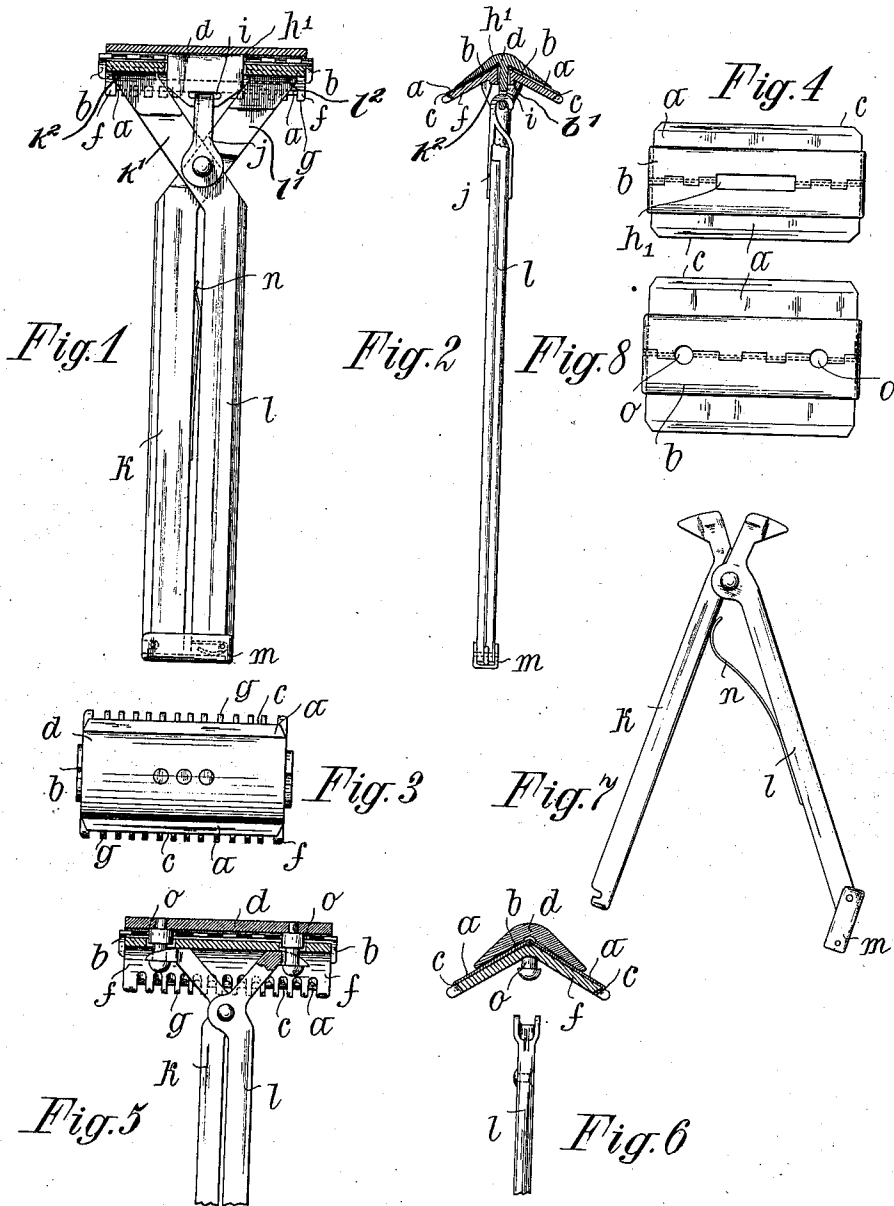


1,000,877.

Patented Aug. 15, 1911.



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# UNITED STATES PATENT OFFICE.

SAMUEL ADLER, OF VIENNA, AUSTRIA-HUNGARY.

SAFETY RAZOR.

1,000,877.

Specification of Letters Patent. Patented Aug. 15, 1911.

Application filed May 31, 1910. Serial No. 564,299.

*To all whom it may concern:*

Be it known that I, SAMUEL ADLER, president of board, 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.

10 This invention relates to a safety razor of the type in which the razor blade consists of two thin flexible steel plates held together to form a single blade which is pressed between a support and a shield.

15 According to this invention, the handle of the apparatus is formed of two double-armed levers pivotally connected together and preferably controlled by a spring. The ends of this handle, which are turned  
20 toward the shield in the position of use, press said shield against the blade and thus clamp the said blade firmly in the cutting position between the shield and support. It is advantageous to combine with the  
25 levers a hook or the like, in order that the shield and support may be more firmly grasped and in order after opening the levers that the loose parts will be still attached to the handle. Upon the ends of the  
30 levers there is placed a cap, clamp or the like which holds the levers fast in the position of use in opposition to the action of a spring placed between them but which automatically slips off the ends of the levers and  
35 releases them when the latter are approached close to one another. In order to facilitate the adjustment of the cutting edges between the angular support and the shield, the plates constituting the razor  
40 blade are pivotally connected together parallel to their edges.

