H. J. GAISMAN.

SAFETY RAZOR.

APPLICATION FILED JAN. 24, 1912.

Patented Dec. 7, 1915.

1,163,137.

Fig. 1

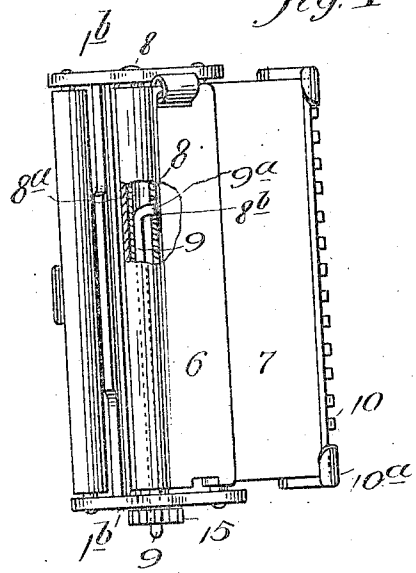
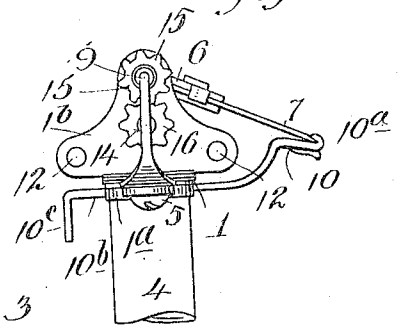


Fig. 2



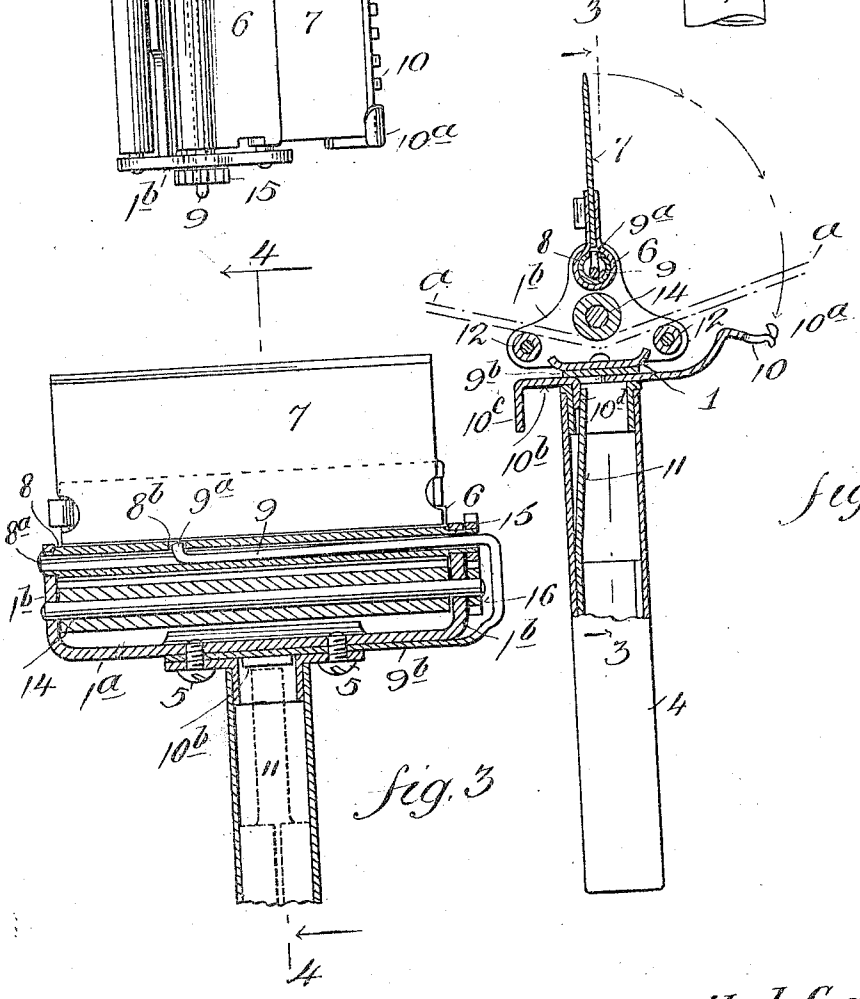


Fig. 4

Fig. 3

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UNITED STATES PATENT OFFICE.

