No. 842,927. PATENTED FEB. 5, 1907.

A. A. WARNER.

SAFETY RAZOR.

APPLICATION FILED JAN. 23, 1906.

Fig. 1.

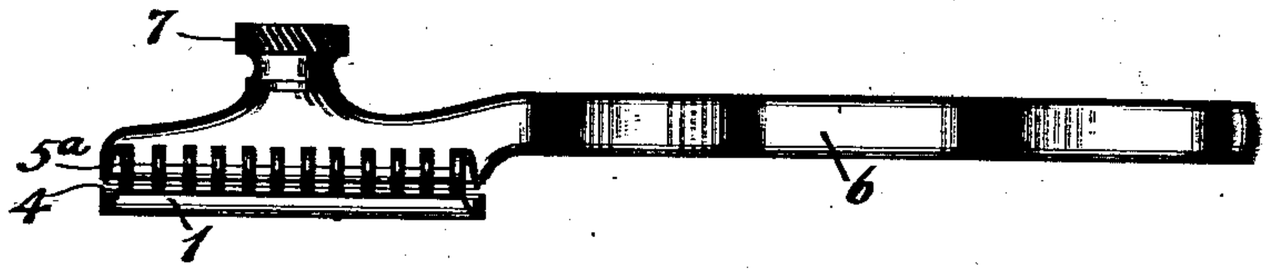


Fig. 2.

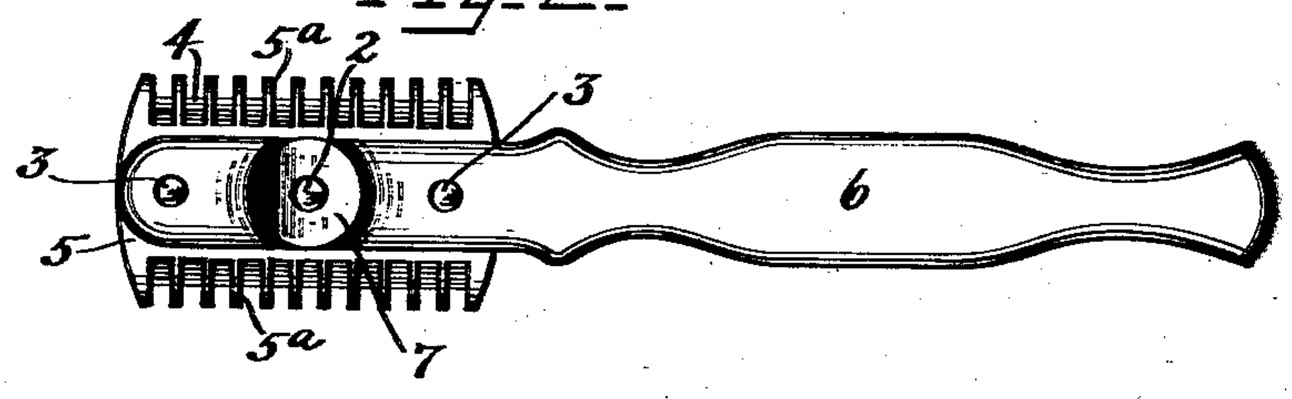


Fig. 3.

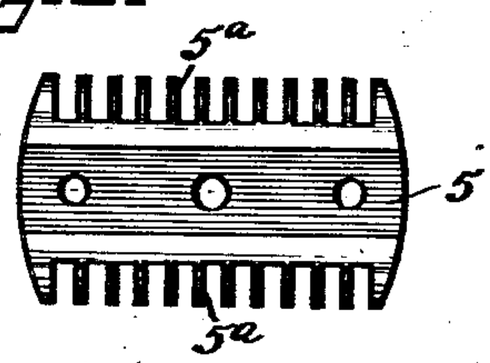


Fig. 4.

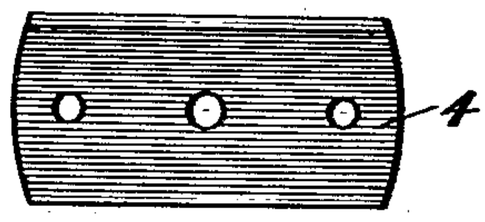


Fig. 5.

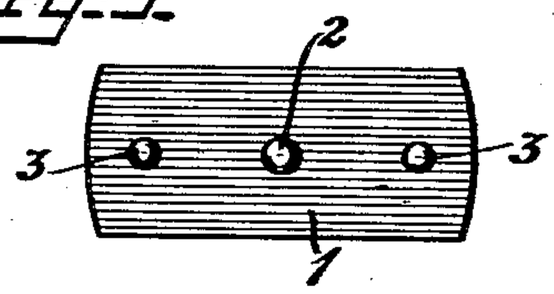


Fig. 6.

