A. A. PRATT.

SAFETY RAZOR.

APPLICATION FILED FEB. 13, 1909.

969,724.

Patented Sept. 6, 1910.

Fig. 1,

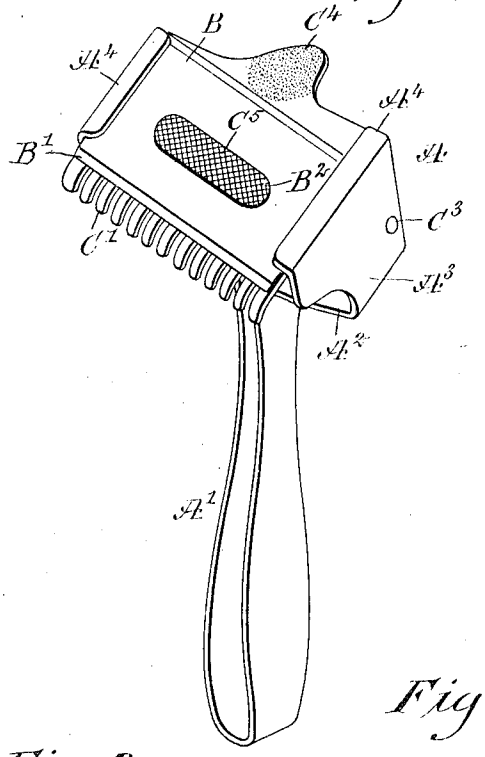


Fig. 2,

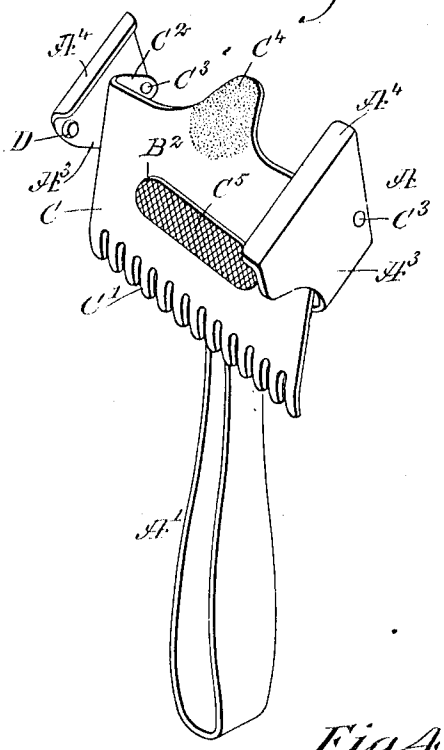


Fig. 3,

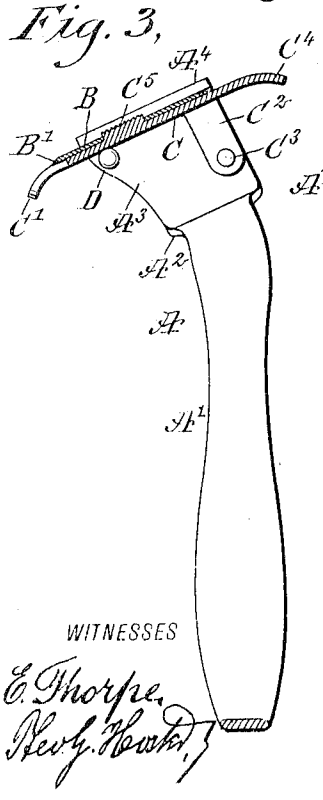


Fig. 5,

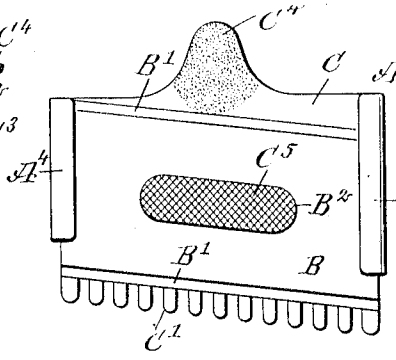


Fig. 4,

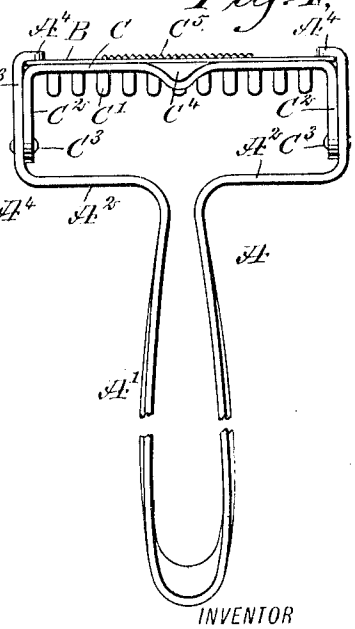
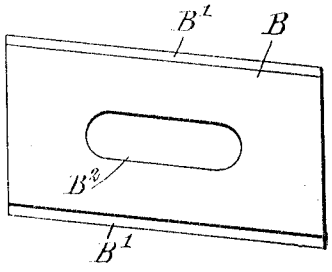


Fig. 6.



WITNESSES

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

SAFETY-RAZOR.

969,724. Specification of Letters Patent. **Patented Sept. 6, 1910.**

Application filed February 13, 1909. Serial No. 477,543.

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 allow convenient insertion and removal of the razor blade, and to give the desired rigidity to the blade when in use. In order to attain this object, use is made of a frame and a hinged carrier adapted to support the flexible razor blade and clamp the ends thereof in position on the frame.

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

Figure 1 is a perspective view of the improvement showing the razor blade in position; Fig. 2 is a like view of the improvement showing the razor blade omitted and the guard plate swung into an open position; Fig. 3 is a cross section of the improvement; Fig. 4 is a rear elevation of the same; Fig. 5 is a plan view of the same; and Fig. 6 is a face view of the razor blade.

The frame A of the safety razor is preferably made of spring metal bent to form a U-shaped handle A′, from the upper end of which extend in opposite directions, the flanges A^2 terminating in upwardly-extending side arms A^3, provided at the top with inwardly-bent lugs A^4, to engage the top of the razor blade B at the ends thereof, the said razor blade B resting on the carrier or guard plate C employed for supporting the razor blade B and for clamping the ends thereof against the underside of the lugs A^4. The guard plate C is provided at its forward edge with the usual guard C′ operating in conjunction with the cutting edge B′ of the