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(54) DEVICES FOR DISPENSING RAZOR BLADE UNITS

(71) We, **THE GILLETTE COMPANY**, a corporation organised under the laws of the State of Delaware, United States of America, of Prudential Tower Building, Boston, State of Massachusetts, United States of America, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to devices for dispensing razor blade units of the type that have a relatively rigid body portion that includes a guard structure and a blade element permanently secured to the body portion to provide a fixed geometrical relation between the guard structure and the cutting edge of the blade element, the body further including coupling structure adapted for sliding engagement with and disengagement from complementary coupling structure on a suitable razor handle, whereby to mount the unit on the handle for use in shaving and to detach the unit from the handle. Such units are hereinafter referred to as being "of the type herein defined."

In accordance with one aspect of the present invention there is provided a device for dispensing a razor blade unit of the type herein defined, comprising an open top chamber in which the blade unit is contained in a predetermined orientation, said chamber being defined by side walls parallel with the blade edge and end walls perpendicular thereto the side and end walls preventing the unit from leaving the chamber except through the open top and retaining means for releasably retaining the blade unit in the chamber and inhibiting movement thereof through the open top of the chamber, wherein an end wall of the chamber is open to permit sliding

movements of a razor handle in a direction parallel with the blade edge to engage and disengage the handle with the unit.

In a particular embodiment of the invention described in more detail below the blade unit retaining means of each chamber includes two latch members, disposed one at each end of the chamber, each latch member having upper and lower camming surfaces, and one latch member being mounted on an end wall and being in the form of a pedestal member so that the latch members may flex to permit insertion and removal of the blade unit from the chamber and the other latch member projecting from the opposite end wall. In another embodiment, the retaining means of each chamber includes two similar latch members that are disposed on the side walls of the chamber and engage a bottom surface of the coupling structure. In another embodiment, each chamber has a projecting latch member that overlies an offset surface of the blade unit when the blade unit is disposed in the chamber, this latch member being located centrally of a side wall and having a length less than one half the length of the chamber. The transverse dimension of the chamber is coordinated with and less than the corresponding (width) dimension of the blade unit so that the blade unit is in firm frictional engagement with internal surfaces of the chamber and the blade unit offset surface is urged beneath the latch surface so that the blade unit is retained in the chamber. Support structure in the chamber positions the blade unit so that the plane of the blade unit coupling structure is disposed parallel to the base of the package while the blade elements are disposed at an angle to the base of the package. In removing a blade unit from this package, the handle coupling structure

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is connected to the blade unit coupling structure and then rotated upwardly, camming the guard surface along the surface opposed to the latch member and generally pivoting the blade unit about a point defined by the projecting latch member so that the blade unit is easily removed from the chamber. The opposed chamber surface may consist of one or more projecting surfaces spaced along the opposed wall of configuration appropriate to the desired function of the particular blade unit securing technique. Either or both the opposed surface and the latch member may have a camming surface to facilitate the insertion and/or withdrawal of the blade unit from the chamber. The wall surface carrying the latch member and the opposed wall surface may be molded integral with the base or may be separate therefrom as a function of flexibility appropriate to the particular securing and removal mechanism the thickness and the nature of the wall materials.

The configuration of the end walls is coordinated with the position of a blade unit coupling structure in the chamber so that the cooperating coupling structure of that handle unit may enter freely into the chamber while one end wall impedes the transverse movement of the blade unit in the chamber, thus facilitating the coupling of the handle member to the blade unit.

In particular embodiments, two series of chambers are disposed in aligned relationship end to end with a common wall disposed between each two corresponding chambers. In such embodiments, one series of chambers may receive used blade units while the other series of chambers stores new blade units. The operator inserts a used blade unit attached to the handle into an empty chamber in the first series and then moves the handle transversely (the common wall restraining the used blade unit in the first chamber) releasing the used blade unit and simultaneously attaching the handle coupling structure to the aligned coupling structure of the new blade unit in the adjacent chamber. When the handle structure is fully engaged with the blade unit, the handle is moved in an outward direction overcoming the resistance of the retaining means and removing a new blade unit from the chamber.

