March 29, 1949. C. F. PROSS 2,465,924

RAZOR

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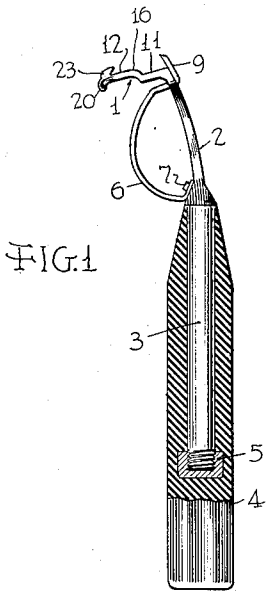


FIG. 1

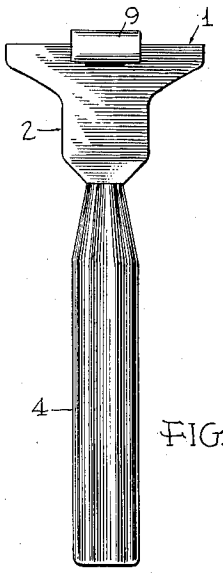


FIG. 2

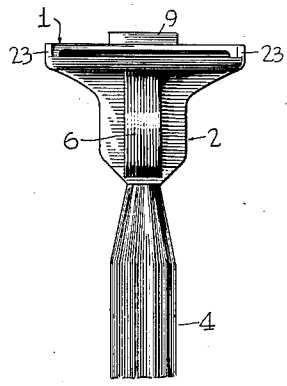


FIG. 3

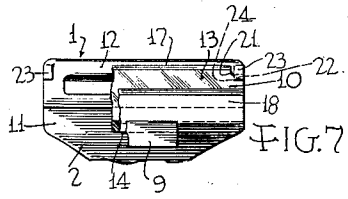


FIG. 7

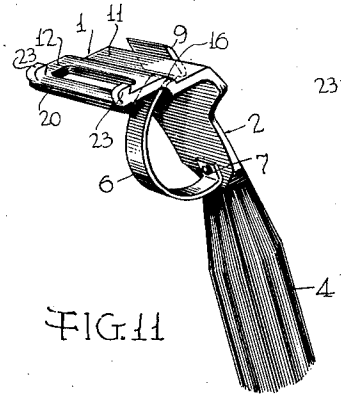


FIG. 11

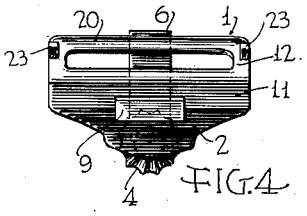


FIG. 4

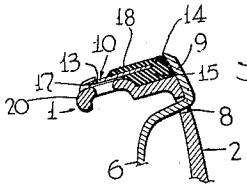


FIG. 5

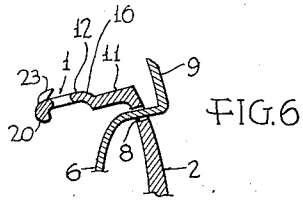


FIG. 6

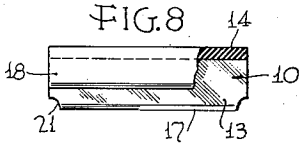


FIG. 8

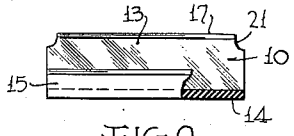


FIG. 9

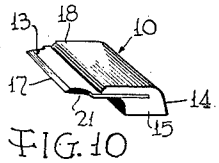


FIG. 10

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RAZOR

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6 Claims. (Cl. 30—67)

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This invention relates to safety razors of the type in which a single-edge blade is used, and has for an object the provision of improvements in this art.

One of the particular objects of the invention is to provide a holder and blade of such shape that the blade will lie firmly upon its seat on the holder and securely maintain its proper position in use.

Another object is to provide a razor having a small head which permits ease of shaving under the chin and below the nose, with a blade which can be easily and safely handled and which is covered with a material which will not retain heat to an unpleasant extent when in contact with the face.

Another object is to provide improved positioning means for the front edge of the blade so that the cutting edge is properly located relative to the edge of the guard and the edge is held down at the proper distance above the edge of the guard.

Another object is to provide an improved resilient clamping device for the blade which permits quick insertion and removal of a blade.

Another object is to provide an improved blade to use with the holder whereby to secure a firm and accurate disposition of the blade in the holder.

The above and other objects of the invention will be apparent from the following description of an exemplary embodiment, reference being made to the accompanying drawings, wherein:

Fig. 1 is a side elevation of a holder without the blade, part of the handle being cut away in section;

Fig. 2 is a rear elevation;

Fig. 3 is a front elevation;

Fig. 4 is a top plan view;

Fig. 5 is a vertical section through the head with the blade clamped in position therein;

Fig. 6 is a view like Fig. 5 but without the blade and showing the spring in blade releasing position;

Fig. 7 is a plan view of one end of the holder with the blade in place therein;

Fig. 8 is a top plan view of the blade alone;

Fig. 9 is a bottom plan view of the blade;

Fig. 10 is an end view of the blade; and

Fig. 11 is a top perspective view of the holder.

