Sept. 24, 1946. J. MUROS 2,408,222

BLADE PACKAGE

Filed March 25, 1944

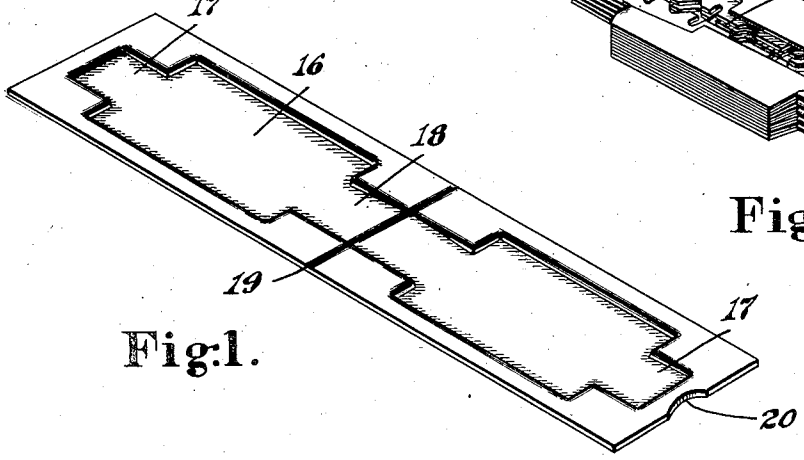



Fig. 1.

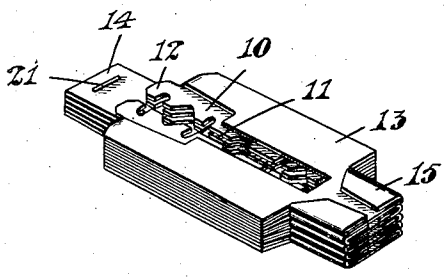



Fig. 2.

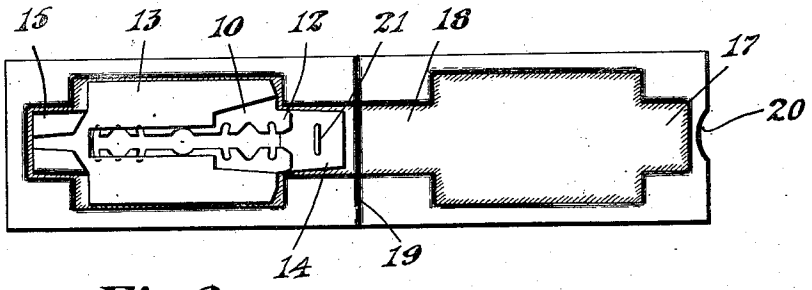



Fig. 3.

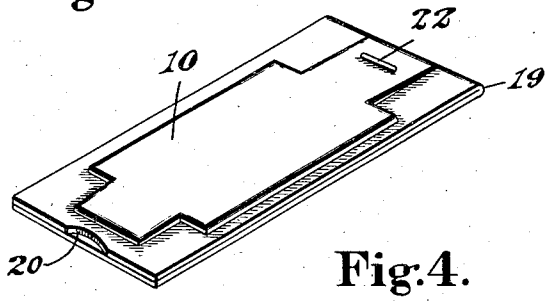



Fig. 4.

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2,408,222

## BLADE PACKAGE

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Application March 25, 1944, Serial No. 528,102

3 Claims. (Cl. 206—46)

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This invention relates to the packaging of fine-edged blades for sale and distribution and is herein illustrated as embodied in a novel package of safety razor blades.

In handling safety razor blades under commerical conditions of transportation and distribution and in the more or less casual treatment of such blades by the user, the extremely fine keen edge of the blade is likely to become dulled by being brought into contact with its wrapping or with other objects before it can be actually clamped in shaving position in the razor. On this account the best and most skillful efforts of the manufacturer in sharpening blades are often brought to naught because of the damage done to the very fragile and delicate structure of the blade edge after it has been brought to the keenest possible shaving condition and before the shaving operation is actually undertaken.