In order that the invention may be more clearly understood and readily carried into effect, some forms of device in accordance with the invention for dispensing razor blade units will now be described by way of example with reference to the accompanying drawings, in which:

Fig. 1 is a top plan view of one form of device;

Fig. 2 is an elevational sectional view taken along the line II—II of Fig. 1;

Fig. 3 is an enlarged perspective view of a portion of the device shown in Fig. 1;

Fig. 4 is an elevational sectional view of a portion of the device shown in Fig. 1 taken along the line IV—IV of Fig. 1;

Fig. 5 is an elevational sectional view similar to Fig. 4 taken along the line V—V of Fig. 1;

Fig. 6 is an elevational sectional view similar to Fig. 5 illustrating the insertion of a used blade unit into a chamber;

Fig. 7 is an elevational sectional view similar to Fig. 6 showing a used blade unit fully positioned in a chamber;

Fig. 8 is an elevational sectional view similar to Fig. 4 showing the handle and blade unit in the position shown in Fig. 7;

Fig. 9 is a sectional elevational view similar to Fig. 8 with the handle removed;

Fig. 10 is an elevational sectional view similar to Fig. 2 showing the handle and a used blade unit in the lefthand chamber and a new blade unit in the righthand chamber;

Fig. 11 is an elevational sectional view similar to Fig. 10 which shows the handle traversing from the left chamber to the right chamber;

Fig. 12 is a sectional elevational view similar to Fig. 10 which shows the handle having progressed to a position fully within the righthand chamber with the used blade unit remaining in the lefthand chamber;

Fig. 13 is an elevational sectional view similar to Fig. 10 which shows the righthand chamber emptied by withdrawal of the handle with the new blade unit attached thereto;

Fig. 14 is a top plan view of another form of device;

Fig. 15 is an elevational sectional view taken along the line XV—XV of Fig. 14;

Fig. 16 is an elevational sectional view taken along the line XVI—XVI of Fig. 14;

Fig. 17 is an elevational sectional view of a portion of the package shown in Fig. 14 taken along the line XVII—XVII of Fig. 14;

Fig. 18 is an enlarged perspective view of a portion of the package shown in Fig. 14;

Fig. 19 is an elevational sectional view taken along the line XIX—XIX of Fig. 14;

Fig. 20 is an elevational sectional view taken along the line XX—XX of Fig. 14;

Fig. 21 is a perspective view of still another form of device;

Fig. 22 is an elevational view partially in section taken along the line XXII—XXII of Fig. 21;

Fig. 23 is an elevational sectional view taken along the line XXIII—XXIII of Fig. 21;

Fig. 24 is an elevational sectional view taken along the line XXIV—XXIV of Fig. 21; and

Fig. 25 is a sectional view of a portion of the package shown in Fig. 21 indicating the mode of removing a blade unit from a chamber by the handle.

Referring now to the drawings, the device or dispensing package shown in Figs. 1 and

2 defines a first set of five rectangular blade unit receiving compartments or chambers 12 in side to side alignment and a second set of five similarly aligned compartments or chambers 14. Each chamber 14 is aligned end to end with a corresponding chamber 12 and separated from that chamber by a barrier wall 10. The device or package has a perimeter defined by side walls 2, 2a, and end walls 4, 4a which are integral with and upstanding from the bottom wall or platform 6. Spacer walls 8, 8a extend from end wall 4 to end wall 4a and are disposed parallel to side walls 2 and 2a. The walls 2, 4, 6, 8 and 10 may be molded as an integral unit of plastics material, or, as shown in the drawings, all or a portion of the bottom wall 6 may be a separate member having a novelty or decorative construction, as, for example, a clear plastic see-through portion 16 that defines the bottom wall of chamber 14.

Each chamber 12 is defined at one end by a portion of end wall 4, at the other end by a barrier wall 10, and on either side by a divider wall 8 or by a divider 8 and a side wall 2 or 2a. Formed on the side and divider wall surface of each chamber 12 is a horizontally extending latch projection or lug portion 18, a recess portion 20 and a planar projection 21. Each latch projection includes an inclined upper surface 15, a vertical transition surface 17 and an inclined lower surface 19 and is adapted to function as retaining means for securing a blade unit in the chamber 12. The upper surface 23 of end wall 4 is inclined to facilitate insertion of a blade unit into chamber 12 while a similar inclined surface 25 is provided on a pedestal portion 27 of barrier 10.

Each chamber 14 is defined at one end by a portion of end wall 4a, at the other end by an end, or barrier wall 10, and on either side by a divider wall 8a or by a divider wall 8a and a side wall 2. Structure for retaining a blade unit in each chamber 14 includes a latch projection or lug 22 of configuration similar to latch projection 18 that projects inwardly from the end wall 4a and a cooperating similar latch projection of lug 24 that projects into the chamber 14 from the barrier wall 10. As shown in Figs. 3 and 4, each barrier wall 10 includes the central relatively narrow pedestal portion 27 from which lug 24 projects, openings formed by recess portions 32, 34 on either side of the upstanding pedestal 27 and portions 36, 38 that are attached to the barrier wall 8 (or at either end to side wall 2 or 2a).

