No. 875,008. PATENTED DEC. 31, 1907.

J. J. STEINHARTER.

SAFETY RAZOR.

APPLICATION FILED MAR. 16, 1907.

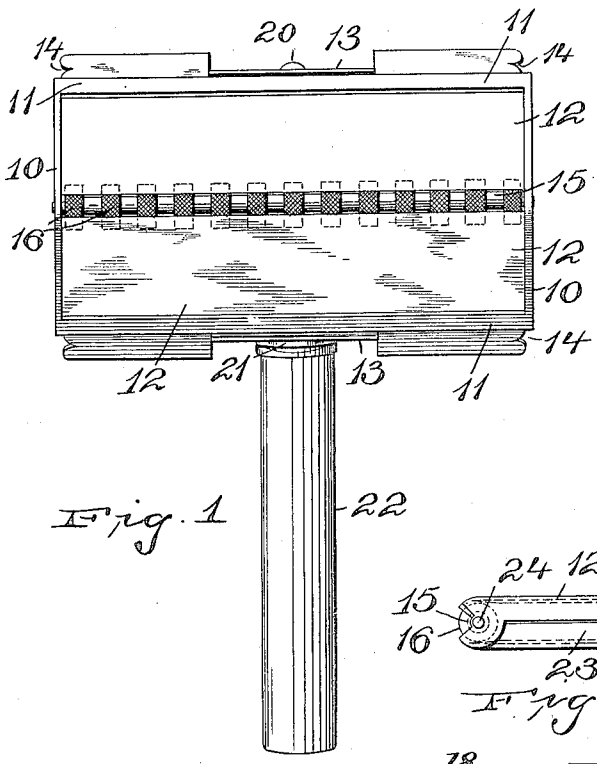


Fig. 1

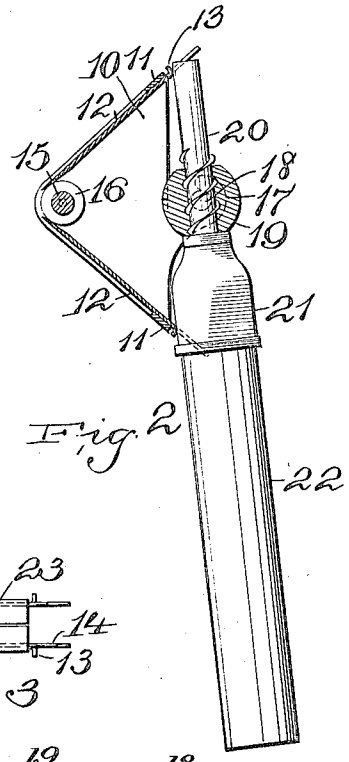


Fig. 2

Fig. 3

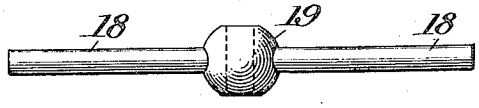


Fig. 4.

WITNESSES:

S. A. Rogers

E. A. Pell

INVENTOR

Joseph J. Steinharter

BY

Mc H. Campfield.

ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH J. STEINHARTER, OF NEWARK, NEW JERSEY, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE NEWARK SAFETY RAZOR COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

SAFETY-RAZOR.

No. 875,008. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed March 16, 1907. Serial No. 362,609.

To all whom it may concern:

Be it known that I, JOSEPH J. STEINHARTER, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a safety razor that is designed to provide a casing to hold a razor blade or blades, and is designed to provide, adjacent to the cutting edges of the blade or blades, a roller which acts both as a guard, and also tends to rotate and to draw back, from the edge of the blade, the lather and the hairs that at present accumulate adjacent to the cutting edges, and tends to keep the cutting edge of the blade cleaner and less apt to have its efficiency interfered with by the accumulation aforesaid.

The invention is designed to provide a roller of this kind in conjunction also with a pair of blades set at angles to one another, these blades acting as a guard for each other when either is being used, this form of razor being described and illustrated, at length, in my application filed on March 9, 1907, Ser. No. 361,536.

