Jan. 30, 1968 W. ELFSTROM ET AL 3,366,232

ARROW HOLDER AND SPACER PAD

Filed April 11, 1966

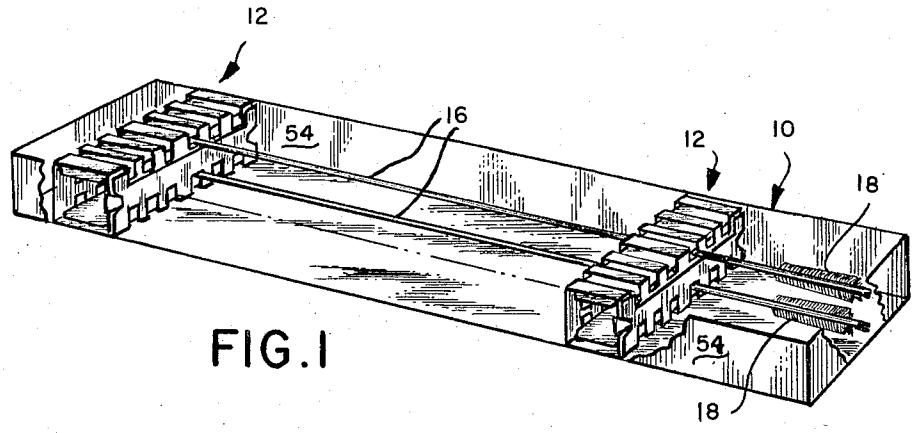


FIG. 1

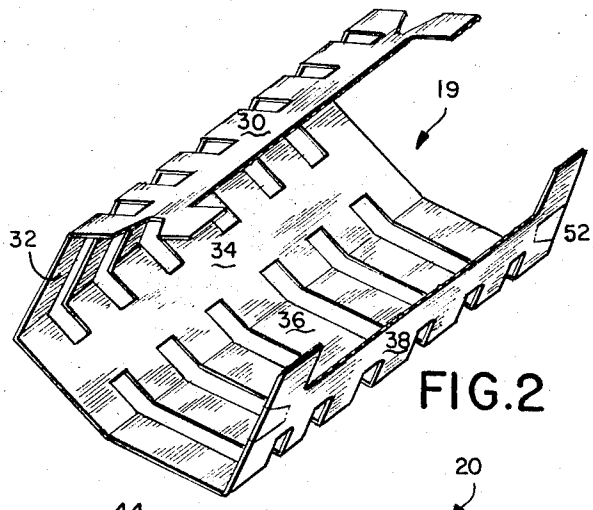


FIG. 2

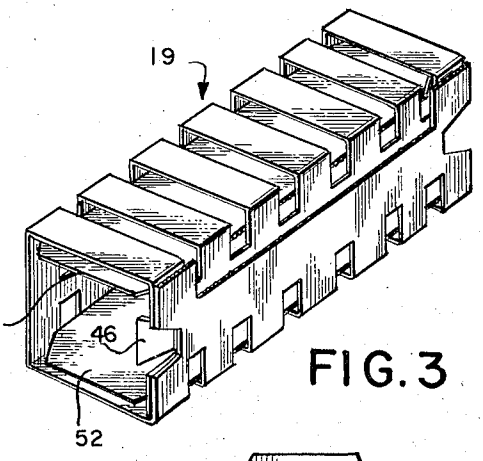


FIG. 3

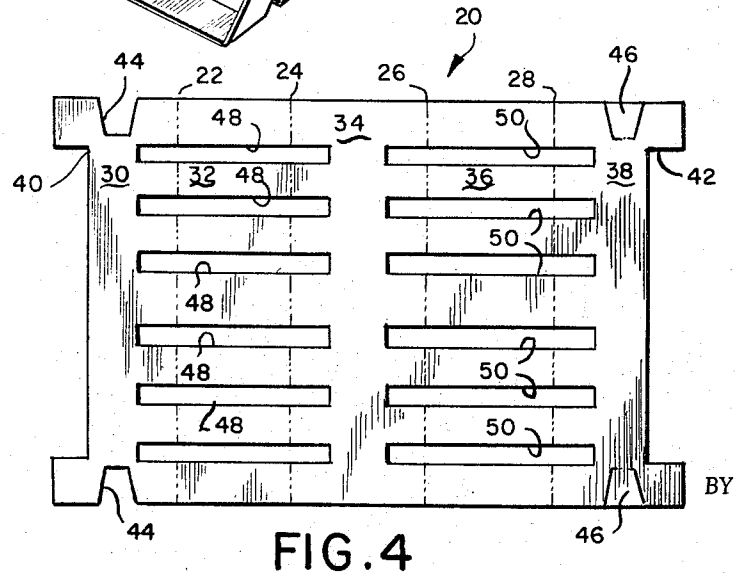


FIG. 4

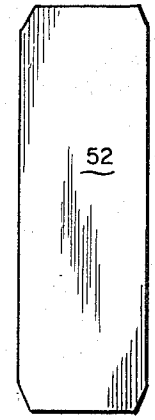


FIG. 5

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United States Patent Office 3,366,232
Patented Jan. 30, 1968

3,366,232

ARROW HOLDER AND SPACER PAD

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Filed Apr. 11, 1966, Ser. No. 541,683
5 Claims. (Cl. 206—65)

This invention relates to an imporvement in cartons used in the shipping and storing of identical elongate articles such as arrows.