This package is designed to store and dispense razor blade units B of the type disclosed in Figs. 28 and 29 of Application No. 11842/72 (Serial No. 1,362,441), the blade unit to be inserted and removed from the package through the use of a cooperating razor handle H of the type disclosed in

Application No. 11840/72 (Serial No. 1,377,134). As indicated in Figs. 6—9, each blade unit has a coupling structure formed integrally with the blade unit body B, that carries two blades having opposed edges E. The blade unit has a length of 1.56 inch, a width of 0.43 inch and a depth of 0.23 inch. The coupling structure includes a pair of spaced legs L, that extend away from body B, each leg having an inwardly extending flange F at the foot thereof so that two spaced grooves are defined in the base of the blade unit between flanges F and the bottom planar handle sliding surface G of the body B. The cooperating handle H has a coupling structure S formed as a U-shaped member that has two spaced parallel walls W, the upper ends of which are bent outward to define two parallel rails or runners R. The grooves defined by the flanges F and bottom surface G of the blade unit B are engaged by the runners R on the handle H typically by sliding runners R into the grooves, to effect a connection between the handle H and the blade unit as shown in Fig. 6.

The package would ordinarily be presented to the consumer or operator with all of the first chambers 12 empty and a new blade assembly disposed in a predetermined orientation in each second chamber 14. Each new blade unit is held in its chamber 14 by engagement of latch projections 22, 24 with the bottom surface G of the blade unit. The pedestal 27 of barrier 10 flexes under pressure to permit insertion and release of the blade assembly. It will be noted (e.g. in Fig. 8) that the intermediate walls 8a of the second chamber 14 are somewhat thicker than the corresponding walls 8 of the first chambers and are pyramidal in cross-section to snugly engage the blade units and retain them in proper alignment in chamber 14.

For illustrative purposes, it will be assumed that an operator has a handle H with a used blade assembly disposed thereon. In operation, the handle H is manipulated by the operator so as to present the used blade assembly to one of the empty chambers 12 as shown in Fig. 6. The blade assembly is introduced into chamber 12 as shown in Fig. 6 so that the lower end of one leg L is placed beneath a latch projection 18 and then the handle H is rotated in a counter-clockwise direction, camming the other leg L past the opposed latch projection 18 to the position shown in Figs. 7 and 10 where the latch surface 19 of each lug 18 overlies the lower end of each leg L of the blade unit, securing the blade unit in the chamber 12 and preventing that blade assembly from falling from the chamber when the package is inverted. The cutting edges E of the blade unit face the bottom of the chamber and thus are not accessible for accidental or harmful cutting. The end wall 4 and barrier wall 10 of the chamber 12

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restrict the endwise movement of the used blade unit.

The U-shaped configuration of support S of the handle H is such that it may be slid out of the blade unit grooves by endwise movement as shown in Figs. 8 and 11, the projecting pedestal 30 of barrier wall 10 not obstructing the handle movement while other portions of the barrier 10 preventing endwise movement of the used blade assembly. Thus, it will be seen that, in addition to acting as a yieldable latch means for the retention of a new blade unit in chamber 14, each barrier 10 serves to prevent endwise movement of the used blade unit in the aligned first chamber 12 while permitting lateral movement of the razor handle H from the first chamber 12 to the second chamber 14.

As the handle moves from chamber 12 to chamber 14, it progressively becomes disengaged from the used blade unit while slidably engaging a new blade unit in the aligned chamber 14. Continued transverse movement of the handle H places the handle entirely within the aligned second chamber 14 with the support structure S connected to the coupling structure of the new blade unit and completely disengaged from the used blade unit, the latter being safely retained in the aligned chamber 12. The assembly of handle and blade unit is then withdrawn from the package, the barrier 10 yielding in leaf spring fashion to permit disengagement of the blade unit surface G and movement past the lugs 22, 24. When it is desired to discard that blade unit, it is inserted into and latched in an open chamber 12 and then the handle H is slid laterally to release the used blade unit and pick up a new blade unit. When all the first chambers 12 are filled with used blade assembly units, the package may be discarded without danger, the cutting edges E all being safely enclosed.

In practice, either or both the opposed surfaces and the latch member may have a camming surface to facilitate the inserting and/or withdrawal of the blade unit from the chamber.

