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DISPENSING CONTAINER FOR RAZOR BLADES

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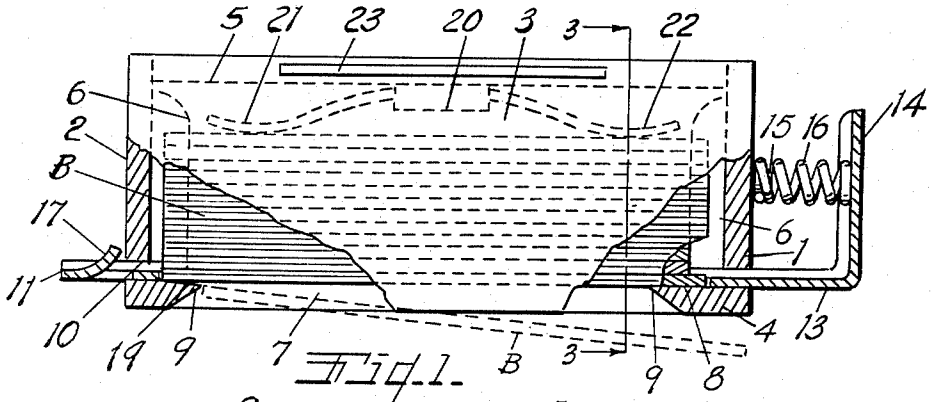


Fig. 1.

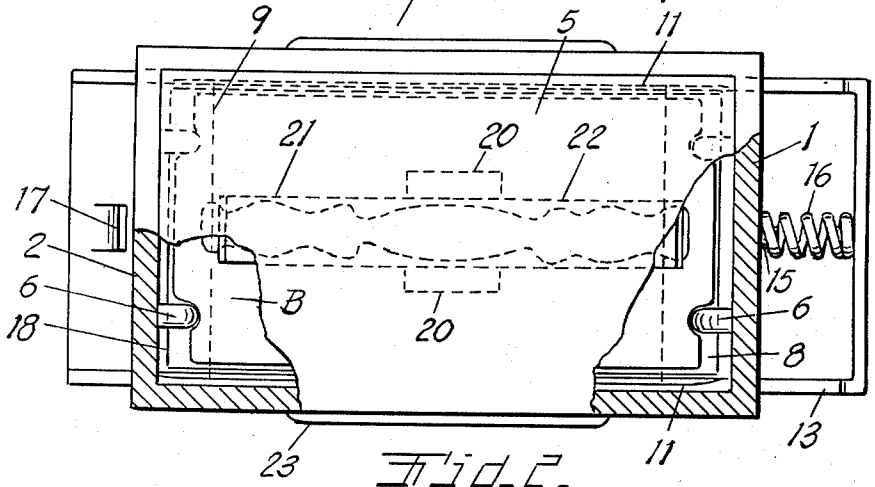


Fig. 2.

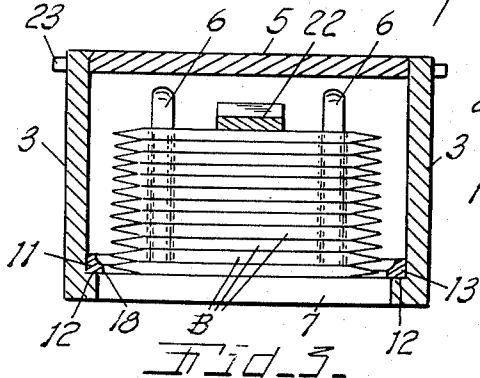


Fig. 3.

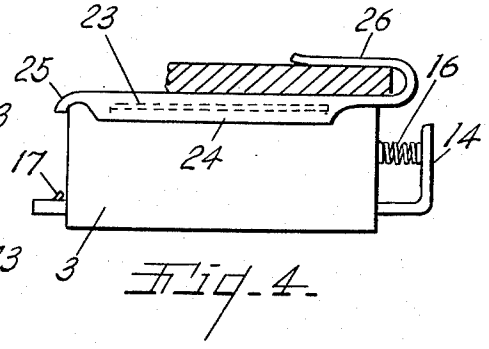


Fig. 4.

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DISPENSING CONTAINER FOR RAZOR BLADES

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7 Claims. (Cl. 221—232)

This invention relates to improvements in a dispensing container for razor blades. The principal objects of this invention are:

First, to provide a novel razor blade dispensing container which will dispense razor blades singly and directly into an open razor held below the container without touching the blades.

Second, to provide a blade dispensing container which can be fixedly mounted on a suitable support and actuated by pressing a dispensing plunger so that the container need not be handled and will not become misplaced.

Third, to provide a blade dispensing container which is inexpensive and which fully protects the cutting edges of the blades contained therein.

Other objects and advantages of the invention will be apparent from a consideration of the following description and claims. The drawings, of which there is one sheet, illustrate a highly practical form of the blade dispensing carton.

Fig. 1 is a side elevational view of the container partially broken away in vertical cross section.

Fig. 2 is a plan view of the container with portions broken away to show interior construction.

Fig. 3 is a transverse vertical cross sectional view taken along the plane of the line 3—3 in Fig. 1.

