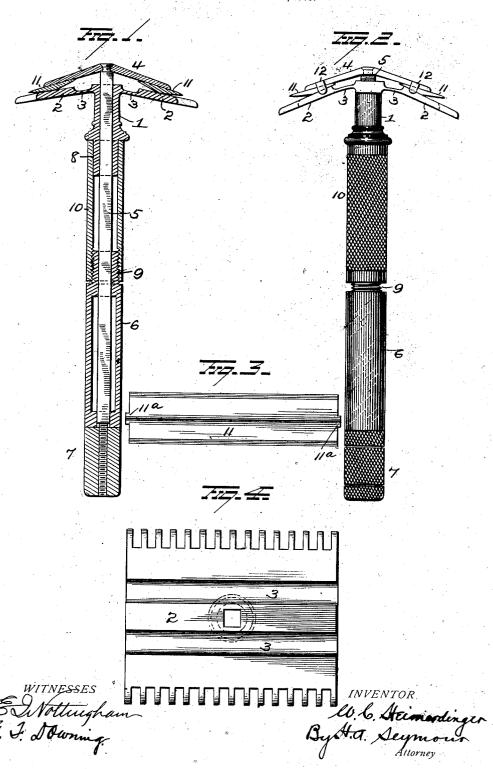
W. C. HEIMERDINGER. SAFETY RAZOR. APPLICATION FILED JAN. 18, 1905.



UNITED STATES PATENT OFFICE.

WILLIAM C. HEIMERDINGER, OF LOUISVILLE, KENTUCKY.

SAFETY-RAZOR.

No. 845,783.

Specification of Letters Patent.

Patented March 5, 1907.

Application filed January 18, 1905. Serial No. 241,662.

To all whom it may concern:

Be it known that I, WILLIAM C. HEIMER-DINGER, a resident of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Safety-Razors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it apper-10 tains to make and use the same.

My invention relates to improvements in safety-razors, the object of the invention béing to provide an improved flexible guard and means for adjusting the same to vary its position with relation to the blade or blades, and, further, to so construct the blade as to facilitate such adjustment of the guard.

With these and other objects in view the invention consists in certain novel features of 20 construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in longitudinal section, illustrating my 25 improvements. Fig. 2 is a view in side elevation. Fig. 3 is a plan view of a blade, and Fig. 4 is a plan view of the guard.

1 represents a sleeve having a double guard 2 integral therewith and the wings of said guard grooved or otherwise thinned, as shown at 3, to give elasticity and flexibility to the wings for a purpose which will hereinafter appear.

4 represents the backing-plate, which is of 35 sufficient thickness to insure its rigidity and is secured at its center to an angular rod 5, which projects through the angular bore of sleeve 1. A holding-sleeve 6 has angular openings to receive the rod 5, and the latter is screw-threaded at its end to receive a thumb-nut 7. Sleeves 1 and 6 have cylindrical shanks 8 and 9, respectively, to receive an adjusting-sleeve 10, and the shank 9 has screw-threads meshing with threads in 45 sleeve 10, so that when the latter is turned the guard 2 and backing-plate 4 will be separated or moved toward each other, as the case may be.

11 represents my improved blade, two of which are employed with the razor. The blade is made with a flat side and tapers from the center of its other side down to its edges. In other words, the blade in cross-section is triangular, and such triangular shape in 55 cross-section provides a flat side to rest

two inclined surfaces, against either of which the flexible guard may be located according to the closeness of shave desired, as will now be explained.

With the parts as shown in Fig. 1 it will be seen that the blade edge lies close to the guard and is in position for an ordinary clean shave. By turning sleeve 10 the center of the guard may be forced toward the backing- 6: plate, and the wings thereof will fulcrum on the highest or thickest portion of the blades to swing the guard-fingers away from the blade edge, as shown in Fig. 2, ready for a close shave. At either adjustment the flat 70 portions of the guard rest against flat faces of the blades, and the blades are securely clamped at either adjustment.

To prevent lateral movement of the blades, the backing-plate 4 is provided with lugs 12, 75 which latter also serve to limit inward movement of lugs 11ª at the ends of the blades, and to prevent accidental displacement of the blades while assembling the parts either the backing-plate or guard is magnetized, so 80 as to attract and hold the light blade and prevent its slipping out of place before it can be securely clamped.

A great many slight changes might be made in the general form and arrangement 85 of the parts described without departing from my invention, and hence I would have it understood that I do not restrict myself to the precise details set forth, but consider myself at liberty to make such slight changes go and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is-

1. A blade for a safety-razor having a flat bearing-face on one side and the other side having inclined faces terminating at the edges of the blade, in combination with a yielding guard to receive the side of the 100 blade having the inclined faces, and an adjustable backing-plate to bear against the flat face of the blade.

2. A blade for a safety-razor thickest at its center, and having two inclined faces on one 105 side tapering from the center of the blade to the edges thereof, the other side of said blade having a flat bearing-face, in combination with a yielding guard to receive the side of the blade having the inclined faces 110 cross-section provides a flat side to rest and an adjustable backing-plate to bear against the flat face of backing-plate 4 and against the flat face of the blade.

3. In a safety-razor, the combination of a rigid backing-plate, a flexible guard and a blade held between and by said rigid backing-plate and flexible guard, said blade having 5 two beveled faces on one side and a flat face on the other side.

4. In a safety-razor, the combination of a rigid backing-plate, a blade having a flat face against the backing-plate, a flexible guard, so and said blade having a fulcrum on which the

guard is movable.

5. In a safety-razor, the combination of a clamp for razor-blades, comprising a rigid backing-plate and a flexible and elastic guard and a razor-blade located between said backing-plate and guard and having a fulcrum on the latter.

6. In a safety-razor, the combination of a double guard having thin portions to give conflexibility and elasticity thereto, a rigid double backing-plate, and blades securely

clamped between the guard and backingplate, said blades having fulcrum on said guard.

7. The combination with a sleeve and a 25 guard thereon, of a backing-plate, an angular rod secured to the backing and projecting through the guard-sleeve, a holding-sleeve having angular openings to receive the rod, a nut screwed onto the rod against said sleeve, 30 and an adjusting-sleeve having screw-threaded engagement with the holding-sleeve; and bearing at its other end against the guard-sleeve.

In testimony whereof I have signed this 35 specification in the presence of two subscrib-

ing witnesses.

WILLIAM C. HEIMERDINGER.

Witnesses:

A. S. Ferguson, S. W. Foster.