

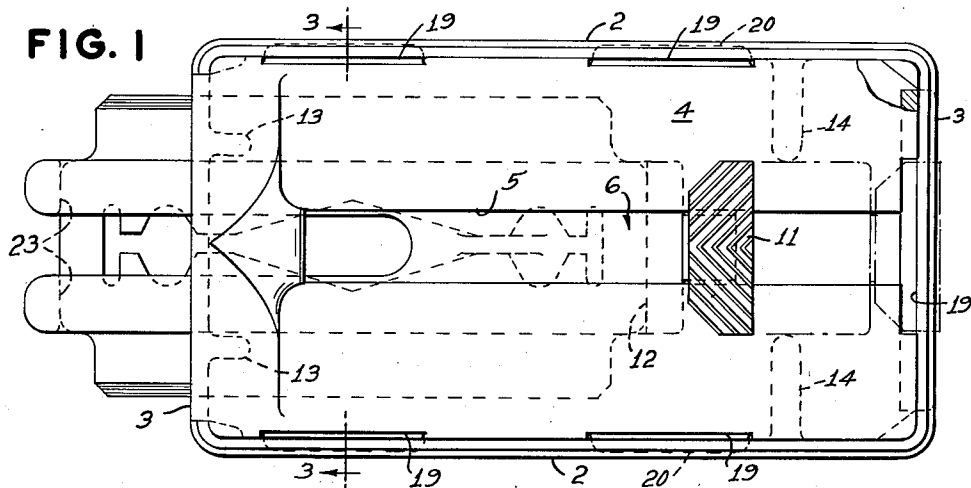
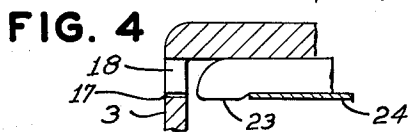
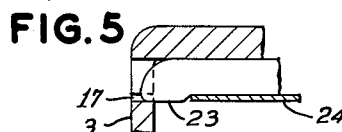
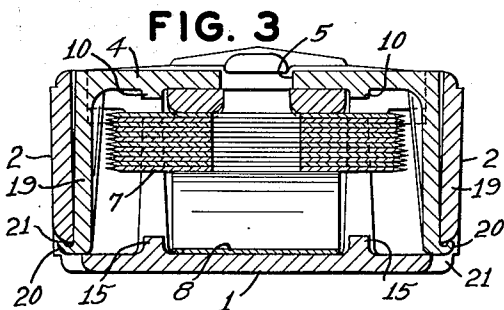
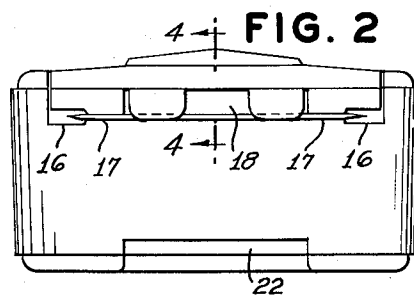
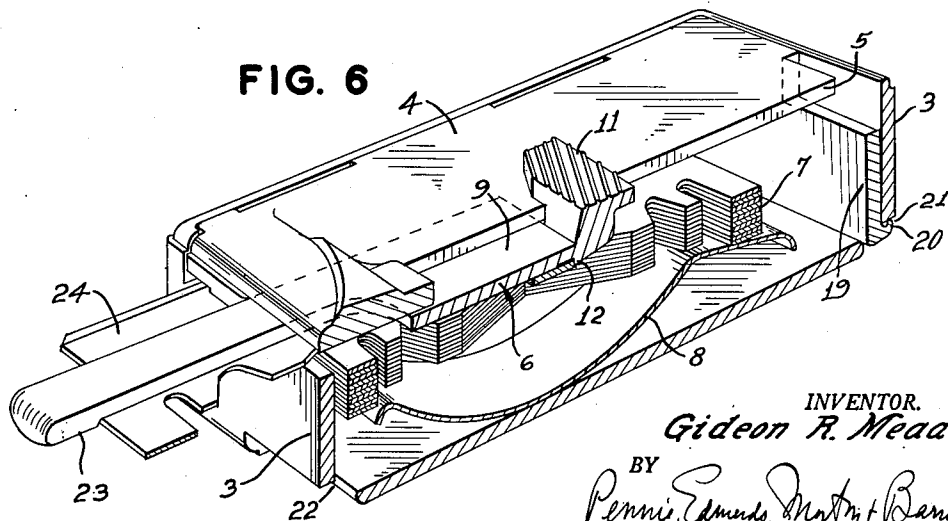
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MAGAZINE FOR SAFETY RAZOR BLADES

