ABSTRACT
A shaving implement has a body member and front and rear cover members. The body member defines a blade supply position, a blade take up position, and a blade support platform which receives a shaving length of ribbon-like razor blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said support platform, and a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform. The front cover member has integral upstanding spaced side wall portions and an end wall portion which define a recess for receiving the body member and an integral handle portion that extends downwardly away from the recess. The rear cover includes a cap portion that overlies the blade support platform, and a spring member that acts against the blade support platform to urge said blade support platform toward said cap portion for securing said blade in proper shaving position on said support platform between said cap portion and said support platform while allowing sliding movement of said blade across said platform. Blade take up mechanism that is coupled to the take up position and operates to position a sequence of shaving portions of said blade on said blade support platform, includes a molded member that comprises an arbor portion to which one end of the blade is secured, a handle portion, and a shaft portion connecting the arbor and handle portions, the shaft portion being journaled in the body member.

19 Claims, 25 Drawing Figures
STRIP FEED SAFETY RAZOR

This application is a continuation-in-part of my co-pending patent application Ser. No. 887,910, filed Dec. 24, 1969 entitled "Shaving Implement", now abandoned.

SUMMARY OF INVENTION

This invention relates to shaving implements and more particularly to shaving implements of the type that employ a continuous band of ribbon like blade in an arrangement which permits successive lengths of blade to be sequentially advanced into shaving position by the user of the implement. Cartridge forms of shaving implements of this general type are shown in the Nissen U.S. Pat. Nos. 3,262,198 and 3,375,578. It is an object of this invention to provide a novel and improved shaving implement of this general type in which the entire structure, including the manipulating handle portion, is an integral unit.

Another object of this invention is to provide an inexpensive and yet sturdy shaving implement which stores several shaving lengths of razor blades so that the implement has a relatively long life and yet can be economically discarded after the shaving lengths of blade contained in the implement have been used.

A further object of the invention is to provide a novel and improved shaving implement assembly manufactured exclusively of molded plastic components for housing a ribbon type of razor blade.

A further object of the invention is to provide in a ribbon razor blade type of shaving implement, novel and improved blade support structures for facilitating the maintenance of a predetermined shaving geometry relationship or range of relationships over the life of the shaving implement.

A further object of the invention is to provide a novel and improved blade take up arrangement particularly adapted for use in shaving implements that employ a ribbon type of razor blade.

A further object of the invention is to provide a novel and improved shaving implement in which the shaving geometry is maintained while facilitating removal of shaving debris during the shaving operation from the shaving zone.

Still another object of the invention is to provide a novel and improved arrangement for varying the shaving geometry that is particularly adapted for use in shaving implements that employ a ribbon type of razor blade.

A shaving implement constructed in accordance with the invention is adapted to store a ribbon type of razor blade of uniform width, the razor blade having parallel, longitudinally extending front and rear edges. At least the front edge of the blade is sharpened. The implement includes a body member and front and rear cover members, and the body member defines a blade supply position, a blade take up position, and a blade support platform which defines a shaving zone for receiving a shaving length of blade in supporting position with the sharpened edge of the blade projecting beyond the front edge of the support platform. A blade guard structure is disposed forwardly of the front edge of the blade support platform and extends in generally parallel spaced relation thereto. The front cover member has integral upstanding spaced side wall portions and an end wall portion which define a recess for receiving the body member and an integral handle portion that extends downwardly away from the recess. The rear cover member includes a cap portion that overlies the blade support platform. A spring member secured to one of the cover members acts against the blade support platform to urge that platform towards the cap portion of the rear cover member to provide a resilient clamping force that secures the blade in proper shaving position on the support platform between the cap portion and the support platform while allowing sliding movement of the blade across the platform. A blade take up mechanism is coupled to the take up position of the body member and advances the length of blade stored in the blade supply position across the blade support platform for positioning a sequence of shaving portions of the blade on the blade support platform.

This assembly, in a preferred embodiment, consists of molded plastic components which are designed for assembly with a length of ribbon type blade by automatic assembly machinery and provides a sturdy shaving implement as a complete unit that is of sufficiently low cost and ease of assembly to warrant disposal of the entire shaving implement after the shaving lengths of the blade stored in the implement have been used.