Fig. 4 is a side elevational view of a convenient manner for mounting the blade dispenser on a fixed support.

The container may be made of any suitable material having sufficient rigidity and molded plastic is mentioned as a suitable material for the container. The container is a box-like structure having a front wall 1, back wall 2, side walls 3 and a bottom wall 4. The cover or top wall 5 is snapped or placed into the top of the container after the container is filled.

As appears more clearly in Figs. 1 and 2 the container is somewhat longer than the blades B contained therein and has vertical ribs 6 on the end walls adapted to enter into the notches commonly found in the ends of razor blades. The ribs 6 are spaced to restrain the blades from any substantial endwise movement without binding or retarding vertical movement of the blades through the container as they are dispensed. The bottom wall 4 of the container defines a rectangular discharge opening 7 that is substantially shorter than the blades as appears in Figs. 1 and 2 but which is substantially wider than the blades as appears in Fig. 3. The bottom wall 4 thus forms shelves 8 at each end of the container that support the ends of the bottom blade and the opposed edges of the shelves are inclined downwardly and outwardly toward the ends of the container to form sharp dispensing or separating edges 9.

The end walls 1 and 2 define horizontal slots 10 just above the top surface of the bottom wall 4 through which a dispensing slide 11 is slidably mounted. The end shelves 8 and narrow side shelves 12 along the sides of the discharge opening 7 support the bottom of the slide 11. The slots 10 are vertically wider than the thickness

of one of the blades B but narrower than twice the thickness of a blade and the guide ribs 6 terminate at their lower ends at the level of the upper edges of the slots 10. Thus a blade resting on the end shelves 8 may be slid endwise into one of the slots 10 but the next blade above the bottom blade will be restrained against edgewise movement by engagement with the guide ribs 6.

The dispensing slide 11 which is desirably of metal has a central portion that is no thicker and desirably thinner than the blades to be dispensed. In order to keep the slide in position vertically in the slots 10 the side edges of the slide are provided with upturned flanges 13 that engage the upper edges of the slots 10. The flanges 13 also stiffen the relatively thin flat slide. The forward end of the slide 11 is turned upwardly to form a finger piece 14 and the front wall 1 of the container is provided with a centering boss 15 that locates a compression spring 16 between the finger piece 14 and the front of the container. The rear end of the slide 11 projects from the rear of the container and has an upwardly struck lug 17 that engages the back wall 2 to limit forward movement of the slide under the influence of the spring 16.

Within the container the flat central portion of the slide 11 defines a rectangular opening 18 that is slightly longer than the length of the blades and substantially wider than the width of the blades so as not to contact and damage the cutting edges of the blades. When the blades are packed in a stack in the container as illustrated the lower blade is supported on the shelves 8 as previously described and the superimposed blades are located against shifting in the container by engagement with the ribs 6. When the finger piece 14 is pushed inwardly the bottom blade is forced to the rear until its forward end clears the knife edge 9 at the front of the container. In moving rearwardly the rear end of the lower blade moves out of the rear end of the container a short distance so that the blade can pivot between the lower rear edge of the superimposed blade and the knife edge 9 at the rear of the discharge opening 7. If desired the rear shelf 8 may be inclined downwardly and forwardly as at 19 in Fig. 1 to facilitate pivoting of the bottom blade. After the forward end of the bottom blade clears the front shelf 8, the blade falls downwardly so that forward motion of the slide under the influence of the spring 16 causes the forward edge of the blade to be forced downwardly along the lower inclined surface of the forward knife edge. The bottom blade is thus ejected from the container and will fall flatwise into an open razor held below the container.

In order to facilitate downward movement of the blades in the container and to insure ejection of the bottom blade the top wall 5 is provided with centrally located bosses 20 between which the leaf spring 21 is pressed. The spring 21 has downwardly curved ends 22 which bear firmly against the top blade in the container to urge the stack of blades downwardly.

In order to permit relatively fixed mounting of the container the side walls 3 are provided with horizontally extending ribs 23 along their upper edges and these ribs 23 are adapted to be slidably received by the channel flanges 24 of a supporting fixture 25. The fixture 25 as shown in Fig. 4 may consist of a springing clip 26 adapted to be snapped over the front of a cabinet shelf or it may be made in the form of a bracket adapted for separate attachment to a wall.

Having thus described the invention, what is claimed as new and is desired to be secured by Letters Patent is:

1. A razor blade dispensing container comprising top and bottom walls connected by side and end walls, the bottom wall defining a discharge opening with support shelves at each end thereof and a downwardly and outwardly inclined knife edge at the edge of the front shelf,

the end walls defining horizontal slots at the surfaces of the shelves, said slots being of greater thickness than the thickness of one of the blades but less than twice the thickness of one of the blades to be dispensed, vertical guide ribs on said end walls adapted to locate a stack of blades within the container and over said shelves, spring means on the top wall urging the ends of a stack of blades downwardly toward said shelves, a dispensing slide slidably disposed on said shelves and projecting through said slots, said slide being of less thickness than one of the blades to be dispensed and defining a central opening of gerater dimension than the blades to be dispensed, a finger piece on the forward end of said slide, spring means disposed to bias said slide forwardly, and a stop on the rear of said slide engageable with the back wall of the container to locate said slide with the opening therein registering with both said shelves.

