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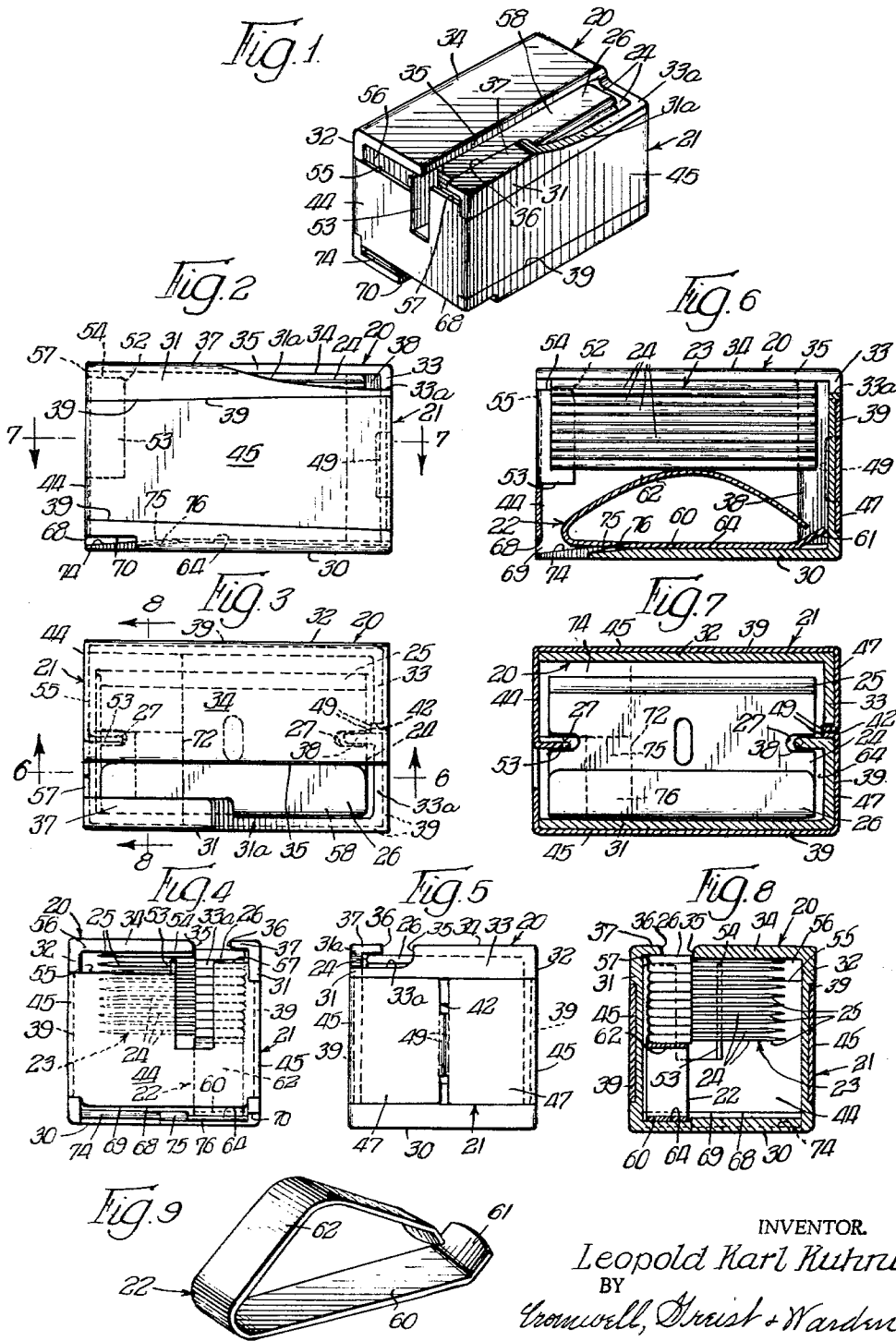
L. K. KUHN

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SINGLE-EDGE SAFETY RAZOR BLADE DISPENSER

Filed Jan. 11, 1962

2 Sheets-Sheet 1



INVENTOR.

