

967,831.

Patented Aug. 16, 1910.

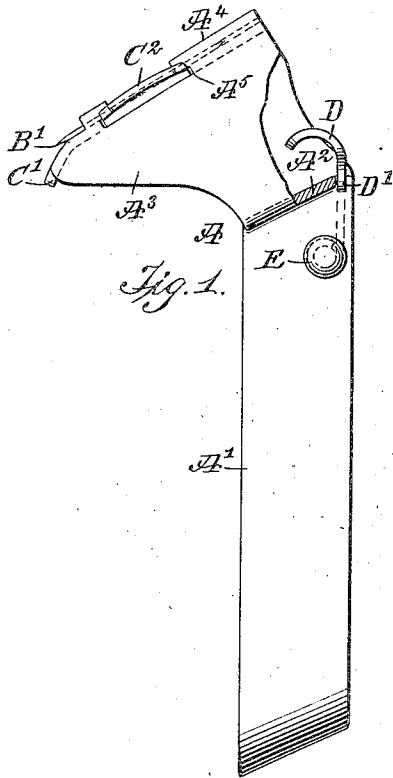


Fig. 1.

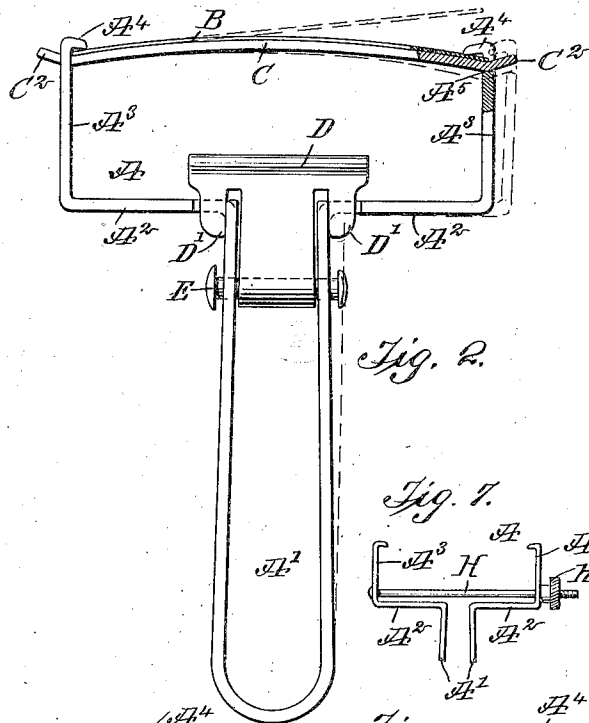


Fig. 2.

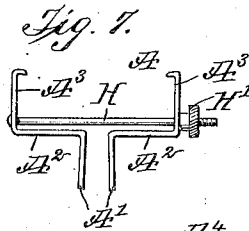


Fig. 7.

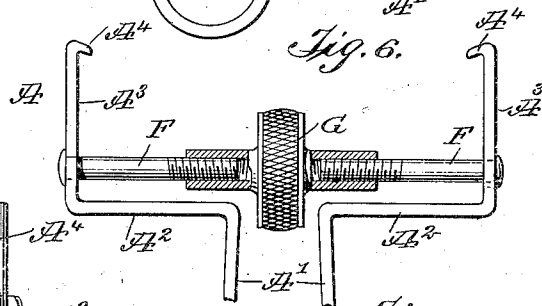


Fig. 6.

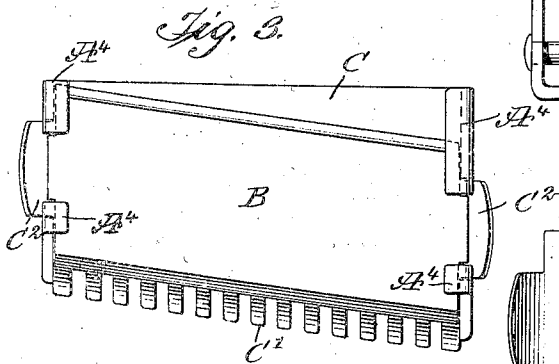


Fig. 3.

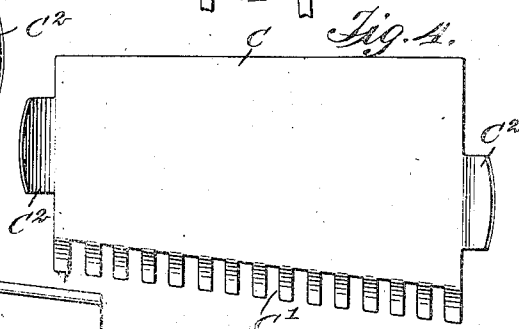
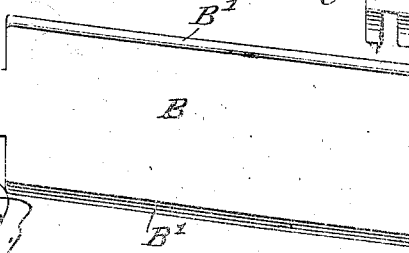


Fig. 4.

Fig. 5.

WITNESSES
Edw. H. Pratt
Rev. J. H. Pratt



INVENTOR
Allison A. Pratt
BY *[Signature]*
ATTORNEYS

UNITED STATES PATENT OFFICE.

ALLISON A. PRATT, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO HENRY J. HEMMENS, OF NEW YORK, N. Y.

SAFETY-RAZOR.

967,831.

Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed July 29, 1908. Serial No. 445,892.

To all whom it may concern:

Be it known that I, ALLISON A. PRATT, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Safety-Razor, of which the following is a full, clear, and exact description.