In a preferred embodiment the shaving implement also includes a hinge structure that secures the guard structure to the platform and permits movement of the guard structure about an axis parallel to the platform. Formed integrally with the guard structure is a lever structure, and a movable adjusting member engages the lever structure so that the guard structure may be rotated relative to the blade support platform about the hinge axis. The lever member includes a camming surface and the spring member is biased against that camming surface so that the clamping pressure is exerted by this spring member through the lever member and hinge structure to the blade support platform. This arrangement provides a uniform clamping pressure on the blade over the range of positions through which the guard structure is movable by the adjusting member. In this embodiment the adjusting member is a camming element that is mounted for pivotal movement on the body member and protrudes through an aperture in the front cover member. A camming portion on the adjusting member is in engagement with a cooperating portion of the lever member for camming the lever member and adjusting the shaving geometry in response to movement of the adjusting member.

The shaving implement in its preferred form employs a post member to transmit the clamping pressure from the spring member to the platform and two large apertures are provided immediately below the shaving support platform, one on either side of the post member, which facilitates the flow of soap material and other accumulated debris away from the shaving area during shaving operations. Supplementary clamping pressure is provided by portions that project from the rear cover member and engage recesses in the body member to stress the cap portion toward engagement with the blade on the blade support platform.

The take up mechanism includes as a molded integral unit, an arbor, a shaft portion adapted to be journalled in the body member, and a handle portion. One end of the ribbon razor blade is secured to the arbor, and is wob about it as the take up mechanism is rotated to advance a new shaving length of blade into position on the support platform. This take up unit is latched in position by a detent structure formed integrally with the
rear cover member which includes two elongated detent projections, each of which has an inclined camming surface over which the handle portion rides up. One camming surface allows the handle to move into latch position and prevent reverse rotation from the latch position; while the other camming surface allows the handle to move out of latch position. This arrangement permits rotation of the take up mechanism in one direction and provides a positive latch position for the take up mechanism.

Other objects, features and advantages of the invention will be seen as the following description of particular embodiments progresses, in conjunction with the drawings, in which:

FIG. 1 is a perspective view of a razor assembly constructed in accordance with the invention;

FIG. 2 is a sectional view taken along the line 2–2 of FIG. 1;

FIG. 3 is an exploded perspective view of components of the razor assembly shown in FIG. 1;

FIG. 4 is a rear view of the front cover and handle component of the razor assembly shown in FIG. 1;

FIGS. 5 and 5a are sectional views taken along the lines 5–5 and 5a–5a, respectively, of FIG. 4;

FIG. 6 is a top view of the front cover component shown in FIG. 4;

FIG. 7 is a front elevational view of the body component of the razor assembly shown in FIG. 1;

FIG. 8 is a sectional view taken along the line 8–8 of FIG. 7;

FIG. 9 is a top view of the body component in FIG. 7 with a portion broken away;

FIG. 10 is a sectional bottom view taken along the line 10–10 of FIG. 7;

FIG. 11 is a front view of a rear cover component of the razor assembly shown in FIG. 1;

FIG. 12 is a sectional view taken along the line 12–12 of FIG. 11;

FIGS. 13 and 14 are, respectively, bottom and rear views of the rear cover component shown in FIG. 11;

FIG. 15 is a rear view of the razor assembly shown in FIG. 1;

FIG. 16 is a sectional view taken along the line 16–16 of FIG. 15;

FIGS. 17 and 18 are rear and side views, respectively, of the blade advancing component of the razor assembly shown in FIG. 1;

FIG. 19 is a side view of the indicator dial employed in the razor assembly shown in FIG. 1;

FIG. 20 is a top view of adjusting lever component employed in the razor assembly shown in FIG. 1;

FIG. 21 is a sectional view taken along the line 21–21 of FIG. 20;

FIGS. 22 and 23 are sectional views similar to a portion of FIG. 2 showing the blade guard in first and second adjusted positions, respectively; and

FIG. 24 is a perspective view of a modified rear cover component.

