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R. E. THOMPSON

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SAFETY RAZOR

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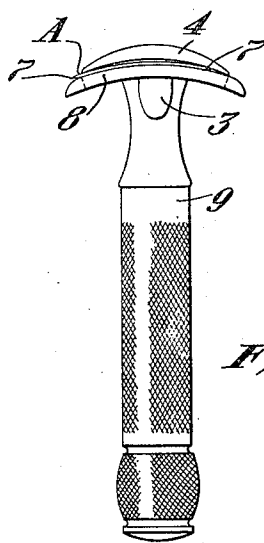
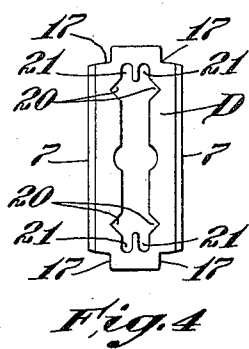
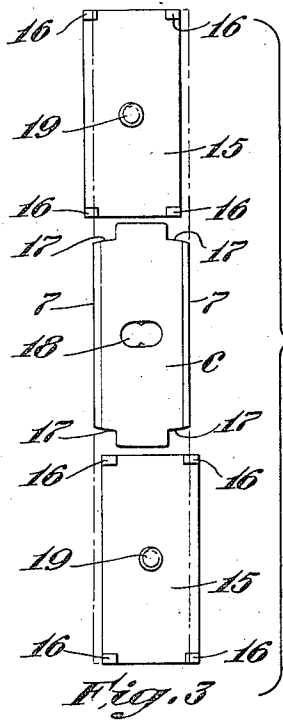
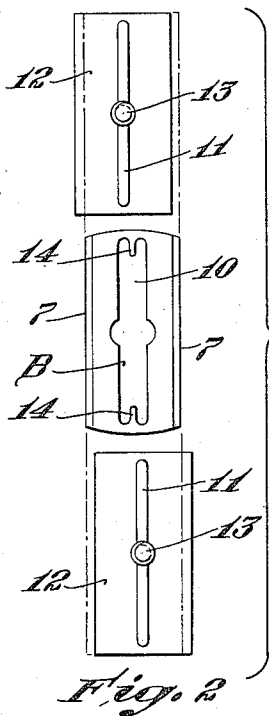
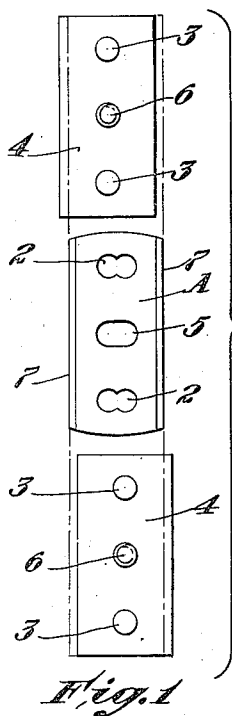


Fig. 5

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UNITED STATES PATENT OFFICE

2,251,008

SAFETY RAZOR

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4 Claims. (Cl. 30-63)

My invention relates to double-edged blades for safety razors of the type in which the blade holder is provided on opposite edges with guards adapted to cooperate with the respective blade edges. Most razors of this type have become standardized so far as the width of the blade is concerned, and it has been the practice to position the blade in the holder in such manner that both of the blade edges are maintained simultaneously in shaving relation to the corresponding guards when the blade is clamped in place.

A blade embodying my invention departs from the usual practice in that it has less than the standard width and is provided with positioning apertures which enable it to be located in either one of two lateral positions in a blade holder designed for blades, of standard width. When clamped in either of these positions, one edge of the blade is held in shaving relation to its guard and the other edge is located behind its guard and cannot be utilized for shaving, so that only one edge is available for use at any given time.

The resulting advantage is that the wear on the blade can be definitely confined to one edge for any desired period. It is a common experience that if a used blade edge is allowed to remain unused for a few days its sharpness is found to be appreciably improved, and various ways have been proposed for enabling the user to distinguish readily between the edges of a double-edged blade in such manner that the use of the blade can be confined to a selected edge at will, while still preserving the advantage of having two available edges. My invention achieves this result by making it impossible to use more than one edge of a double-edged blade so long as the position of the blade in its holder remains unchanged, thereby increasing the useful life of the blade and lessening the likelihood that the user will discard a blade prematurely in case one edge is unsatisfactory or both edges are not equally sharp.

In the accompanying drawing illustrating my invention:

Figures 1, 2 and 3 are similar views showing three different forms of my blade, each associated with a blade-clamping cap shown above and below it in the two positions which these parts can occupy in relation to each other when the blade is clamped;

Figure 4 shows a form of my blade which can be used with any of the blade-clamping caps above referred to; and

Figure 5 is an end view of a razor having its cap constructed as shown in Figure 1.

In Figure 1 is illustrated a form of my blade which is suitable for use in a well-known type of holder in which the blade-clamping cap is provided on its inner face with a central threaded stem for attachment to the razor handle and with two positioning studs located near the ends of the cap, in line with the threaded stem. In this case the blade, A, has two positioning apertures 2-2 so shaped and located as to receive and engage the studs 3-3 on the cap 4 in two different lateral positions of the blade, and a transversely-extending slot 5 of such length as to receive the threaded stem 6 in either position. The dotted lines, which are prolongations of the cutting edges 7-7 of the blade, indicate the location of these edges with respect to the cap when the blade is applied thereto in either position, and it will be seen that whether the blade is in one position or the other, one of its edges 7 will be exposed for shaving when clamped in the holder while the other edge 7 will be covered by the cap and thus rendered inoperative. The complete razor is shown in Figure 5, in which the parts above described are associated with a guard member 8 and a handle 9 of familiar construction.