Referring to the accompanying drawing forming a part of this specification wherein the invention is illustrated in two modifications:  
45 —Figure 1 is a side view of the invention partially in elevation and partially in section; Fig. 2 is an end view partly in section of the parts shown in Fig. 1; Fig. 3 is a plan view; Fig. 4 illustrates the razor blade detached; Fig. 5 shows a modification of the device partially in elevation and partially  
50 in section; Fig. 6 is an end view of the parts shown in Fig. 5 partially in elevation and

partially in section; Fig. 7 shows the handle alone in the open position; and Fig. 8 shows  
55 a further modification of the razor-blade.

The razor blade of this mechanism is formed of two thin hardened steel plates *a* constituting a single blade and possessing two cutting edges, which plates are secured  
60 in hinged holders *b* placed parallel to the cutting edges *c* as best shown in Fig. 4. The blade and holder is clamped fast in the usual manner between a support *d* and a shield *f*, which parts are formed with an  
65 angle and possess flat clamping surfaces, between which the razor blade in consequence of the hinged connection of its two plates fits closely (Fig. 3). The shield *f* is provided with teeth *g* in the usual manner,  
70 against which the cutting edges of the blade press after it is firmly clamped in place, and over which they slightly project as indicated in Figs. 1 and 2. The support *d* has  
75 a projection *h* which passes through a perforation *h'* in the razor blade and a corresponding perforation in the shield, in order that the operator may easily effect the correct adjustment of the parts. The projection  
80 *h* has a slot *i* in which a hook *j* attached to the handle engages and by which the hook, the support, the razor blade and the shield are suspended and held together even when the clamping action of the handle  
85 of the device is not in action.

The handle consists of two double armed levers, having long armed handle portions  
85 *k* *l*, and the short armed clamping portion *k'* *l'*, Fig. 1, which are further provided with the grooved extreme end portions *k*<sup>2</sup> *l*<sup>2</sup>  
90 into which fit the projections *b'* of the shields *f* as shown. It will thus be seen that when the parts are in the position shown in Fig. 1, the said short arms are caused to  
95 press firmly against the shield and thereby serve to clamp the blade between said shield and said support *d*. The shield *f* has guide ribs which engage in a groove on the ends of the shorter arms of the levers *k* *l* so that  
100 any twisting of the handle is prevented. Pivotaly attached to one of the levers of the handle at its free end is a cap or clamp  
105 *m* which incloses in the position of use the ends of both the levers and so retains them in the said position in opposition to the action of a spring *n* placed between said

levers. If the levers *k l* are pressed flat against one another and the spring, then the cap *m* slides off from the ends of the levers under the influence of a spring indicated in dotted lines in Fig. 1, and the levers when released, will automatically return to the open position (Fig. 7).

The modifications illustrated in Figs. 5 to 8 differ from the structure above described in details. For example in Fig. 5 the correct adjustment of the shield *f* and the razor blade, the support *d* is provided with studs *o* having heads which project through holes in the blade and corresponding holes in the shield. The ends of the arms of the levers *k l* are formed with forks and surround the studs *o*. At the same time the ends of the arms are rounded off in such a manner that they constitute pressure levers (Fig. 7) and thereby serve to firmly clamp the razor blade. The remaining construction of the handle remains the same as that above described.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In a safety razor, the combination of a shield; a support; a blade located between said shield and support; a handle comprising two pivoted levers whose ends are adapted to wedge against said shield; and connections between said levers and support adapted under the wedging action of said levers to cause said blade to be firmly clamped between said shield and support, substantially as described.

2. In a safety razor, the combination of a shield; a support; a blade located between said shield and support; a handle comprising two pivoted levers whose ends are adapted to wedge against said shield, and a hook between said levers and support adapted under the wedging action of said levers to cause said blade to be firmly

clamped between said shield and support, substantially as described.

3. In a safety razor, the combination of a shield; a support; a blade located between said shield and support; a handle comprising two pivoted levers whose ends are adapted to wedge against said shield; a hook between said levers and support adapted under the wedging action of said levers to cause said blade to be firmly clamped between said shield and support; and means for holding said levers in their closed positions, substantially as described.

4. In a safety razor, the combination of a shield; a support; a blade located between said shield and support; a handle comprising two pivoted levers whose ends are adapted to wedge against said shield; a hook between said levers and support adapted under the wedging action of said levers to cause said blade to be firmly clamped between said shield and support; and means comprising a spring actuated cap adapted to hold said levers in their closed positions, substantially as described.

5. A safety razor comprising a shield; a support; a hinged holder; and a blade held in said holder and located between said shield and support, substantially as described.

6. A safety razor comprising a shield; a support having a projection; a hinged holder located between said shield and support and having a perforation through which said projection may pass; a plurality of blades carried by said holder; and means associated with said holder for pivotally connecting said blades, substantially as described.

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

SAMUEL ADLER.

Witnesses:

GERSON WOLFF,  
AUGUST FUGGER.