

L. NAHEMOW.
SAFETY RAZOR.
APPLICATION FILED JAN. 11, 1909.

952,837.

Patented Mar. 22, 1910.

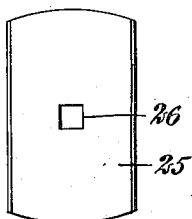


FIG. 4.

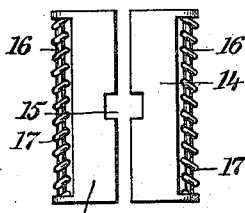


FIG. 3.

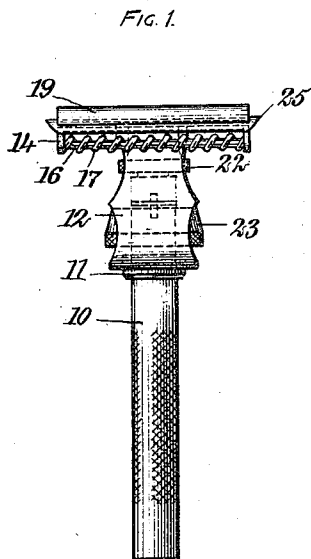


FIG. 1.

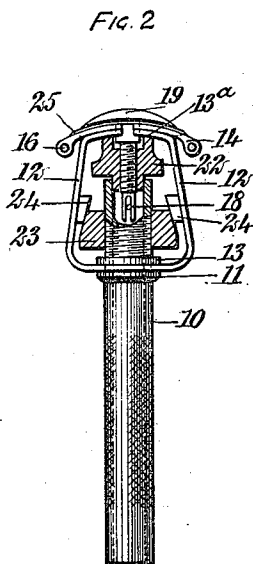


FIG. 2.

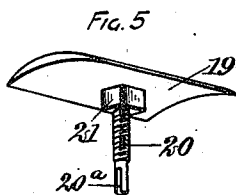


FIG. 5.

WITNESSES

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SAFETY-RAZOR.

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952,837.

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To all whom it may concern:

Be it known that I, LOUIS NAHEMOW, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Safety-Razor, of which the following is a full, clear, and exact description.

The invention is an improved safety razor, and in its preferred form belongs to that general type of such devices in which a double guard plate is arranged at right-angles to the handle and is to be used in connection with a flexible blade.

Heretofore the adjustability of safety razors using flexible blades depended upon the curve to which the blade was bent, the adjustment being obtained by slacking the clamping plate to admit of the blade slightly straightening out, thus raising the cutting edges from the guard plate, thereby rendering the razor less safe.

By my invention the cutting edges of the blade are retained close to the guard plate at all times during the use of the razor, and each guard or guard plate is made as a separate section, with means to spread the sections apart or move them together according to whether a close shave or otherwise is desired.

The invention further resides in providing each guard with rotary teeth which are arranged in a helix to feed the skin obliquely to the cutting edge of the blade, the winding of the teeth of one guard being reverse to the winding of the teeth of the other guard.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of a safety razor constructed in accordance with my invention; Fig. 2 is a view of the razor looking at right-angles to the position shown in Fig. 1 and partly in central vertical section; Fig. 3 is a plan of the sectional guard; Fig. 4 is a plan of the razor blade; and Fig. 5 is a perspective view of the clamping plate.

The razor is provided with a handle 10 of suitable form which is threaded at its inner end, with a collar 11 at the outer end of the thread, on which is seated a spring yoke 12, the latter being fixed to the handle between the collar and jam-nut 13. The spring arms

of the yoke project inwardly beyond the inner threaded end of the handle and opposed end portions 13^a, to which is fixed a double guard or guard plates 14, as shown in Fig. 3, each guard or guard plate 14 being constructed as a separate section, with one of the sections carried by each arm. The double guard has a central angular opening 15 and is formed with an outer convex face. At the outer edge of each guard plate is journaled a roller 16 having a wire 17 wound helically thereabout to feed the skin to the blade teeth, the winding of the teeth of one roller being reverse to the winding of the teeth of the opposite roller.