razor blade B. The guard plate C is provided at the sides and at or near the rear end thereof with downwardly-extending lugs C^2, pivotally connected at C^3 with the side arms A^3 of the frame A, so as to permit the guard plate C to swing downward and outward into an open position, to gain easy access thereto, as shown in Fig. 2, or upward and backward into a closed clamping position, as illustrated in Figs. 1, 3 and 4. The guard plate C in swinging passes with its side edges over retaining or locking projections D formed on the inner faces of the side arms A^3, to lock the guard plate C in the uppermost clamping position by the spring action of the frame, as plainly shown in Fig. 3. The rear end of the guard plate C is provided with a rearwardly and downwardly curved handle C^4 adapted to be engaged at the under side by the forefinger of the hand of the user, resting the thumb on top of a projection C^5 formed on the top of the guard plate C and extending through a correspondingly shaped slot B^2 formed in the razor blade B. The upper surface of the projection C^5 is preferably knurled to provide a firm hold for the thumb of the user's hand.

As shown in Figs. 5 and 6, 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 the obliquely arranged guard C′.

The guard plate C supports the razor blade B, that is, the razor blade B is wholly superimposed on the carrier or guard plate C, and hence when the latter is swung upward with the razor blade superimposed thereon and the ends of the razor blade are clamped in position against the lugs A^4, then the razor blade B is rigidly held in cutting or shaving position. It is also understood that in order to open the safety razor for placing the razor blade B in position or removing it from the carrier or guard plate C, the latter is swung downward and in order to close the safety razor for clamping the razor blade B in shaving position,

it is necessary to swing the carrier or guard plate C upward, and by the formation of the hinge it is also carried backward.