Leopold Karl Kuhn.

BY

Frommell, Christ + Warden

attys

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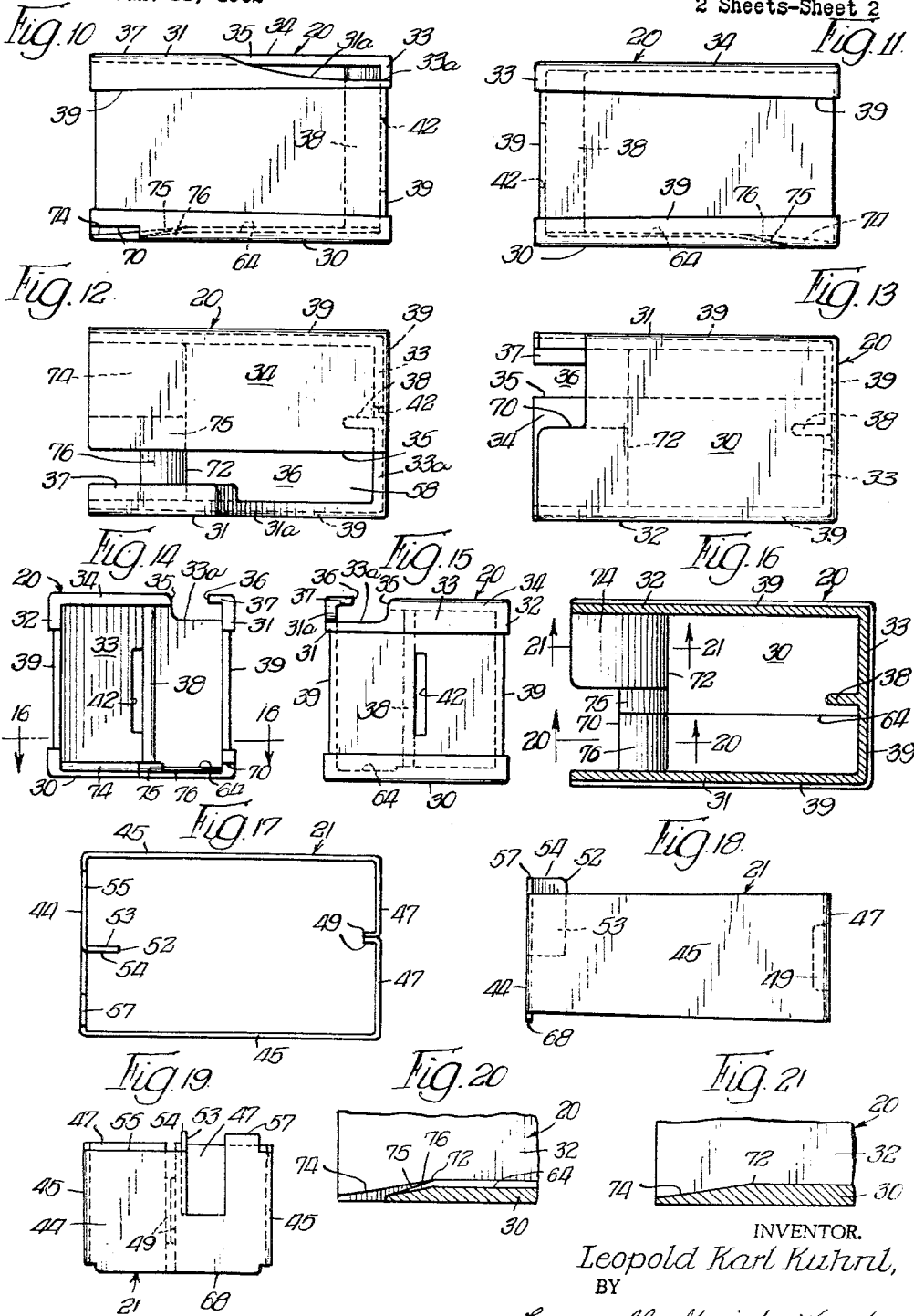
L. K. KUHN

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INVENTOR.
Leopold Karl Kuhn,
BY
Cromwell, Trust & Ward

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2

3,180,484 SINGLE-EDGE SAFETY RAZOR BLADE DISPENSER

Leopold Karl Kuhn, Stratford, Conn., assignor to Ever-
sharp, Inc., Milford, Conn., a corporation of Delaware
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This invention has to do with a dispenser for dispensing single-edge safety razor blades of the type having re-enforced back edges and end notches.

