H. J. GAISMAN.

SAFETY RAZOR.

APPLICATION FILED DEC 18, 1908.

1,121,915. Patented Dec. 22, 1914.

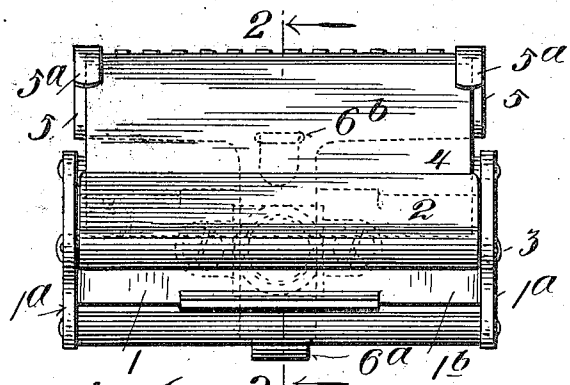


Fig. 1.

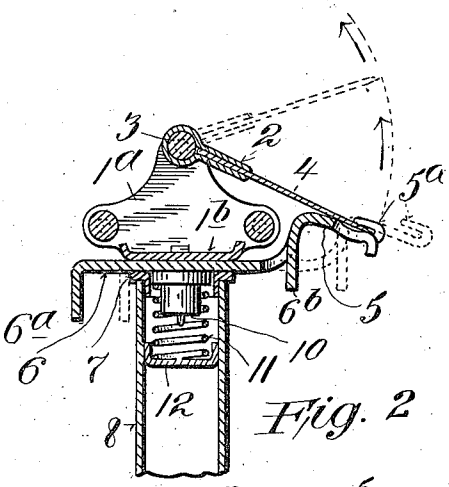


Fig. 2

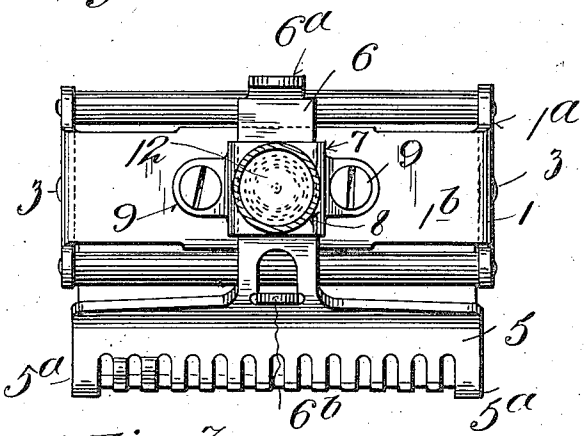


Fig. 3.

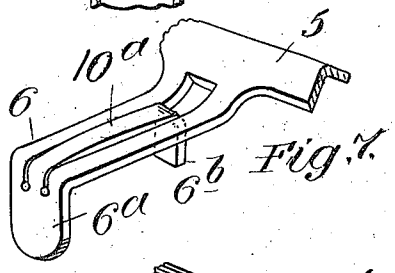


Fig. 7.

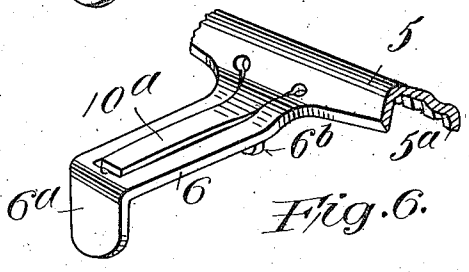


Fig. 6.

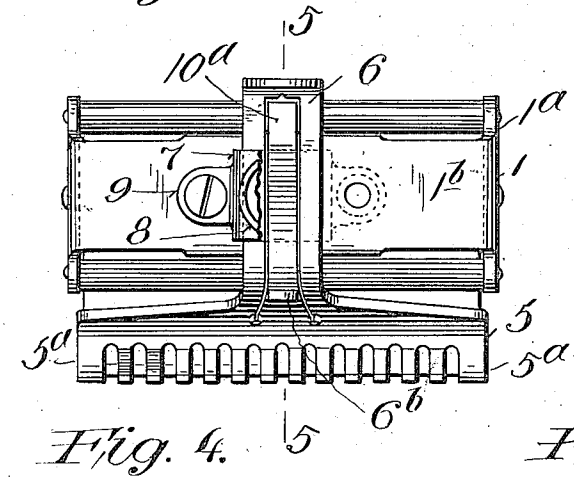


Fig. 4.

