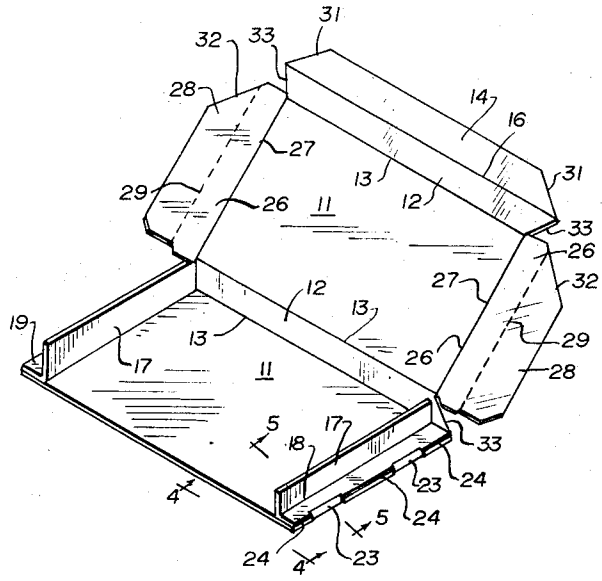


FIG. 2

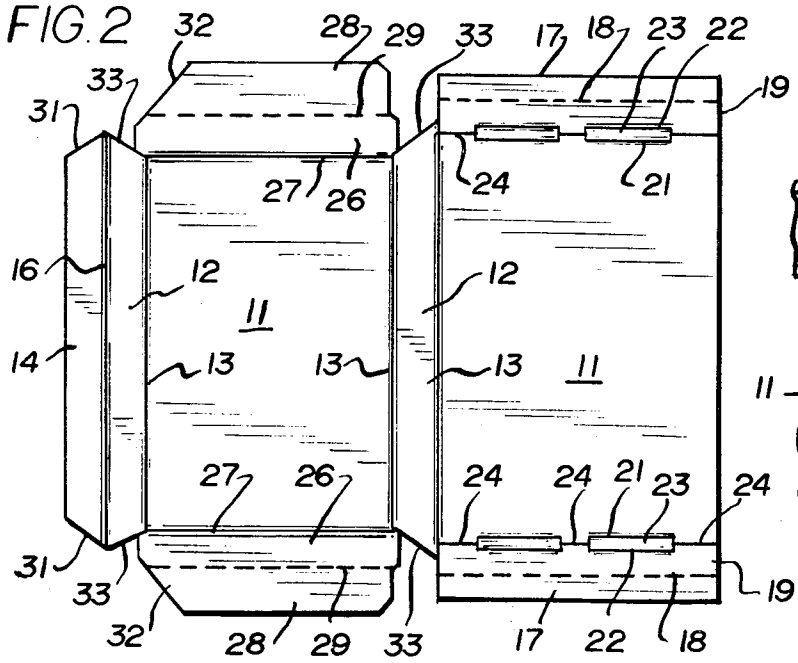


FIG. 4

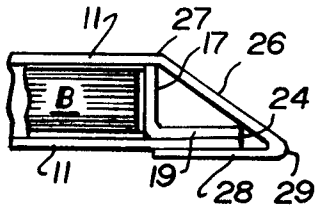


FIG. 5

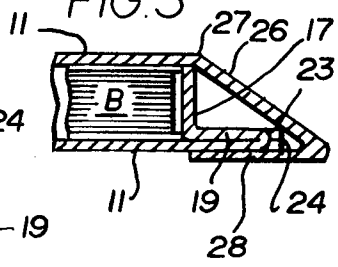


FIG. 1

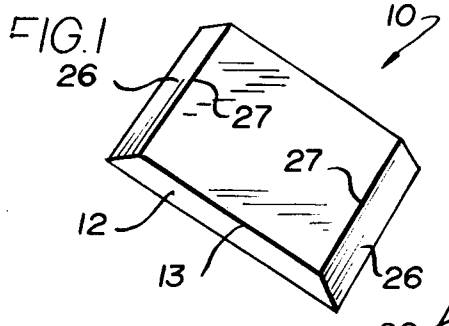
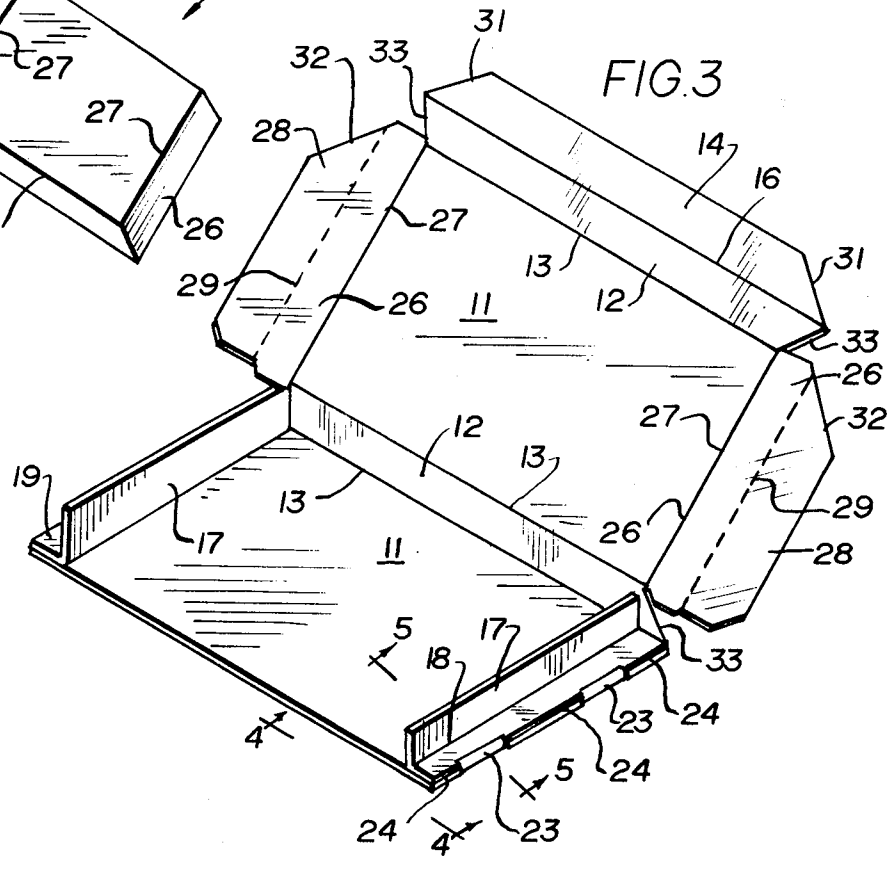


