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HOLDER FOR STROPPING RAZOR BLADES

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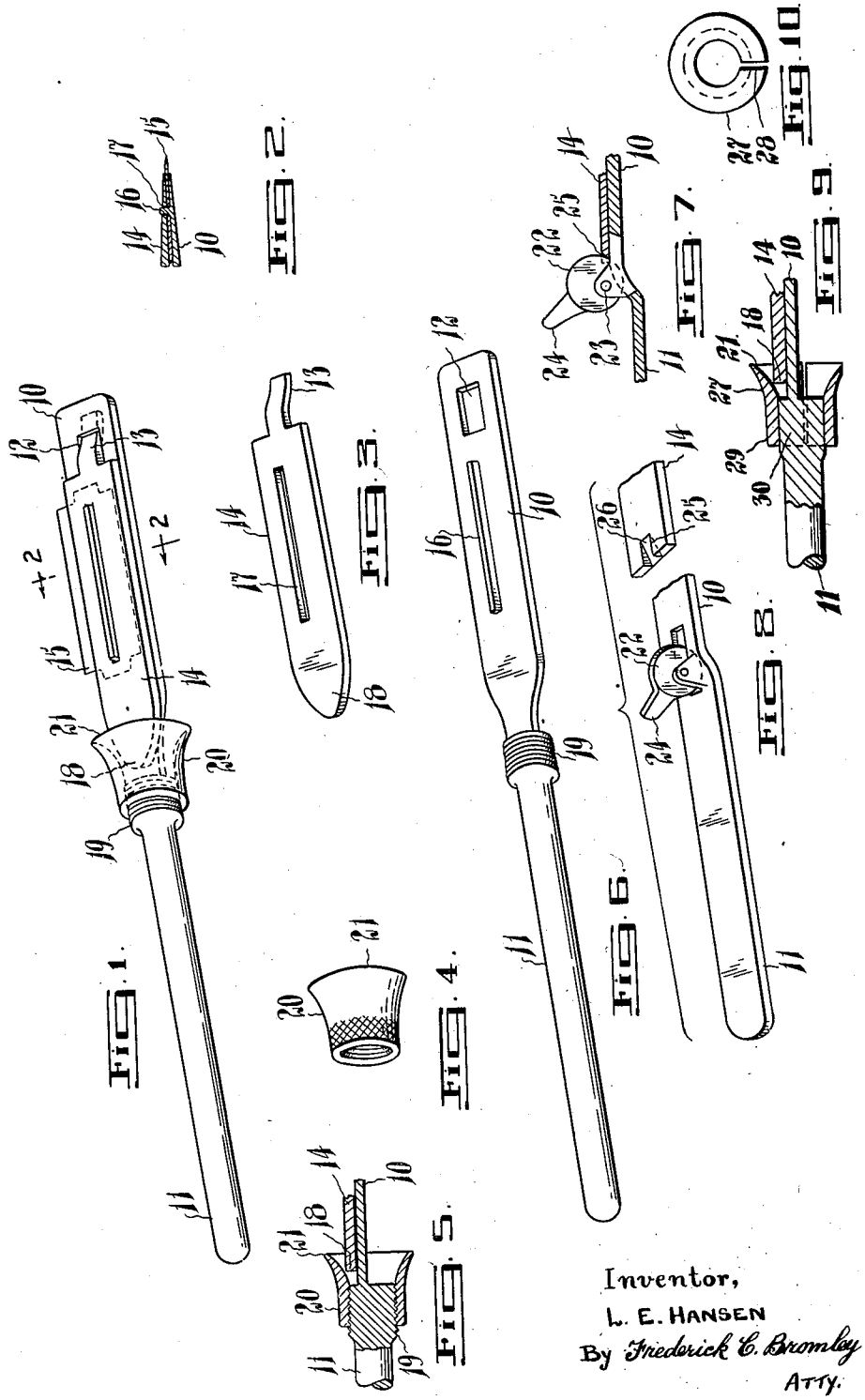


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

Fig. 9.

Fig. 10.

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HOLDER FOR STROPPING RAZOR BLADES

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2 Claims. (Cl. 30—333)

The invention appertains to improvements in devices for holding blades of safety razors so that they may be conveniently stropped, and has for its object the provision of a holder of a simple and practical construction in which a razor blade of the double-edge type can be easily and quickly inserted and removed after the cutting edge has been restored.

The distinctive feature of construction resides in the attachment means for the razor blade by which it is held firmly with an edge exposed for contact with an ordinary strop.

The invention comprehends a handled holder having a flat elongated member against which a razor blade is clamped in place by a keeper plate. The blade is placed over a locating ridge which upstands from said member and fits into an aperture in the keeper plate. The keeper plate is loosely attached and arranged to be swung upwardly endwise from said member for insertion of a blade, and its removal after sharpening. The attachment means provides a bent tongue fitted in a slot, the arrangement being such that endwise pressure on the keeper plate causes it to securely clamp a blade against said member, which carries means for exerting the necessary endwise pressure in the form of a locking device.

In one embodiment of the invention the locking device comprises a screw collar having a flared mouth for engaging a tapered end of the keeper plate. In another embodiment, the locking device comprises a split collar having a plain bore which is a press fit on a section of a handle. The collar is urged along the said section by hand pressure and is frictionally retained in place. The collar has a flared mouth for engaging the tapered end of the keeper plate. In yet another variant form the locking device consists of a cam finger engageable with a biased face on the keeper plate.

The invention is inexpensive to manufacture and may be employed advantageously for restoring the edge of a razor blade.

Referring to the accompanying drawing,

Fig. 1 is a perspective view of the preferred form of the invention depicting a blade held in place.

Fig. 2 is a cross section taken on line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the keeper plate.

Fig. 4 is a detail of the screw collar.