Another object of the invention is to provide the blades, forming this improved razor, with means for limiting the movement of the blades into the casing holding them, and another new feature of the device is a razor of this kind, the side pieces of which are swiveled so that the casing can be folded to be packed in a small space.

The invention is illustrated in the accompanying drawing, in which

Figure 1 is a front view of my improved razor, and Fig. 2 is a side view of the same, the casing, the roller and the blade, however, being shown in section. Fig. 3 is a side view of a modified form of casing for the razor blades. Fig. 4 is a detail view of the bar that receives the handle.

In the form of razor shown in Figs. 1 and 2, I employ a casing comprising the end plates 10 which have the connecting strips 11 at the top and bottom, and sliding in this casing, in grooves in the side edges or in any other conventional way, are a pair of blades 12 with their cutting edges separated by a slight space, these blades being limited in their forward movement by means of the lips 13 which are struck up from the back edge, in longitudinal relation to the edge, and the blades have the side notches 14 so that these notches can be engaged by the finger-nails of an operator to provide an easy means for grasping the razor blades to withdraw them.

Close up to the cutting edges, and underneath them, is arranged a roller 15 journaled in the end plates 10, and provided with the enlarged and roughened portions 16 which are arranged in close proximity to, but do not touch the razor blades 12. This roller 15 is free to revolve, and when the razor is operated, the lather and hair that is taken off of the face is carried back from the edge of the blade by this roller which can rotate in any direction, and is applicable to either blade. The blades are held in the casing by reason of the nut 19 having extensions 18 which are swiveled in hooks 17, these hooks being arranged on the back edge of each of the end plates 10. Through the nut 19 passes a screw-threaded rod 20, the end of which bears on one of the ribs or lips 13, and an enlarged portion 21 bears on the other lip 13 of the second blade 12, the whole being supported on the handle portion 22, this means fastening the blades in the casing, and also fastening the handle to the casing.

If desired, I can make the side frames as shown in Fig. 3, two members 23 being jointed at 24, this joint being also utilized, if desired, as a journal for the roller 15. This mechanism provides a casing that can be folded up to a small compass, which makes it desirable on account of allowing it to be packed in a small box, and there is no cumbersome package if the razor is used when traveling. This structure also makes an easy running razor, as the rotation of the roller allows the razor to pass smoothly over the skin, and there is an easier motion than when the guard is arranged to slide on the face. This rolling motion does not cause the hair to be smoothed out or flattened right before the cutting takes place, which

is not true in guards that glide smoothly over the face, the rotation of the roller tending to straighten up the hair before the cutting, and thus making the operation of the shaving more pleasant.

Having thus described my invention, what I claim is:—

1. A razor comprising a casing, a pair of blades arranged in the casing at an angle to one another and with their cutting edges close together, and a roller arranged in the casing and adapted to rotate between the blades and in close proximity to their cutting edges.

2. A safety razor comprising a casing formed of a pair of members on each end, the members being arranged in hinged relation, blades in the casing, one being arranged in each member, and a roller arranged between the members and arranged to rotate between the blades and in close proximity to their cutting edges.

3. A safety razor comprising a pair of hinged members, and blades in the members with their cutting edges adjacent to the axis of the hinges.

4. A safety razor comprising a pair of hinged members, blades in the members with their cutting edges adjacent to the axis of the hinges, and one adapted to act as a guard for the other when the hinged members are swung apart.

5. A safety razor comprising a pair of hinged members, blades in the members with their cutting edges adjacent to the axis of the hinges, and one adapted to act as a guard for the other when the hinged members are swung apart, and a roller between the members and adapted to roll adjacent to the cutting edges of the blades.

6. A safety razor comprising hinged members, blades in the members with their cutting edges adjacent to the axis of the hinges, a roller journaled in the hinged members and adapted to rotate between the cutting edges of the blades.

In testimony, that I claim the foregoing, I have hereunto set my hand this 15th day of March 1907.

JOSEPH J. STEINHARTER.

Witnesses:
WM. H. CAMFIELD,
E. A. PELL.