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J. MUROS

2,425,337

BLADE PACKAGE

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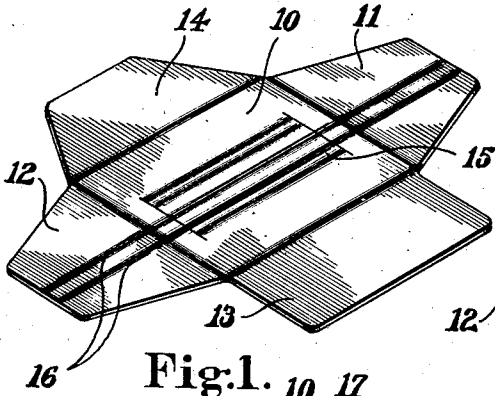


Fig. 1.

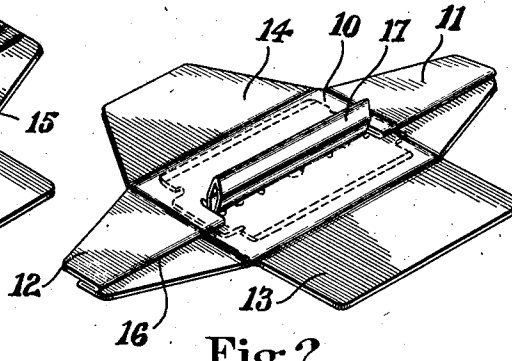


Fig. 2.

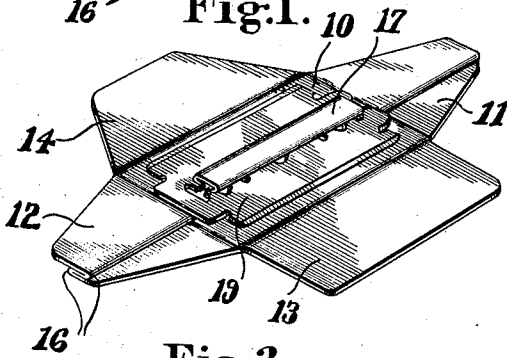


Fig. 3.

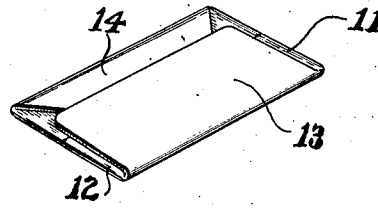


Fig. 4.

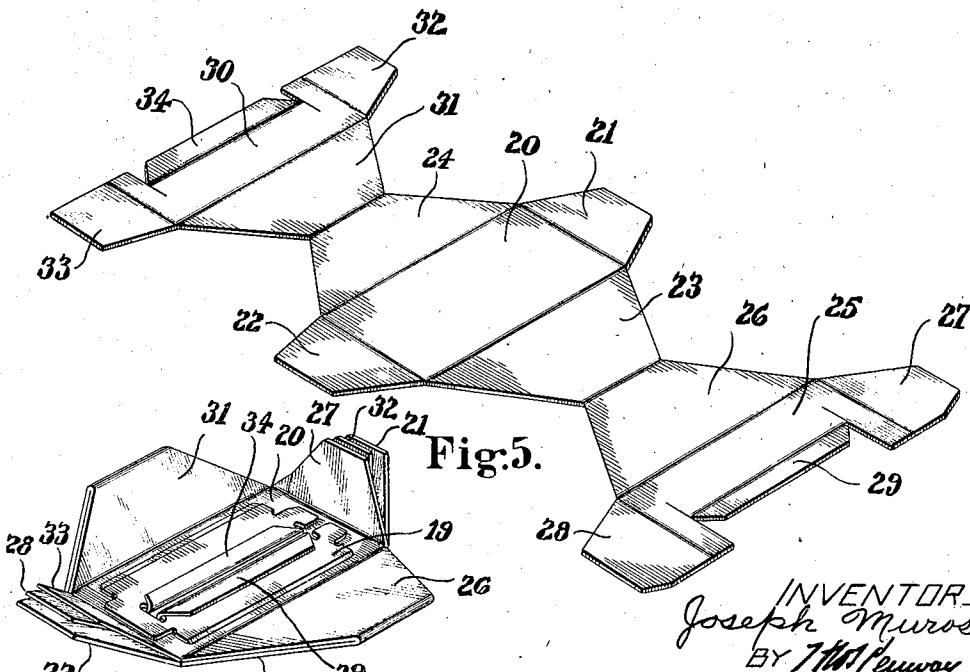


Fig. 5.

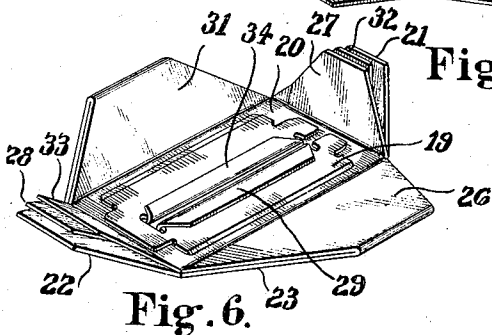


Fig. 6.