One of the esesntial problems in shipping and storing arrows is the preservation of the feathers which are provided on one end of the arrow. The arrows must be supported in a spaced parallel relation and maintained in that position so that the feathers will not be damaged through unnecessary contact in the movement of the carton. Various methods have been used to support the arrows which require special handling or special materials such as wood or plastic which are costly and require special handling to manufacture.

One of the primary objects of the present invention is to provide a spacer support member for a carton which is low in cost and easy to assemble.

Another object of the present invention is to provide a carton for shipping arrows that preserves the feather on the arrow.

A further object of the present invention is to provide a means for locking the arrow in position within a carton.

These objects are accomplished by combining a carton having a length substantially equal to the length of the shaft of the arrow with a pair of support members which are positioned in spaced relation within the carton and are designed to hold the arrows in a parallel locked, spaced relation. Each of the support members is formed from a single blank of carton forming material with top, bottom and connecting side walls for folding to a square or rectangular shape. Parallel spaced slots are provided in its top and bottom walls and extend partially down the sides of the side walls. The shaft of the arrows are placed in the slots and a retainer strip is slipped into the space between the shaft of the arrow and the inside surface of the top and bottom wall to lock the arrows in the slots. The retainer strips are of equal length with the support member which is equal in length to the width of the carton so that when placed in the carton the retainer strips will be retained in position by the walls of the carton and cannot come out thereby locking the arrows in position.

Other objects and advantages will become more readily apparent in the following detailed description when read in connection with the accompanying drawings in which

FIG. 1 is a perspective view of the carton partly broken away to show the support members.

FIG. 2 is a view of the carton blank cut and scored for making the support member.

FIG. 3 is a perspective view of the support member partially closed.

FIG. 4 is a perspective view of the support member with the retainer strips in position.

FIG. 5 is a view of the retainer strip.

Referring more particularly to the drawings, in FIG. 1 a carton **10** is shown having support members **12** located a spaced distance from each end. A number of arrows **16** are positioned in the support members with the feathers **18** spaced from each other as seen in the drawing.

Each support member includes a housing **19** and a pair of retainer strips **52**. The housing is formed from a blank of carton forming material **20** which is scored at **22**, **24**, **26** and **28** to form top flap section **30**, top section **32**, connecting section **34**, bottom section **36** and flap section **38**. When the blank is folded a square or rectangular shaped

housing will be formed with flap sections **30** and **38** overlapping.

Slots **48** are provided in top section **32** which extend partially into the connecting section **34** and flap section **30**. Similarily slots **50** are provided in bottom section **36** and extend partially into the connecting section **34** and flap section **38**. When the carton is folded into the upright position as shown in FIG. 3, slots **48** and **50** will provide parallel grooves into which arrows can be placed.

Notch **40** is provided in flap section **30** and notch **42** is provided in flap section **38**. These notches allow for an overlap in the flap sections by providing a clearance at the end of the slots where the flap sections are overlapped.

Lock notches **44** are cut at each end of flap section **30** and lock tabs **46** are cut in each end of flap section **38**. When the flap sections are folded to an overlapping relation the tabs are bent into the lock notches thereby holding the housing in the upright position.

The shaft of the arrows are positioned in the grooves in the support members and retainer strips **52** are inserted into the support member above the shaft of the arrows on the top and below the shaft of the arrow on the bottom. The arrows are thereby locked into the grooves. The support members with the arrows in the grooves are then placed in the carton. The housing and retainer strips are of the same length as the width of the carton so that the retainer strips will be held in position by the sidewalls **54** of the carton. It will then be impossible to remove the shaft of the arrow from the carton until the support member is removed from the carton.

Although only one embodiment of the present invention has been shown and described it should be apparent that various changes and modifications can be made herein without departing from the scope of the appended claims.

What is claimed is:

1. An arrow holder carton comprising the combination of

a rectangular carton having top, bottom, end and side walls,

and a pair of arrow support members located in said carton a spaced distance from each end wall and abutting each side wall,

each of said members including

a first flap section, a top section, a connecting section, a bottom section and second flap section overlapping the first flap section,

a first set of parallel slots extending across the top section and partially into the adjoining flap and connecting sections,

a second set of parallel slots extending across the bottom section and partially into the adjoining flap and connecting sections,

each set of slots forming grooves in the top and bottom of the support member, to hold a plurality of arrows in a spaced relation in the carton,

and a pair of retainer strips positioned in each support member in abutting relation to the inside surface of the top and bottom sections,

whereby the shafts of the arrows placed in the grooves will be retained in the support members by the retainer strips.

2. An arrow holder carton according to claim **1**

wherein said first flap section has a lock notch at each end and said second flap section has a lock tab at each end which is engageable with said lock notch to hold the flap sections together.

3. An arrow holder carton according to claim **2** wherein

each of said flap sections is cut out adjacent the portion of the slots in the connecting sections to allow for

adequate clearance for the shafts of the arrows where positioned in the grooves formed by the slots.

4. A support member for an arrow carton comprising

a first flap section, a top section, a connecting section, a bottom section, and a second flap section overlapping the first flap section,

all of said sections being formed from a single blank of carton forming material, and being hingedly connected together,

a first set of parallel slots extending across the top section and partially into the first flap section and connecting section,

a second set of parallel slots extending across the bottom section and partially into the second flap section and connecting section,

said slots forming grooves for holding arrow shafts in a parallel spaced relation,

and a pair of retaining strips positioned in the support member adjacent the inside surface of the top and bottom members respectively whereby said arrow

shafts will be held in position in the support member.

5. A support member according to claim 4 wherein said first flap includes at least one lock notch and said second flap section includes a corresponding number of lock tabs for engaging said lock notch to hold the flap sections in an overlapped relation.

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