Jan. 27, 1959 B. A. HOLOHAN 2,870,905

RAZOR BLADE PACKAGE

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FIG. 2

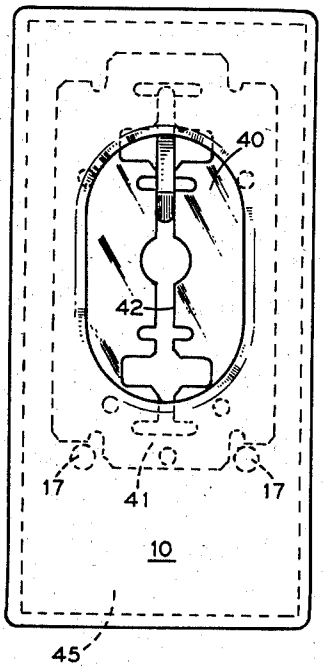


FIG. 1

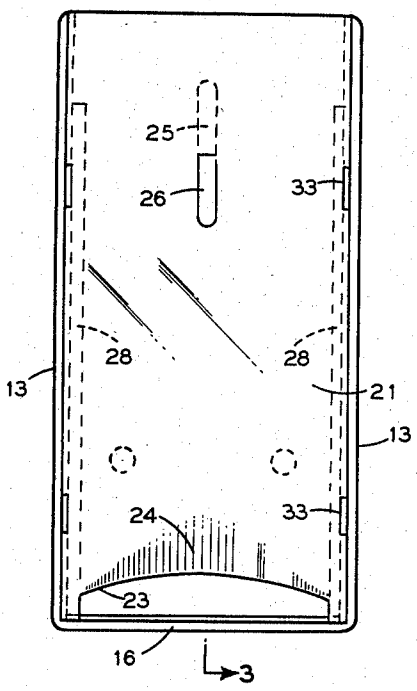
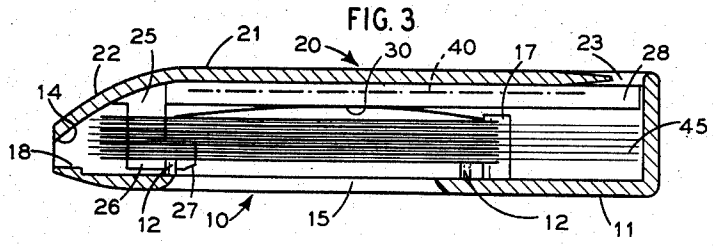


FIG. 3



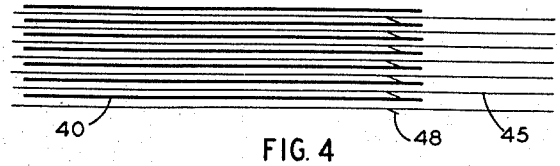


FIG. 4

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RAZOR BLADE PACKAGE

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FIG. 5

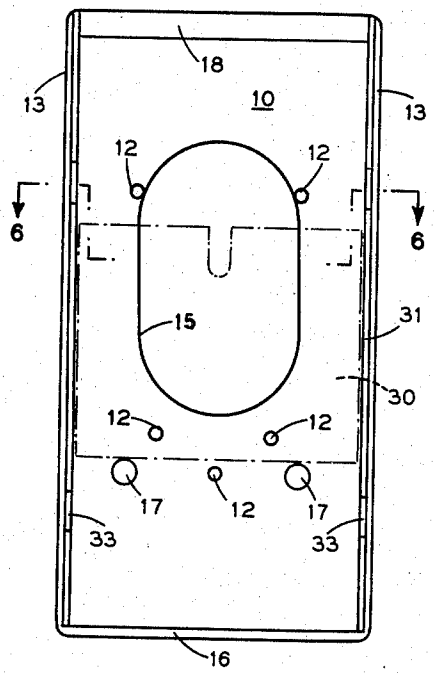


FIG. 6

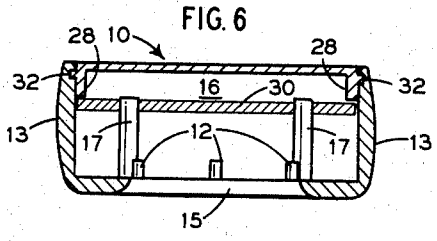


FIG. 7

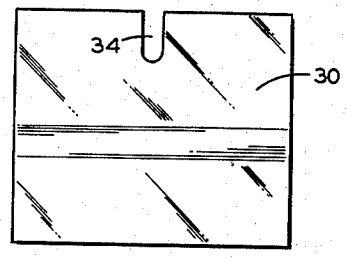
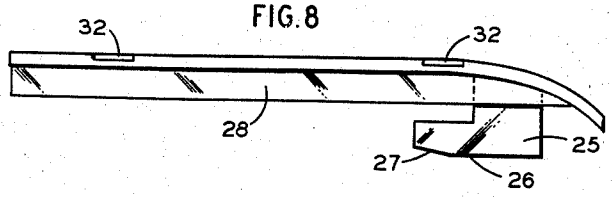


