DEVICE FOR SHARPENING SAFETY RAZOR BLADES

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My invention relates to a device for sharpening or honing safety razor blades.

After using a safety razor blade, or after using it a few times, the edge of the blade loses its keenness or sharpness to such an extent that it can no longer be used to give a satisfactory shave and must be discarded and replaced by a new blade.

My invention provides a device whereby the used blade may be easily and quickly honed to restore it to its original sharpness. By thus honing the blade prior to shaving, it may be used for an indefinite number of shaves. The device is, moreover, of simple construction and easy to use.

In my invention, I provide a supporting base on which the blade is placed. This base has anchoring means which secures the blade against lateral or longitudinal shifting. The anchoring means acts to anchor the blade automatically when the blade is placed on the base. My invention also provides a honing element which is placed on the base and which has a honing surface or surfaces, one for each edge of the blade. The honing element is slideable on the blade and base to hone the edge or edges of the blade. When one side of the blade has been honed the blade is turned over and the opposite side of the edge is honed. The honing surface may be of any hard, smooth, stone-like material. I have found that a small plate of glass for each edge is fully satisfactory and is preferred because of its low cost. Each glass plate may be mounted on the honing element by cementing and is inclined to the bevel of the edge of the blade. The invention may be applied to the sharpening of a single edge blade or a double edge blade.

An embodiment of the invention for sharpening a double edge blade is shown by way of example in the accompanying drawing, in which,

Fig. 1 is a side elevation of a device embodying the invention, the limits of shifting of the honing element being indicated in broken lines.

Fig. 2 is an end perspective elevation of the device of Fig. 1.

Fig. 3 is a perspective view of the base and anchoring means, the position of the blade being indicated in broken lines.

Fig. 4 is a bottom plan view of the honing element. Fig. 5 is a vertical, longitudinal section of the device on a larger scale taken on line 5—5 of Fig. 2.

Fig. 6 is a vertical section similar to that of Fig. 5 of a portion of the device showing the honing device shifted on the base to the right of its position in Fig. 5, and, Fig. 7 is a vertical section of the device taken on line 7—7 of Fig. 1.

In the embodiment shown in the accompanying drawings, a base 10 is provided with a flat upper surface 11 on which may be placed for honing a double edge safety razor blade 12 of common construction having a longitudinal slot 13. Extending upwardly from the base 10 in a median longitudinal position and through the slot 13 is a vertical, blade anchoring, projection 14. The projection 14 serves not only to anchor the blade in position on the base 10 but is notched at its ends to form stop surfaces 15 and 16 to limit the longitudinal movement of a honing element 17.

The honing element 17 has an upwardly extending wing 18 by which it may be grasped and the under surface is recessed as at 19, Fig. 4, over an area preferably about equal to that of the blade 12. The honing element is more deeply recessed at 20 in its central median part to receive the projection 14 of the base. Notches 21 and 22 are provided at each end of the honing element to permit the element to slide over that part of the projection 14 beyond the stop surfaces 15 and 16 so that the element may slide longitudinally of the base until its opposite ends contact with one or the other of the surfaces 15 and 16.

The upper surface of the recess 19 slopes slightly upwardly from its side edges at an angle to the horizontal corresponding with the bevel of the edge of the razor blade 12 and a pair of glass plates 23 and 24 are cemented to these surfaces and form the honing surfaces of the element. When the blade 12 is in place on the base and anchored by the projection 14 against movement thereon, the honing element 17 is placed in position as shown in Fig. 5 with the under surfaces of the glass plates pressed against the blade 12. Then the element may be moved back and forth within the limits of the stop faces 15 and 16 a few times, honing the upper surfaces of the beveled cutting edges of the blade. The blade may then be turned over and the opposite face similarly honed. The result is to restore the keen cutting edges of the blade.

The base 10 and honing element 17 may be of any suitable material, for example, a molded plastic and the base may be hollow to economize on plastic.

Having described my invention, what I claim is:

1. A honing device for safety razor blades which comprises a base having an upper, flat blade supporting surface extending to the edge margin of a blade to be honed and an anchoring projecting extending upwardly from said base at a median portion to form guide surfaces extending longitudinally of said median line and of a size to engage the opening of a razor blade and to hold the blade stationary, and a honing element having a recess extending from its lower face, said recess having a sliding fit with the longitudinal guide faces of said anchoring projection and of a longitudinal length greater than said projection to permit restricted longitudinal movement of said honing element relative to said base and to prevent sidewise movements, said honing element having honing surfaces on its lower face extending downwardly and outwardly on opposite sides of said recess to the edge of a blade mounted on said base.

2. The honing device of claim 1 in which said anchoring projection is a vertical rib.

3. The honing device of claim 1 in which a pair of honing plates are mounted in the lower part of said honing element to form the downwardly and outwardly extending honing surfaces.

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