With these conditions in view, an important object of the present invention is to provide an effective and inexpensive blade package which may be readily assembled and sealed by the blade manufacturer, while safeguarding at all times the keen edge of the blade, and which will then be effective fully to protect the blade or a supply of blades during distribution and sale and up to the time when it is actually introduced into the razor by the user preparatory to shaving.

I have discovered that a satisfactory blade package may be formed by employing package covers of sheet material molded or embossed to present between them an enclosure for a stack of blades with surrounding flat areas in the covers that may be sealed together in face-to-face contact outside the outline of the blade stack. I may employ fiberboard, cardboard, plastic sheet material, or the like, for the material of the package cover and mold cooperating or supplementary pieces of this sheet material to provide similar recesses or depressions of an outline best adapted to contain the particular blade to be packaged. For example, in dealing with a double-edge blade of the "Gillette" type, the depression may consist of a main rectangular portion slightly wider than the blades to be enclosed and merging at each of its ends into an outwardly extending trough shaped to receive the elongated, unsharpened end portions of the blade. Surrounding this depression in each element of the package cover are formed flat areas which may be brought into face-to-face contact and sealed together. By employing waterproof material for the body of the package cover or by providing it with a waterproof coating, the resulting package may be made thoroughly waterproof and the blades thus protected for an indefinite time against rusting.

The enclosure formed in the package cover preferably is of such a shape as to hold the enclosed blades in position in the package with their sharp edges maintained out of contact with any part of the package. For example, in the case of the "Gillette" type blade, the trough portions of the depression receive and engage the elongated unsharpened end portions of the stacked blades, thus securely holding them in place with their sharpened edges located in the free unobstructed enclosure of the package. Such package may be completely formed and sealed by the blade manufacturer, the blades being meanwhile handled mechanically and entirely without danger of damage. The completely sealed package will preserve its integrity indefinitely. The opening of the package may be facilitated by setting off in the package a portion of the sealed area by a line of perforations so that the user may easily tear off a sealed marginal portion of the package and have ready access to its contents.

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These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof selected for purposes of illustration and shown in the accompanying drawing in which:

Fig. 1 is a view in perspective of the cover blank in flat condition;

Fig. 2 is a view in perspective of a stack of blades ready for packaging;

Fig. 3 is a plan view showing the blade stack in position in the flat blank; and

Fig. 4 is a view in perspective of the completed package.

The invention is herein shown in its application to the packaging of double-edged blades of the well-known "Gillette" type, but it is not limited in its application to this or to any particular type of blade but with suitable modification may be adapted to the packaging of blades of any other shape, all within the scope of the invention.

As will be apparent from Figs. 2 and 3, the blade **10** is substantially rectangular in shape, sharpened at both longitudinal edges and provided with a medial longitudinal slot **11** having a central circular enlargement and other intermediate enlargements shaped to fit the blade-locating projections of the various safety razors in which the blade may be used. The blade has a reentrant recess in each corner and these define elongated, unsharpened end portions **12** in both ends of the blade. As herein shown, but not necessarily, each blade may be protected by a cover **13** of thin waxed paper or the like. The cover is shaped to provide a tongue **14** projecting beyond one end of the blade and is divided and folded over the shoulders of the blade at the same end. At the other end of the blade the cover is formed into a projecting collar **15**. The collar **15** is formed partly by ears in the cover which are folded later-

ally over the elongated end of the blade as shown in U. S. Patent No. 2,194,281, March 19, 1940, Gustafson. The cover 13 is centrally slotted to expose the slot 11 of the blade so that a fully-protected covered blade may be presented in shaving position to the razor before the cover is removed.

The package herein shown is designed to accommodate a stack of four or five of the blades above described and in the accompanying drawing many features of the illustrated package are adapted for the purpose of fitting the blade just described, and may be varied for the accommodation of blades of different shapes.

