H. COYNE.

SAFETY RAZOR.

APPLICATION FILED JUNE 16, 1915.

1,171,175. Patented Feb. 8, 1916.

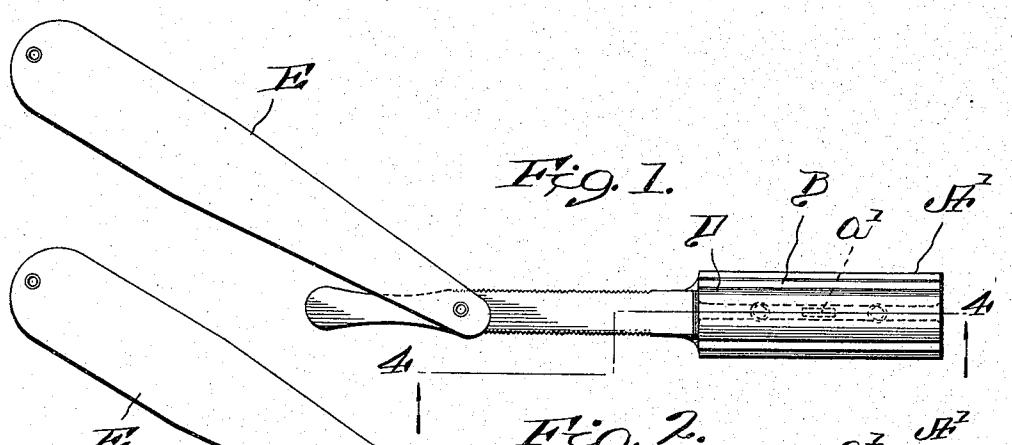


Fig. 1.

Fig. 2.

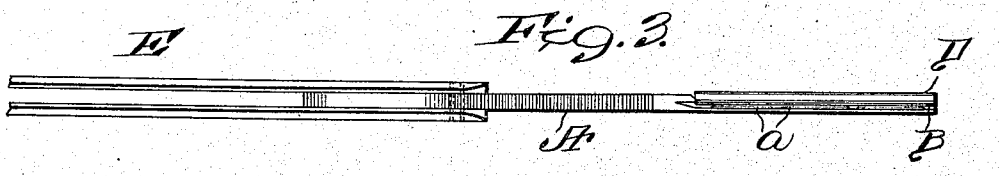


Fig. 3.

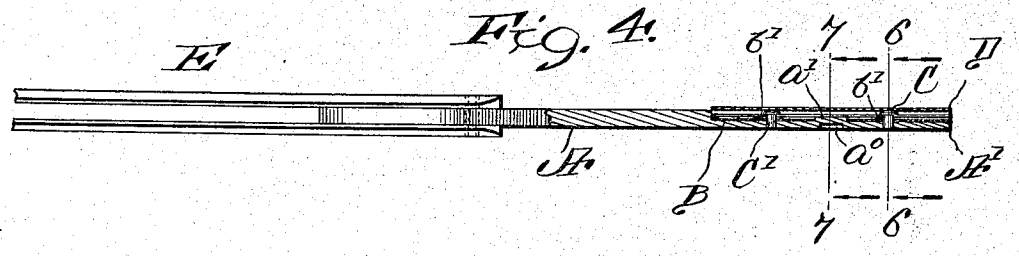


Fig. 4.

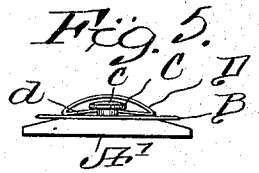


Fig. 5.

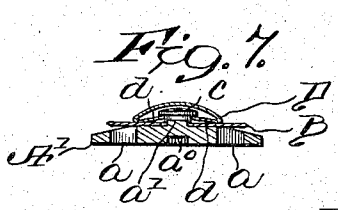


Fig. 7.

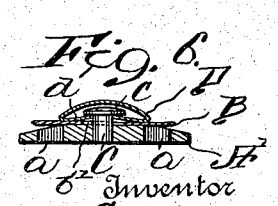


Fig. 6.

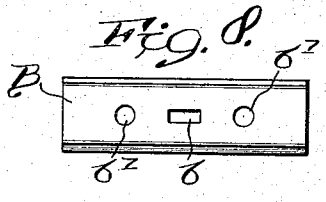


Fig. 8.

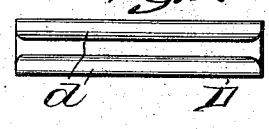


Fig. 9.

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SAFETY-RAZOR.

1,171,175. Specification of Letters Patent. Patented Feb. 8, 1916.

Application filed June 16, 1915. Serial No. 34,504.