Another device or package is shown in Figs. 14-20 and is designed for use with a blade unit of the type disclosed in Figs. 1 to 4B of Application No. 11842/72 (Serial No. 1,362,441), and the same type of razor handle. This package is molded of a suitable plastic such as high impact styrene and has a first set of five blade unit chambers 112 and a second set of five aligned blade unit chambers 114, each chamber being 1.58 inch long and slightly less than one half inch wide. A barrier member 110, 0.10 inch high separates each chamber 112 from a corresponding aligned chamber 114. The package has side walls 102 and end walls 104, 104a which project upwardly 0.29 inch from bottom wall 106. Divider walls 108, 108a

extend between end walls 104, 104a and are parallel to side walls 102. Formed at the top of the upper divider wall of each chamber 112, 114 (as viewed in Fig. 14) are one or more projecting lugs 118, 130, 130', the lower surface of which defines a horizontal latch surface 119, 131, 131'. A recess 120 and a projecting surface 121 is provided below each lug in the chambers 112, a projecting surface 123' is provided below each lug in chamber 114, and one or more cooperating abutment projections 122, 132 are provided in the opposite wall. The horizontal space between lug 118 and cooperating abutment 122 or between lug 130 and cooperating abutment 132 is 0.397 inch. A pair of support projections 124, 126 or 134, 136 are provided in the base of each chamber to support the blade unit so that its bottom handle sliding surface G' is parallel with the bottom wall 106. Latch recesses 138 and projection 140 engage corresponding surfaces of a transparent insert (not shown) which constitutes the bottom wall of chamber 114 similar to insert portion 16 of the embodiment shown in Figs. 1-13.

The blade unit for use with this package has a transverse length of 1.56 inch, a width of 0.43 inch and a depth of 0.26 inch. The upper end surfaces M' of body B' are disposed at an angle of about 17° to the surface G'. The blade unit includes two parallel offset blade edges E' (Fig. 25), a guard J', a pair of spaced legs L' and an offset surface K' (0.025 inch in length) where the rear leg L' joins body B', the distance between points J' and K' being 0.46 inch.

In operation, walls 108 flex as a used blade unit is inserted into a compartment 112 with the blade unit body B' being supported as indicated in Fig. 20 by projections 124 and the offset rear surface K' being latched by projecting lug 118. The interference fit between surfaces J' and K' and surfaces 118 and 122 is such that projecting surface 122 urges body B' toward lug 118 firmly to secure the used blade unit in chamber 112. In that position, the handle runners R' (see Fig. 25) are aligned with the grooves in the new blade unit disposed in the adjacent aligned chamber 114. The handle is slid transversely across barrier wall 110 which restrains the used blade unit, disengaging the runners R from the used blade unit while simultaneously engaging the runners in the grooves of the new blade unit in the aligned chamber 114. Movement of the handle H is continued until the handle is entirely within chamber 114 and thus connected to the new blade unit and completely disengaged from the used blade unit, the latter being retained in its chamber 112 by frictional engagement with projections 118 and 122. The new blade unit is then removed from the chamber by upward rotational movement of the handle

(in the clockwise direction as viewed in Fig. 19), camming the guard surface J' of the blade unit past projection 132 into the space above surface 132, so that the blade unit is easily removed from the chamber 114. The entire blade unit changing operation and disposal of used blade unit is accomplished without the necessity of the operator touching the blade unit.

10 Still another form of device or package is shown in Figs. 21—25. The package is a one-piece molded plastic structure designed for use with the same type of blade units as the embodiment shown in Figs. 14—20 and includes side walls 202, 204, end walls 206, 15 208, and divider walls 210, all of which are upstanding from base 212 to form a series of six chambers 214.

20 Each chamber 214 has a length of about 1.58 inch, a width slightly less than one half inch and is defined at one end by a portion of end wall 206 and at the other end by a portion of end wall 208, and on either side by a divider wall 210 (the outer wall of each end chamber being defined by a side wall 25 202 or 204). Formed on the wall on the upper side of each chamber is a latch structure 216 that projects inwardly from the vertical surface and has a length of about one-quarter inch. Structure 216 includes an inclined upper surface 218, a vertical surface 30 220, a horizontal latching surface 222 and a lower extension 224. Surface 220 is disposed about 0.05 inch from the plane of the supporting wall. The opposite surface 226 of the chamber is planar. On either end of the chamber adjacent the end wall 206, 208 is a support structure 230 of the same configuration for engaging the top end surfaces M' of the blade unit so that the base surface of the coupling structure is supported in alignment with the plane of the base 212 of the package. 40 The end wall 208 at each chamber 214 has an opening in the form of a recess 240, 0.30 inch in width and 0.08 inch in depth that is disposed so that it is aligned with the coupling structure of a blade unit latched in chamber 214.