The package may be formed from a flat elongated blank of pasteboard or other moldable sheet material, preferably saturated or coated with wax to render it waterproof. A pasteboard blank of this character is shown in Fig. 1 being somewhat more than twice the length of the blade to be packaged and having molded therein a pair of identical recesses or depressions each of which includes a main rectangular portion 16 shouldered and merging into an outwardly tapering trough 17 and into an inwardly tapering common-connecting trough 18. These recesses or depressions may be conveniently molded or embossed into the package cover blank without danger of breaking or weakening its material. The areas of the embossed blank outside and surrounding the recesses and troughs are flat and lie in a single plane. Going more into detail, narrow longitudinal areas are provided along both sides of the main portion 10 of the depression and across the ends of the troughs and these merge into flat areas corresponding to the reentrant recesses at the blade corners. The blank is divided equally by a transverse scored line 19 upon which it is to be later folded and which intersects the trough 18 that extends between the two recesses 16. It is also provided at one end with a curved finger recess 20.

Having prepared the package cover blank by embossing or molding as suggested in Fig. 1, the manufacturer may now conveniently place in one of the recesses the stack of covered blades which are ready to be packaged and have been secured together by a staple 21 inserted through the superposed tongues 14 of the covers outside or beyond the ends of the protected blades. The stack positioned in this manner is shown in Fig. 3 from which it will be apparent that the troughs 17—18 receive the unsharpened end portions 12 of the blades with a snug fit while the main portion 16 of the recesses receives the body of the blades with distinct clearance. Thus the blades are securely held by fitting in the troughs 17 and 18 with their keen cutting edges disposed in the clear space of the recesses and so positively prevented from making contact with any part of the package.

The package is completed by folding the cover portion over the blade stack thus bringing the two recesses 16 and their contiguous troughs 17 and 18 into exact registration with the blade stack enclosed between them. In this folding operation, the flat areas of both faces of the package cover are brought into intimate and continuous face-to-face contact and may be conveniently sealed together by the application of moderate heat and pressure distributed over the flat areas without touching the embossed configuration of the package. When the package cover is wax-coated the instantaneous fusing of the wax forms a water-tight and satisfactory seal for the package. A staple 22 may now be inserted through both sides of the closed package adjacent to its folded end, thus reinforcing the adhesive sealing of the package and fastening the stack of blades in position.



It will be noted that the troughs 17 and 18 taper outwardly in depth and thus merge into flat end areas that may be brought into sealing contact at the end of the package opposite its folded end. In the sealed package the finger recess 20 affords the user a convenient means for bending down the end of the lower cover leaf and so breaking the seal when it is desired to open the package and extract a blade therefrom. Moreover the arrangement is such that the blades may be removed one by one from the stack, all without disturbance of those remaining in the package.

Having thus disclosed my invention and described in detail an illustrative embodiment thereof, I claim as new and desire to secure by Letters Patent:

1. An open container for use in forming a blade package, comprising a straight elongated blank of pasteboard having therein a pair of substantially identical rectangular recesses spaced apart and connected through a common trough of less width than the recesses and intersected by a transverse scored line, the said recesses and trough being surrounded with complementary flat areas whereby the container may be sealed when folded on said scored line.

2. A package for razor blades of the type having elongated unsharpened end portions, a stack of blades in the package, said package including a pair of connected folding cover sheets of moldable material having walls forming opposed recesses connected by a common trough intersected by the fold line of the covers and surrounded by flat areas, the recesses being shaped to enclose with clearance the bodies of the blades in the stack, the cover-sheets having also walls forming separate troughs leading from said recesses, which troughs are shaped to cooperate with the folded sections of the said common trough to receive the elongated end portions of the blades and hold the blades with their edges in the open space provided by the opposed recesses.

3. A package for razor blades of the type having elongated unsharpened end portions, a stack of blades in the package, said package including in its structure a pair of similar cover sheets of moldable material having a folding connection and walls therein forming rectangular recesses of substantially equal size connected by a common trough which is intersected by the fold line of the covers and surrounded by flat areas, the recesses being shaped to enclose with clearance the bodies of the blades in the stack, the cover sheets having also walls forming troughs leading from opposite ends of at least one of said recesses, which troughs are shaped to co-operate with the folded sections of said common trough and to receive the elongated end portions of the blades and hold the blades with their edges in the open space provided by the said recesses, the said cover sheets being united in their flat areas.

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