

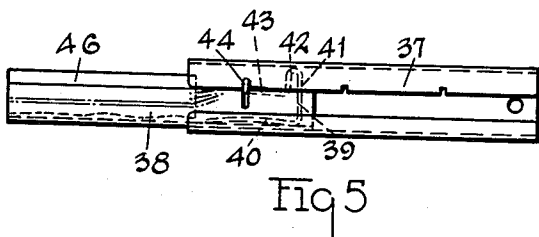
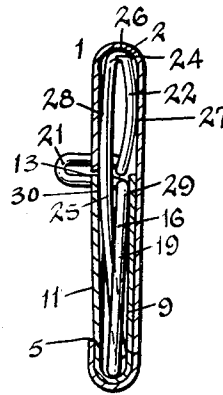
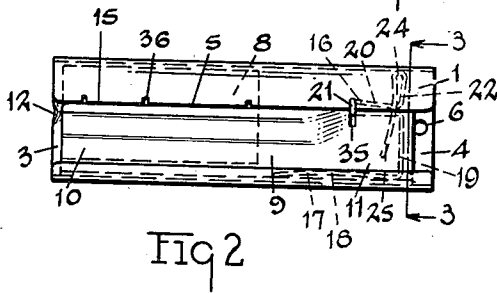
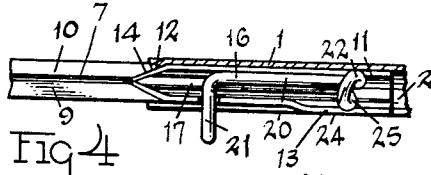
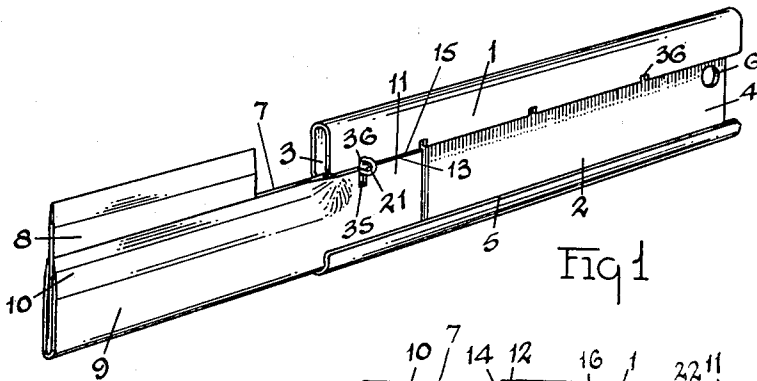
Jan. 18, 1938.

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2,105,663

BLADE HAFT

Filed Oct. 3, 1935



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UNITED STATES PATENT OFFICE

2,105,663

BLADE HAFT

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Application October 3, 1935, Serial No. 43,396

2 Claims. (Cl. 30—162)

My invention relates to the cutlery art and particularly to a haft for manipulating an item of cutlery.

The invention has for an object to provide a
5 haft or handle in which a blade may be telescopically supported by means tending to prevent the blade from being withdrawn except upon actuation of said means in a prescribed manner. Another object of the invention is to provide a
10 blade clamping or supporting element, movable with respect to the haft and of such a form and construction as to enable separation or disassembly of the blade from the other component parts of the construction. Thus, the invention
15 provides means whereby razor blades of the safety razor type which have heretofore been discarded after ordinary use, may be utilized to a considerable advantage by mounting or assembling the same with the said blade supporting element and, with due regard to safety, using the blade in con-
20 junction with the haft of my invention. The uses to which the blade may thus be put when mounted and guarded are multiple, and the considerable waste resulting from discarding such used blades is reduced.

The invention has for a further object to provide resilient means for supporting and guiding said blade supporting element with reference to the haft and to its movement with respect there-
30 to. Said resilient means operates to prevent transverse play as between the haft and element while the same are in telescopic or blade covering relation and also to prevent binding between the element and the haft when they are being moved with respect to each other to or
35 from said telescopic relation. Another object of the invention is to provide means, acting in conjunction with said resilient means, for automatically locking the said element in any of a variety of positions with reference to the haft and said telescopic or blade covering positions. Said last named means, when thus locked, co-
40 operates with said resilient means to prevent endwise movements of the said element with respect to the haft, as well as the aforementioned prevention of transverse movements, despite an application of considerable end thrust to either the haft or blade supporting element.