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BLADE PACKAGE

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4 Claims. (Cl. 206-46)

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This invention consists in a new and improved package for safety razor blades or the like and in a novel wrapper herein shown as employed in the construction of the improved package.

The fine keen edge of a razor blade properly ground, honed and stropped for shaving is so delicate in its structure that it may be seriously impaired by chance contact with any object before it is finally placed in position for shaving and clamped ready for use in the razor. Moreover, the cutting edge itself is susceptible to rusting and must be adequately protected from moisture during all stages of transportation and storage and until the user is actually ready to begin to shave with it.

The present invention consists in an improved package answering all the requirements above suggested and which, furthermore, may be made up conveniently by the manufacturer before the blades pass out of his control. An object of the invention is to produce a package for blades of the double edged open-end type, that is to say, blades having two sharpened side portions which are connected at one end by a transverse hinge portion and separated throughout substantially their full length by a medial slot opening through the other end of the blade. Such blades may be secured in place in a package by moving them endwise into engagement with a rib or other blade-locating projection provided for that purpose in the wrapper, and they may be similarly removed by endwise movement in the opposite direction. On the other hand, slotted blades which are not of the open-end type cannot be presented or removed by endwise movement but must be presented widthwise to a blade-positioning rib or projection.

With these requirements in view, an important feature of the present invention consists in a blade package comprising a flexible sheet having an elongated intermediate portion defined therein by transverse slits at its ends and turned or folded upwardly to form a projecting rib or a pair of projecting parallel walls. These walls or the rib may be embraced by the sides of a slotted blade or of an open-end blade and serve to locate the blade reliably with its sharpened edge out of contact with marginal fold vertices of the wrapper. Having located the blade in this manner the package is completed by covering the blade by flaps or panels which are a part of the wrapper.

Preferably and as herein shown the wrapper is of such shape and dimensions that it may be formed conveniently with little waste from a

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flat blank. The blade-locating projection may be formed by transversely slitting the blank and longitudinally folding upwardly the material thus set off so that it forms either upstanding walls or an internal rib having parallel side walls. The material is then either bent upwardly in the form of an internal rib or folded downwardly upon the face of the blank. This operation may be facilitated in accordance with another feature of the invention, viz., by first forming a continuous fold extending all across the body of the wrapper, including its opposite foldable flaps and the narrow area set off by the transverse slits. The material of the wrapper between the parallel scored lines is folded over on the body of the blank outside the narrow area defined therein by the slits, while within that area it may be erected to form a rib or walls as already suggested.

If desired a blank may be employed of sufficient size and proper shape to form a double-ply wrapper, and by suitably treating portions or a surface of the wrapper the necessity is obviated of using a separate inner envelope of moisture-proof material as has been heretofore considered necessary.

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

Fig. 1 is a view in perspective of a flat blank prepared to be incorporated in the blade package of my invention;

Fig. 2 is a view in perspective of the partially formed wrapper showing a blade thereon in dotted lines;

Fig. 3 is a similar view suggesting the step of flattening the blade-locating rib of the wrapper after the blade is in place.

Fig. 4 is a view of the blade package closed and completed;

Fig. 5 is a view in perspective of a blank used in the construction of a two-ply wrapper; and

Fig. 6 is a perspective view showing a blade as presented to the partially completed package of Fig. 5.

The blade packages herein shown are illustrated in their application to a double-edged, open-end blade of the "Gillette" type. The blade 19, as shown in Figs. 3 and 6, is substantially rectangular in outline and provided with reentrant recesses in each of its corners which define elongated unsharpened end portions. One end is

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solid and constitutes a hinge between the two similarly shaped and sharpened side portions. These are separated by a medial slot which opens through the other elongated unsharpened end portion of the blade. The slot includes intermediate enlargements at various places in its length and these are shaped to accommodate the blade-locating projections found in many different safety razors. The opposite longitudinal edges of the blade are ground, honed and stropped to provide keen shaving edges. These side portions of the blade are hardened and tempered while the hinge portion is annealed so that it may be flexed without danger of cracking.

The wrapper employed in the package of Fig. 4 is shown in its flat condition in Fig. 1 as comprising a rectangular body 10 which is somewhat wider than the blade. The body portion merges at opposite ends into similar end flaps 11 and 12 which taper outwardly from the body 10. At its opposite longitudinal sides respectively the body 10 merges into a rectangular side flap 13 and a tapering side flap 14, all of the flaps being defined by scored lines, and being integral parts of the wrapper or cover blank. A pair of parallel scored lines 16 extend continuously longitudinally across the body 10 and the end flaps 11 and 12. The inner of these two lines coincides substantially with the medial axis of the blank. Within the body 10 the scored lines 16 are intersected and an elongated rectangular area 15 set off between them by a pair of transverse parallel slits or cuts. It will be noted that the steps of scoring and slitting the blank may be carried out while the blank is in flat condition, and indeed they may well be carried out simultaneously with the operation of forming the blank from sheet material.