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

SAFETY-RAZOR.

1,163,137. Specification of Letters Patent. Patented Dec. 7, 1915.

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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, borough of Manhattan, 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 has reference to improvements in safety razors of the class in which a movable or rocking blade holder is maintained in relation to a guard, and the object of my invention is to provide improved means for causing the blade to move with respect to the guard upon the operation of the guard.

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

Reference is to be had to the accompanying drawings forming part hereof, wherein, Figure 1 is a plan view partly broken of a safety razor embodying my invention; Fig. 2 is an end view thereof; Fig. 3 is a central section of the razor substantially on the line 3, 3, in Fig. 4; and Fig. 4 is a section substantially on the line 4, 4, in Fig. 3.

In the accompanying drawings, in which similar numerals of reference indicate corresponding parts in the several views, the numeral 1 indicates a suitable frame having a base 1^a and uprights 1^b at its ends.

At 4 is a handle secured to base 1^b by any suitable means, such as screws 5.

At 6 is a blade holder of any suitable construction adapted to hold blade 7 in any well known manner, which blade holder is secured to a shaft or the like 8 journaled to rotate in uprights 1^b. Shaft 8 is shown provided with a bore 8^a receiving a torsion spring 9, the inner bent end 9^a of which engages shaft 8, as by entering an opening 8^b therein. Spring 9, which may be of wire, is suitably bent and secured to base 1^a, being shown flattened at its outer end 9^b and secured by the screws 5. The arrangement is such that spring 9 normally tends to retain holder 6 and blade 7 in the upright position, (Fig. 4).

At 10 is indicated a suitable guard having means, such as lugs or hooks 10^a, to engage the edge of the blade to retain the latter in shaving position with respect to the guard, and thus to retain the blade against tendency of spring 9 to raise the blade from the guard. Guard 10 is shown provided with an extension or slide 10^b shown guided in a guideway between the handle and the frame to slide transversely of the latter and being shown provided with a finger piece 10^c for convenience in pushing the guard.

At 11 is a spring shown located within handle 4 and bearing against a lug 10^d on slide 10^b whereby the guard is normally drawn toward the blade edge.

At 12 are tension rollers or bars carried by supports 1^b on opposite sides, and at 14 is a roller or driving member journaled in uprights 1^b. To shaft 8 is secured a gear 15 meshing with a gear 16 secured on shaft or roller 14. A space is open through the frame whereby a strop *a* may be passed beneath shaft or roller 14 so that when the razor is reciprocated along the shaft, the blade holder and blade will be rocked for stropping the blade edge, in a well-known manner.

When the blade is to be used for shaving the guard is moved to enable the blade retaining lugs or hooks 10^a to receive the blade, and the latter is moved down upon the guard, as in Figs. 1 and 2. When it is desired to release the blade from the guard the latter is moved away from the blade as to the right in Fig. 2 and thus the operation of moving the guard causes the operation of the blade in moving away from the guard, that is to say, by reason of moving of the guard and its lugs away from the guard the spring 9 causes the blade to rise and be retained in an upright position away from the guard.

While I have illustrated and described a practical embodiment of my invention, it will be understood that changes may be made in the arrangements set forth, within the scope of the appended claim, without departing from the spirit of the invention.

Having now described my invention what I claim is:—

A razor comprising a blade holder including a hollow shaft by which the blade

holder is pivotally mounted, said shaft having a lateral opening merging with the bore thereof, a frame on which the shaft is pivoted, a spring anchored to the frame, said spring lying partially in the hollow shaft and having an end anchored in the lateral opening of the shaft.

Signed at New York city, in the county of New York and State of New York this 23rd day of January, A. D. 1912.

HENRY J. GAISMAN.

Witnesses:
T. F. BOURNE,
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