DESCRIPTION OF PARTICULAR EMBODIMENTS

The razor assembly shown in FIGS. 1–3 and 15 includes a front cover member 10 molded of a suitable material such as a modified polyethylene oxide (PPO) plastic sold under the name Noryl that has formed at its lower end an integral elongated handle portion 12. Recesses 11 may be formed in the handle to reduce the weight of the razor assembly if desired. Cover member 10 has side walls and an intermediate end wall 13 that defines a recess in which body member 14, also molded of Noryl is secured. Member 14 defines a blade support platform 16, a blade supply chamber 18 and an aperture 20 in which is journaled a blade take up structure 22. The blade support platform includes a planar main surface which terminates at each end in an abrupt curved end surface transition of 0.062 inch radius. A rear cover member 24, also molded of Noryl, includes a forwardly projecting cap portion 26 that defines and camming surface 27 which overlies the blade support platform 16 and cooperates with cover 10 to define and enclose the path of the razor blade at platform 16. Disposed in blade chamber 18 is a coil of razor blade 28 that has a sharpened forward edge 30. The blade 28 extends from chamber 18 over support platform 16 to take up structure 22 where its leading end is secured in slot 32 of arbor 34. Arbor 34 has a forwardly projecting stub shaft 36 which is journaled in cylindrical recess 38 (FIG. 4) in cover 10. An indicator disc 40 is journaled on second stub shaft 42 that projects forwardly of arbor 34 and is eccentric of stub shaft 36. Disc 40 has teeth 44 in its outer periphery which cooperate with corresponding teeth 46 (FIG. 4) formed in the rear surface of cover member 10. The numerals 48 on the face of disc 40 are visible through aperture 50 in the front wall of cover member 10.

An adjusting lever 52 is supported for pivoting movement on projection 54 (at the rear wall of body member 14 above blade supply chamber 18) which is received in bore 55. Lever 52 includes a camming groove 56 which receives downwardly projecting stub 58 of depending adjusting lever structure 60 that is molded integrally with blade guard 62. Guard 62 is connected to blade support platform 16 by hinge web 64. Lever 52 includes a latch surface 65 (FIGS. 20 and 21) that engages one of the cooperating latch grooves 66 that are located on convex surface 67 of cover 10 just below aperture 68 through which lever 52 extends.

Additional details of the front cover member 10 may be seen with reference to FIGS. 4–6. The cover at its upper end includes two spaced vertically projecting guard surfaces 70, one at either end of a recess in which guard bar 62 is received. At the base of and extending rearwardly from that recess (immediately below slot 68) are two rearwardly extending dowel pins 72. Formed in each side wall 74 of cover 10 are two latch ribs 76, 78 and a tapered guide surface 82 which provides control for the movement of razor blade strip 28 from the blade supply chamber 18 to the support platform 16 and from platform 16 to take up arbor 34.

Details of the molded razor body member 14 are shown in FIGS. 7–10. That member includes structures that define alignment apertures 90 located immediately above the blade supply chamber 18 which receive dowel pins 72. Latch projections 92 engage ribs 76 and side wall surfaces 93 engage ribs 78 to hold cover 10 and body 14 together. Body 14 further includes two transverse slots 94, each having a latch recess 96. Two projections 98 overlie platform 16, and each has a vertical front latch surface and a rearwardly extending groove in which the rear portion of the blade strip is received.

As indicated above, guard bar 62 is secured to blade support platform by hinge 64. The front surface 100 of bar 62 is curved and rearwardly of surface 100 are two elongated slots 102 which allow passage from the shav-
ing zone of hair elements or other debris that might accumulate during the shaving operation. The hinge web 64 in the illustrated embodiment is an imperforate web which is reinforced by spaced rib elements 104. The depending adjusting lever structure 60 includes three arms 106 which support a connecting web 108 so that two apertures, each about three-eighths inch wide and three-sixteenths inch high are defined. Stud 58 projects downwardly from the lower surface of web 108. Flange member 110, which extends rearwardly from web 108 from a central location just above stud 58, has a lower surface 112 that is curved at a radius of 0.346 inch about a center 114 in hinge web 64.

