Nov. 3, 1942. R. P. MARTIN 2,300,794

RAZOR

Filed Feb. 15, 1941

Fig. 1

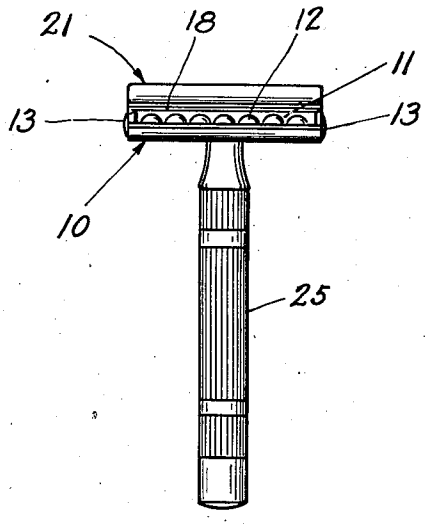


Fig. 2

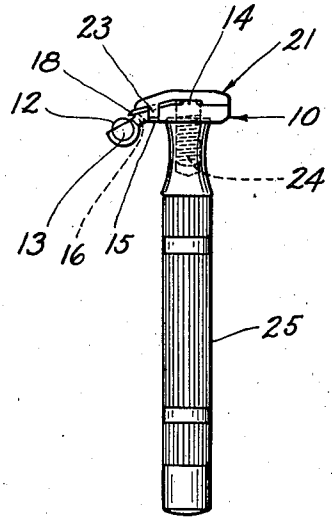


Fig. 3

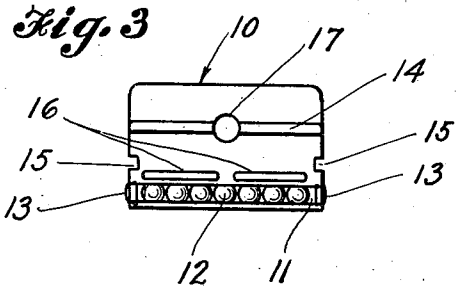


Fig. 4

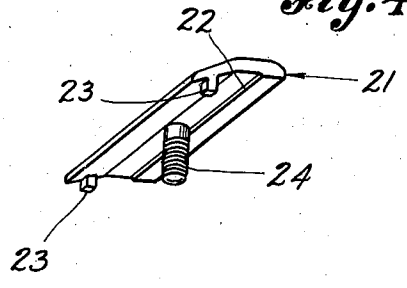


Fig. 6

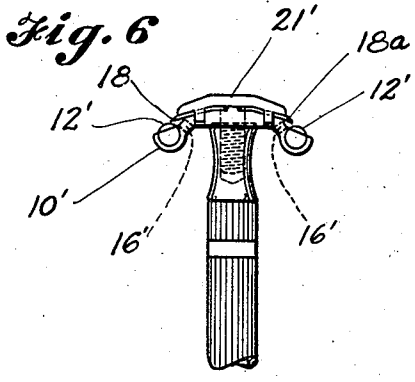
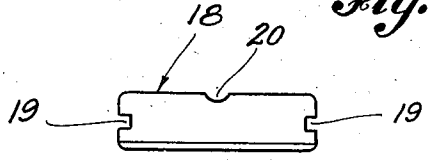


Fig. 5



INVENTOR.

Robert P. Martin.

Patented Nov. 3, 1942 2,300,794

UNITED STATES PATENT OFFICE

2,300,794

RAZOR

Robert P. Martin, Seattle, Wash.

Application February 15, 1941, Serial No. 379,038

5 Claims. (Cl. 30—77)

My invention relates to an improvement in razors, and this application is a continuation-in-part of my prior application on Safety razors, Ser. No. 304,556, filed November 15, 1939.

The object of my invention is to improve the guard of a safety razor to facilitate the shaving action by providing for freedom of movement of the razor in all directions.

A further object is to incorporate in the safety razor a razor guard provided with a plurality of spheres to roll in operation and eliminate raking and scraping, and to be used in a single and double edged razor; and a razor blade to be used in both razors in combination with the guard which guard plate is provided with slots to allow the flow of cut stubble and lather to flow through to prevent plugging up the razor.

I have illustrated a preferred embodiment of my invention in the accompanying drawing, in which:

Fig. 1 is a side view of a single edged razor provided with a single edged blade and a single edged guard.

Fig. 2 is an end view of Figure 1.

Fig. 3 is an inside view of guard plate, with bed plate and razor blade removed.

Fig. 4 is a perspective of bed plate as viewed from underside.

Fig. 5 is a plan view of blade to be used in both razors, single and doubled edged.

Fig. 6 is an end view of a double edged razor disclosing two blades as shown in Fig. 5, and a double edged guard provided with a plurality of spheres which may be made of suitable material such as ball bearings, glass, pearls, or any suitable composition.

The drawing illustrates the invention as applied, a specific form of razor provided with means to suit a blade and two razors, but it will be understood that this invention is not limited to this form but is equally applicable to other forms and shapes, such as single and double edged blades to fit razors.