FIG. 8



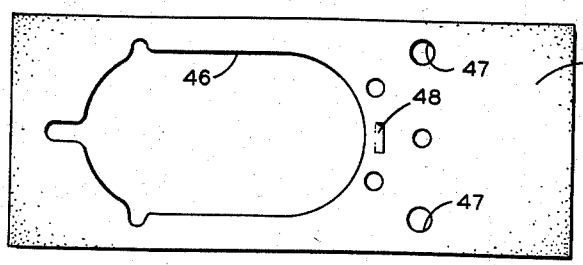


FIG. 9

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2,870,905

RAZOR BLADE PACKAGE

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Application July 11, 1956, Serial No. 597,250

1 Claim. (Cl. 206—16)

This invention relates to magazines for razor blades or the like, and more particularly, to a novel magazine of this type arranged to contain a plurality of blades separated by paper strips acting as lubricators and in which all of the blades are removed from the same end of the magazine.

This application is a continuation in part of my copending application Serial No. 559,862 filed January 18, 1956.

The modern trend in dispensing razor blades is to sell packages of such blades in magazines of relatively rigid material such as metal or plastic composition materials. This magazine contains springs normally maintaining the blades engaged with one or more lugs extended through the blade slots. Most present magazines are relatively complicated in that the blades must be alternately removed from opposite ends of the magazine, which requires that the blades be so placed that arrows imprinted thereon indicate the removal direction. In addition, should the magazine be subjected to moisture, the blades tend to become rusted or stuck together.

In accordance with the present invention, a novel magazine is provided in which paper strips are disposed between adjacent blades. The magazine includes a pair of posts or pins or the like engaged through holes in the paper strips so that these latter are permanently held in the magazine. Also, the paper strips have cut-outs corresponding in size and location to the usual access opening for placing a finger against a blade so that normally the paper strips are invisible.

The magazine comprises a bottom or base section having side walls and one end wall, the side walls being curved downwardly toward the open end, and a cover curved at one end to conform to the side wall curvature. This cover carries a pair of ribs parallel to the side walls and serving as seats for a spring urging the stacked alternating blades and paper separators toward the base. The edges of the cover are formed for snap interlocking with the base side walls.

The stacked blades and separators are pushed by the spring against positioning posts around the access opening in the base. These posts are of such a height as to maintain the blades above the lower edge of the lug extending from the cover and engaged in the blade slots. If a blade is pressed to move toward the discharge slot between the cover and base at the open end of the base, it remains in engagement with the lug until such time as the end of the blade slot engages with a rearward extension of the lug. At this time, the reduced end portion of the blade falls between a pair of spaced posts, which lowers the blade sufficiently to pass beneath the lower end of the lug for withdrawal.

The paper separators not only act as "lubricators" separating the individual blades but also have tabs entering the blade slots to lock underlying blades against movement when the outermost blade is being withdrawn.

For an understanding of the invention principle, reference is made to the following description of a typical

embodiment thereof as illustrated in the accompanying drawings. In the drawing:

Figs. 1 and 2 are, respectively, top and bottom plan views of the loaded magazine;

Fig. 3 is a sectional view on the line 3—3 of Fig. 2;

Fig. 4 is an exaggerated side elevation view of the blades and separators, illustrating the locking tabs on the separators;

Fig. 5 is an inside view of the base;

Fig. 6 is a sectional view on the line 6—6 of Fig. 5;

Fig. 7 is a plan view of the spring;

Fig. 8 is a side elevation view of the cover; and

Fig. 9 is a plan view of a paper separator strip.

Referring to the drawings, the magazine includes a base member **10**, a cover or closure member **20**, and a spring **30**. Members **10** and **20** are formed of any suitable relatively rigid material such as metal or a plastic composition material.