The purpose of the invention is to provide an improved single-edge safety razor blade dispenser wherein the uppermost blade in a stack of new blades in the dispenser is adapted to be ejected from the dispenser through an exit slot provided therein.

While the foregoing statements are indicative in a general way of the nature of the invention other more specific objects and advantages will be apparent to those skilled in the art upon a full understanding of the construction, arrangement and function of the several parts which have been combined to form the dispenser.

A preferred embodiment of the invention is presented herein but it will of course be appreciated that the invention is susceptible of incorporation in other forms coming equally within the scope of the appended claims.

In the accompanying drawings:

FIG. 1 is a perspective view of a preferred embodiment of the dispenser;

FIG. 2 is a side elevational view of the dispenser of FIG. 1;

FIG. 3 is a top plan view thereof;

FIG. 4 is a front end elevational view thereof;

FIG. 5 is a rear end elevational view thereof;

FIG. 6 is a vertical section taken generally on the line 6-6 of FIG. 3;

FIG. 7 is a horizontal section taken generally on the line 7-7 of FIG. 2;

FIG. 8 is a vertical section taken generally on the line 8-8 of FIG. 3;

FIG. 9 is a perspective view of the spring member of the dispenser;

FIG. 10 is a side elevational view of the container portion of the dispenser of FIG. 1 looking toward one side thereof;

FIG. 11 is a side elevational view of the container looking toward the opposite side thereof;

FIG. 12 is a top plan view of the container;

FIG. 13 is a bottom plan view thereof;

FIG. 14 is a front end elevational view thereof;

FIG. 15 is a rear end elevational view thereof;

FIG. 16 is a horizontal section taken generally on the line 16-16 of FIG. 14;

FIG. 17 is a top plan view of the band-like cover portion of the dispenser of FIG. 1;

FIG. 18 is a side elevational view of the band-like cover;

FIG. 19 is a front end elevational view thereof;

FIG. 20 is an enlarged scale vertical section taken generally on the line 20-20 of FIG. 16; and,

FIG. 21 is an enlarged scale vertical section taken generally on the line 21-21 of FIG. 16.

The dispenser includes a generally rectangular open-ended box-like container 20 which may be formed of clear plastic or any other suitable material, a band-like cover 21 which is preferably formed of a thin flexible sheet metal material and which encircles the container 20 and provides a closure for the open end thereof, and a spring member 22 which is disposed in the lower portion of the container 20 for resiliently urging a stack 23 of single-edge safety razor blades 24 disposed in the container 20

upwardly toward the underside of the top of the container. The blades 24 are of the type having single cutting edges 25, re-enforced back edges 26, and notches 27 in the opposite ends thereof.

The container 20 which is open at its front or forward end is characterized by a bottom wall 30, side walls 31 and 32, a rear end wall 33, and a partial top wall 34 which terminates with a curved edge 35 a distance from the side wall 31 which is approximately equal to the width of the re-enforced back edges 26 of the blades 24, whereby to define a slot 36 along one side of the top of the container 20 which extends longitudinally for the full length of the container. An inwardly turned lip 37 is provided on the forward portion of the upper edge of the side wall 31 for a purpose to be described herein-after. The lip 37, which terminates in spaced relationship to the curved edge 35 of the top wall 34, is preferably formed with a thickness which is less than the thickness of the top wall 34 and may be formed integrally with the side wall 31. The upper portion of the side wall 31 is curved gently downwardly in a rearward direction from the lip 37, as at 31a, and the portion of the rear end wall 33 at the rear of the slot 36 is reduced in height, as at 33a, so as to correspond to the height of the side wall 31 at its rear end, thus facilitating frictional engagement of the uppermost blade 24 by a person's thumb. A vertically disposed forwardly extending guide rib 38 is provided in the rear end of the container 20 approximately midway between the side walls 31 and 32 thereof. Preferably, the guide rib 38 is formed integrally with the rear end wall 33.