It is understood that when the guard plate C is swung upward into the clamping position, it passes the projections D so as to lock the guard plate C in an uppermost clamping position.

When the guard plate C is in the open position shown in Fig. 2, the razor blade B can be placed conveniently in position on the top of the guard plate C by engaging the slot B^2 of the razor blade B with the projection C^5 on the guard plate C, thus centering the razor blade B relatively to the guard C'. The operator then takes hold with the fore-finger on the under side of the handle C^4 and places the thumb on top of the projection C^5, and then swings the guard plate C upward into the clamping position above referred to, it being understood that during this upward swinging motion the razor blade B is held against accidental displacement by the operator's thumb resting on top of the projection C^5 and the blade B.

As indicated in Figs. 5 and 6, 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.

The safety razor shown and described is very simple and durable in construction, composed of comparatively few parts, and not liable easily to get out of order.

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

1. In a safety razor and in combination, a blade, a frame having arms provided with means against which the ends of the said blade are clamped, and a blade carrier pivoted at its ends to and between the arms of the said frame and on which the said blade is superimposed for carrying the blade and for clamping the ends of the blade against the said means.

2. In a safety razor and in combination, a blade, a frame having arms provided with means against which the ends of the said blade are clamped, and a blade carrier pivoted at its ends to and between the arms of the said frame and on which the said blade is superimposed for carrying the blade and for clamping the ends of the blade against the said means, and locking means for locking the said blade carrier in clamping position.

3. In a safety razor and in combination, a blade, a frame having arms provided with means against which the ends of the said blade are clamped, and a blade carrier pivoted between the arms of the said frame and on which the said blade is superimposed for carrying the blade and for clamping the ends of the blade against the said means, and centering means on the said blade carrier for centering the blade on the carrier and for holding it against lateral movement while the carrier is in an open position.

4. In a safety razor and in combination, a blade, a frame having yielding side arms provided with inwardly-extending lugs, and a blade carrier mounted to swing between the arms of the said frame and on which the said blade is superimposed, the said carrier holding the ends of the blade clamped against the said lugs.

5. In a safety razor and in combination, a blade, a frame having yielding side arms provided with inwardly-extending lugs, and a blade carrier mounted to swing on the said frame and on which the said blade is superimposed, the said carrier holding the ends of the blade clamped against the said lugs, and locking means on the said side arms for engagement by the said blade carrier by locking the latter in clamping position.

6. In a safety razor and in combination, a blade, a frame having yielding side arms provided with inwardly-extending lugs, and a blade carrier mounted to swing on the said frame and on which the said blade is superimposed, the said carrier holding the ends of the blade clamped against the said lugs, and projections integral on the inner faces of the said side arms for engagement by the said blade carrier to lock the latter in clamping position.

7. A safety razor comprising a razor blade, a frame having yielding side arms provided with inwardly-extending lugs and with integral locking projections, and combined blade carrier and guard extending between and pivoted on the said side arms and adapted to clamp the ends of the said razor blade against the said lugs, the said carrier and guard engaging the said projections for locking the said carrier and guard in clamping position.

8. A safety razor comprising a razor blade, a frame having yielding side arms provided with inwardly-extending lugs and with integral locking projections, and a combined blade carrier and guard extending between and pivoted on the said side arms and adapted to clamp the ends of the said razor blade against the said lugs, the said carrier and guard engaging the said projections for locking the said carrier and guard in clamping position, the said blade and combined carrier and guard having centering means for centering the superimposed blade on the carrier and guard and for holding the blade against lateral movement.

9. A safety razor comprising a razor blade, a frame having yielding side arms provided with inwardly-extending lugs and with integral locking projections, and a combined blade carrier and guard extending between and pivoted on the said side arms and adapted to clamp the ends of the said razor blade against the said lugs, the said carrier and guard engaging the said projections for locking the said carrier and guard in clamping position, the said carrier and guard having an integral knurled projection and the said razor blade having an opening for engagement with the said knurled projection in the carrier and guard.

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,

JOHN P. DAVIS.