Details of the molded rear cover member 24 are shown in FIGS. 11–14. That cover member in its lower portion includes two hook members 120 which engage latch surfaces 96 of slots 94 to secure the lower end of the rear cover 24 firmly to the razor body 14. Rearwardly projecting dowel pins 122 of the member 24 engage the rear portions of holes 90 in body member 14. In the assembled position, the vertical latch surface 124 immediately to the rear of clamping surface 27 of member 24 engages the vertical front surfaces of projections 98. Cap portion 26 overlies the blade support platform of the razor body and forms an enclosure for the blade 28, forwardly of which its forward sharpened edge 30 projects in shaving position. The forward facing surfaces 126 at either end of cap portion 26 mate with rearwardly facing surfaces 128 of projections 70 of front cover 10 to provide an enclosure at either end of the blade support platform that overlies the ends of the platform 16 about which the blades 28 is sharply bent so that the entire width of the blade is enclosed at those points.

Below cap portion 26 is an aperture 130 of configuration similar to that of adjusting lever structure 60 and which is bounded about its periphery by a forwardly projecting flange 132 that guides shaving debris passing downwardly from the shaving zone rearwardly and protects blade supply chamber 18. Centrally located in the bottom portion of flange 132 is a forwardly projecting, resilient, cantilever spring finger member 134. Spaced, forwardly projecting fingers 136 at the forward end of member 134 define a recess through which stub 58 is adapted to project. At lower end of member 24 are two latch fingers 140 which cooperate with handle portion 145 of take up member 22 to latch that member in a desired position and favor rotation of handle in the clockwise direction as viewed from the rear of the razor assembly. The rear surface of each finger 140 includes a camming portion 141 inclined at an angle of 25° and a transition portion 142 parallel to the body of back cover 24. Each interior side wall 143 is perpendicular to the body of cover 24 and inclined outwardly at an angle of 4°, and each exterior side wall 144 is also perpendicular to the body of cover 24 and inclined inwardly at an angle of 10°.

Details of the molded one-piece take-up-arbor structure may be seen with reference to FIGS. 17 and 18. That arbor includes a shaft portion 146 which is journaled in port 20 of body 14 and connects the cylindrical arbor 22 to handle portion 148. At the forward end of the arbor 22 is a guide shaft 36 concentric with shaft portion 146 which is received in recess 38 in the rear surface of cover 10 and an eccentric shaft 42 on which the adjusting disc 40 is disposed. A recess 150 in the front wall of arbor 22 in initial assembly receives pin 152 of indicator disc 40 as shown in FIG. 19. An end of the blade strip with a reinforcing tab secured thereto is disposed in slot 32, the reinforcing tab being retained by projection 154.

The camming member 52 is shown in FIGS. 20 and 21. Camming groove 56 has an angular extent of 60° and a radius of 0.263 inch about a center 160 that is offset 0.093 inch laterally from the center of pivot axis 57 and 0.027 inch forwardly of that axis. A rib 65 on the rear surface of the vertically extending handle portion 164 cooperates with notches 66 (FIG. 6) in a curved projecting boss 67 in the front cover member 10 for latching the camming lever 52 in a selected position.

In assembly, a coil of razor blade strip 28 is positioned in blade supply chamber 18, passed over the blade support platform 16 and connected to arbor structure 22 disposed in aperture 20. A reinforcing tab at the end of the blade in the take up station is engaged by projection 154. An indicator dial 40 is then disposed on arbor 22 with projection 152 disposed for locating purposes in hole 150. The razor body 14 is then inserted in the recess in front cover 10, and is properly located by engagement of dowels 72 in locating holes 90 and latched in place by the engagement of ribs 76 and 78 with cooperating body surfaces 92 and 93. A blade guiding channel about 0.060 inch in width is defined between each side wall 74 of cover 10 and the adjacent curved end surface of platform 16.

