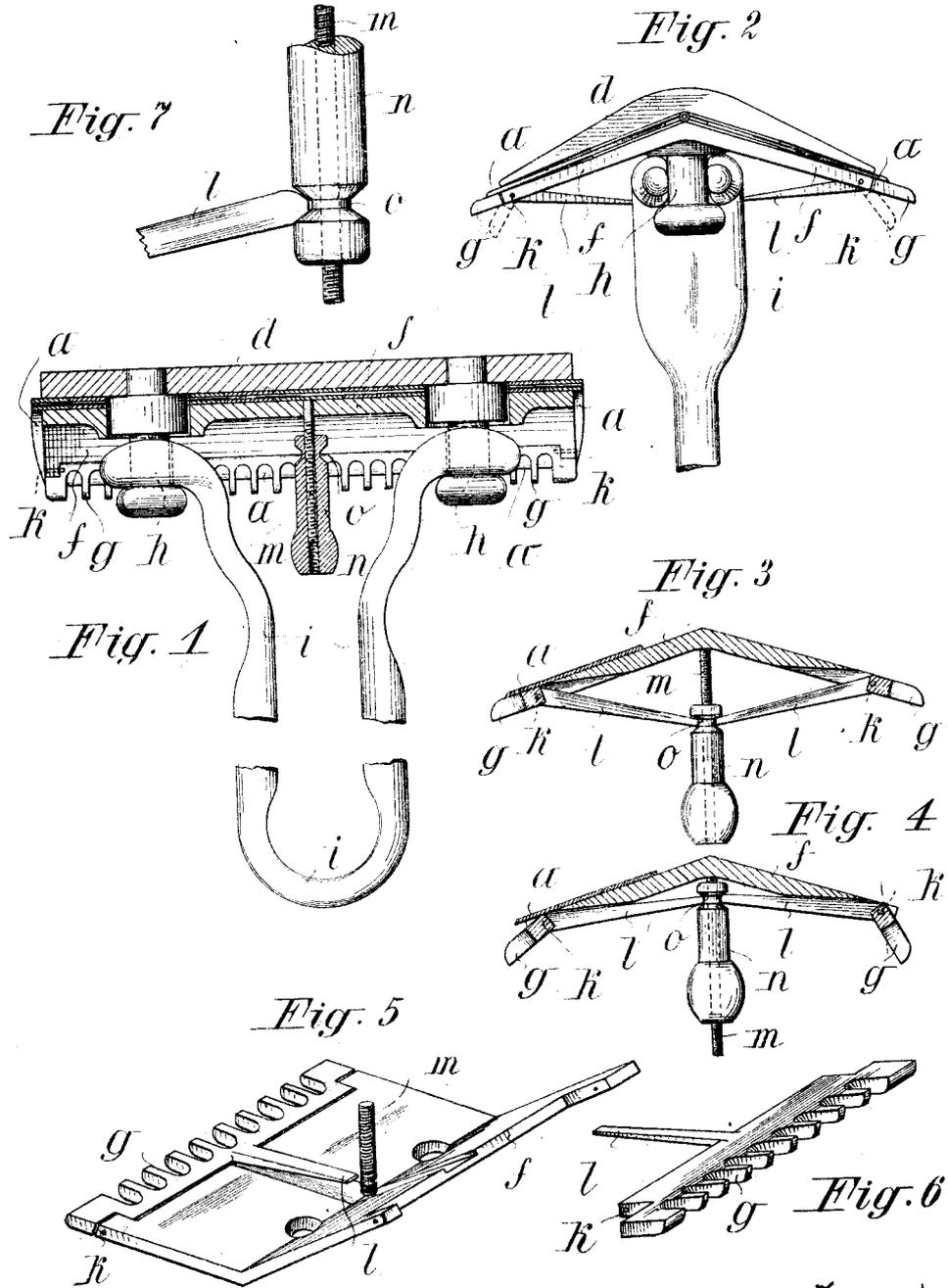


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SAFETY RAZOR.
APPLICATION FILED JAN. 5, 1912.

Patented Dec. 31, 1912.

1,049,031.



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UNITED STATES PATENT OFFICE.

SAMUEL ADLER, OF VIENNA, AUSTRIA-HUNGARY.

SAFETY-RAZOR.

1,049,031.

Specification of Letters Patent. Patented Dec. 31, 1912.

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To all whom it may concern:

Be it known that I, SAMUEL ADLER, a subject of the Emperor of Austria-Hungary, residing at 110 Dresdnerstrasse, in the city of Vienna, Empire of Austria-Hungary, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

This invention relates to a shaving razor which may be adjusted to obtain a fine or coarse cut by adjusting the guard plate relatively to the blade.

