

O. KAMPFE.
SAFETY RAZOR.
APPLICATION FILED OCT. 6, 1909.

1,040,347.

Patented Oct. 8, 1912.

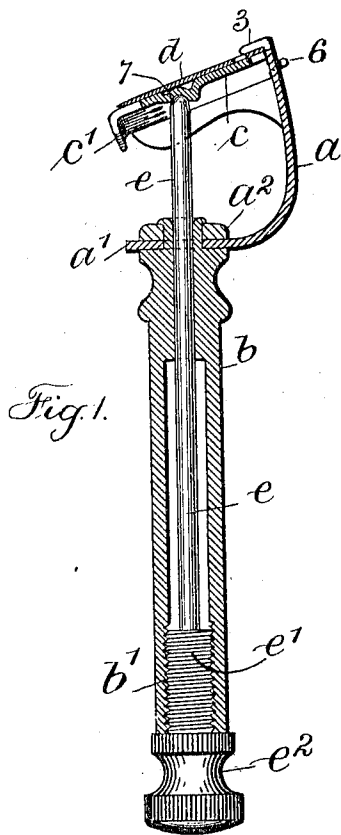


Fig. 1.

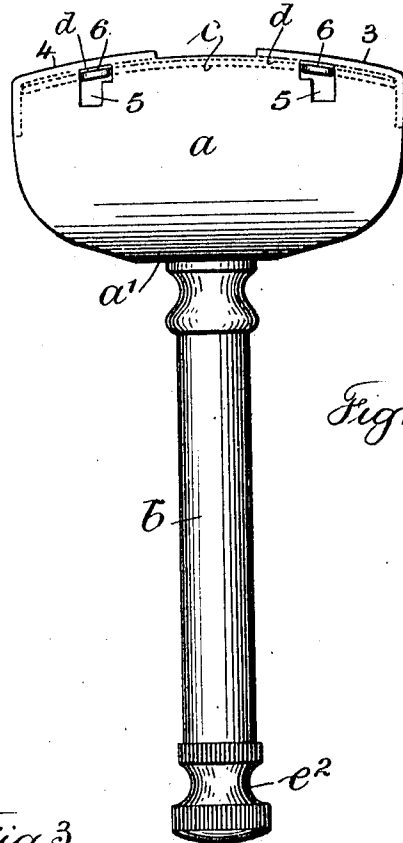


Fig. 2.

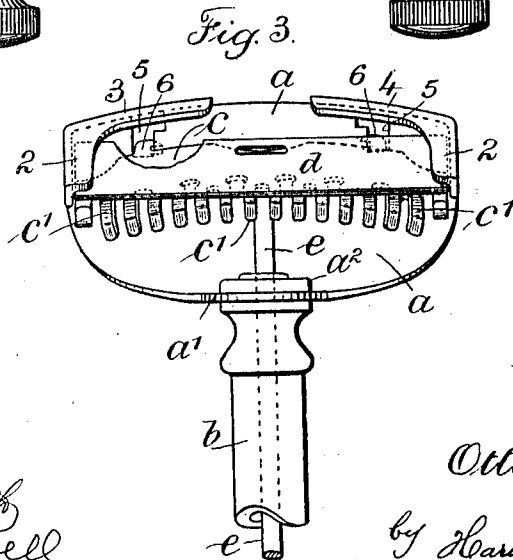


Fig. 3.

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UNITED STATES PATENT OFFICE.

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SAFETY-RAZOR.

1,040,347.

Specification of Letters Patent.

Patented Oct. 8, 1912.

Application filed October 6, 1909. Serial No. 521,270.

To all whom it may concern:

Be it known that I, OTTO KAMPFE, a citizen of the United States, residing in the borough of Brooklyn, in the county of Kings, city and State of New York, have invented an Improvement in Safety-Razors, of which the following is a specification.

My invention is designed as an improvement upon the safety razors shown and described in applications for Letters Patent filed by me, the one under date of October 2, 1906, Serial #337,152, and the other under date of July 20, 1907, Serial #384,798, with the object of freely introducing a thin flexible blade into the curved holder of a safety razor and removing the same therefrom in a normally flat condition and so removing all liability of cutting the fingers in handling the blade.

In carrying out my invention, I provide the body member with openings or bayonet slots which are as deep as is required for the extreme movement of the guard-comb between its full open position with the thin normally flat blade inserted freely in position and its extreme position under pressure with the flexible blade bent or flexed and ready for use. The construction of the safety razor holder is substantially the same as described in my before-named applications.

In the drawing, Figure 1 is a partial central section and partial elevation representing the device of my improvement. Fig. 2 is a rear view of the safety razor and Fig. 3 is a front elevation with the guard-comb moved out; in which position the normally flat blade is readily removed or inserted in the holder.