The stack 23 of single-edge blades 24 is disposed in the container 20 with the re-enforced back edges 26 thereof vertically aligned with the slot 36 in the top of the container. The guide rib 38 is received in the end notches 27 of the blades 24 at the rear of the container for positioning the rear ends of the blades 24. The spring member 22 is disposed in the container 20 beneath the re-enforced back edge 26 of the lowermost blade 24 in the stack 23 whereby to resiliently urge the stack 23 of blades 24 upwardly toward the underside of the top of the container 20. The forward portion of the re-enforced back edge 26 of the uppermost blade 24 in the stack 23 is urged against the underside of the lip 37, whereby the blades 24 are retained in generally horizontally disposed positions.

The outer surfaces of the side walls 31 and 32 and the rear end wall 33 are slightly recessed intermediate the top and bottom of the container 20 whereby to provide a continuous countersunk groove 39 which encircles the outer surfaces of the container 20 from the front edges of the side walls 31 and 32, the height of the groove 39 being slightly less than the height of the container 20 and the upper and lower edges of the side portions of the groove 39 being slightly tapered upwardly and downwardly, respectively, in a rearward direction. A vertically disposed slot or recess 42 is formed in the rear end wall 33 of the container 20 adjacent the side of the rear guide rib 38 farthest from the side wall 31.

The readily removable band-like cover 21 which encircles the container 20 is characterized by a vertical front end portion 44 which extends across the open front end of the container 20 to provide a closure therefor, integral vertical side portions 45 which extend rearwardly and are correspondingly tapered so as to be snugly received in the tapered portions of the groove 39 formed in the side walls 31 and 32 of the container 20, and inwardly turned vertical rear end portions 47 which are received in the portion of the groove 39 formed in the rear end wall 33 of the container 20. The meeting edges of the rear end portions 47 of the band-like cover 21

are provided with forwardly extending tabs or flanges 49 which are adapted to be snapped into the vertical recess 42 formed in the rear end wall 33 of the container 20 whereby the cover 21 and container are disposed in interlocked relationship. When assembled, the outer surfaces of the cover 21 are substantially flush with the non-grooved outer surfaces of the container 20. When the dispenser has been emptied, the band-like cover 21 may be readily removed from the container 20 by snapping the flanges 49 out of the recess 42 whereby to permit filling the dispenser with a new stack of blades 24.

The front end closure portion 44 of the band-like cover 21 is provided with an inwardly struck-out upper portion which defines a vertically disposed rearwardly extending guide rib 53 having an upper edge 54, the upper rear corner of which edge is preferably rounded, as at 52. The guide rib 53 is received in the notches 27 formed in the ends of the blades 24 at the front end of the container 20 for positioning the front ends of the blades 24.

The external groove 39 of the container 20 in which the side and rear end portions 45 and 47, respectively, of the band-like cover 21 are received serves to vertically position the cover 21 relative to the container 20, whereby the upper edge 55 of the front end closure portion 44 of the cover 21 is spaced below the front edge of the top wall 34 to provide an exit slot 56 in the front end of the dispenser. The upper edge portion 57 of the front end closure 44 adjacent the side wall 31 is spaced beneath the underside of the front edge of the lip 37 a distance slightly greater than the thickness of the re-enforced back edge 26 of one of the blades 24 so that only the uppermost blade 24 may be ejected from the dispenser. It is noted that the upper edge portion 55 of the front end closure portion 44 of the cover 21 is spaced sufficiently below the top wall 34 and the upper edge 54 of the rearwardly extending guide rib 53 so that there will be no interference with the cutting edges 25 of the blades 24 during ejection thereof.