Fig. 5 is a fragmentary detail partly in section showing how the mouth of the screw collar engages the tapered end of the keeper plate.

Fig. 6 shows the holder with the keeper plate and the screw collar removed.

Fig. 7 is a fragmentary longitudinal section of the variant form of the invention in which a cam finger is used as the locking device for the keeper plate.

Fig. 8 is a further view of this modification illustrating more particularly the cam finger and showing the biased face on the keeper plate.

Fig. 9 is a view similar to Fig. 5, but showing the modification of the invention in which a split collar secures the keeper plate on the holder.

Fig. 10 is an end view of the split collar disassembled.

Like numerals of reference denote similar parts in each figure of the drawing.

Referring at first to Figs. 1 to 6 inclusive, I preferably construct the holder proper of an elongated flat member 10 having an integral continuation at one end in the form of a handle 11. At the end opposite the handle I provide a slot 12 running lengthwise suitable for receiving a tongue 13 projecting from an end of the keeper plate, denoted at 14, which is also a flat element similar to the member 10 and disposed thereover so that a razor blade may be located therebetween with an edge portion laterally protruding therefrom for engagement with an ordinary strop. Both the member 10 and the keeper plate are tapered toward their side edges from which the razor blade 15 protrudes, as will be seen from an inspection of Fig. 2, which allows the strop to properly contact the edge of the blade to be sharpened.

For the purposes of positioning the razor blade, I furnish a ridge or tongue 16 on the member 10 to fit in the slot customarily supplied in a blade. A suitable aperture 17 is formed in the keeper plate to accommodate the ridge 15.

I deform the tongue 13 downwardly and outwardly on a curvature such that it will fit into the slot 12 to permit the keeper plate to lie parallel with the member 10 and to cause it to be urged toward the member 10 when pressure is applied on the inner end 18 thereof. The end 18 is tapered or rounded, and at the juncture of the handle 11 with the member 10 there is supplied a screw-threaded shank 19 which carries the screw collar 20. The screw collar has a flared mouth 21 adapted to fit over the adjacent tapered end of the keeper plate when screwed toward the same.

According to this construction it will be evident that in order to secure a razor blade in the holder ready for resharpening it is only

necessary to raise the tapered end of the keeper plate, while it is clear of the collar 20, insert the blade over the ridge 16, and then allow the keeper plate to drop back into place again and tighten the collar. An important feature is that the flared mouth of the collar cooperates with the tongue 13 in urging it endwise to force the keeper plate into clamping engagement with the interposed razor blade, and at the same time firmly lock the tapered end of the keeper plate to preclude its shifting out of alignment. The blade is reversed for sharpening its other edge.

Adverting to the variant form of the locking device depicted in Figs. 7 and 8, this comprises the cam finger 22 which is in the form of an eccentric pivoted at 23 at the inner end of the member 10 and supplied with a finger piece 24 by which it may be turned. The cam finger is disposed in a slot and arranged perpendicularly to the plane of the member 10. The inner end of the keeper plate has a notch 25 providing an inclined face 26. The notch accommodate the eccentric when the finger piece is pushed toward the keeper plate to engage the inclined face 26. The engagement co-acts with the tongue 13 in clamping the keeper plate. On release of the cam finger the keeper plate can be swung up on its tongue-and-slot connection. Since the operation of the keeper plate is similar to the preferred form of the invention, no further description is thought to be necessary.

The modification of the locking device shown in Figs. 9 and 10 is similar to that already described in reference to Figs. 1 to 6. However, in lieu of screwing the collar on the holder it is made a friction fit so that it may be slid into a locking position with respect to the tapered end 18 of the keeper plate. The collar, denoted at 27, has a flared mouth section receptive to said end 18 of the keeper plate so that when it is urged into engagement with this end it will exert a wedging effect thereon and at the same time cause the tongue 13 to firmly engage the slot 12. The collar is split as at 28 to enable it to expand, and has a section 29 provided with a smooth bore. The handle 11 has a round, smooth shank section 30 immediately adjacent the member 10 and of a slightly greater diameter than the bore of the collar section 29 to provide a frictional grip. Beyond the shank section 30 the handle is reduced in diameter so that the collar may slide loosely thereover. To lock the keeper plate, the user merely has to press the split collar on and along the shank section 30 until it firmly engages the tapered end 18. The split collar can be readily slid off the shank section to release the keeper plate in removing a razor blade.

The advantages and utility of the invention will be realized from the above description and it will be obvious that such variations in detail may be resorted to as come within the scope of the appended claims.

What I claim is:

1. A holder of the class described comprising a handled member of a flat elongated shape having an intermediate extent upon which a razor blade is positionally located for stropping, and provided at its outer end with a slot running lengthwise, a keeper plate adapted to overlie said razor blade and extend lengthwise beyond the same, a tongue projecting downwardly and outwardly from the outer end of the keeper plate on a curvature and engaged in said slot so that when it is urged into the slot it will cause the keeper plate to clamp the interposed razor blade, and a cam finger pivotally carried by the inner end of the aforesaid member and having an eccentric portion engageable with a biased face provided on the inner end of said keeper plate, said cam finger coacting with the tongue and slot in applying clamping pressure upon the keeper plate.

2. A holder of the class described comprising a handled member of a flat elongated shape having an intermediate extent upon which a razor blade is positionally located for stropping, a keeper plate adapted to overlie the razor blade and extend lengthwise beyond the same, said keeper plate having a notch at one end providing a biased face, a cam finger carried pivotally by the adjacent end of the aforesaid member and having an eccentric portion engageable with the biased face of said notch to apply clamping pressure upon said keeper plate, and means at the other end of said keeper plate detachably connecting it to the aforesaid member.

LOUIS E. HANSEN.