2. A razor blade dispensing container comprising top and bottom walls connected by side and end walls, the bottom wall defining a discharge opening with support shelves at each end thereof and a downwardly and outwardly inclined knife edge at the edge of the front shelf, the end walls defining horizontal slots at the surfaces of the shelves, said slots being of greater thickness than the thickness of one of the blades but less than twice the thickness of one of the blades to be dispensed, vertical guide means on said end walls adapted to locate a stack of blades within the container and over said shelves, yieldable means bearing against the top wall urging the ends of a stack of blades downwardly toward said shelves, a dispensing slide slidably disposed on said shelves and projecting through said slots, said slide being of less thickness than one of the blades to be dispensed and defining a central opening of greater dimension than the blades to be dispensed, a finger piece on the forward end of said slide, spring means disposed to bias said slide forwardly, and a stop on the rear of said slide engageable with the back wall of the container to locate said slide with the opening therein registering with both said shelves.

3. A razor blade dispensing container comprising side and end walls, inwardly extending shelves at the bottoms of the end walls having knife edges with downwardly and outwardly inclined under surfaces at the opposed edges of the shelves defining with the side walls a blade discharge opening, the end walls defining horizontal slots at the upper surfaces of said shelves, said slots being of greater thickness than the thickness of one of the blades but less than twice the thickness of one of the blades to be dispensed, guide means on said end walls adapted to locate a stack of blades within the container and over said shelves, means in the top of said container for urging the ends of a stack of blades downwardly toward said shelves, a dispensing slide slidably disposed on said shelves and projecting into said slots, said slide being of less thickness than one of the blades to be dispensed and defining a central opening of greater dimensions than the blades to be dispensed, stiffening flanges on the sides of said slide guidingly engaged with the tops of said slots, a turned up finger piece on the forward end of said slide, spring means disposed to bias said slide forwardly, a stop on the rear of said slide engageable with the back wall of the container to limit sliding motion of the slide.

4. A razor blade dispensing container comprising side and end walls, inwardly extending shelves at the bottoms of the end walls having knife edges with downwardly and outwardly inclined under surfaces at the opposed edges of the shelves defining with the side walls a blade discharge opening, the end walls defining horizontal slots at the upper surfaces of said shelves, said slots being of greater thickness than the thickness of one of the blades but less than twice the thickness of one of the blades to be dispensed, guide means on said end walls adapted to locate a stack of blades within the container and over said shelves, means in the top of said container for urging the ends of a stack of blades downwardly toward said shelves, a dispensing slide slidably disposed on said shelves and projecting into said slots, said slide being of less thickness than one of the blades to be dispensed and defining a central opening of greater dimensions than the blades to be dispensed, a turned up finger piece on the forward end of said slide, and a stop on said slide engageable with the back wall of the container to limit sliding motion of the slide.

5. A blade dispensing container comprising rectangularly arranged side and end walls, inwardly directed supports positioned at the ends of said container and at the bottom thereof to define with said side walls a rectangular discharge opening, said end walls having slots formed therein at the top surfaces of said supports, stop means on the inside of said container blocking the entrance of blades above the bottom blade into said slots, a dispensing slide disposed through said slots and having an actuating portion extending exteriorly of the container on one end, said slide having an opening formed therein with spaced opposed edges adapted to receive a blade on said support in endwise position between the opposed edges, said slide being no thicker than the thickness of one of the blades, means biasing said slide to a neutral position with said opposed edges over said supports, other means in the top of said container adapted to press the ends of a stack of blades to be dispensed downwardly against said supports, and a downwardly and outwardly inclined knife edge on one of said supports.

6. A blade dispensing container comprising rectangularly arranged side and end walls adapted to receive a stack of blades therewithin, guides fixed within said side and end walls and arranged to engage the stack of blades and hold the cutting edges of the blades in spaced relation from said walls, top and bottom walls on said container, and spring means on one of said latter walls arranged to bias said stack against the other one of said latter walls, the wall against which said stack is biased defining a delivery opening wider than the width of the blades of the stack and shorter than the length of the blades to leave shelves supporting the ends of the stack with inwardly bevelled edges on the shelves, said guides terminating short of the wall with the opening and defining therewith slots in which the end blade of the stack can be slid endwise to clear said bevelled edge, the top of one of said shelves being outwardly bevelled.

7. A blade dispensing container comprising angularly arranged walls adapted to receive a stack of blades therewithin, guides fixed within said walls and arranged to engage the stack of blades and hold the cutting edges of the blades in spaced relation from said walls, top and bottom walls on said container, and spring means arranged to bias said stack against one of said latter walls, the wall against which said stack is biased defining a delivery opening wider than the width of the blades of the stack and shorter than the length of the blades to leave shelves supporting the ends of the stack with an inwardly bevelled edge on one of the shelves, the guides at the end of the stack opposite from said bevelled edge terminating short of the wall with the opening therein and defining therewith a slot in which the bottom blade of the stack can be slid endwise to clear said bevelled edge.

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