June 9, 1964 R. REYNIER 3,136,056

DISPOSABLE SAFETY RAZOR WITH INTEGRAL BLADE

Filed June 21, 1962

Fig. 1

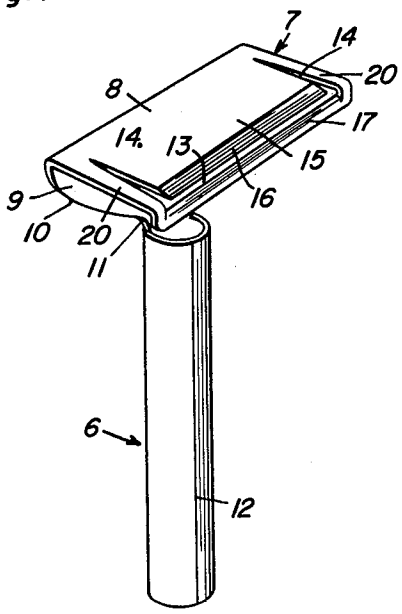


Fig. 2

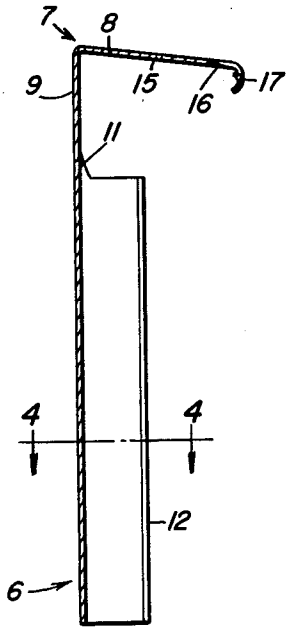


Fig. 3

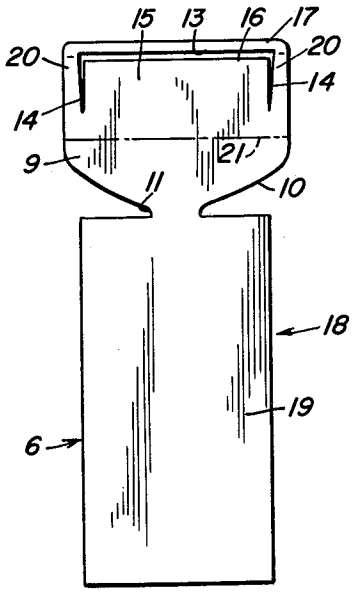


Fig. 4

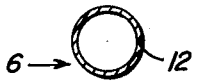
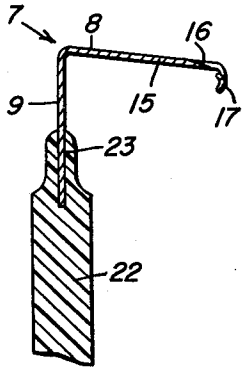


Fig. 5



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DISPOSABLE SAFETY RAZOR WITH INTEGRAL BLADE

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This invention relates to new and useful improvements in safety razors of the "throw-away" type and has for its primary object to provide, in a manner as hereinafter set forth, an implement of the character which may be manufactured at such low cost as to make its disposal after a single use, if desired, economically feasible.

Another important object of the present invention is to provide an improved throw-away or disposable safety razor of the aforementioned character wherein the complete device, including the blade, may be expeditiously produced from a single sheet of suitable metal.

Still another object is to provide a disposable safety razor comprising an integral tubular handle, open at both ends, which may accommodate such articles or products as a miniature tube of shaving cream, a short styptic pencil, etc.

Other objects of the invention are to provide an improved, one-piece disposable safety razor which is of relatively simple construction, strong and durable, compact and of light weight.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of a one-piece disposable safety razor constructed in accordance with the present invention;

FIGURE 2 is a view in vertical longitudinal section through the device;

FIGURE 3 is a plan view of the blank;

FIGURE 4 is a cross-sectional view through the handle, taken substantially on the line 4—4 of FIGURE 2; and

FIGURE 5 is a view in vertical longitudinal section through the forward portion of a modified embodiment of the invention.

Referring now to the drawing in detail, it will be seen that the embodiment of the present invention which has been illustrated in FIGURES 1 to 4, inclusive, of said drawing comprises a longitudinally split tubular handle of suitable metal which is designated generally by reference numeral **6**. Of course, the handle **6** may be of any desired length and diameter. As shown to advantage in FIGURE 2 of the drawing, the handle **6** is of uniform diameter throughout and open at both ends.