The portion of the slot 36 in the top of the container 20 rearwardly of the lip 37 defines a thumb or finger opening 58 through which the rear portion of the re-enforced back edge 26 of the uppermost blade 24 in the stack 23 may be frictionally engaged by a person's thumb or finger to eject the uppermost blade 24 from the dispenser through the exit slot 56.

As best illustrated in FIGS. 6 and 9, the spring member 22, which is formed of flat spring metal, is characterized by a lower run 60 which terminates at its rear end with a short upwardly inclined foot 61 and by an inverted V-shaped upper run 62 which extends generally rearwardly from the forward end of the lower run 60. Preferably, the upper surface of the bottom wall 30 of the container 20 is provided with a shallow groove 64 which is generally vertically aligned with the slot 36 in the top of the container 20 and which is adapted to receive and position the lower run 60 of the spring member 22.

The container 20 is also adapted to receive used blades in the lower portion thereof beneath the spring member 22. The band-like cover 21 is therefore vertically positioned relative to the container 20 by the external groove 39 formed in the side and rear end walls thereof so that the lower edge 68 of the front end closure portion 44 of the cover 21 is spaced above the front edge of the bottom wall 30 of the container 20 whereby to define an entrance slot 69 in the front end of the dispenser for inserting used blades into the lower portion thereof beneath the spring member 22, the re-enforced back edge 26 of the lowermost used blade being received in the spring groove 64. To facilitate insertion of the used blades into the lower portion of the container 20, a front corner portion of the bottom wall 30 of the container 20 adjacent the side wall 31 thereof may be cut away, as at 70 in

FIG. 16. The cut-away corner portion 70 extends laterally somewhat further than the inner edge of the spring groove 64. As best illustrated in FIGS. 16, 20 and 21, the front portion of the upper surface of the bottom wall 30 is tapered downwardly in a forward direction from a lateral line 72 to facilitate insertion of the used blades into the lower portion of the container 20. Because of the spring groove 64 and the cut-away corner portion 70, this tapering provides three entrance surfaces 74, 75 and 76 which are inclined at slightly different angles so that the narrowed front edge of the bottom wall 30 is substantially uniform in thickness across the full width thereof.

As best illustrated in FIGS. 3, 4 and 8, the shoulder defined on the upper surface of the uppermost blade 24 between the reinforced back edge 26 and the main body portion of the blade abuts against the lowermost portion of the curved edge 35 of the top wall 34 where it intersects the underside of the top wall 34 of the container 20. This arrangement aids in properly positioning the uppermost blade 24 in the dispenser and in guiding same during ejection thereof from the dispenser.

I claim:

1. A dispenser for single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising, a generally rectangular box-like container having an open front end adapted to receive a stack of said blades, means resiliently urging the stack of blades upwardly toward the underside of the top of the container, a vertically disposed forwardly extending guide rib in the rear end of the container for engagement in the end notches of the blades at the rear end of the container, a band-like cover which substantially encircles the front end, sides and rear end of the container and is characterized by a vertical front end portion which extends across the open front end of the container to provide a closure therefore and by vertical side portions which extend rearwardly from the vertical front end portion along the sides of the container, the upper edge of said vertical front end closure portion of said cover being spaced below the front edge of the underside of the top of said container whereby to provide an exit slot through which the uppermost blade only in the stack of blades may be dispensed, a rearwardly extending vertically disposed guide rib provided on said front end closure portion of said cover for engagement in the end notches of the blades at the front end of said container, and means for detachably connecting said cover to the container.

2. A dispenser for single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising, a generally rectangular box-like container having an open front end adapted to receive a stack of said blades, means resiliently urging the stack of blades upwardly toward the underside of the top of the container, a vertically disposed forwardly extending guide rib in the rear end of the container for engagement in the end notches of the blades at the rear end of the container, a vertically disposed band-like cover which substantially encircles the front end, sides and rear end of the container and is characterized by a vertical front end portion which extends across the open front end of the container to provide a closure therefore and by vertical side portions which extend rearwardly from the vertical front end portion along the sides of the container, means vertically positioning said cover relative to the container whereby the upper edge of said vertical front end closure portion thereof is spaced below the front edge of the underside of the top of said container whereby to provide an exit slot through which the uppermost blade only in the stack of blades may be dispensed, a rearwardly extending vertically disposed guide rib provided on said front end closure portion of said cover for engagement in the end notches of the blades at the front end of said container, and means for detachably connecting said cover to the container at the rear end thereof.