In the drawing, the numeral **10** designates a guard plate in entirety; numeral **11** a seat or channel for spheres; numeral **12** indicates spheres; numeral **13** end guard to retain spheres; numeral **14** indicates key on top of guard plate; **15** indicates notch on top of guard plate to match the razor blade; **16** indicates slots in guard plate to allow the flow of lather to go through; numeral **17** indicates a hole to allow stud **24** to go through; numeral **18** indicates the blade; while numeral **18a** indicates second blade shown in Fig. 6, to operate the double-edged razor. Numeral **19** indicates notches at both ends in the razor blade; numeral **20** indicates a notch in the back of the blade so the blade may be held rigid at three points; numeral **21** indicates bed plate provided with stud **24** and lugs **23**. Numeral **22** indicates back shoulder on bed plate; numeral **23** indicates lugs on bed plate to register with notches in blade and guard plate to hold same rigid. Numeral **24** indicates clamping screw in bed plate to screw the handle **25** on; numeral **25** indicates the handle.

In operation the razor blade **5** is fitted on the bed plate Fig. 4 so notches **19** will fit the lugs **23** on the bed plate Fig. 4, and the threaded stud **24** will fit groove **20** to hold same rigid; then the guard plate is slipped on over the threaded stud **24** and notches **15** in the guard plate, and the handle **25** is screwed on to stud **24**, and the single edged razor and blade is assembled ready as shown in Fig. 1 and Fig. 2; while the assembly of the double edged razor will be practically the same with the exception of adding another blade provided with a second guard to the plates.

The channel **11** for the balls or spheres **12** is formed in a portion at the edge of the guard plate **10** that is offset laterally substantially from the major portion of the width of said guard plate, as shown in Figs. 2 and 6, with said channel extending lengthwise of the blade cutting edge. The channel **11** is so positioned that it projects outwardly beyond the free edge of the bed plate **21** and the cutting edge of the blade. The balls or spheres **12** in the channel are confined loosely therein free for turning movement in all directions and extend in a straight line lengthwise of the guard plate with portions of the balls projecting from the channel **11** toward the cutting edge of the blade **18** to ride on the skin at the point of cutting and to smooth out the skin for accomplishing the desired cutting action. The razor may be used in any desired stroke either at right angles to the length of the blade or in an arcuate or angular movement, the balls or spheres rolling over the surface freely and providing for a smooth cutting action without pulling of the hairs.

It will be understood that my invention is not limited to any particular construction or type of razors illustrated and described, but may be adapted and employed to all forms of razors in which a razor blade may be used on two razors and a guard provided with a plurality of spheres seated to suit the razor.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. In a safety razor having a guard plate, a bed plate, means for securing the bed plate and guard plate together in clamping relation with lateral edge portions of said plates adjacent each other, and a blade clamped between said plates and having a cutting edge projecting free of said lateral edge portions, the edge portion of said guard plate substantially throughout the length thereof being offset laterally substantially from the major portion of the width of said guard plate and having a channel in said offset edge portion extending lengthwise of the blade cutting edge, and said channel portion projecting outwardly beyond the free edge of the bed plate, and a series of balls confined in said channel and respectively free therein for turning movement in all directions, said balls being arranged adjacent the blade cutting edge and forming a guard therefor and permitting movement of the razor in any direction over the skin.

2. In a safety razor having a guard plate, a bed plate, means for securing the bed plate and guard plate together in clamping relation with lateral edge portions of said plates adjacent each other, and a blade clamped between said plates and having a cutting edge projecting free of said lateral edge portions, the edge portion of said guard plate substantially throughout the length thereof being offset laterally substantially from the major portion of the width of said guard plate and having a channel in said offset edge portion extending lengthwise of the blade cutting edge, and said channel portion projecting outwardly beyond the free edge of the bed plate, and a series of balls confined in said channel and respectively free therein for turning movement in all directions, said balls being arranged adjacent the blade cutting edge and forming a guard therefor and permitting movement of the razor in any direction over the skin, said guard plate having a slot therein and extending lengthwise thereof parallel with the channel and adjacent to said channel beneath the free cutting edge of the blade for discharging cut hairs therethrough.

3. A guard plate for a safety razor adapted to receive a blade thereon with a lateral cutting edge, said guard plate having an edge portion substantially throughout the length thereof offset laterally from the major portion of the width of said guard plate, said offset edge portion having a channel therein and extending lengthwise thereof, and a series of balls confined in said channel and respectively free therein for turning movement in all directions, said balls forming a guard for the blade cutting edge and permitting movement of the razor in any direction over the skin.

4. A guard plate for a safety razor adapted to receive a blade thereon with a lateral cutting edge, said guard plate having one edge portion only thereof substantially throughout the length thereof offset laterally from the major portion of the width of said guard plate, said offset edge portion having a channel therein and extending lengthwise thereof, and a series of balls confined in said channel and respectively free therein for turning movement in all directions, said balls forming a guard for the blade cutting edge and permitting movement of the razor in any direction over the skin.

5. A guard plate for a safety razor adapted to receive a blade thereon with lateral cutting edges, said guard plate having each opposite edge portion substantially throughout the length thereof offset laterally from the major portion of the width of said guard plate, said offset edge portion having a channel therein and extending lengthwise thereof, and a series of balls confined in said channel and respectively free therein for turning movement in all directions, said balls forming a guard for the adjacent cutting edge of the blade and permitting movement of the razor in any direction over the skin.

ROBERT P. MARTIN.