50 In use, the package is supplied with new blade units (of the type disclosed in Figs. 1 to 4B of Application No. 11842/72 (Serial No. 1,362,441) in five of the six chambers 214. The operator inserts a used blade unit attached to a handle H into the empty (typically the uppermost) chamber by snapping surface K' under latch lug surface 222 and engaging the guard surface J' against the opposed wall surface 226 to secure the blade unit in the chamber. The handle H is then slid laterally through the recess 240 in end wall 208. The used blade unit is thus retained in the chamber 214 and the handle H is free to pick up a new blade unit in the next chamber. The coupling structure is inserted 65 through the recess 240 of that chamber with

the runners R' being slid into engagement in grooves of the blade unit coupling structure, and then when the runners are fully engaged with those grooves, the handle is rotated upwardly as viewed in Fig. 25, camming the guard surface J' along surface 226 and flexing the central portion of the wall carrying latch lug 216 as indicated in Fig. 25 to remove the blade unit from the chamber.

The packages described hereinabove, which are preferably molded of plastics material as a single unit or as a composite structure and, in any event, are economical to manufacture.

In each of the above described form of device, the latch projection on the side wall of the chamber is less than one half of the chamber length.

The above described devices provide a convenient and safe storage arrangement for razor blade units with the sharpened edges of each razor blade unit in a protected position, both from the standpoint of potential external damage from external sources to the sharpened edge of the blade and from the standpoint of potential injury to the user.

WHAT WE CLAIM IS:—

1. A device for dispensing a razor blade unit of the type herein defined, comprising an open-top chamber in which the blade unit is contained in a predetermined orientation, said chamber being defined by side walls parallel with the blade edge and end walls perpendicular thereto, the side and end walls preventing the unit from leaving the chamber except through the open top, and retaining means for releasably retaining the blade unit in the chamber and inhibiting movement thereof through the open top of the chamber, wherein an end wall of the chamber is open to permit sliding movements of a razor handle in a direction parallel with the blade edge to engage and disengage the handle with the unit.

2. A device according to claim 1, wherein the side walls are perpendicular to the bottom of the chamber and extend from one end wall to the other.

3. A device according to claim 1 or 2, wherein said chamber is one of a row of such open-top chambers containing respective blade units, at least one end wall of each chamber being open to permit said sliding movements of the handle.

4. A device according to claim 3, comprising two adjacent rows of open-top chambers for receiving the blade unit each in its predetermined orientation, units being contained in the chambers of at least one row, wherein each of the end walls between the rows of laterally adjacent chambers are open to permit, in use, sliding movement of a razor handle out of engagement with a blade unit in one of the chambers into engagement



(in the clockwise direction as viewed in Fig. 19), camming the guard surface J' of the blade unit past projection 132 into the space above surface 132, so that the blade unit is easily removed from the chamber 114. The entire blade unit changing operation and disposal of used blade unit is accomplished without the necessity of the operator touching the blade unit.

10 Still another form of device or package is shown in Figs. 21-25. The package is a one-piece molded plastic structure designed for use with the same type of blade units as the embodiment shown in Figs. 14-20 and includes side walls 202, 204, end walls 206, 208, and divider walls 210, all of which are upstanding from base 212 to form a series of six chambers 214.

20 Each chamber 214 has a length of about 1.58 inch, a width slightly less than one half inch and is defined at one end by a portion of end wall 206 and at the other end by a portion of end wall 208, and on either side by a divider wall 210 (the outer wall of each end chamber being defined by a side wall 202 or 204). Formed on the wall on the upper side of each chamber is a latch structure 216 that projects inwardly from the vertical surface and has a length of about one-quarter inch. Structure 216 includes an inclined upper surface 218, a vertical surface 220, a horizontal latching surface 222 and a lower extension 224. Surface 220 is disposed about 0.05 inch from the plane of the supporting wall. The opposite surface 226 of the chamber is planar. On either end of the chamber adjacent the end wall 206, 208 is a support structure 230 of the same configuration for engaging the top end surfaces M' of the blade unit so that the base surface of the coupling structure is supported in alignment with the plane of the base 212 of the package. The end wall 208 at each chamber 214 has an opening in the form of a recess 240, 0.30 inch in width and 0.08 inch in depth that is disposed so that it is aligned with the coupling structure of a blade unit latched in chamber 214.