Rear cover 24 is then secured to the assembled front cover 10 and body 14. Rear cover 24 is positioned relative to that subassembly so that latch surfaces 124 engage the front surfaces of blade hold down guide elements 98 and dowel pins 122 are aligned with holes 90 and tabs 124 are aligned with slots 94. Each dowel pin 122 has a conical lead surface 166, and each tab 120 has a tapered lead surface 168. The nominal distance between the surface of platform 16 and surface 112 is 0.401 inch. The nominal distance between clamp surface 26 and the plane of the upper surface of spring member 134 is 0.386 inch. The upper surface of spring member 134 at its forward end, on either side of recess 136, includes an inclined surface portion 170 that tapers downwardly toward the rear at an angle of 3° and a lead surface 172 that tapers downwardly toward the front at an angle of 30°. In assembly, surfaces 124 are engaged with elements 98 and the rear cover 24 is rotated about the axis defined by that engagement towards the subassembly of the front cover 10 and body 14. Spring member 134 is cammed along the curved lower surface 112 of the adjusting lever structure 106. The conical lead surfaces 166 of dowel pins 122 enter the rear ends of aligning holes 90, and the lead surfaces 168 cam into slots 94 for latching engagement between tabs 120 and recesses 96. Actuating lever 52 is then inserted through the slot 68 in the front wall of cover 10 and positioned with pivot stub 54 engaged in hole 55 and cam slot 56 engaged with lever stub 58.

The assembly of front cover 10, body 14 and rear cover 24 is accurately aligned by engagement by dowel pins 72 and 122 with aligning channels 90, and forward surfaces of the back cover are in engagement with the rear surfaces of latch members 76, 78. In assembly, spring member 134 is stressed and exerts an upward force against the adjusting structure 60 and the blade support platform 16 to provide a clamping force on the
blade 28 disposed on the blade support platform as indicated in FIG. 2. Due to the radused surface 112 of the adjusting structure 60, uniformity of clamping force is maintained throughout the range of adjustments of the blade. Thus and this clamping force firmly positions the blade in desired position on the shaving platform while allowing sliding movement of that blade 28 across the platform as advanced by the take up structure 22. Surfaces 126 of the rear cover 24 at either end of the clamp surface 27 mate with front cover surfaces 128 so that the ends of platform 16 are completely enclosed thus providing blade protection at those points.

In use, a shaving length of blade is advanced into shaving position on platform 16 by one complete clockwise rotation of the take up structure 22. Pin 152 is broken easily and thus arbor 22 moves freely with respect to indicator disc 40. Rotation of the arbor structure 22 causes one or more teeth of the indicator disc 40 to engage the corresponding teeth 46 in the rear of cover 10 so that one full complete rotation of the take up-arbor structure 22 advances disc 40 to display the next number in sequence at window 50. As indicated in FIGS. 15 and 16, fingers 140 locate handle 148 positively and permit rotation in the clockwise direction.

Camming surface 141 R allows handle 148 to ride out of the latch position and over finger 140 R. After an almost full revolution of arbor 22, camming surface 141 L raises the handle 148 to pass over finger 140 L and return to latched position to complete a revolution of the take up arbor and advance a fresh shaving length of blade into shaving position on platform 16.

The shaving geometry may be seen with reference to FIG. 2. A line 200 may be drawn tangent to the outer surface of guard cap 26 and surface 100 of guard bar 62. The distance D that the sharpened edge 30 of the blade 28 projects in a direction perpendicular to line 200 may be termed "exposure". The angle A between line 202 (the plane of blade 28 on shaving platform 16) and line 204 (a line extending between the surface 100 of guard 62 and the sharpened edge 30 of blade 28) is termed the tangent angle. The distance S (span) between the sharpened edge 30 of blade 28 and the point 206 line 204 engages surface 100 is another dimension which may have a significant effect on the comfort and/or effect of shaving. In this embodiment, a normal value of tangent angle of 29.5° is provided. The "exposure" in this position is about 0.0024 inch and the "span" is about 0.0607 inch.

These dimensions may be adjusted or varied by the user of the razor through movement of lever 52. Movement of lever 52 to the left as viewed in FIG. 1 changes the position of the components to that shown in FIG. 22, the tangent angle being increased 7.5° to 37°, the exposure being increased to about 0.0062 inch and the span to about 0.0675 inch. Movement of lever 52 to the right to the position shown in FIG. 23 decreases the tangent angle to about 22.5°, exposure to a negative value of −0.0014 inch and span to 0.054 inch.