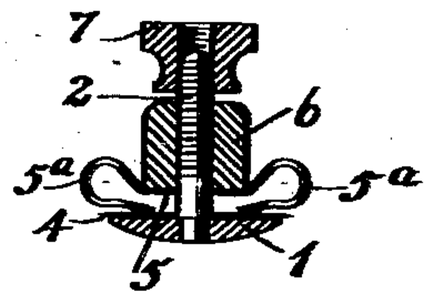
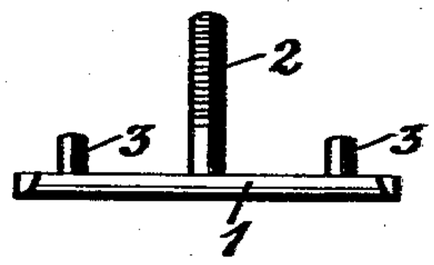


Fig. 7.



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UNITED STATES PATENT OFFICE.

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SAFETY-RAZOR.

No. 842,927. Specification of Letters Patent. Patented Feb. 5, 1907.

Application filed January 23, 1906. Serial No. 297,397.

To all whom it may concern:

Be it known that I, ALONZO ABNER WARNER, a citizen of the United States, residing at New Britain, Hartford county, Connecticut, have invented certain new and useful Improvements in Safety-Razors, of which the following is a full, clear, and exact description.

My invention relates to improvements in "safety-razors," so called, and has for its object simplicity of form, economy of construction and manufacture, effectiveness, and durability of operation.

The construction is such that the various parts are in number reduced to the minimum and may be readily assembled or separated and thoroughly cleaned at any time.

Another feature of substantial advantage resides in the particular construction by which the razor may be applied, the handle being so arranged relatively to the blade that the desirable "draw-stroke" may be practiced. This makes it possible for users of the ordinary razor to instantly adapt themselves to the use of my improved safety-razor.

A further important feature is the construction of the guard for securing adjustment of the cutting edge.

In the accompanying drawings, Figure 1 is a side elevation of the various parts assembled and complete. Fig. 2 is a plan view. Fig. 3 is a view of the under side of the combined guard and spring plate. Fig. 4 is a view of the blade. Fig. 5 is a plan view of the base. Fig. 6 is a section on the line 6 6, Fig. 1, the various parts being released and free from tension. Fig. 7 is a front elevation of the base.

In the preferred form of the apparatus, 1 is the base-plate, the same having its lower side rounded to form a smooth unbroken bearing or contact surface.

2 is a binding-post.

3 3 are pins carried by the base-plate.

4 is a blade adapted to rest upon the base 1, the same being perforated or recessed to permit the passage of the binding-post 2 and the pins 3 3.

5 is the body portion of a combined guard and spring member. This body portion is likewise perforated to register with the binding-post and pins. The opposite side edges of the back 5 are bent around and down, so as to form rounded guard portions, which overstand the opposite edges of the blade 4 when in the normal position, the extreme edges of said member bearing upon the blade. These guard portions are slotted vertically to form the separate looped guard members 5^a 5^a. These looped guard members may be of any desired number, and the spaces between them afford clearance-passages for the lather as the instrument is in use.

6 is the handle, one end of the same projecting laterally so as to be grasped in the same manner as the usual razor, the other end overstanding the back 5 of the combined guard and spring member. This handle may be likewise perforated to afford clearance for the binding-post 2 and the pins 3 3.

7 is a thumb-nut adapted to the binding-post 2, normally standing above the back of the handle 6, so that by setting down said nut the parts may be clamped together. The bends in the guard-plate, which constitute the individual guard members 5^a 5^a, are elastic or flexible. Hence the guard-plate is at once a combined guard and spring member, the free edges thereof bearing upon the blade when assembled and holding the same against its seat on the base 1.

In Fig. 6 the various parts are shown as relieved from tension, the thumb-nut 7 being raised on the binding-screw. Upon setting down said thumb-nut the looped guard members are put under tension and securely hold the blade against its seat. At the same time the rounded contour of the individual guards 5^a tends to flatten, so that by adjusting said nut they will be brought into the desired relation with the edge of the blade, whereby more or less clearance may be afforded. In this manner the razor may be adapted to the particular beard with which it is to be used, and permits a "medium" or "close shave," as desired.

In this construction their are no cavities or crevices in which the water or the soap may accumulate that may not be readily gotten at and cleansed and dried. The separate distinct backing member, such as commonly employed in razors, is eliminated, the handle itself performing that function. The construction of the combined guard and spring plate eliminates the necessity of a sec-

ond part and is of the simplest possible character, and yet in use is productive of the most substantial and beneficial results. The handle is preferably made from some bone or non-metallic compound or material, whereby the tendency to oxidize or tarnish is eliminated and the weight of the instrument substantially reduced. Beyond this, by using a non-metallic back the cost of production is substantially decreased and the appearance materially enhanced.

What I claim is—

In a safety-razor, a base, a screw-threaded binding-post carried thereby, a blade supported thereon, said binding-post passing through said blade, a combined spring and guard member resting upon said blade, said binding-post passing through said guard member, a handle, one end of said handle resting upon said guard member, said binding-post passing through said handle portion, and means independent of the handle to vary the tension of the spring member upon said blade, and modify and adjust the relative position of the guards and blade edges consisting in a nut engaging the screw-threaded portion of the binding-post.

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