To all whom it may concern:

Be it known that I, HOOPER COYNE, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Safety-Razors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to improvements in safety razors, and it is intended to provide a cheap, simple, efficient and durable form of safety razor in which the razor blade is held firmly in place when in use, and in which the parts may be readily assembled and disassembled when it is desired to clean the razor or substitute another blade, or for other purposes.

It is well known that with the safety razors now generally in use, there is more or less trouble and annoyance in taking the razor apart and cleaning up the same and then restoring the same to the original assembled position each time that the razor is used.

My present invention relates especially to improvements on the device shown in my Patent No. 1,142,310, granted June 8, 1915, and entitled "Improvements in safety razors".

The object of my invention is to reduce and simplify the number of these parts, and to facilitate the operation of assembling and disassembling these parts, which will be more fully hereinafter described.

Reference is had to the accompanying drawings in which:—

Figure 1 is a top plan view of the complete razor ready for use; Fig. 2 shows the support for the razor blade, with the blade and its sliding locking piece detached; Fig. 3 is a side elevation of the razor with the parts assembled; Fig. 4 shows a section along the line 4—4 of Fig. 1, and looking in the direction of the arrows, parts being shown in elevation; Fig. 5 is an end view as seen from the right of Fig. 1, the parts being shown on a larger scale; Fig. 6 shows a section along the line 6—6 of Fig. 4, and looking in the direction of the arrows, the parts being shown on a larger scale; Fig. 7 shows a similar section along the line 7—7 of Fig. 4, and looking in the direction of the arrows; Fig. 8 is a detail showing one side of the reversible razor blade; and Fig. 9 is a detail showing the sliding locking piece for locking the razor blade in place on its support. Figs. 8 and 9 are on the same scale as the corresponding parts shown in Figs. 1 to 4.

A represents the holder or support for the razor, whose head A′ is preferably provided with clearance slots *a* beneath the edges of the blade. The head of the blade support is provided with a rectangular lug *a′* stamped out of one side thereof opposite the corresponding recess *a°* which lug is adapted to engage the central slot *b* of the reversible razor blade B, and to steady the razor blade against movement laterally or longitudinally when the blade is clamped in place, as will be hereinafter described.

C and C′ represent the two end studs which are provided with heads *c*, having engaging flanges as shown in Figs. 5–7, which heads pass freely through the holes *b′* in the razor blade, and permit the blade to be readily slipped in place or removed when desired.

D represents the locking piece which is made of a single piece of metal, shown in Fig. 9, and is provided with inwardly-turned flanges *d*, as shown most clearly in Figs. 4 and 8. This locking piece is arch-shaped in cross section, as shown in Figs. 5–7, and the inwardly-turned flanges *d* have their inner edges inclined slightly upward toward the arch and engaging the shoulders beneath the flanged heads of the studs C and C′, with the result that the resilient metal locking strip presses downward on the razor blade and automatically adapts itself to varying thicknesses of the blade, and always holds the blade firmly in place on the combined guard and support. The blade is, moreover, positively locked against lateral or longitudinal movement relative to the support A, due to the engagement of the rectangular lug *a′* and the slot *b* in the center of the razor blade.

E represents the handle which is hinged to the part A in the usual way. This handle is preferably of such construction as to permit the support A to be swung freely therethrough, thus facilitating the use of the implement on either side of the face of the user.

To assemble the parts, the holder A being in the position shown in Fig. 2, the razor blade is put in place, engaging the boss *a* and slipping over the studs C and C′; and

then the sliding locking piece is slid longitudinally from the end of the support to engage the flanges on the studs B and B′. To disassemble the parts, simply slide the locking piece in the opposite direction, until it is disengaged from the two studs C and C′, and then remove the razor blade.

By having the slot *b* in the center of the razor blade, and the lug *a′* in the center of the head A′ of the razor support, the razor blade may be applied upside down, thus reversing the cutting edges, when desired.

It will be seen that the device is of such constructon that it may be readily cleaned when desired, and that the razor blade may be quickly applied or removed; thus the device consists essentially of three parts—the support carrying the centering and holding lug and the locking studs, the razor blade, and the sliding locking piece for holding the blade in position. The locking piece should be made of resilient material so that it will automatically press down on the razor blade and stiffen same near its edges.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:—

In a safety razor, the combination with a holder having its head adapted to form a support for the razor blade, said head being provided with a central rectangular lug stamped out of the center thereof, with studs having flanged heads projecting from the same side of said support as said lugs, and spaced apart therefrom and parallel therewith, of a blade perforated to slip over said studs and to engage said lug, thus preventing lateral or longitudinal movement, and a sliding resilient locking piece, arch-shaped in cross section and having the edges turned inward and slightly upward toward the arch, said member being adapted to engage the flanged heads of said studs and to press down the razor blade and lock it in position, substantially as described.

In testimony whereof I affix my signature.

HOOPER COYNE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."