The next step in the preparation of the package consists in folding the blank on the scored lines 16, that is to say, overlapping the material between the scored lines throughout the tongues 11 and 12 and erecting the material in the rectangular area 15 between the transverse slits into an upstanding rib 17 as shown in Fig. 2. This may be formed by folding the material on the medial scored line 16 and turning up as side walls the material gained by narrowing the blank in its longitudinal fold. The dimensions of the rib are determined with reference to the width of the slot in the blade which is to be packaged, that is to say, the side walls of the rib should be separated by a distance slightly less than the width of the blade slot.

When the blade is of the open-end type, as is the blade 19 shown in Fig. 3, it may be slipped endwise into position upon the body 10, with the sides of its slot embracing the upstanding walls of the rib 17. If the blade is of the closed-end type it may be dropped into position while the rib of the wrapper is maintained in a narrow condition. In any case, after the blade has been positioned as shown in Fig. 2, the rib 17, being of flexible material, may be forcibly flattened down upon the surface of the blade and also widened in this step so that it overlies the face of the blade on both sides of the blade slot and thus secures the blade in place. The end or ends of the blade which project beyond the erected rib 17 will, of course, lie upon the flattened fold in the material of the body portion but the thickness of the fold is negligible particularly when thin sheet material is used for the wrapper.

The package is completed by folding the end

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flaps 11 and 12 inwardly and downwardly over the blade 19 and the flattened rib 17, folding the side flaps 14 and 13 inwardly and downwardly and securing them adhesively in place, as suggested in Fig. 4. The blade may be conveniently removed from the package when the user is ready to employ it by breaking open the side flaps, turning back the end flaps and sliding the blade endwise out of engagement with the rib 17 without the necessity of disturbing its flattened condition. It will be apparent that the blade is secured and positively held by the rib 17 in position on the body 10 of the wrapper with its sharpened edges out of contact with the fold lines of the wrapper and that when it is removed from the wrapper it is guided so that its edges will ordinarily make no contact with any part of the wrapper. I prefer to use as material for the wrapper a tough partially moisture-proof paper and if desired may wax or size at least one surface of the paper so as to make it highly moisture-resistant.

In Figs. 5 and 6 I have shown an embodiment of the invention which may be employed when it is desired to provide a two-ply wrapper and one having no external slits therein. In this instance the blank is shown as including a rectangular body portion 20 having end flaps 21 and 22 and tapering side flaps 23 and 24 which merge into flaps 26 and 31 of similar shape. These in turn merge into narrow substantially rectangular panels 25 and 30 respectively, each of which is about one-half the width of the central body portion 20. The panel 25 has end flaps 27 and 28 as the corresponding panel has end flaps 32 and 33. Each panel 25 and 30 is provided with a pair of spaced transverse slits or cuts and the material included between the slits is turned up into an upstanding wall 29 or 34.

When the blank of Fig. 5 is folded the flap 26 is turned inwardly over the flap 23 and the narrow panel 25 superposed upon one-half of the body 20. The other side flap 31 is turned over the side flap 24 and the narrow panel 30 superposed on the other half of the body 20. The upstanding walls 29 and 34 now extend in adjacent parallel relation above the body 20, or substantially in the location of the side walls of the rib 17, as shown in Fig. 2. In these folding steps the end flaps 21, 27 and 32 are brought into registration at one end of the wrapper and the end flaps 22, 28 and 33 at the other end thereof. A blade 19 may now be positioned on the body 20 and located by the upstanding walls 29 and 34 by endwise movement in the case of an open-end blade, or by dropping the blade in place if it is a slotted blade closed at both ends. The upturned walls 29 and 34 may now be folded downwardly upon the surface of the blade and the package completed by folding inwardly the three-ply end flaps thus provided and then the two-ply side flaps 23—26 and 24—31.

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

1. A blade package comprising a body of flexible sheet material having a rectangular area defined therein by end cuts and scored side lines, and end flaps, there being a longitudinal fold extending continuously through said rectangular area and end flaps, the material of the fold between the end cuts being erected into a blade-locating rib, and a slotted blade fitting upon said rib.

2. A blade package comprising a flexible sheet

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having a flat body portion with foldable flaps at its sides and ends, a fold extending continuously through the said flat body into the shape at opposite sides thereof, the fold being severed within the outline of said body and erected in the form of a rib, and a slotted open-end blade engaging said rib and extending beyond the rib at its open end, the said flaps enclosing the blade and rib.

3. A blade package comprising a wrapper of flexible material having a flat portion and a slotted blade lying thereon, the material of the wrapper being transversely slitted in spaced lines beneath the blade slot, folded into a rib extending up through the blade slot and flattened and widened above the surface of the blade into contact with the face of the blade on both sides of its slot thereby holding the blade in place, the wrapper having also flaps enclosing the blade and said rib.

4. A blade package comprising a wrapper of flexible sheet material having a flat portion of double-ply thickness, and a slotted blade positioned thereon, the material of one ply of the wrapper being transversely slitted in spaced lines

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beneath the blade slot, spaced apart by at least the length of the blade slot and turned upwardly into a two-ply rib extending up through the blade slot and flattened by folding each ply downwardly in opposite direction above the surface of the blade into contact with the face of the blade on both sides of its slot thereby holding the blade in place, the wrapper having also double-ply flaps overlying the blade and said flattened rib.

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