5

3. A dispenser of single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising a generally rectangular box-like container having an open front end and adapted to receive a stack of said blades, means resiliently urging the stack of blades upwardly toward the underside of the top of the container, a vertically disposed forwardly extending guide rib in the rear end of the container for engagement in the end notches of the blades at the rear end of the container, a band-like cover characterized by a vertical front end portion which extends across the open front end of the container to provide a closure therefor and by vertical side portions which extend rearwardly along the sides of the container, said cover being further characterized by vertical rear end portions having inwardly turned vertical flanges removably connected with the rear end of the container, the upper edge of said front end closure portion of said cover being spaced below the front edge of the underside of the top of said container whereby to provide an exit slot through which the uppermost blade only in the stack may be dispensed, and a rearwardly extending vertically disposed guide rib provided on said front end closure portion of said cover for engagement in the end notches of the blades at the front end of said container.

4. A dispenser for single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising a generally rectangular box-like container which is characterized by a top wall, a bottom wall, side walls, a rear end wall, and an open front end, said container being adapted to receive a stack of said blades, a spring within the container beneath the lowermost blade for resiliently urging the stack of blades upwardly toward the underside of the top wall of the container, a vertically disposed integral forwarding extending guide rib on the inner surface of said rear end wall of said container for engagement in the end notches of the blades at the rear end of the container, a vertically disposed band-like cover having a height approximately equal to the height of said container removably fitted about said container in engagement with said side and rear end walls and extending across said open front end thereof whereby to provide a closure therefor, the portion of said cover defining said front end closure being characterized by an upper edge which is spaced below the underside of the front edge of said top wall whereby to define an exit slot through which the uppermost blade only in the stack may be dispensed and by a rearwardly extending vertically disposed guide rib which is engageable in the end notches of the blades at the front end of said container, the upper edge of said rearwardly extending guide rib being spaced above said upper edge of said front end closure portion of said cover and below the underside of the front edge of said top wall, and means in said top wall of said container facilitating dispensing of said uppermost blade through said exit slot.

5. A dispenser for single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising a generally rectangular box-like container characterized by an open front end and by a slot formed along one side of the top thereof, which slot extends longitudinally of the container and has a width approximately equal to the width of the re-enforced back edges of said blades, said container being adapted to receive a stack of said blades, with the blades being disposed in the container with their re-enforced back edges vertically aligned with said slot, a spring within the container beneath the re-enforced back edge of the lowermost blade in the stack for resiliently urging the stack of blades upwardly toward the underside of the top of the container, a vertically disposed forwardly extending guide rib in the rear end of the container for engagement in the end notches of the blades at the rear end of the container, a band-like cover characterized by a vertical front end portion which extends across the open front of the container to provide a closure therefor and by vertical side portions which extend rearwardly along the sides of the container,

6

said cover being further characterized by vertical rear end portions extending inwardly from the rear ends of said side portions along the rear end of the container, which rear end portions are provided with forwardly turned vertical flange portions for interlocking engagement with vertical recess means formed in the rear end of the container, the upper edge of said front end closure portion of said cover being spaced below the underside of the front edge of the top of said container whereby to provide an exit slot through which the uppermost blade only in the stack may be dispensed, and a rearwardly extending vertically disposed guide rib provided on said front end closure portion of said cover for engagement in the end notches of the blades at the front end of said container, the uppermost blade in said stack being engageable through said slot by a person's thumb whereby it may be dispensed through said exit slot.