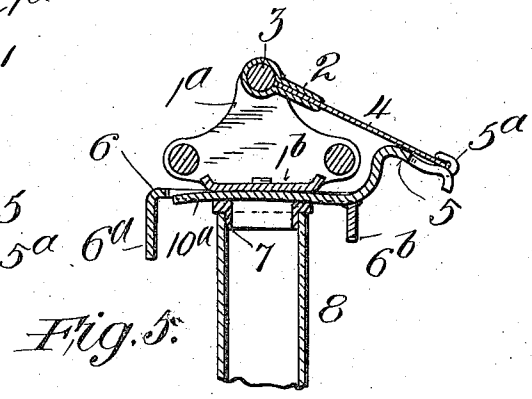


Fig. 5.

Witnesses:

Inventor

Henry J. Gaisman.

By his Attorney

T. F. Bourne

UNITED STATES PATENT OFFICE.

HENRY JACQUES GAISMAN, OF NEW YORK, N. Y., ASSIGNOR TO AUTO STROP COMPANY, A CORPORATION OF NEW YORK.

SAFETY-RAZOR.

1,121,915. Specification of Letters Patent. Patented Dec. 22, 1914.

Application filed December 18, 1908. Serial No. 468,113.

To all whom it may concern:

Be it known that I, HENRY J. GAISMAN, a citizen of the United States, and resident of New York city, in the county of New York 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 improvements in the class of safety razors provided with a movable means for holding the blade edge and guard with respect to each other, and the object of my invention is to permit the blade to be readily adjusted respecting the guard, for the purpose of insertion and removal of the blade as well as for cleaning the razor, and for other purposes.

In carrying out my invention I provide a suitable frame, a guard, means for removably holding the blade, and means for frictionally retaining the blade holding devices in different positions of adjustment whereby when such devices are in one position the blade will be held in position for shaving and when said devices are moved into another position the blade will be released, as for replacement of the blade, cleaning and other purposes. To these ends I have shown the guard provided with lugs or hooks adapted to engage the blade to hold the blade in shaving position upon the guard.

My invention also comprises the novel details of improvement that will be more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming part hereof, wherein,

Figure 1 is a plan view of a safety razor embodying my invention; Fig. 2 is a cross section on the line 2, 2, in Fig. 1; Fig. 3 is an inverted plan view, the handle being in section; Fig. 4 is a similar view illustrating a modification; Fig. 5 is a section substantially on the line 5, 5, in Fig. 4; Fig. 6 is a partly broken detail of the guard device of Figs. 4 and 5, and Fig. 7 is a similar view of a further modification.

Similar numerals of reference indicate corresponding parts in the several views.

The numeral 1 indicates a suitable frame, shown provided with uprights 1^a at opposite ends, and at 2 is a suitable blade holder shown movably supported between uprights 1^a, as by a shaft 3, whereby the blade 4 can be movably held in holder 2 and may be swung around as desired. The guard for the blade edge is indicated generally at 5, and it is shown provided with comb-like teeth and also with lugs or hooks 5^a at its front corners, which lugs are bent back to engage the blade to hold the blade in shaving position upon or with respect to the guard. The guard 5 is also provided with an extension or slide 6 that passes transversely across with respect to frame 1 and is adapted to slide in its guideway to permit the guard to be moved as desired into and out of operative relation to the blade edge. I have shown the extension 6 carried in a guideway 7 between handle 8 and the base 1^b of frame 1, which guideway may be in the form of a piece of bent metal secured to handle 8 and removably attached to base 1^a by screws 9. Extension 6 is provided with a pusher or thumb piece 6^a at or near its outer end and preferably has a depending pusher or thumb piece 6^b on a side of the handle adjacent the guard, whereby the guard may be pushed in opposite directions as desired. The thumb pieces 6^a, 6^b may be made integral with the material of the guard and extension 6, or one or both of said thumb pieces may be made separate and attached to the extension or guard by solder or otherwise as preferred.

