

A. BEMMERER.
SAFETY RAZOR.

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1,049,198.

Patented Dec. 31, 1912.

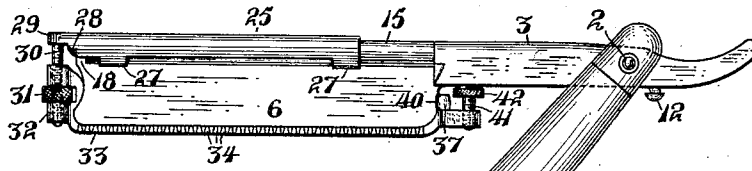


Fig. 1.

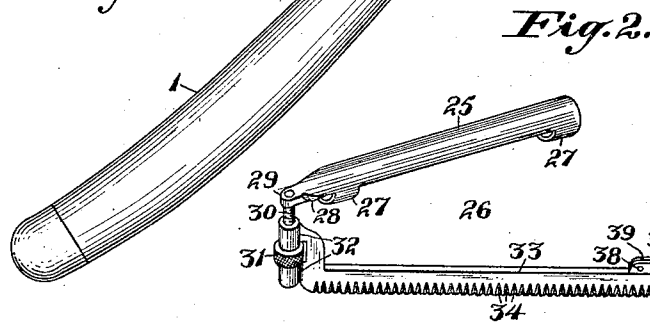


Fig. 2.

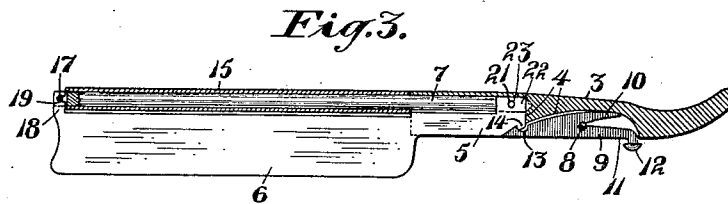


Fig. 3.



Fig. 4.



Fig. 5.



Fig. 6.

WITNESSES:

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SAFETY-RAZOR.

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To all whom it may concern:

Be it known that I, AUGUST BEMMERER, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Safety-Razors, of which the following is a specification.

The present invention relates to improvements in safety razors and the objects of the invention are to provide a razor of this character, in which the razor will be held within the holder or tang positively and securely, and not merely by friction; one having an improved guard which will permit of readily changing the side of the razor to which it is applied, of varying the extent of projection of the guard over the edge of the blade, and of adjusting the same as the blade wears and becomes narrower.

In the accompanying drawing, Figure 1 is a side view of the razor; Fig. 2 is a perspective view of the guard detached; Fig. 3 is a side view of the razor blade detached the roller and tang being shown in section; Fig. 4 is a broken side view of the roller detached; Fig. 5 is a side view of the stem or shaft for said roller detached; Fig. 6 is a broken side view of another form of back used when wet honing the razor.

Referring to the drawing, 1 indicates a razor handle of usual construction, that is, comprising two side plates of bone, rubber, celluloid or the like, between which is pivoted, as shown at 2, a holder or tang 3. The outer end of said tang is formed with a deep groove 4, which is adapted to receive the shank 5 of the razor blade 6, the bottom of said groove being enlarged and rounded to receive the end of a stem 7, which carries said razor blade 6. Pivoted in said groove, on a transverse pin 8, is a latch lever 9, which at its rear end is forked, its inner part 10 bearing against the bottom of said groove 4, and forming a spring, which, by its pressure against said bottom, holds the front end of said latch in, so that its outer edge is flush with the outer edge of the tang. The outer portion 11 of said forked end of the latch is extended outside the groove 4, and is formed with a knob 12 by which pressure may be applied to the rear end of the latching lever to move it inward against the pressure of said spring portion 10 and extend its front end outward. In the inner edge of said front end is formed a notch 13, which is adapted to engage a tooth 14 formed

in the edge of the shank 5 of the razor blade. When said notch so engages said tooth, the shank 5 and the stem 7 are held securely in the groove 4, but, upon pressing inward the knob 12 on the rear end of said latching lever, the front end is moved outward withdrawing the notch 13 from the tooth 14, and permitting the stem to be removed. This permits the razor blade to be changed, or to be honed on a wet hone, in which case it would be desirable to use a solid back instead of the hollow back hereinafter described, the objection to the latter being the entrance of the water thereinto, and the consequent rusting, and also the escape of the water upon the surface of the strop, spoiling the strop. The razor blade is secured upon its stem in the following manner. Around said cylindrical stem 7 is first passed a roller tube 15. The outer end of the stem is slit longitudinally, as shown at 16, and extending across said slit is a pin 17. The outer end of the blade is formed with a rear extension 18, the inner edge of which is formed with a half round bearing 19 which, when said extension 18 is passed into said slit 16 in the end of the stem, is adapted to engage said pin 17 and swing thereon. Having first so engaged said pin, the blade is then moved into a position parallel with the stem, and the free end of the shank 5 of the blade is then opposite to, or over, the other end 20 of the stem 7, which end is reduced in thickness and flattened on its inner surface, and from said flattened end extends a transverse pin 21. The free end of the shank 5 of the blade is formed with a rear extension 22, which is adapted to coincide with the flattened end of the stem 20, and said extension 22 is formed with an aperture 23, into which is adapted to pass the said pin 21, and in this position the blade is held securely upon the stem. The stem is now passed into the inner rounded portion of the bottom of the groove 4 and the shank 5 of the blade passes into said groove or slit 4 itself, until the tooth 14 formed in the edge of said shank is engaged by the notch 13 of the spring latch, and the blade is then held securely in the holder of the razor.