A particular object of the invention is to provide
50 a combination of a haft of inexpensive construction, a supporting element for any of a variety of blades, razor or otherwise, slidably supported within the haft, and a spring member bent and disposed with reference to both the element
55 and haft to provide a resilient guide and bearing

means as between the said haft and element and an automatic hand releasable locking means for allocating the said blade supporting element with reference to the haft. A further particular object is to provide means for preventing the blade supporting element from being withdrawn completely from the haft in any but a prescribed direction and to a safe place thereby reducing the danger of handling the blade, as during replacement thereof.

The invention consists in other features and advantages which will appear from the following description and upon examination of the drawing. Structures containing the invention may partake of different forms and may be varied in their details and still embody the invention. To illustrate a practical application of the invention, I have selected a blade haft and a modification thereof embodying the invention as ex-
15 amples of the details thereof that contain the invention and shall describe the selected structures hereinafter, it being understood that variations may be made without departing from the spirit of the invention. The particular structures selected are shown in the accompanying drawing.

Fig. 1 of the accompanying drawing illustrates an enlarged perspective view of a blade haft partaking of the features of my invention and selected for purposes of illustration, showing the blade and blade supporting element in an extended position. Fig. 2 illustrates a life-size side view of a blade haft with the blade and blade supporting element shown in telescopic or blade covered relation. Fig. 3 illustrates an enlarged view of a section taken along the plane of the
30 line 3—3 indicated in Fig. 2. Fig. 4 illustrates an enlarged view of a longitudinal section of the haft shown with the blade supporting element in a position of full extension with reference to one end of the haft. Fig. 5 illustrates a life-size side view of a modified form of construction to that shown in Figs. 1 to 4, inclusive.

A blade haft partaking of the features of my invention is preferably formed of stiffened sheet material bent or formed to define an inner chamber open at either end. The haft may have provision for connecting it to a retaining chain or cord, such as a watch chain and the like. Slidably mounted within the chamber is an element, also preferably formed of stiffened sheet material, bent or formed to have portions disposed in resilient proximity to each other between which may be forcibly moved and located the shank portion of a blade, such as a razor blade. Mounted in another portion of the said element is a re-
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resilient member having portions, some of which bear resiliently on the wall of the said chamber and serve to guide the element in movement with respect to said wall and prevent transverse movement or rattling of the element within the chamber. Other of the portions of the resilient member operate in conjunction with the haft and portions thereof to automatically lock the element in a variety of positions with reference to said haft and to cooperate with first named portions of said resilient member to prevent endwise movements of the element with respect to the haft when locked.

Referring to the drawing wherein, as aforesaid, a blade haft 1, selected for the purposes of illustrations, is shown, it will be noted that the haft is preferably formed of sheet metal bent to define a chamber 2. The chamber 2 has open ends 3 and 4 and a slot-like side opening 5. A hole 6 may be formed in the metal of the haft by means of which the haft may be connected to a retaining chain or cord. The chamber 2 provides a magazine or retreat in which a blade, such as the illustrated safety razor blade 8, may be movably supported by a blade supporting element 9.

The blade supporting element 9 is formed preferably of a sheet metal blank first bent substantially to a U-shape throughout its length. The edges 7 of one end portion 10 of the element 9 are preferably beveled and bent so that the said edges and the inner surfaces of the element 9 adjacent to said edges resiliently close the open side of the U-shaped blank in that portion and thereby provides a resilient clasp for the blade 8 which may be forcibly inserted between said edges 7 and surfaces adjacent thereto. Thus the blade 8 is firmly but removably held by the element 9 which is adapted to be inserted through the open end 4 of the haft into the chamber 2 with the portion 10 and mounted blade 8 leading. One edge 13 of the remaining or body portion 11 of the element 9 is located with respect to an edge 15 of the slot opening 5 in edge to edge relation, sufficient clearance being had to permit free movement of the element through the chamber.