The razor comprises a head 1 supported by a neck 2 having a tang or stem 3 projecting into the end of a handle 4 and therein secured as by being threaded into a nut 5 embedded in the handle.

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A spring clamp 6 is secured to the neck, as by a rivet 7 or other suitable means (solder, welding, brazing or the like), and extends through the neck from front to back, as through a slot-like aperture 8. The spring 6, which is curved throughout most of its length, is straight (i. e. straighter than the other part, actually approximately on an arc struck approximately from the point of anchorage of the spring) where it passes through the slot, whereby the vertical extent of the slot need be but little deeper than the thickness of the spring stock, and whereby the rearward movement of the spring is halted at the front end of the straight part. The spring clamp has at its free end a flange or bent portion 9 which is adapted to press against the rear edge of a blade 10 and to slightly overlie the rear top edge of the blade and to hold it firmly down on its seat on the head.

The head 1 is formed with a rear lower seat 11 and a front upper seat 12 for the blade 10, the blade having a metal blade portion proper 13 and a back 14 of a material such as plastic or other suitable non-metallic material. Due to the fact that such material is generally a much poorer conductor of heat than most metals, it will not be heated to the same extent as metal would be heated when hot water is permitted to run over the razor as is usual. Therefore this plastic material will not be uncomfortably hot when applied to the skin of the user. The lower portion 15 of the back which rests on the lower-level seat 11 may be short and shaped at its front end to engage a riser 16 of the head to accurately position the front cutting edge 17 of the blade. The upper portion 18 of the back may be longer and leave only enough of the front edge of the metal blade exposed to shave, whereby only non-metallic material forms a broad surface contact with the skin. The metal blade 13 rests on the upper-level seat 12.

The cutting edge 17 of the blade stands above and behind the guard bar 20, and the blade at each end of the cutting edge is formed with an arcuate recess 21 which fits against the arcuate portion 22 of a positioning lug 23. The lug has a corner element 24 which overlies the blade to hold it down on its seat when it is pressed forward by the spring clamp.

To insert a blade it is only necessary to press the spring clamp rearwardly by squeezing it toward the neck of the holder, place a blade in position on the holder seat, and release the spring clamp to engage the back of the blade. The corner lugs at the ends of the blade seat provide

stops forward and endwise for the blade, and the riser between the lower and upper seats provides a stop for the lower portion 15 of the blade back. This riser may be square, sloping, or curved. Normally the holder lugs provide all the stopping and positioning action required but the back stop provides additional safety in case the corner lugs of the holder should be bent slightly.

The flange of the spring clamp is wide enough to provide a broad zone of pressure on the back of the blade. It limits the front movement of the spring so it would not get out of its slot.

The invention herein described may be variously modified and embodied within the scope of the subjoined claims.

I claim:

1. A safety razor comprising a head having a seat with a lower level and an upper level for a blade and a transverse riser between the two levels, a blade having a back seated on the lower seat level and the blade proper seated on the upper seat level, the front edge of the back engaging the step between levels, and means retaining the blade on its seat with the front edge of the back pressed against the riser.

2. A safety razor comprising a head having a seat for a blade, lugs on the ends of the front edge of the head for fitting in the cut-out corners of a blade and overhanging portions adapted to stand above and retain the blade, a blade adapted to rest on said seat and having arcuate cut-out corners receiving said lugs, and means retaining said blade on the seat and pressing the cut-out corners against the lugs.

3. A safety razor comprising a head having a seat for a blade, a blade on said seat adapted to be pressed forward and downward for securement, a handle having a neck portion carrying said head, and a spring clamp secured to the front of the neck passing back through the neck and terminating in a flange which presses against the back edge and top of the blade to hold it in position.

4. A safety razor comprising a head having a seat for a blade, a blade on said seat adapted to be pressed forward and downward for securement, a handle having a neck portion carrying said head, and a spring clamp secured to the front of the neck, passing back through the neck and upwardly to press against the back edge and top of the blade to hold it in position, said spring clamp having a portion passing through a slot in said neck.

5. A safety razor comprising a head having a seat for a blade, a blade on said seat adapted to be pressed forward and downward for securement, a handle having a neck portion carrying said head, and a spring clamp secured to the front of the neck, passing back through the neck and upwardly to press against the back edge and top of the blade to hold it in position, said neck having a slot for the spring clamp, and the spring clamp having a portion in the slot which is straighter than the spring front portion to move through the slot without extensive vertical shift in position, whereby the slot may closely fit the spring clamp along the part passing therethrough.

6. A razor having a holder and a blade with a rigid non-metallic back, the blade back having a short lower portion fitting in a seat of the holder and a wide upper portion to prevent contact of the metal of the blade with the skin except at the cutting edge.

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The following references are of record in the file of this patent:

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