Member **10** includes a flat wall portion **11** formed with an oval access opening **15** around which are short posts **12** having their outer ends in a common plane. Extending from wall **11** are parallel side walls **13**, having curved forward ends **14**, and an end wall **16**. Just rearwardly of opening **15** a pair of pins **17** project from wall **11** for a purpose to be described. A lip **18** extends across the forward open end of wall **11**.

Member **20** includes a main wall **21** arranged to lie between walls **13** of member **10** and curved, as at **22**, to conform to the curvature of the forward ends of walls **13**. Wall **21** seats in grooves **31** in base side walls **13** and has lugs **32** along its side edges formed for snap engagement beneath lugs **33** on walls **13**.

For a purpose to be described, the rear end of wall **21** is recessed, as at **23**, and formed with a tapered or feathered portion **24**. Ribs **28** extend parallel to the side edges of wall **21** and lie against walls **13** of member **10**. A projection **25** extends from wall **21** and has a rearwardly projecting arm **26** and a sloping guide surface **27**, the lower surface of arm **26** being substantially in the common plane of the ends of posts **12**.

Before assembly of members **10** and **20**, the magazine is filled with blades **40** separated from each other by paper strips **45**. The blades **40** are arranged with their reduced outer ends **41** engaged between posts **17**, and paper strips **45** have holes **47** receiving these posts. The assembly of alternating blades and paper strips is pressed toward wall **11** of member **20** by spring **30**, with the blades resting on posts **12** around opening **15**. Strips **45** have cutouts **46** conforming to opening **15**, so that only the blades are exposed at this opening.

As best seen in Figs. 3, 5 and 7, spring **30** is bowed and formed with a slot **34** to engage lug **25**. The bowed surface of the spring engages cover ribs **28** and the spring ends engage the stacked blades and separators.

The blades are normally locked in position by engagement of lug **25** in blade slots **42**. To discharge a blade, a finger is pressed against a blade through opening **15** to slide the blade toward lip **18**. During this movement, slot **42** remains in engagement with lug **25**. As the end of the slot reaches extension **26**, the end of the blade is pressed between this extension and posts **12** with blade extension **41** dropping between the forward pair of posts **12**. The blade then slips along guide surface **26** for removal through the open front of the magazine.

The paper strips **45** are held in the magazine by engagement of posts **17** through holes **47**, and act as separating "lubricators" between the blades. These strips thus prevent the blades from sticking together due to rusting or the like. Strips **45** have tabs **48** which enter the slots of underlying blades, as seen in Fig. 4, to lock these blades against movement while a blade is being withdrawn.

It will be noted that the height of posts **12** is such that the blades are kept above the lower edge **27** of abutment **25** until such time as the blade has been withdrawn so that the rear edge of slot **42** engages extension **26**. At this time, reduced end **41** of blade **40** falls between forward posts **12** so that the blade is now below edge **26** and can be withdrawn.

Used blades are stored in a chamber defined by the inner surface of wall **21**, the longitudinally extending ribs **28** and the bowed surface of spring **30**.

While a specific embodiment of the invention has been shown and described in detail to illustrate the application of the invention principles, it will be understood that the invention may be embodied otherwise without departing from such principles.

What is claimed is:

A razor blade dispensing magazine comprising, in combination, a disengageably interconnected base and cover cooperably providing a pair of spaced substantially parallel walls arranged to form a blade discharge opening at one end of the magazine; the base wall having an access opening therein and posts around said opening having their outer ends in a substantially common plane parallel to the base wall; the cover wall having a lug projecting therefrom for engagement in the usual central slot of razor blades; said lug being between such access and discharge openings and extending inwardly to at least such substantially common plane; a plurality of blades disposed in said magazine; a plurality of paper separator strips disposed in said magazine in alternation with said blades; interengaging means on said strips and in said magazine retaining said strips in said magazine as the blades are dispensed, said interengaging means in said magazine engaging the ends of said blades furthest from said discharge opening to prevent movement of said blades in a direction away from said discharge opening; and spring means engaged with said cover wall to bias the blades toward said posts whereby outward movement of the blades is limited by engagement of said lug in the blade slots; said posts including a pair at the discharge end of said recess spaced laterally substantially the width of the usual reduced end of a blade whereby, when a blade engaging said posts is moved outwardly to near the limit provided by engagement of said lug in the blade slot, the reduced width end of the blade, moving between said pair of posts, will displace the blade inwardly for outward movement beneath said lug, each strip having a tab extending into a blade slot to retain underlying blades against movement when the blade engaging said pair of posts is dispensed.

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