The body member *a* as will appear from the drawing is of elongated proportions. It is curved as shown in Fig. 1 in cross section and slightly arched. The upper edge of the body member is provided with overturned edges 2 3 and 4, the edges 2 coming at the sides and the edges 3 and 4 at the back. These are overturned from the upper edge of the body member so as to form a frame adapted to overlap the back and the opposite ends or three sides of the guard comb *c* and a thin normally flat blade *d*. These over-turned edges are comparatively narrow and the respective ends are preferably rounded so as not to present any blunt or

opposing point to interfere with the handling of the implement.

A part *a'* of the body member is perforated so as to receive the upper reduced end of the tubular handle *b* and a washer *a''* preferably comes over the perforated end *a'* around the reduced end of the handle which is riveted in position to firmly connect the body member at the perforated part and the washer to the tubular handle. The lower end of the tubular handle as constructed is interiorly threaded at *b'*.

c represents the guard comb longitudinally curved and transversely flat and conforming to the curved upper edge and the over-turned edges 3 4 of the body member. The guard comb is provided with teeth *c'* at its forward edge and with lugs 6 at its back edge; the lugs 6 being hook-shaped.

In the back and at the upper edge of the body member I provide apertures in the form of bayonet slots 5 at their upper parts wide enough to receive the lugs 6 of the guard comb and of a width in their lower parts to correspond with the width of the lugs back of the hook ends, consequently the guard comb when its lugs are connected at the openings 5 is free to move down the body member to the depth of the slots or openings 5.

e represents a rod passing through the tubular handle and having formed therewith at its lower end the exteriorly threaded cylinder *e'* and the knurled head *e''*; the cylinder *e'* screwing into the interiorly threaded end *b'* of the tubular handle, the rotation of which parts advances the rod *e* or withdraws the same, and I prefer as shown in Fig. 1 to provide the guard comb at about the center with an appreciable recess 7 Fig. 1 to receive the upper free rounded end of the rod *e*.

Fig. 1 shows the guard comb and the thin normally flat razor blade in a position of use with the blade under tension and in which position the guard comb is held with force against the under side of the blade and the blade clamped in the body member beneath the edges 2 3 and 4; the lugs 6 on the back of the guard comb coming into the upper parts of the slots 5 as shown in Fig. 2.

Fig. 3 in front elevation shows the position of the parts with the rod *e* withdrawn or lowered to an extent which permits of

the return of the thin razor blade to its normally flat condition. To attain this position the guard comb is moved down gradually by the force or power of the blade attempting automatically to return to a flat condition with the release of pressure, until the lugs 6 come to the lower portions of the slots 5 and the razor blade fully returns to its normally flat condition in which it is readily removed either by the fingers or by tipping the safety razor and permitting the blade to fall out. In this same position of the parts a blade may be inserted by dropping it into place. Tension then applied by a forward movement of the rod *e* and the revolution of the threaded cylinder *e*¹ by the knurled head *e*² in the handle moves the guard comb toward the over-turned edges 2 3 and 4, gradually bending or flexing the razor blade until the parts are brought into a relation of forcible contact with the blade clamped as in Figs. 1 and 2, and in which the parts are ready for use.

I claim as my invention:

1. In a safety razor, the combination with a thin normally flat removable and resilient blade, of a body member adapted to receive and having edges to extend over and engage all edges except the cutting edge of the blade, a longitudinally curved guard comb coming against the under or opposite side of the blade to flex the same and said guard comb adapted for a uniform falling and rising movement equally away from all edges upon its release, providing for the ready insertion of the thin removable blade in its

normally flat condition, said body member being provided with spaced apart vertically disposed slots of greater length than the extent of movement necessarily required for the guard comb and projecting members of the guard comb passing through such slots and movable therein and constructed for engagement therewith to prevent the accidental separation of the guard comb from the body, and means for applying tension to move the guard comb and blade bodily outward against the said edges of the body member and flex the blade.

2. In a safety razor, a longitudinally curved guard comb having hook-shaped lugs, a body member receiving the comb and having curved engaging surfaces, and having bayonet slots which in depth are placed at right angles to the plane of the lugs and receive said lugs, a thin normally flat removable resilient blade placed freely between said guard-comb and body member in its normally flat condition and means for moving the comb and blade bodily and so applying tension to bend and flex the blade and clamp the same ready for use between said parts, the release of which clamping means permits the resilient blade to straighten or return to its normally flat condition and in so doing move the guard comb.

Signed by me this 29th day of Sept. 1909.

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Witnesses:

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