The element 9 may be moved freely in the chamber 2 and may be directed to extend the portion 10 with the blade 8 outwardly through the open end 3 of the haft. In order to prevent the element 9 from being drawn completely through the open end 3 and to thereby prescribe its removal from the haft only from the open end 4 for safety of handling, a stop or detent 12 is formed on the haft which detent extends into the open end 3. The detent 12 is adapted to engage a shoulder 14 on the element 9 formed by the closing of the edges of the blank to form the portion 10 at a point where the portion 10 joins the remaining or body portion 11 of the element 9. Thus it will be seen, as illustrated in Fig. 4 of the drawing, that the element 9 and the blade clasped thereby may be drawn through the open end 3 only a distance as defined by the shoulder 14 and its engagement with the detent 12 and that, in order to entirely remove the element 9 and its associated blade from the haft, one must withdraw the same through the open end 4. By restricting the removal to the open end 4 it will be appreciated that in the course of removal the portion 11 of the element will first be presented to the user and forms a readily claspable handle that may be manipulated with safety to effect the complete removal

of the element from the haft for purposes of substitution of the blade and the like.

In order to guide the element 9 in its movement in the chamber 2 and to prevent vibration or transverse rattling movements of the element in the chamber, a resilient means is preferably supported and carried by the portion 11 of the element 9. In the form of construction shown in the drawing, said means is embodied in a spring 16, which is preferably bent and disposed as hereinafter described. One end 17 of the spring 16 has a slightly bowed portion 18 joining a portion 19 which is bent substantially at right angles to the portion 18. The portion 19 connects with a portion 20 and extends substantially at right angles to the portion 19 and substantially parallel to the portion 18. The portion 20 is bent upon itself to form a loop 21. The portion 20 is joined by a portion 22 extending substantially at right angles to the portion 20 and substantially coaxial with the portion 19. The portion 22 is bent upon itself to form a loop 24 and a tail 25. The tail 25 is bowed around the extremities of the portion 20. In assembly, the end 17 and the bowed portion 18 are located so as to bear on the channel of the body portion 11 of the element 9, and the portions 19 and 22 extend between the side walls of portion 11 and the sides of the chamber 2 to locate the loop 24 resiliently against an edge wall of the chamber 2, as shown at 26. Thus, the loop 24 serves as a resilient guiding and bearing foot in the movement of the element in the chamber 2 and also prevents transverse movements or rattling of the element in the chamber in planes parallel to a plane extending through the side edges of the chamber and element.

Preferably the lead strand of the portion 22 forming the loop 24 is bent so as to resiliently bear against the wall of the chamber 2 at a point 27, and the tail portion 25 is bent to resiliently bear against the said wall at a point 28 substantially opposite to the point 27. Further, the portion 19 is preferably bent to bear resiliently against a side wall of the element 9, as at the point 29, and the tail 25 is bent to bear resiliently against an opposite side wall of the element 9, as at the point 30. Thus, transverse movements or rattling of the element 9 with respect to the haft 1 in planes extending through the sides of the haft are also prevented.

In order to lock the element 9 in any of a variety of positions with reference to the haft, the loop 21 is bent at substantially right angles to the portion 20 and to a plane extending through the portions 18, 19, and 20, to form a releasable catch. Said loop 21 is urged to move by the leading and return strands of the portion 20 and in a direction away from the edges of the element 9 and is guided in its movement by a slot 35 formed in a wall of the element 9. The loop 21 is adapted to engage the haft 1 and lock the element with reference thereto by entering into one of a plurality of slots 36 formed at various points in the wall of the chamber 2 along the line of movement of the element 9 there-through. Thus, as the slot 35 is brought into registration with the one of the slots 36, one of the strands of the loop 21 is automatically caused to enter said slot 36. The leading and return strands of the portion 20 forming the loop 21 thereby bridge and interjoin the element 9 and haft 1 to lock the element 9 and blade 8 at any of a variety of positions, two of which are illustrated in Figs. 1 and 2 of the drawing. When it