6. A dispenser for single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising a generally rectangular box-like container which is characterized by a bottom wall, side walls, a rear end wall, an open front end, and a partial top wall which terminates a distance from the upper edge of one side wall which is approximately equal to the width of the re-enforced back edges of said blades, whereby to define a longitudinal slot in the top of said container which extends the full length thereof adjacent one side edge thereof, said container being adapted to receive a stack of said blades, with the re-enforced back edges thereof being vertically aligned with said slot in the top of said container, a spring within the container beneath the re-enforced back edge of the lowermost blade in the stack for resiliently urging the stack of blades upwardly toward the underside of the top wall of the container, a narrow lip projecting inwardly from the front portion of the upper edge of said one side wall of said container for overlying engagement with a portion of the re-enforced back edge of the uppermost blade in the stack, a vertically disposed forwardly extending guide rib on the inner surface of said rear end wall of said container for engagement in the end notches of the blades at the rear end of the container, and a vertically disposed band-like cover having a height approximately equal to the height of said container fitted about the container in engagement with said side and rear end walls and extending across said open front end thereof whereby to provide a closure therefor, the portion of said cover defining said front end closure being characterized by an upper edge which is spaced below the front edges of the undersides of said partial top wall and said inwardly turned lip whereby to define an exit slot through which the uppermost blade only in the stack may be dispensed and by a rearwardly extending vertically disposed guide rib which is engageable in the end notches of the blades at the front end of said container, the upper edge of said rearwardly extending guide rib being spaced above said upper edge of said front end closure portion of said cover and below the underside of the front edge of said partial top wall, the rear end of the uppermost blade in the stack being engageable through said slot by a person's thumb whereby it may be dispensed through said exit slot.

7. A dispenser for single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising a generally rectangular box-like container having an open front end and adapted to receive a stack of said blades, means in the container resiliently urging the stack of blades upwardly toward the underside of the top of the container, a vertically disposed forwardly extending guide rib in the rear end of the container for engagement in the end notches of the blades at the rear end of the container, a band-like cover encircling the front end, sides and rear end of said container and being characterized by a vertical front end portion which extends across the open front end of the container to provide a closure therefor and by vertical

7

side portions which extend rearwardly along the sides of the container, countersunk grooves formed in the sides of said container for receiving said rearwardly extending vertical side portions of said cover whereby to vertically position said cover relative to the container with the upper edge of said vertical front end closure portion thereof being spaced below the underside of the front edge of the top of said container to provide an exit slot through which the uppermost blade only in the stack may be dispensed, a rearwardly extending vertically disposed guide rib provided on said front end closure portion of said cover for engagement in the end notches of the blades at the front end of said container, means for detachably connecting said cover to the container, and means in the top of said container facilitating dispensing the uppermost blade through said exit slot.

8. A dispenser for single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising, a generally rectangular box-like plastic container which is characterized by a top wall, a bottom wall, side walls, a rear end wall, an open front end, and by a slot formed along one side of the top wall and having a width approximately equal to the width of the re-enforced back edges of said blades, said container being adapted to receive a stack of said blades, with the blades being disposed in the container with their re-enforced back edges vertically aligned with said slot, a spring within the container beneath the re-enforced back edge of the lowermost blade in the stack for resiliently urging the stack of blades upwardly toward the underside of the top wall of the container, a vertically disposed forwardly extending guide rib on the inner surface of said rear end wall of said container for engagement in the end notches of the blades at the rear end of the container, a metal band-like cover substantially encircling the container and being characterized by a vertical front end portion which extends across the open front end of the container to provide a closure therefor and by vertical side portions which extend rearwardly along the side walls of the container, said cover being further characterized by vertical end portions at the rear ends of said side portions having intumed flanges releasably interlocked in recess means formed in the rear end wall of the container, longitudinally extending countersunk grooves having vertical dimensions corresponding to those of said side portions of said cover formed on the side walls of the container and adapted to receive said rearwardly extending vertical side portions of said cover whereby to vertically position said cover relative to the container so that the upper edge of said front end closure portion of said cover is spaced below the underside of the front edge of the top wall of said container whereby to provide an exit slot through which the uppermost blade only in the stack may be dispensed, and a rearwardly extending vertically disposed guide rib provided on said front end closure portion of said cover for engagement in the end notches of the blades at the front end of said container, the upper edge of said rearwardly extending guide rib being spaced above said upper edge of said front end closure portion of said cover and below the underside of said top wall of the container, the uppermost blade in the stack being engageable through said slot by a person's thumb whereby to facilitate dispensing same through said exit slot.