FIG. 3



CUSHIONED SHIPPING FOLDER

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to structures for enclosing books for movement through the mails, the structure being characterized by cells at each end thereof protecting the ends of the book therein.

2. The Prior Art

Structures of this general kind are illustrated in Skaggs U.S. Pat. No. 3,116,005 (Class 229/40).

SUMMARY OF THE INVENTION

According to the present invention good protection is provided for a book during shipment by the provision of a cell disposed at each end of the shipping folder, the cell being characterized by an element extending in contact with one end of a book, a second element extending substantially in planar relationship with a wall of the folder, and an oblique member defining with the other elements a protective deformation resistant cell of generally triangular cross section.

THE DRAWING

FIG. 1 is an isometric view of a closed shipping folder according to the present invention;

FIG. 2 is a plan view of a cut and scored blank for forming the shipping folder of FIG. 1;

FIG. 3 is a perspective view showing steps in forming the folder of FIG. 1;

FIG. 4 is a view looking in the direction of the arrows 4—4 of FIG. 3;

FIG. 5 is a sectional view taken along the line 5—5 looking in the direction of the arrows.

The cushioned shipping folder according to the present invention is referred to generally by the reference numeral **10** and is formed from a cut and scored blank **10A** consisting of a pair of major parallel walls **11** and minor parallel walls **12** foldably interconnected along fold lines **13**. An outer closure flap **14** is connected to one of the minor parallel walls **12** along a fold line **16**, and a flap **14** is connected to the remote major wall **11** to form a tubular structure.

The folder according to the present invention is adapted to enclose a book B resting upon one of the major parallel walls **11** seen in FIG. **3**, and closure structure is provided for each end of the folder **10**, and comprises a first inner flap **19** and a second inner flap **17** foldably connected to each other along a fold line **18**. First inner flap **19** is connected to a major parallel wall **11** by means of spaced score lines **21** and **22**, there being a score panel **23** therebetween. An interrupted cut line **24** flanks the two score panels **23**.

As seen in FIG. **3**, the inner flap **19** is folded to a position in facing relationship to the major parallel wall **11**, and the second inner flap **17** is folded perpendicular to the first inner flap **19** and the major parallel wall **11** to lie against a book B seen in FIGS. **4** and **5**.

The closure structure includes a pair of first and second outer flaps **26** and **28** foldably connected to each other along a fold line **29**. First outer flap **26** is foldable with respect to the other parallel wall **11** along a fold line **27**.

With the book B in position between the second inner flaps **17**, the other major panel **11** is brought over the book B. First outer flap **26** is folded to the position seen in FIGS. **3** and **4**, and the second outer flap **28** is foldably connected as seen in the said figures and secured to the outer side of the first major wall **11**, thereby creating an essentially triangular shaped cell protecting opposite ends of the book B.

After the formation of the end cells seen more clearly with respect to FIGS. **4** and **5**, the outer closure flap **14** is brought around and secured to the outside of panel **11**. The ends of the closure flap **14** are mitered at **31** and contiguous ends of the second outer flaps are mitered as at **32**, so that the flaps **14** and **28** may fit against each other.

Minor parallel wall **12** is likewise mitered at the ends **33** to fit snugly against the first outer flap **26** when the same is brought to the oblique position seen in FIGS. **4** and **5**.

I claim:

1. A cushioned shipping folder formed from a unitary blank of foldable paperboard or the like, comprising:

a. opposed pairs of major and minor parallel walls foldably interconnected to form a tubular structure;

b. an outer closure flap foldably connected to one of said parallel walls and secured to an adjacent parallel wall of said tubular structure;

c. a closure structure for each end of said tubular structure, said structure comprising:

i. a pair of first and second inner flaps foldably connected to each other with one of said flaps being foldably connected adjacent to one end of said major parallel walls:

A. said first inner flap being folded to a position in facing relationship to said one major parallel wall;

B. said second inner flap being folded perpendicularly with respect to said first inner flap and said one major parallel wall;

ii. a pair of first and second outer flaps foldably connected to each other with one of said outer flaps being foldably connected to one end of the other of said major parallel walls:

A. said first outer flap being folded to an oblique position in contact with edges of said inner flaps;

B. said second outer flap being folded along and secured to the first of said major parallel walls;

iii. said first and second pair of flaps defining a deformation resistant cell of generally triangular cross section.

2. A folder according to claim **1** wherein said first inner flap is connected to said one major wall by spaced score lines defining score panels and cut lines alternating with said score panels to enable said first inner flap to be folded readily to position against said one major wall.

3. A folder according to claim **1** wherein said first inner flaps have a book or other flat object held therebetween.

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