Means are provided for retaining the guard in different positions of adjustment, the means shown being of a friction nature.

In Figs. 1, 2 and 3 the razor is provided with a friction block 10, shown located within the handle and bearing against extension or slide 6, spring 11 within the handle bearing against the friction block 10 and against an abutment or shelf 12 secured within the handle, whereby the pressure of the spring against the block causes the latter to push extension or slide 6 against base 1^b and thus hold the extension or slide in any set position.

In Figs. 4, 5 and 6 I have shown the friction piece 10^a in the form of a spring finger connected with the guard, as by being cut out of the material of extension 6, and adapted to bear against a part of the guideway of said extension, such as against the base 1^b, the spring 10^a being suitably bent for such purpose.

In Fig. 7 the pusher or thumb piece 6^b is shown formed directly on the spring friction piece 10^a by being bent down there-

from. By means of the arrangements set forth, by pushing upon the thumb piece 6^a the extension or slide 6 together with the guard and lugs will be pushed outwardly, whereupon the lugs or hooks 5^a will be moved out of operative relation with respect to the blade and thereby the blade may be inserted and removed, and cleaning of the parts effected. When the blade is inserted in its holder and placed down upon the guard the latter may be pushed toward the blade by the thumb piece 6^b, whereupon the lugs or hooks 5^a will engage the blade and hold it in shaving position with respect to the guard, and the friction devices will hold and retain the guard in such set position, thus holding the blade upon the guard.

When the parts are in the positions shown in Figs. 1, 2 and 5 the razor may be used for shaving, the friction devices maintaining the parts in proper operative position, and when the guard is moved outwardly, as in dotted lines in Fig. 2, the guard and lugs will still be retained by the friction devices in such position, and the blade may be readily raised from the guard for removal for cleaning the parts, and for other purposes.

Having now described my invention what I claim is:—

1. In a safety razor, a frame having a guide, a guard having blade engaging lugs, an extension from the guard slidable in the guide, a friction member coacting with the extension and guide for holding the guard in engagement with the blade or disengaged therefrom, and means for urging the friction member against the extension.

2. A safety razor having a frame, a guard for a blade of the razor, an extension from the guard engaging the frame and slidably supported thereon, and a friction member movable with relation to and coacting with the extension and operative to press the extension against the frame to retain the guard in engagement with the blade or disengaged therefrom.

3. A safety razor having a frame, a guard for a blade of the razor, means slidably supported in the frame for carrying the guard, a friction member engaging the means for carrying the guard for holding the guard in engagement with the blade or disengaged therefrom, said friction member being slidable with relation to the frame, and means for yieldably holding the friction member in engagement with the means for carrying the guard.

4. In a safety razor, a frame, a guard for a blade, an extension from the guard slidably supported in the frame and free to move under the influence of pressure applied thereto, a member frictionally retaining the guard in engagement with the blade or disengaged therefrom, and means for urging the said member against the extension.

5. In a safety razor, a frame, a blade holder, a guard having blade engaging lugs in position to engage the cutting edge of a blade held by the blade holder, an extension from the guard slidable transversely of the blade holder under the blade, and friction means coöperating with said extension and with the frame for retaining the guard in engagement with the blade or disengaged therefrom and free to move under pressure on the said extension sufficient to overcome the friction of the retaining means.

Signed at New York city, in the county of New York, and State of New York, this 14″ day of December, A. D. 1908.

HENRY JACQUES GAISMAN.

Witnesses:

EMMA SCHWERIN,

JULIET V. WALSH.