9. A dispenser for single-edge safety razor blades of the type having re-enforced back edges and end notches, said dispenser comprising, a generally rectangular box-like container which is characterized by a top wall, a bottom wall, side walls, a rear end wall, an open front end, and by a slot formed along one side of the top wall and having a width approximately equal to the width of the re-enforced back edges of said blades, said container being adapted to receive a stack of said blades, with the blades being disposed in the container with their re-enforced back edges vertically aligned with said slot, a spring within the container beneath the re-enforced back

8

edge of the lowermost blade in the stack for resiliently urging the stack of blades upwardly toward the underside of the top wall of the container, a vertically disposed forwardly extending guide rib on the inner surface of said rear end wall of said container for engagement in the end notches of the blades at the rear end of the container, a band-like cover substantially encircling the container and being characterized by a vertical front end portion which extends across the open front end of the container to provide a closure therefor and by vertical side portions which extend rearwardly along the side walls of the container, said cover being further characterized by vertical end portions at the rear ends of said side portions having intumed flanges releasably interlocked in recess means formed in the rear end wall of the container, longitudinally extending grooves having vertical dimensions corresponding to those of said side portions of said cover formed on the side walls of the container, which grooves are adapted to receive said rearwardly extending vertical side portions of said cover whereby to vertically position said cover relative to the container so that the upper edge of said front end closure portion of said cover is spaced below the underside of the front edge of the top wall of said container whereby to provide an exit slot through which the uppermost blade only in the stack may be dispensed and so that the lower edge of said front end closure portion of said cover is spaced above the front edge of the bottom wall of said container whereby to provide an entrance slot through which used blades may be inserted into the container beneath said spring therein, the upper surface of the front portion of the bottom wall of the container being tapered downwardly in a forward direction whereby to facilitate insertion of used blades into the container, and a rearwardly extending vertically disposed guide rib provided on said front end closure portion of said cover for engagement in the end notches of the blades at the front end of said container, the upper edge of said rearwardly extending guide rib being spaced above said upper edge of said front end closure portion of said cover and below the underside of said top wall of the container, the uppermost blade in the stack being engageable through said slot by a person's thumb whereby to facilitate dispensing same through said exit slot.

10. A dispenser for single-edge safety razor blades of the type having reinforced back edges and end notches, which dispenser includes an elongated, generally rectangular, box-like casing characterized by front and rear end walls, top and bottom walls, and side walls, said casing being adapted to receive a stack of said blades with the reinforced back edges thereof extending longitudinally of the casing in vertical alignment with each other, spring means within the casing for resiliently urging the stack of blades upwardly toward the underside of the top wall, the upper edge of the front wall of the casing terminating below the underside of the front edge of the top wall to provide an exit slot for the uppermost blade in the stack, one of the longitudinal side edges of the top wall being spaced throughout its length from the longitudinal upper edge of one of the side walls a distance approximating the width of the reinforced back edge of one of the blades, whereby to receive in said space the reinforced back edge of the uppermost blade, with said back edge in abutting and longitudinal sliding engagement with said edge of the top wall, and the front portion only of the upper edge of said side wall being provided with a narrow longitudinal lip, which lip projects horizontally toward but terminates short of the front portion of said edge of the top wall, with the underside of said lip disposed at a higher elevation than the underside of said top wall for overlying engagement with the front portion only of the back edge of the uppermost blade, the spacing of the rear portion of the upper edge of said side wall from the edge of said top wall rearwardly of said lip forming a thumb access opening, in which opening the rear portion of the back edge of the

uppermost blade is exposed for engagement of the same by the thumb of the user to project the uppermost blade through said exit slot.

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