The blade B shown in Figure 2 differs from the blade A in being provided with a central longitudinally-extending slot 10 adapting it to be positioned by means of a longitudinal rib 11 centrally located on the under side of a cap 12, which has a central threaded stem 13 for attaching it to a handle. The slot 10 is divided at its ends into two parts by inwardly-projecting fingers 14-14, each part of the slot being of such width as to receive and fit the rib 11, whereby the blade can be located in either of two lateral positions with respect to the cap 12 as indicated by the dotted lines, and with the same result as in the case of the blade shown in Figure 1.

The positioning apertures in the blade are not necessarily internal but may be external, as is illustrated in Figure 3, in which the blade C is positioned on the cap 15 by means of one or the other of two pairs of projections 16 located respectively at the four corners of the cap on its under side and adapted to enter corresponding notches 17 in the corners of the blade. The aperture 18 at the center of the blade serves, like the slot 5 in Figure 1, to receive the threaded stem 19 on the cap 15 and permit the blade to be located in either of the lateral positions indicated by the dotted lines.

The blade-holding parts above described are such as are commonly used with flexible blades,

but my invention is equally applicable to rigid blades, and the apertures in the blades may be readily adapted to cooperate with whatever positioning and clamping means are employed in the holders in which they are used. Also, the apertures may be so shaped and located that my blade can be used in different holders and located in each of them in the two lateral positions which are distinctive of my blade as compared with those heretofore used in double-edged safety razors. For example, Figure 4 shows a blade, D, which combines the positioning apertures of the blades described in connection with Figures 1, 2 and 3 and can be used with either of the caps 4, 12 and 15, its apertures being shaped to receive the studs 3—3 at 20—20, the ends of the rib 11 at 21—21 and the projections 16 in the corner notches 17, in either of the two lateral positions above described. Its internal aperture, like the slot 10 in Figure 2, is also made wide enough to receive clamping means such as the stems 6, 13 and 19 in either position, as is necessary in any case in which the clamping means pass through the blade.

In Figure 1 each of the apertures 2—2 in the blade A has the contour of two intersecting circles, so that the blade cannot move laterally when placed on the studs 3—3 in either position, and the same result is obtained by the fingers 14—14 with which the blade B is provided, but this arrangement is convenient rather than essential, because either blade could readily be held in either position while being clamped in place. In the case of the blade C shown in Figure 3, lateral displacement of the blade may be prevented, if desired, by shaping the aperture 18 like the apertures 2—2, as indicated in dotted lines.

I claim:

1. A blade having opposite cutting edges and adapted for use in a safety razor having a holder including guards spaced apart in the direction of the width of the blade, said holder having fixed blade positioning means, said blade being so much narrower than the space between the guards that when either one of said edges is in operative shaving position relative to a guard the other edge is completely concealed within the holder, said blade being formed with recesses for cooperation with said positioning means, said recesses being all off-set from the longitudinal central line of the blade so as to cooperate with said positioning means only in the laterally displaced relations of the blade wherein one blade edge or the other is in shaving position relative to a guard, the blade being thus positionable in the holder only in an operative relation thereto.

2. A blade having opposite cutting edges and adapted for use in a safety razor including a

holder provided with fixed blade-positioning means and with opposite guards spaced apart in the direction of the width of the blade, said blade being so much narrower than the space between the guards that whenever either one of its edges is in operative shaving position relative to a guard its other edge is completely concealed within the holder and thereby rendered inaccessible for shaving, and said blade being formed with two independent sets of laterally-spaced positioning apertures all off-set from the longitudinal central line of the blade so as to cooperate with the positioning means in the holder in only one or the other of two extreme lateral positions of the blade wherein one blade edge or the other is in shaving relation to a guard, the blade being thus positionable in the holder only in an operative relation thereto.

3. A blade having opposite cutting edges and adapted for use in a safety razor including a holder provided with fixed blade-positioning means and with opposite guards spaced apart in the direction of the width of the blade, said blade being so much narrower than the space between the guards that whenever either one of its edges is in operative shaving position relative to a guard its other edge is completely concealed within the holder and thereby rendered inaccessible for shaving, and said blade being formed with an elongated central slot extending parallel with its cutting edges and divided at its ends by inwardly-projecting fingers located on the central longitudinal line of the blade, whereby a pair of laterally-separated recesses all off-set from the longitudinal central line of the blade is provided at each end of said slot to receive the positioning means in the holder in either of two extreme lateral positions of the blade wherein one blade edge or the other is in shaving relation to a guard, the blade being thus positionable in the holder only in an operative relation thereto.

4. In a safety razor, the combination of a blade holder comprising parallel guards on opposite edges and fixed blade positioning means, and a blade having opposite cutting edges and a width that is so much less than the space between the guards that whenever either one of said edges is in operative shaving position relative to a guard its other edge is completely concealed within the holder and thereby rendered inaccessible for shaving, said blade being formed with two independent sets of laterally-spaced positioning apertures all off-set from the longitudinal central line of the blade so as to cooperate with the positioning means in the holder in only one or the other of two extreme lateral positions of the blade wherein one blade edge or the other is in shaving relation to a guard.

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