In arrangements which have been suggested in which the guard plate is pivoted to the hand 1° of the razor for the purpose of adjusting the guard plate relatively to the blade, it was necessary to form the handle of particular shape and use mechanism for the guard plate which was much too complicated to be used with shaving razors. Further, this arrangement could not be used for shaving razors in which the blade is clamped between a back plate and the protective comb. All these disadvantages are avoided in the shaving razor according to the present invention, which is characterized by its simplicity and reliable working and also allows any desired handle to be used. This is obtained in that each guard comb is pivoted on and adjustable relative to the guard plate so that the guard comb may be adjusted relatively to the blade without affecting the latter to obtain the desired fineness of cut.

One method of construction according to the present invention is illustrated by way of example in the accompanying drawings in which—

Figure 1 shows the razor partly in section and partly in elevation. Fig. 2 is an end elevational view and Figs. 3 and 4 are sections through the guard plate at various adjustments of the guard comb. Fig. 5 shows the guard plate with one guard comb. Fig. 6 shows a perspective view of the guard comb alone, and Fig. 7 is a detail perspective view of the blade adjusting device.

The blade a of the razor is clamped between a back plate d and a guard plate f . The guard plate f is provided along each longitudinal side with a guard comb g in the known manner, the teeth of which guard comb after the blade has been clamped, lie against the cutting edges and project slightly beyond these (Figs. 1 and 2).

In order to correctly adjust the guard plate f and the blade a relatively to the back plate d , the back plate d is provided with two pins h having small heads which pass through perforations in the blade and guard comb. The handle consists of the spring clip i , the ends of which lying opposite the guard plate of the razor are forked and are adapted to engage the guide pins h . The ends of the clip are also formed so that they act as pressure members for the purpose of clamping the blade securely between the back plate and the guard plate. Owing to the elasticity of the clip in its position of use it presses the guard plate against the blade by reason of its thumb-shaped ends and holds this in the cutting position.

Each guard comb g is arranged as an independent part and is pivotally mounted by means of pins k (Figs. 1 to 5) on the guard plate f . Each comb member g carries an arm l which abuts against the middle of the guard plate. In the middle of this guard plate a screw spindle m is mounted upon which is arranged a nut or knob n provided with a rounded end. The nut n is further provided with an annular groove o in which the narrowed ends of the arms l of the guard comb g engage. By disposing the nut n along the screw spindle m the guard comb g is turned by means of the arms l and is displaced relatively to the blade a for the purpose of adjusting the fineness of cut. In this manner, therefore, the displacing of the guard comb does not affect the blade so that this may always be securely clamped between the back plate and the guard plate.

Any desired sliding member moving up and down may be substituted for the nut displaceable along the screw spindle; the guard plate must be connected to it by intermediate means so that by displacing the sliding member the guard comb is swung about its pivots.

I claim—

1. In a safety razor, the combination of a guard plate; a back plate; a blade interposed between said guard and back plates; a guard comb pivotally mounted on said guard plate and having a projecting portion; a guard-comb adjusting device comprising a member mounted on the guard plate, a nut adjustably mounted on said

member and engaging with said comb projecting portion; and a handle, substantially as described.

2. In a safety razor, the combination of a guard plate; a back plate; a blade interposed between said guard and back plates; a guard comb pivotally mounted on said guard plate and having a projecting arm; a guard-comb adjusting device comprising a screw spindle secured to said guard plate; and a knob screw-threaded on said spindle and having an annular groove engaging the end of said arm whereby to turn the guard comb on its pivot; and a handle, substantially as described.

3. In a safety razor, the combination of a guard plate having a cut-away side portion; a back plate overlying the guard plate; a blade interposed between said guard and back plates; a guard comb pivotally mounted within the cut-away portion of said guard plate and having a projecting arm; a guard-comb adjusting device comprising a screw spindle secured to said guard plate; and a knob screw-threaded on said spindle and having an annular groove engaging the end of said arm whereby to turn the guard comb on its pivot and a handle, substantially as described.

4. In a safety razor, the combination of a guard plate having cut-away side portions; a back plate overlying said guard

plate; blades interposed between said guard and back plates; a guard comb pivotally mounted within each of said cut-away portions on the guard plate, and having each a projecting arm; a guard-comb adjusting device comprising a screw spindle secured to said guard plate, a knob screw-threaded on said spindle and having an annular groove engaging with the adjacent ends of said arms for turning said guard combs on their pivots; and a handle, substantially as described.

5. In a safety razor, the combination of a guard plate; a back plate; blades interposed between said guard and back plates; guard combs pivotally mounted on said guard plate and having each a projecting portion; an adjusting device for said comb guards engaging with the projecting portions thereof; a pair of pins passing through said guard and back plates; and a spring handle having bifurcated ends frictionally engaging with said pins and holding said guard and back plates in assembled relation, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

SAMUEL ADLER.

Witnesses:

GUSTAV WOLFF,
AUGUST FUGGER.