is desired to move the element 9 with reference to the haft 1, the loop 21 may be manually depressed against the tension of the portion 20 to move the strand from engagement with the particular slot 35 whereupon the loop 21 may be utilized as a control handle for moving the element 9 and blade 8 with respect to the haft 1. Thus the haft 1 may be supported in the palm of a user's hand with the loop 21 extending upwardly, and the movement and operation of the loop 21 may be effected by manipulation of the thumb of the said hand to vary the relative position of the element to the haft.

When the element 9 and the haft 1 are interlocked, a considerable end thrust force may be applied to either the haft or the element without changing the established locked position or endangering the construction. By reason of the relation of the loop 21 and the bowed end portion 18 to the strands of the portion 20 forming the loop 21 on each of which such endwise directed force first acts, it will be seen that force will be transmitted to the said loop 21 and bowed end portion 18 causing them to bear against their respective seats on the walls of the haft and element respectively with increasing pressure and thus further resist endwise movements of the element and haft. It is to be further noted in this connection that torque as between the element 9 and haft 1 is prevented by the interengagement of the edges 13 of the element and 15 of the haft 1 as shown in Fig. 1.

I appreciate that the spring member 16 may be formed in other ways than that which I have described hereinabove and still partake of the features of my invention. One of such modifications is shown in the modified structure illustrated in Fig. 5 of the drawing. A haft 37 like unto the heretofore described haft 1 in all respects except that of being in reduced dimension, and a blade supporting element 38 like unto the blade supporting element 9 in all respects except that of being in reduced dimension are combined with a modified spring member 39. The spring member 39 has a bowed end portion 40 which adjoins a portion 41 bent to extend at substantially right angles to the end portion 40. The portion 41 is bent upon itself to form a loop 42, the return strand being located substantially parallel to the leading strand of the portion 41. The return strand of the portion 41 joins a portion 43 extending substantially at right angles to the portion 41 and extending parallel to the end portion 40. The said portion 43 may be bent upon itself to form an end loop 44. In assembly

the end portion 40 is located in a position in the element 38 corresponding to the position of the portion 18 of the preferred form and operates in a like manner. The leading strand of the portion 41 is located in a position in the element 38 and haft 37 corresponding to the positions of the portions 19 and 22 of the preferred form. The loop 42 resiliently bears against the wall of the chamber defined by the haft 37 and operates in fashion similar to the operation of the loop 21 of the preferred form. The end loop 44 is bent substantially at right angles to the portion 43 and to a plane extending through the portions 40, 41, and 43 and forms a releasable catch which operates in a manner similar to that described with reference to the loop 21 of the preferred form. The structure of Fig. 5 besides illustrating a modified form of structure as above noted, also shows an embodiment wherein a half or partial blade, such as the bisected razor blade 45, may be used.

I claim:

1. A blade haft having portions thereof formed to substantially define a chamber, the chamber having an opening, a blade supporting element slidably movable in the chamber and outwardly through the opening, a slot formed in the chamber wall, one edge of the slot adapted to abut against the blade holder element along a longitudinal edge of said blade supporting element to prevent angular movement of the holder with respect to the haft when the holder is located in an extending position through said opening, and a resilient means mounted on the holder and movable therewith extending between the holder and the wall of the chamber to yieldingly resist movements of the member toward the chamber wall to resiliently guide the movements of the member toward and away from the said opening and to positively resist torque movements of the member with respect to the haft.

2. A blade haft having portions formed to substantially define a chamber, the chamber having an opening, a blade supporting element slidably movable in the chamber and outwardly through the opening, a slot formed in the chamber wall, one edge of the slot located in substantially the same plane as a portion of the slidably movable blade holder, whereby angular movement of the blade holder element with respect to the haft is prevented by abutting of the slot edge and extending portion of the blade holder element when the holder element is extending through the opening and is located in a position of use.

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