The invention relates to safety razors having thin flexible blades, and its object is to provide a new and improved safety razor arranged to permit the user to shave with a shearing cut, to allow convenient insertion and removal of the razor blade and casing after use and to give the desired rigidity to the blade in the razor frame.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement, parts being broken out; Fig. 2 is a rear elevation of the same, parts being in section; Fig. 3 is a plan view of the same; Fig. 4 is a plan view of the guard plate; Fig. 5 is a like view of the razor blade; Fig. 6 is a front elevation of a modified form of the actuating means for the frame, parts being in section; and Fig. 7 is a similar view of another modified form of the actuating means for the frame.

The frame A of the safety razor is preferably made from spring metal bent to form a U-shaped handle A', from the upper ends of which extend in opposite directions the flanges A², terminating in upwardly-extending side arms A³, provided at the top with inwardly-bent lugs A⁴, to engage the top of the razor blade B, resting on the guard plate C, provided at its forward end with the usual guard C', operating in conjunction with the cutting edge B' of the razor blade B. As illustrated in Figs. 3, 4 and 5, the cutting edge B' of the razor blade B extends obliquely relatively to the parallel ends of the razor blade, and the guard C' extends likewise obliquely to correspond to the oblique cutting edge B'. Now by the arrangement described, the user of the safety razor can shave with a shearing cut, owing

to the oblique cutting edge B' of the razor blade B and obliquely arranged guard C'.

The guard plate C is arched or curved in the direction of its length, and the sides of the guard plate C are provided with upwardly-extending cam arms C², fitting into openings A⁵, formed in the side arms A³ of the frame A, so that when the frame A is in the normal or open position and a razor blade B is placed in position on the top of the guard plate C and the arms A³ are moved toward each other, then the cam arms C² are moved upward and with them the guard plate C, to bring the top surface of the razor blade B at the sides thereof into engagement with the under side of the lugs A⁴, thus causing the razor blade B to bend and to conform to the shape of the guard plate C, giving the desired rigidity to the razor blade B while using the safety razor for its legitimate purpose.

In order to hold the frame A in the closed position mentioned, that is, with the side arms A³ moved toward each other, a locking device is provided, preferably in the form of a locking lever D, fulcrumed on a pivot E held loosely on the side arms of the handle A', as plainly indicated in Fig. 2. The locking lever D is provided with locking arms D' adapted to engage the outer faces of the side arms of the handle A' after the latter are pressed toward each other by the operator, to thus hold the said side arms of the handle A' and consequently the side arms A³ of the frame, against outward movement. When the locking lever D is swung rearward to move the arms D' out of engagement with the side arms of the handle A', then the frame A opens by its own resiliency, thus allowing the guard plate C to move downward by the action of its cam arms C², thereby relieving the razor blade B and allowing the latter to assume its natural straight shape by its own resiliency, and to also allow removal of the razor blade from under the lugs A⁴.

Suitable means may be employed for moving the frame A into open or closed position, for instance, as shown in Fig. 6, use is made of a turn-buckle device consisting of rods F, held on the side arms A³ and having their right and left-hand threaded ends screwing in a corresponding double nut G adapted to be turned by the operator, to move the side arms A³ toward or from each other ac-

gording to the direction in which the nut G is turned. As illustrated in Fig. 7, the side arms A³ are connected with each other by a screw rod H, on which screws a nut H' abutting against the outer face of one of the side arms A³. By screwing up the nut H' the side arms A³ are moved toward each other, and by unscrewing the nut H' the side arms A³ open by the resiliency of the spring frame.

As indicated in Figs. 3 and 5, both longitudinal edges of the razor blade B are preferably sharpened to form oblique cutting edges, to permit the use of either edge in case the other is dull.

In using the safety razor, the operator pushes one end of the razor blade B under the lugs A⁴ of one side arm A³ (see dotted lines in Fig. 2), and then presses the free end of the razor blade B down onto the guard plate C, after which the side arms A³ are pressed toward each other to bring the other lug over the other end of the razor blade and to raise the guard plate C, thus firmly clamping the razor blade B in position and holding it arched on top of the guard plate C, the frame being now locked in the closed position by the locking lever D.

The razor blade B is provided at the ends with lugs B², fitting into the spaces between the lugs A⁴ of the side arms A³, so that the blade is properly guided into position and is not liable to accidentally shift laterally.

When it is desired to remove the razor blade B, the operator takes hold of the blade at one side thereof and then unlocks the frame by swinging the locking lever D rearward, so that the frame opens by its own resiliency, and the other non-held end of the razor blade B moves from under the lugs A⁴ at this side of the frame, so that the razor blade springs upward into the position

shown in dotted lines in Fig. 2, to allow the operator to take hold of the end of the razor blade and withdraw the latter from the frame.

The safety razor shown and described is very simple and durable in construction, and allows convenient insertion and removal of the razor blade and cleaning of the blade and frame after use.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A safety razor, comprising a frame having side arms movable toward and from each other and provided with clamping members and openings, means for drawing the arms toward each other, an arched guard plate provided with arms having cam surfaces and projecting into the openings of the side arms of the frame, and a razor blade on the guard plate and engaged by the clamping members of the side arms.

2. A safety razor, comprising a frame having spring arms provided with inwardly extending lugs at their upper ends and with openings adjacent to the said lugs, means for drawing the spring arms toward each other, an arched guard plate provided at its ends with upwardly extending arms having cam surfaces on their lower faces and projecting into the openings of the side arms of the frame, and a razor blade on the guard plate and engaged by the lugs of the said side arms.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALLISON A. PRATT.

Witnesses:

THEO. G. HOSTER,

EVERARD B. MARSHALL.