A modified rear cover member is shown in FIG. 24. This cover member is of the same configuration as the cover member shown in FIGS. 3 and 11–14. Similar elements are identified by a corresponding primed reference numeral. Supplemetning pins 122 are two posts 210, 212, each of which has an upper surface 214 that extends 0.031 inch forward from the surface 216 of the cover member, and an inclined surface 218 that is disposed at an angle of 45°. Surface 214 is spaced 0.512 inch below surface 27′. Surface 95 of body member 14, as shown in FIG. 7, is spaced 0.517 inch below blade support platform 16. As the rear cover 24′ is secured to the assembled front cover 10 in body 14, the lead surfaces 166′ of the dowel pins 122′ and the lead surfaces 218 of posts 210, 212 cam into holes 90 and over surfaces 95, respectively, and due to the above-mentioned dimensional relationship, the engagement of surfaces 95 and 214 with the rear cover latched in place impose a stress between blade support platform 16 and clamp surface 27′ to more securely maintain the desired geometrical relationship.

This razor is a compact assembly of molded plastic components which houses a ribbon razor blade and securely positions that blade in proper shaving position throughout the life of the razor. Further, the razor provides precise shaving geometry that is easily adjusted over a range of shaving geometries. While particular embodiments of the invention have been shown and described, various modifications thereof will be apparent to those skilled in the art and therefore it is not intended that the invention be limited to the disclosed embodiments or to details thereof and departures may be made therefrom within the spirit and scope of the invention as defined in the claims.

What is claimed is:

1. A shaving implement having a ribbon like razor blade of uniform width, said blade having parallel longitudinally extending front and rear edges with at least said front edge being sharpened, said implement comprising a body member, a front cover member, a rear cover member, said body member defining a blade supply position, a blade take up position, and a blade support platform which defines the shaving zone for receiving a shaving length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, said front cover member being disposed over the front of said body member and said rear cover member being disposed over the rear of said body member, said rear cover member including a cap portion overlying said blade support platform, a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, a hinge securing said guard structure to said platform and defining an axis parallel to said guard structure, a lever structure secured to said guard structure, an adjusting member engaging said lever structure and being movable to rotate said guard structure relative to said blade support platform about said hinge axis, said lever structure having a camming surface, a spring member secured to one of said cover members, said spring member being in engagement with said camming surface so that a uniform clamping pressure is exerted by said spring member on said blade support platform over a range of positions of said guard structure to urge said blade support platform toward said cap portion for securing said blade in proper shaving position on said support platform between said cap portion and said support platform while allowing sliding movement of said blade across said platform, and blade take up mechanism coupled to said take up position for advancing a length of blade stored in said blade supply position across said blade support
platform to position a sequence of shaving positions of said blade on said blade support platform.

2. The implement as claimed in claim 1 wherein said adjusting member is supported on said body member for pivotal movement about an axis perpendicular to said blade support platform and includes a camming portion in engagement with a cooperating portion of said lever member.

3. A shaving implement having a ribbon like razor blade of uniform width, said blade having parallel longitudinally extending front and rear edges with at least said front edge being sharpened, said implement comprising a body member, a front cover member, a rear cover member, said body member defining a blade support platform which defines the shaving zone for receiving a shaving length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said support platform, said blade being disposed in a blade path extending between said support position and said take up position across said support platform, said front cover member being disposed over the front of said body member and said rear cover member being disposed over the rear of said body member, said rear cover member including a cap portion overlying said blade support platform, a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, and a detent structure for cooperation with said blade take up mechanism to favor rotation of said blade take up mechanism in a preferred direction, said detent structure including two generally parallel spaced detent projections, each said projection having an inclined camming surface on one side and a vertical surface on the opposite side so that said detent projections permit rotation of said take up mechanism in one direction and inhibit rotation in the opposite direction, and define a latch position for said take up mechanism between said projections.

4. The implement as claimed in claim 4 wherein said blade take up mechanism includes an arbor portion to which one end of said blade is secured, a handle portion integral with said arbor portion, said handle portion being disposed outwardly of one of said cover members for manual manipulation, and a shaft portion connecting said arbor and handle portions, said shaft portion being journaled in said body member.