25 indicates a support for a safety guard 26. It is of a general tubular form, and is adapted to pass around the roller 15 but is open on one side to permit it to pass on opposite sides of the blade of the razor. The edges of said open side are formed with pairs of extensions 27 one at an extreme

end and the other near the other end, the extensions of each pair nearly meeting each other and their edges being adapted to press against the sides of the blade and guide the guard in proper position as it is slid upon the roller. The inner ends of the two sides of the tubular support are pressed inward to form lugs 28 to arrest the support, when it has been slid over the roller the proper distance, and said support is extended beyond said lugs 28 to form a base 29 from which extends transversely a screw 30. Upon said screw is screwed an adjusting nut 31, and, pivoted on said screw on each side of said nut, are the two parts of the forked end 32 of a guard 33, which is formed at its edge remote from the support with serrations or grooves 34, which, when in proximity to the sharp edge of the blade prevent cutting of the skin in shaving. This manner of attachment of the guard to the support therefore permits of either side of the blade being used. When in either position it is adapted to be securely retained by means of a latching plate 37, which is riveted, as shown at 38, to an inward extension 39 of said guard and is formed with two notches 40, one or the other of which, according to the side on which the guard is swung, is adapted to engage an edge of the blade extending from the shank transversely to the sharp edge, and, by said engagement to hold said guard in position. Into the free end of the guard is screwed a screw 41, having a milled head 42 which, when the blade is in position, bears against the edge of the tang or holder, so that, by turning said screw, and also by turning the nut 31 upon the screw 30, the distance of the guard plate from the back of the razor may be varied as desired, either to vary the amount of overhang of the guard over the sharp edge of the blade, or to adjust the device for reduction in the width of the blade due to wear.

When it is desired to sharpen the razor by wet honing, if this were done with the above described roller back on the razor, the moisture from the wet hone would enter between the roller and the stem, which would be injurious by causing the stem to rust, and by allowing the moisture to escape on to the strop, when stropping, and thereby injuring the strop. To avoid this it is desirable, in such honing, to remove the stem and roller back and replace the same by a solid back 44 of the same general form as said roller and stem when assembled, but without any interstices into which liquid can enter, thereby avoiding the above objections.

The important features of this invention are; first, the provision of a roller back on the blade so that, in stropping, the back, in-

stead of scraping along the strop, rolls thereover and does not remove the strop dressing; the specific arrangement for securing the blade to the tang of the razor positively and without relying upon the friction alone, whereby there is no danger of the blade being accidentally removed or becoming loosely supported; second, the form and arrangement of the guard, with its support, and the means for adjusting the same, which not only permits of accurate adjustment to suit the requirements of the user, and of adjusting for wear, but also of independent adjustment at the two ends, if the blade should wear faster at one end than at another.

I claim:

1. A support for a safety razor guard adapted to be supported on a razor blade, and having at one end a base, a screw extending transversely from said base, and a guard adjustably connected at one end with said screw, and having at the other or free end a latching plate formed with notches, either of which can engage the corresponding end of the blade, substantially as described.

2. In combination with a razor blade having a shank, a support for a safety guard supported on said razor blade, and a guard adjustably secured at one end to the corresponding end of the support, its other end being free and provided with means for detachably engaging the corresponding end of the blade, and a screw screwed into said free end and having a head bearing against the edge of the razor shank to vary the position of said guard relatively to the blade, substantially as described.

3. In combination with a razor blade having a shank, a support for a safety guard comprising a part engaging both sides of a back of the razor blade, and having at one end a base, a screw extending transversely from said base, an adjusting nut thereon, and a guard having a forked end engaging said screw on opposite sides of said nut, and having at the other or free end a latching plate formed with notches, either of which can engage the corresponding end of the blade, and a screw screwed into said free end having a head bearing against the edge of the razor shank to vary the position of said guard relatively to the blade substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

AUGUST BEMMERER.

Witnesses:

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