Formed integrally with one end of the tubular handle **6** is a head **7**. The head **7** includes a substantially rectangular plate **8** having formed integrally with the upper portion thereof a generally segmental flange **9**. The flange **9** extends at an acute angle from the plate **8** and the peripheral edge **10** thereof is joined to one end of the tubular handle **6** by an integral connection or neck **11**. It will be noted that the flange **9** is joined at **11** to the handle **6** at a point diametrically opposite the longitudinal seam or split **12** of said handle.

The plate **8** of the head **7** has formed therein a generally U-shaped slot or opening **13** comprising tapered end or leg portions **14** and providing an integral blade **15** having a bevelled cutting edge **16**. The longitudinal marginal portion of the substantially rectangular plate **8** which is remote from the flange **9** is turned or bent rearwardly to provide a guard **17** for the cutting edge **16** of the blade **15**, said guard paralleling said cutting edge in spaced relation thereto.

It is thought that the use of the razor will be readily apparent from a consideration of the foregoing. As shown in FIGURE 3 of the drawing, the complete razor is produced from a blank **18** comprising a single sheet of metal. The blank **18** includes a substantially rectangular plate **19** which is rolled to provide the handle **6**. Of course, the handle **6** is gripped in either hand and the blade **15** is drawn over the skin in the usual manner. The member **17** functions as a gauge and a guard for the cutting edge **16** of the blade **15**, as will be understood. The construction and arrangement are such that the blade **15** and the guard **17** are bendably adjustable relatively to each other. The tubular handle **6**, being unobstructed and open at both ends, is adapted to receive therein miniature shaving cream tubes, short styptic pencils and other articles. As illustrated to advantage in FIGURE 2 of the drawing, the guard **17** is of arcuate cross-section to glide smoothly over the skin without irritating. In the embodiment shown in FIGURE 1 of the drawing, the blade **15** and the legs or arms **20** of the generally U-shaped guard **17** are coplanar. In FIGURE 3 of the drawing reference numeral **21** designates the line on which the plate **8** is bent to provide the flange **9**.

Of course, the blade **15** may be of any suitable dimensions. As shown to advantage in FIGURE 2 of the drawing, the construction and arrangement is such that the blade **15** will prevent such articles as miniature shaving cream tubes, styptic pencils, etc., from sliding out of the handle **6** through the forward end thereof.

In the modification of FIGURE 5 of the drawing, reference numeral **22** designates a handle of a suitable plastic or other material on which the head **7** is mounted. Toward this end, one end portion of the plastic handle **22** has formed therein a kerf **23** in which the flange **9** of the head **7** is fixedly secured in any suitable manner. In other respects this form of the invention is substantially similar to the embodiment of FIGURE 1 of the drawing.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A one-piece disposable safety razor comprising an elongated tubular handle, a generally planar rectangular head plate longitudinally spaced from one end of the tubular handle, an angularly related flange integral with one edge of the plate, said flange having side edges converging from a maximum width at approximately said one edge of the plate, and a relatively narrow neck integral with the narrow end of the flange and said one end of the tubular handle, said head plate having an elongated slot adjacent the free edge thereof, said slot terminating at each end in a rearwardly extending slot forming in effect a U-shaped slot defining a blade portion, the edge of the blade portion bordering the first mentioned elongated slot being bevelled so as to form a cutting edge, the portion of the plate between the first mentioned elongated slot and the free edge of the plate being downwardly bent so as to form a guard for the cutting edge parallel to said cutting edge.

2. A disposable combination razor head and blade consisting of a single flat sheet of metal angularly bent so as to form a single thickness plate and a flange depending at an angle therefrom, said plate having an elongated slot adjacent the free edge thereof, said slot terminating at each end in a rearwardly extending slot forming in

effect a U-shaped slot defining a blade portion, the edge of the blade portion bordering the first mentioned elongated slot being bevelled so as to form a cutting edge, and the portion of the plate between the first mentioned elongated slot and the free edge of the plate being downwardly bent so as to form a guard for the cutting edge parallel to said cutting edge.

References Cited in the file of this patent

UNITED STATES PATENTS

2,550,056	Foltis	Apr. 24, 1951
2,684,520	Samko	July 27, 1954
2,871,560	Eberbaugh	Feb. 3, 1959
2,911,713	Kuhnl	Nov. 10, 1959