5. A shaving implement having a ribbon like razor blade of uniform width, said blade having parallel longitudinally extending front and rear edges with at least said front edge being sharpened, said implement comprising a body member, a front cover member, a rear cover member, said body member defining a blade supply position, a blade take up position, and a blade support platform which defines the shaving zone for receiving a shaving length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said support platform, a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, said front cover member being disposed over the front of said body member and said rear cover member being disposed over the rear of said body member, said rear cover member including a cap portion overlying said blade support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, and a detent structure for cooperation with said blade take up mechanism to favor rotation of said blade take up mechanism in a preferred direction, said detent structure including two generally parallel spaced detent projections, each said projection having an inclined camming surface on one side and a vertical surface on the opposite side so that said detent projections permit rotation of said take up mechanism in one direction and inhibit rotation in the opposite direction, and define a latch position for said take up mechanism between said projections.

6. A shaving implement having a ribbon like razor blade of uniform width, said blade having parallel longitudinally extending front and rear edges with at least said front edge being sharpened, said implement comprising a body member, a front cover member, a rear cover member, said body member defining a blade supply position, a blade take up position, and a blade support platform which defines the shaving zone for receiving a shaving length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said support platform, and a detent structure for cooperation with said blade take up mechanism to favor rotation of said blade take up mechanism in a preferred direction, said detent structure including two generally parallel spaced detent projections, each said projection having an inclined camming surface on one side and a vertical surface on the opposite side so that said detent projections permit rotation of said take up mechanism in one direction and inhibit rotation in the opposite direction, and define a latch position for said take up mechanism between said projections.
blade support platform to position a sequence of shaving portions of said blade on said blade support platform.

7. The implement as claimed in claim 6 and further including a hinge securing said guard structure to said platform and defining an axis parallel to said guard structure, a lever structure secured to said guard structure, and an adjusting member engaging said lever structure and being movable to rotate said guard structure relative to said blade support platform about said hinge axis, said lever structure including said post member and having a camming surface, and said spring member being in engagement with said camming surface so that a uniform clamping pressure is exerted by said spring member on said platform over a range of positions of said guard structure.

8. The implement as claimed in claim 7 wherein said adjusting member is supported on said body member for pivotal movement about an axis perpendicular to said blade support platform and includes a camming portion in engagement with a cooperating portion of said lever member.

9. The implement as claimed in claim 8 wherein said blade take up mechanism includes an arrow portion to which one end of said blade is secured, a handle portion integral with said arrow portion, said handle portion being disposed outwardly of one of said cover members for manual manipulation, and a shaft portion connecting said arrow and handle portions, said shaft portion being journalled in said body member and the other cover member.

10. The implement as claimed in claim 9 and further including a detent structure formed integrally with said one cover member for cooperation with said blade take up mechanism to favor rotation of said blade take up mechanism in a preferred direction, said detent structure including two generally parallel spaced detent projections, each said projection having an inclined camming surface on one side and a vertical surface on the opposite side so that said detent projections permit rotation of said take up mechanism in one direction and inhibit rotation in the opposite direction, and define a latch position for said take up mechanism between said projections.

11. The implement as claimed in claim 10 wherein one of said cover structures includes an elongated razor handle integrally formed therewith.

12. The implement as claimed in claim 11 and further including structure defining apertures on either side of said post member to facilitate flow of material away from the area of the razor blade edge during shaving operations.

13. A shaving implement having a ribbon like razor blade of uniform width, said blade having parallel longitudinally extending front and rear edges with at least said front edge being sharpened, said implement comprising a body member, a front cover member, a rear cover member, said body member defining a blade supply position, a blade take up position, and a blade support platform which defines the shaving zone for receiving a shaving length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said support platform, and a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, said front cover member being disposed over the front of said body member and said rear cover member being disposed over the rear of said body member, said rear cover member including a cap portion overlying said blade support platform, a spring member secured to one of said cover members and acting against said blade support platform to urge said blade support platform toward said cap portion for securing said blade in proper shaving position on said support platform between said cap portion and said support platform while allowing sliding movement of said blade across said platform, a post member extending between said spring member and said platform, structure defining apertures on either side of said post member to facilitate flow of material away from the area of the razor blade edge during shaving operations, and blade take up mechanism coupled to said take up position for advancing a length of blade stored in said blade supply position across said blade support platform to position a sequence of shaving portions of said blade on said blade support platform.