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MAGAZINE FOR SAFETY RAZOR BLADES

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3 Claims. (Cl. 206—16)

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This invention relates to a blade magazine for dispensing unwrapped double-edge blades having the usual longitudinal slot and corner notches. It is the object of the present invention to provide a magazine of this type in which unwrapped blades can be stored and from which they can be dispensed one at a time by means of a longitudinally movable slide which engages the topmost blade only. Magazines of this type are commonly made of a plastic because of its lightness and cheapness. Double-edge safety razor blades are made from thin steel generally from four-thousandths to six-thousandths of an inch thick, and this determines the size of the discharge slot of the magazine. The width of this slot must be less than the thickness of two blades, otherwise it is difficult or impossible to insure the ejection of but a single blade for each movement of the ejector slide, but due to warpage of the plastic it is not feasible to work to such nice tolerances and a discharge slot intended to be nine-thousandths wide might turn out in practice to be thirteen; thus two blades might emerge instead of one. It is a further object of the present invention to overcome this difficulty and make sure that but a single blade is dispensed with each stroke of the slide. I attain this object by making the discharge slot effectively less than the thickness of a single blade in width and providing the ejector slide with an enlargement at its forward end which pries the slot open to the proper width and thus permits the emergence of only a single blade. It is not difficult to make the slide of precisely the right thickness, but it is difficult to make the slot of unvarying width.

In the accompanying drawing I have illustrated a preferred embodiment of my invention. In these drawings,

Figure 1 is a plan view of my magazine showing one blade partly ejected;

Figure 2 is a front elevation of the magazine;

Figure 3 is a transverse section taken along line 3—3 of Figure 1;

Figure 4 is a fragmentary longitudinal section taken along line 4—4 of Figure 2 with the ejector slide retracted to its innermost position;

Figure 5 is a view similar to Figure 4, but showing the forward end of the ejector slide at the beginning of the ejecting operation;

Figure 6 is a perspective view of the magazine partly in section showing a blade in the process of being ejected.

The magazine comprises a casing having a bottom 1, side walls 2, end walls 3 and a top or cover 4. The top is provided with a longitudinal slot

5 in which is mounted a slide 6 for engaging the topmost blade of a stack 7 mounted within the magazine and pressed against the lower face of the slide by means of a spring 8. The slide comprises a plate 9 bifurcated to form forwardly extending fingers designed to slide between longitudinal guide ribs 10 on the underface of the top, and a head 11 overlying the upper face of the top adjacent the slot. The rear end of the underface of the slide is provided with a narrow transverse shoulder 12, of a thickness less than that of a blade, designed to engage the rear end of the topmost blade in the stack during each ejecting operation. When the shoulder 12 engages the rear end of the topmost blade, the forward end of the fingers of the slide extend beyond the forward end of the blade.

The forward end wall of the casing is provided with two vertical, longitudinally extending ribs or guide bars 13 and the side walls, near the other end of the casing, with two opposed vertical transverse ribs 14. These ribs are designed to extend within the notches at the corners of the blades and to locate the stack approximately in the middle of the casing and prevent the edges from making contact with it. The transverse ribs 14 divide the casing into two chambers of unequal size, the one containing the blades and the other empty, but permitting retraction of the slide so that the shoulder 12 may be withdrawn beyond the stack of blades in order that it may engage the rear edge of the topmost blade on its forward movement. The upper face of the bottom 1 is provided with a pair of parallel guide ribs 15, parallel to the guide ribs 10 on the top, which act as locating means for the spring 8. The forward end wall of the casing is cut away to define, in cooperation with the top, a discharge or exit slot for the blades. This slot is provided with end-sections 16 wider than the thickness of the blade through which the cutting edges pass, two intermediate sections 17 normally narrower than the thickness of the blade, and a central section 18 slightly narrower than the thickness of the front end of the slide.

Five plates 19 depend from the top, two on each side and one on the end, the lower end of each having an outwardly extending flange 20 designed to snap into corresponding slots 21, at the juncture of the side and end walls and the bottom. The forward end wall is provided with a narrower slot 22 through which the spring 8 may be inserted after the stack of blades has been placed within the casing and the cover snapped into position.