The inner threaded end of the handle 10 is of tubular construction and is provided with a cross-pin 18. A clamping plate 19, as shown in perspective in Fig. 5, has a concave inner face, from which projects a threaded shank 20, the latter having an enlarged angular portion 21 at its inner end to fit the opening 15 in the double guard. The extremity 20^a of the shank 20 is bifurcated and engages, when the razor is assembled, over the cross-pin 18. Threaded on the shank 20 and bearing on the opposed portions 13^a of the yoke is a nut 22, the nut having a recess in its inner face for receiving the angular portion 21 of the shank 20, and provided with a boss on its opposite face fitting within the bore of the handle. Threaded on the handle 10 within the yoke is a conical nut 23 which bears at opposite sides on beveled lugs 24 in fixed relation to the spring arms of the yoke, the bevel bearing faces of the lugs conforming to the taper of the nut, and with the smaller end of the nut facing inwardly.

The double edge blade 25 for the razor, as shown in detail in Fig. 4, is of a thin flexible construction and has a central opening 26 of angular form to fit the angular portion 21 of the clamping plate shank. In assembling the razor the shank of the clamping plate is passed through the blade and the latter seated on the double guard, with the bifurcated inner end of the guard shank engaged over the pin 18, the nut 22 being threaded on the shank as the latter is passed into the tubular end of the handle. On tightening the nut 22 the blade is clamped to the guard and enforced to conform to the outer convex face thereof, the clamping plate binding on the blade at the edges only. On adjusting the conical nut 23 the two sec-

tions or guards of the double guard are moved to any required position relatively to the cutting edges of the blade, the guards being spread apart when the nut is screwed inwardly, and the guards approaching each other under the influence of the spring arms of the yoke when the nut is screwed outwardly.

In shaving, the rotary teeth of the guard in use, feed the skin to the blade in a direction corresponding to the winding of the rib or teeth and obliquely relatively to the cutting edge of the blade, whereby a shearing cut is attained and a clean, smooth shave effected.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a razor having a blade with cutting edges at the opposite sides, a roller adjacent to each cutting edge of the blade, having helical teeth to feed the skin to the blade obliquely to the said cutting edge, with the winding of the teeth of one roller reverse to the winding of the teeth of the other roller, whereby the feeding of the teeth of one roller is to one side of a median line and the feeding of the teeth of the other roller is to the opposite side of the said line.

2. In a razor, a handle, a double guard arranged at approximately right-angles to the handle, each guard of the double guard of a separate section, a support for each guard, a razor blade having cutting edges and means to operatively engage with the guard supports to simultaneously spread the guards apart and move them together to adjust them to the cutting edges of the razor blade.

3. In a razor, a handle, a yoke secured to the handle having spring arms, a guard carried by each of said arms providing a seat for a razor blade, and means for spreading the arms to adjust the guards to the cutting edges of the razor blade.

4. In a razor, a handle, a yoke secured to the handle having spring arms, a double guard made in two sections, with a section attached to each of the spring arms and

providing a seat for a razor blade, and a conical nut threaded on the handle and bearing on the spring arms to spread the latter apart in adjusting the sections of the double guard to the cutting edges of the razor blade.

5. In a razor, a double guard having a convex face, the guard being constructed of two guard sections oppositely arranged, a thin flexible blade having cutting edges at opposite sides, means to clamp the blade to the guard and enforce the blade to conform to the convex face of the guard, and means to move the guard sections to and from each other whereby they are adjusted to the cutting edges of the flexible blade.

6. In a razor, a handle, a yoke fixed to the handle and extended over the inner end thereof, guards carried by the yoke, said handle having a tubular inner end provided with a cross-pin, a clamping plate having a shank passing through the guard, said shank having a bifurcated inner end engaging over said cross-pin, and a nut to draw the clamping plate to the guards, threaded on the shank and bearing on the inside of the yoke.

7. In a safety razor, a handle, a yoke attached to the handle, having spring arms provided with opposed end portions extending over the end of the handle, a double-edge guard composed of two separate guard sections, with the sections attached to the opposed end portions of the spring arms, a clamping plate having a shank passing between the guard sections of the double guard, a nut to draw the clamping plate to the guard, threaded on said shank and bearing on the inside of the guard, lugs fixed on the spring arms of the yoke, and a conical nut threaded on the handle and bearing on the lugs.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS NAHEMOW.

Witnesses:

W. W. HOLT,
JOHN P. DAVIS.