14. A shaving implement having a ribbon like razor blade of uniform width, said blade having parallel longitudinally extending front and rear edges with at least said front edge being sharpened, said implement comprising a body member and front and rear cover members, said body member defining a blade supply position, a blade take up position, and a blade support platform which defines the shaving zone for receiving a shaving length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said blade support platform, and a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, said front cover member being disposed over the front of said body member and said rear cover member being disposed over the rear of said body member, said rear cover member including a cap portion overlying said blade support platform, blade take up mechanism coupled to said take up position for advancing a length of blade stored in said blade supply position across said blade support platform, a post member extending between said body member and said platform, structure defining apertures on either side of said post member to facilitate flow of material away from the area of the razor blade edge during shaving operations, and blade take up mechanism coupled to said take up position for advancing a length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said blade support platform, and a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, a blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, said blade being disposed in a blade path extending between said support platform, said front cover member being disposed over the front of said body member and said rear cover member being disposed over the rear of said body member, said rear cover member including a cap portion overlying said blade support platform, a spring member secured to one of said cover members and acting against said blade support platform to urge said blade support platform toward said cap portion for securing said blade in proper shaving position on said support platform between said cap portion and said support platform while allowing sliding movement of said blade across said platform, a post member extending between said spring member and said platform, structure defining apertures on either side of said post member to facilitate flow of material away from the area of the razor blade edge during shaving operations, and blade take up mechanism coupled to said take up position for advancing a length of blade stored in said blade supply position across said blade support platform to position a sequence of shaving portions of said blade on said blade support platform.
ing said arbor and handle portions, said shaft portion being journalled in said body member.

16. The implement as claimed in claim 15 wherein said detent structure is formed integrally with said rear cover member.

17. A shaving implement having a ribbon like razor blade of uniform width, said blade having parallel longitudinally extending front and rear edges with at least said front edge being sharpened, said implement comprising a body member, front and rear cover members, said front cover member having integral outstanding spaced side wall portions and an end wall portion defining a recess for receiving said body member and an integral handle portion extending away from said recess, said body member defining a blade supply position, a blade take up position, and a blade support platform which defines the shaving zone for receiving a shaving length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said support platform, said rear cover member including an integral cap portion overlying said blade on said blade support platform, blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, each of said cover members including projecting latch structure for engaging cooperating recesses in said body member to latch said front and rear cover members to said body member as a unit with said body member secured therebetween, said rear cover member further including a surface portion spaced from said cap portion for engaging a cooperating surface in said body member to stress said cap portion toward engagement with the blade on said blade support platform, and blade take up mechanism coupled to said take up position for advancing a length of blade stored in said blade supply position across said blade support platform to position a sequence of shaving portions of said blade on said blade support platform.

19. A shaving implement having a ribbon like razor blade of uniform width, said blade having parallel longitudinally extending front and rear edges with at least said front edge being sharpened said implement comprising a body member, front and rear cover members, said front cover member having integral outstanding spaced side wall portions and an end wall portion defining a recess for receiving said body member and an integral handle portion extending away from said recess, said body member defining a blade supply position, a blade take up position, a blade support platform which defines the shaving zone for receiving a shaving length of blade in supporting position with the sharpened front edge of the blade projecting beyond the front edge of said support platform, and blade guard structure extending in generally parallel spaced relation to and disposed forwardly of the front edge of said blade support platform, said rear cover member including an integral cap portion overlying said blade on said blade support platform, said blade being disposed in a blade path extending between said supply position and said take up position across said support platform, each of said cover members including projecting latch structure for engaging cooperating recesses in said body member to latch said front and rear cover members to said body member as a unit with said body member secured therebetween, said cap portion of said rear cover member including a transversely extending surface; said rear cover member further including two transversely spaced portions, each of which has a surface disposed a predetermined distance from said transversely extending surface; and said body member includes two transversely spaced surfaces, each said transversely spaced surface being spaced from said blade support platform a distance greater than said predetermined distance of the corresponding transversely spaced portion of said rear cover member from said transversely extending surface, said each transversely spaced surface being in engagement with a corresponding one of said transversely spaced portion, and blade take up mechanism coupled to said take up position for advancing a length of blade stored in said blade supply position across said blade support platform to position a sequence of shaving portions of said blade on said blade support platform.

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