50 In use, the package is supplied with new blade units (of the type disclosed in Figs. 1 to 4B of Application No. 11842/72 (Serial No. 1,362,441) in five of the six chambers 214. The operator inserts a used blade unit attached to a handle H into the empty (typically the uppermost) chamber by snapping surface K' under latch lug surface 222 and engaging the guard surface J' against the opposed wall surface 226 to secure the blade unit in the chamber. The handle H is then slid laterally through the recess 240 in end wall 208. The used blade unit is thus retained in the chamber 214 and the handle H is free to pick up a new blade unit in the next chamber. The coupling structure is inserted through the recess 240 of that chamber with

the runners R' being slid into engagement in grooves of the blade unit coupling structure, and then when the runners are fully engaged with those grooves, the handle is rotated upwardly as viewed in Fig. 25, camming the guard surface J' along surface 226 and flexing the central portion of the wall carrying latch lug 216 as indicated in Fig. 25 to remove the blade unit from the chamber.

The packages described hereinabove, which are preferably molded of plastics material as a single unit or as a composite structure and, in any event, are economical to manufacture.

In each of the above described form of device, the latch projection on the side wall of the chamber is less than one half of the chamber length.

The above described devices provide a convenient and safe storage arrangement for razor blade units with the sharpened edges of each razor blade unit in a protected position, both from the standpoint of potential external damage from external sources to the sharpened edge of the blade and from the standpoint of potential injury to the user.

WHAT WE CLAIM IS:—

1. A device for dispensing a razor blade unit of the type herein defined, comprising an open-top chamber in which the blade unit is contained in a predetermined orientation, said chamber being defined by side walls parallel with the blade edge and end walls perpendicular thereto, the side and end walls preventing the unit from leaving the chamber except through the open top, and retaining means for releasably retaining the blade unit in the chamber and inhibiting movement thereof through the open top of the chamber, wherein an end wall of the chamber is open to permit sliding movements of a razor handle in a direction parallel with the blade edge to engage and disengage the handle with the unit.

2. A device according to claim 1, wherein the side walls are perpendicular to the bottom of the chamber and extend from one end wall to the other.

3. A device according to claim 1 or 2, wherein said chamber is one of a row of such open-top chambers containing respective blade units, at least one end wall of each chamber being open to permit said sliding movements of the handle.

4. A device according to claim 3, comprising two adjacent rows of open-top chambers for receiving the blade unit each in its predetermined orientation, units being contained in the chambers of at least one row, wherein each of the end walls between the rows of laterally adjacent chambers are open to permit, in use, sliding movement of a razor handle out of engagement with a blade unit in one of the chambers into engagement



with a blade unit in its laterally adjacent chamber.

5 A device according to any of the preceding claims, wherein the retaining means of the or each chamber comprises a securing surface projecting inwardly from a wall of the chamber to overlies a surface of a blade unit when received therein and releasably retain the blade unit in the chamber.

10 6. A device according to claim 5, wherein the securing surface is located on a side wall of the chamber and has a length less than one half of the chamber length.

15 7. A device according to claim 5 or 6, wherein the retaining means of the or each chamber comprises a further securing surface on an opposite wall, and wherein one securing surface provides a fulcrum and the other surface of the chamber provides a cam surface for cooperation with a blade unit whereby, upon rotation of the blade unit about said fulcrum, a camming action between the blade unit and the cam surface facilitates movement of the blade unit into and out of the chamber.

20 8. A device according to any of the preceding claims, wherein the or each chamber has a support for a blade unit in which a handle slide surface for slidably receiving the razor handle is inclined to that surface of the unit which lies adjacent the bottom of the

chamber when the unit is in the chamber, the support being arranged to position the blade unit with the handle slide surface of the unit substantially parallel with the bottom of the chamber.

9. A device according to any of claims 1 to 5 wherein the chamber or at least some of the chambers have two latch members disposed one at each end thereof, each latch member having upper and lower camming surfaces.

40 10. A device according to claim 9, wherein one of the latch members is in the form of a flexible pedestal.

45 11. A device according to any of the preceding claims, wherein the side walls of the or each chamber are independently flexible transversely with respect to the bottom of the chamber.

50 12. A device for dispensing razor blade units substantially as herein described with reference to Figures 1 to 13, to Figures 14 to 20 or to Figures 21 to 25 of the accompanying drawings.

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