No. 842,956. PATENTED FEB. 5, 1907.

F. KAMPFE.

SAFETY RAZOR.

APPLICATION FILED MAY 16, 1904.

Fig. 1,

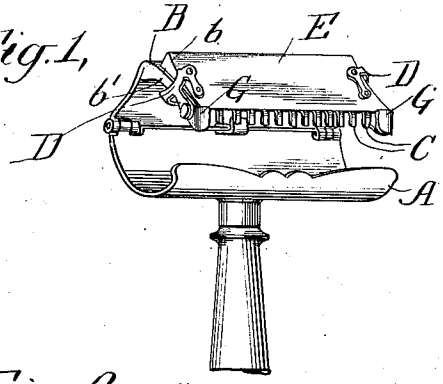


Fig. 2,

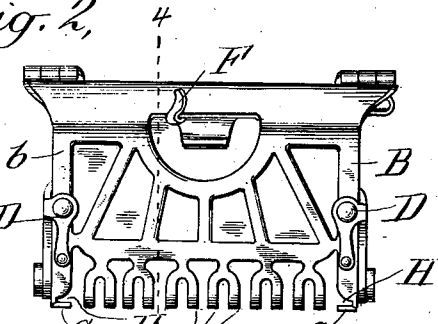


Fig. 3,

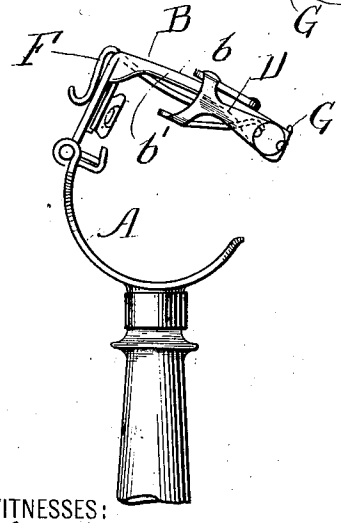
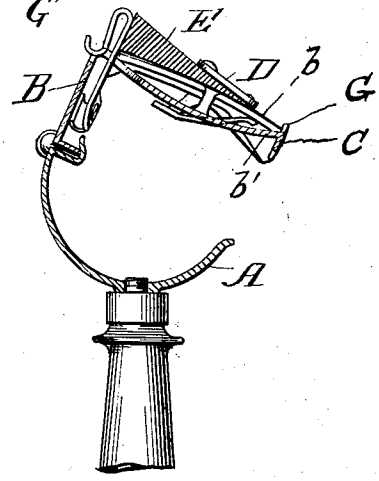


Fig 4



WITNESSES:

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SAFETY-RAZOR.

No. 842,956. Specification of Letters Patent. Patented Feb. 5, 1907.

Application filed May 16, 1904. Serial No. 208,126.

To all whom it may concern:

Be it known that I, FREDERICK KAMPFE, a citizen of the United States, and a resident of the borough of Brooklyn, county of Kings, city and State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

My invention relates to safety-razors.

In the accompanying drawings I have illustrated a construction embodying the preferred form of my invention. In these drawings similar letters of reference designate corresponding parts.

Figure 1 is a view from the front and slightly perspective; Fig. 2, a top or plan view; Fig. 3, a detailed view of one end of a casing comprising a clip, blade support and stop, and connecting devices. Fig. 4 is a cross-section on the line 4 4 of Fig. 2.

Referring now to the drawings, A designates the lower part of a casing, and B the upper part of a casing, which may be either hinged or rigidly secured to the lower part. C designates a set of guard-teeth which preferably will be rigidly secured to and substantially integral with the upper part B of the casing.

D designates clips, which may be of any suitable shape and construction and attached in any suitable manner, but which will preferably tend normally to bear down upon the upper surface of a blade E when the same is in position upon the casing in order to retain the blade in position thereon.

As shown, the ends of the upper part of the casing are provided with end pieces or blade-supports *b*, upon which the blade normally rests when in position. Furthermore, as shown, depending flanges *b'* are rigidly secured to and preferably formed integral with these blade-supports. To these depending flanges *b'* the clips are shown as being pivotally connected at their forward ends. Any other suitable construction may be used, however.

F designates a back spring which is constantly under a tension in a forward direction and which when the blade is in position on the casing tends to force the same forward. If the clips are spring-clips or in any other way self-adjusting clips, it is evidently desirable to provide some permanent means of stopping the forward movement of the blade. Various forms of forward stops have been devised and various methods of making such stops have been worked out. Down to date, however, so far as I am aware, all stops have been defective, first, in that they were too narrow and too apt to cut or break the cutting edge of the blade, and, second, in that they were directly connected to and formed practically a continuation of either a guard-tooth or a blade-support or some part upon which the blade rested directly or upon which its drippings were apt to collect. In the construction shown in the accompanying drawings, illustrating the preferred form of my invention, two forward stops G are provided, each of a considerable width relative to the width of the blade-support and to the end guard-teeth. Furthermore, as shown and preferably, a space is provided intermediate the blade-supports proper and the stops. As a result in the first place the blade is not so apt to cut, chip, or have its cutting edge deteriorated. In the second place there is much less danger of dirt or any other undesirable substance collecting and being forced into contact with the said stops or either of them, and thereby interfering with the perfect position or alinement of said blade.

As shown in the accompanying drawings, the stops G are formed by bending extensions of the metal forming the flanges *b'*, arranged at the forward or front ends thereof at substantially right angles to said flanges and of such a width and construction as to form stops projecting slightly above the surface of the blade-holder *b*. As shown, the forward or front surfaces of these stops G serve as end guard-teeth at the same time that their interior or back surfaces act as stops. As shown, these stops G are approximately the width of the end pieces or blade-supports *b*. Furthermore, as shown, slots or spaces H are formed intermediate the end of the blade-holders proper and the stops. The nearer these slots come to the inner surfaces of the stops the better; but they may be provided anywhere along the blade-supports within suitable distance of said stops. Evidently any accumulations which may form between the lower surface of the blade and the upper surface of the blade-holder will on removal and reinsertion of the blade be forced down through the said spaces rather than accumulate and form an obstruction to the cutting edge of the blade or in any way interfere with the proper position thereof.

What I claim as new is—

1. In a safety-razor, the combination with a blade of a casing having blade-supports extending substantially to the front thereof and adapted to support the blade substantially throughout its width, said supports having depending flanges, the front portions of which are bent at substantially a right angle thereto to form stops contiguous to the front ends of said supports of substantially the same width as the same, but separated therefrom by a space formed by removing a portion of the front ends of said supports.

2. The combination in a safety-razor of a casing comprising blade-supports, and depending flanges secured to said blade-supports and provided with projections extending at substantially right angles to said flanges and arranged in the front of said blade-supports and adapted to form stops to limit the forward movement of a blade.

3. The combination in a safety-razor of a casing comprising blade-supports, and depending flanges secured to said blade-supports and provided with projections extending at substantially right angles to said flanges and arranged in front of said blade-supports and adapted to form stops to limit the forward movement of a blade and also to serve as terminal guard-teeth.

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

FREDERICK KAMPFE.

Witnesses:
ARTHUR G. ZIMMER,
RICHARD KAMPFE.