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The magazine is loaded and assembled as follows: a stack of from ten to twenty double-edge blades is placed within the bottom of the container with the appropriate ribs 13 and 14 lying within the corner notches of the blades. The top with the slide mounted upon it is then snapped into place with the flanges 20 entering the slots 21. The loaded magazine is then turned over and the spring 8 inserted through the slot 22 until it assumes the position shown in Figure 6. The slide having been retracted until the head 11 is at the rear end of the slot 5, the magazine is now in readiness for use.

When the bifurcated slide is in its rearmost position the forward ends of its two fingers are retracted just within the front end wall 3, as shown in Figure 4. The ends of these fingers are thickened slightly, as shown in Figure 4, by means of downwardly extending projections 23, approximately the thickness of a blade. When the parts are in the position shown in Figure 4 the sections 17 of the discharge slot are slightly narrower than the thickness of the blade, and the mid-sections 18 are slightly narrower than the thickness of the enlarged ends of the fingers, as shown in Figure 4. When the ejection operation is initiated by moving the slide forward, these enlarged ends move through the section 18 of the discharge slot and cam it open slightly, thereby raising the cover and increasing the width of the discharge section 17, as shown in Figure 5, this thickness being slightly more than the thickness of a blade. As the slide continues to move forward, carrying with it the topmost blade 24, the rear end of which has been engaged by the shoulder 12, the blade follows the thickened ends of the slide fingers and enters the discharge slot at 17 before the thickened ends of the fingers have emerged from the casing. The parts are so designed that the width of the section 17 of the discharge slot is never equal to twice the thickness of the blade so that if by chance two blades were carried by the slide only the topmost one could emerge.

The forward guide ribs 13 terminate flush with the lower edge of the discharge slot section 17 to permit discharge of the topmost blade, but the rear guide ribs 14 extend up to the ribs 10. During ejection of the topmost blade it is kept in alignment by the shoulder 12 which presses against its rear end.

When the major part of the blade has been ejected it can be placed over the inverted cap of the razor and left in proper position by withdrawing the magazine. The bifurcation of the slide permits its withdrawal without interference with the locating pins or bars of the cap. During this last movement the thickened portions 23 ride easily over the edge of the blade because their inner edges are rounded, as shown in Figures 4 and 5.

I claim:

1. A dispensing magazine for unwrapped, double-edge safety razor blades, comprising a casing, a stack of blades in the casing, the casing having relatively movable parts at one end thereof forming a discharge slot having a sec-

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tion normally narrower than the thickness of a single blade, a spring holding the stack of blades with the topmost blade in alignment with the discharge slot, and an ejector slide mounted on the casing and having a bifurcated part within the casing overlying the topmost blade for ejecting it through the discharge slot, the forward ends of the bifurcated part of the slide having downwardly extending enlargements approximately the thickness of a blade and lying in front of the topmost blade to pry the discharge slot open to permit the passage of a single blade by relatively moving apart the slot-forming parts of the casing.

2. A dispensing magazine for unwrapped double-edge, slotted, corner-notched safety razor blades, comprising a casing having a bottom, side and end walls and a top, a discharge slot between the upper edge of the forward end wall and the top having a section normally narrower than the thickness of a single blade and a wider central section, a stack of blades in the casing, guide ribs in the casing cooperating with the notches in the blades for centering the stack, a spring urging the stack upward with the topmost blade in alignment with the discharge slot, and an ejector slide longer than and overlying the topmost blade, bifurcated to form two forwardly extending fingers, mounted on the top, the forward ends of the slide fingers being thicker than the width of the central section of the discharge slot to pry it open at the initiation of the discharge operation to permit egress of a single blade.

3. A dispensing magazine for unwrapped double-edge, slotted, corner-notched safety razor blades, comprising a casing having a bottom, side and end walls and a top, a discharge slot between the upper edge of the forward end wall and the top having a section normally narrower than the thickness of a single blade and a wider central section, a stack of blades in the casing, guide ribs in the casing cooperating with the notches in the blades for centering the stack, a spring urging the stack upward with the topmost blade in alignment with the discharge slot, and an ejector slide longer than and overlying the topmost blade and mounted on the top, the forward end of said slide extending beyond the forward edge of the stack of blades and being thicker than the width of the central section of the discharge slot to pry it open at the initiation of the discharge operation to permit egress of a single blade.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,352,113	Muros	June 20, 1944
2,436,025	Steinbach	Feb. 17, 1948
2,439,243	Dalkowitz	Apr. 6, 1948