June 11, 1940. H. A. D. BAER 2,203,714

BLADE HOLDER

Filed Jan. 31, 1939

Fig. 1.

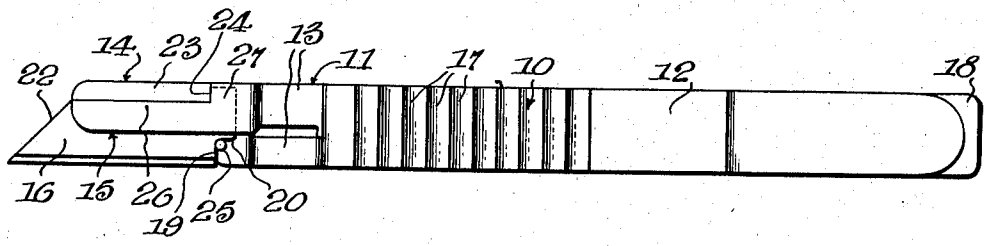


Fig. 2.

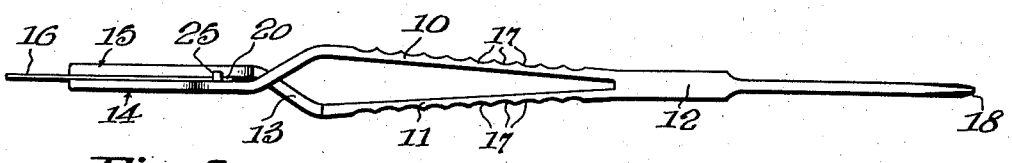


Fig. 3.

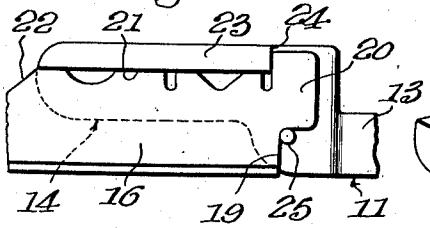


Fig. 5.

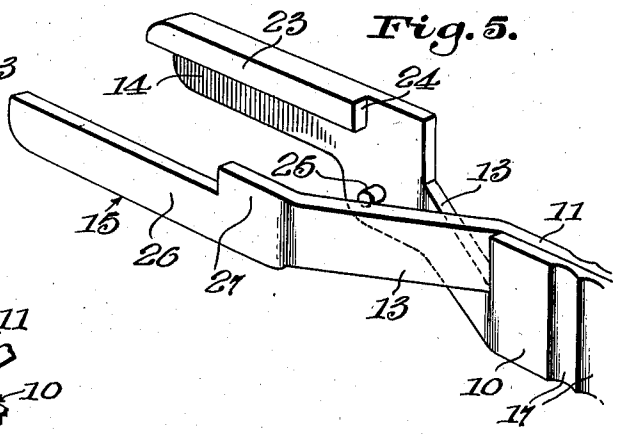


Fig. 4.

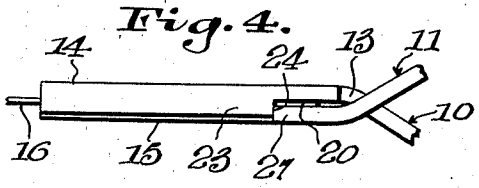
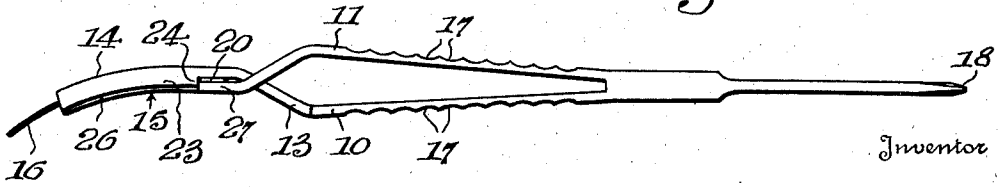


Fig. 6.



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UNITED STATES PATENT OFFICE

2,203,714

BLADE HOLDER

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Application January 31, 1939, Serial No. 253,906

3 Claims. (Cl. 30—338)

The invention aims to provide an exceptionally simple and inexpensive, yet an effective holder by means of which a thin blade may be so held as to form an efficient knife, for use by the surgeon, the seamstress, or others.

A further object is to provide a holder which will effectively hold a blade formed from half of a safety razor blade broken apart longitudinally.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawing.

Figure 1 is a side elevation showing a blade held in the holder.

Figure 2 is a lower edge view.

Figure 3 is an enlarged fragmentary elevation with the finger 15 removed.

Figure 4 is an enlarged detail upper edge view.

Figure 5 is a fragmentary perspective view.

Figure 6 is an upper edge view showing a modification.

In the drawing above briefly described, a preferred construction has been illustrated and while this construction will be specifically explained, it is to be understood that variations may be made within the scope of the invention as claimed.

Two spring arms 10 and 11 are shown integrally united at their rear ends 12 and diverging forwardly to provide a handle, said arms being tensioned to move away from each other. Near their front ends, the arms 10 and 11 are reduced in width as shown at 13 and crossed, and the portions of said arms projecting forwardly beyond the crossing point, constitute two holding fingers 14 and 15 for a blade 16, said fingers having means for holding the blade against slipping with respect thereto. The outer sides of the arms 10 and 11 are suitably roughened at 17 to provide for an effective grip thereon and a blunt blade 18 preferably projects rearwardly beyond said arms if the device be intended for surgical use, said blade 18 constituting a blunt dissector. The tension of the arms 10 and 11 is of course such as to overcome any liability of accidentally releasing the blade but when said arms are forcibly pressed together, said blade will be freed and another may be easily inserted.

The blade which has been disclosed is formed from half of an ordinary safety razor blade broken apart longitudinally in such a manner that the rear end 19 of said blade is provided with a lug 20 which projects rearwardly beyond said end 19 and also projects upwardly beyond the upper edge 21 of the blade. The irregular formation of this edge 21 is due only to the formation of the safety razor blade from which the blade 16 is formed. If desired, the blade 16 may have an acute front end formed by breaking the safety razor blade along an inclined line 22.

In the present disclosure, the finger 14 is provided with a smooth inner side to lie against one side of the blade 16, said finger being provided along its upper edge with a rib 23, the rear end 24 of said rib being spaced forwardly from the rear extremity of said finger. This finger (14) is also provided with a stud or other projection 25 which projects laterally from its inner side at a point below the rear end of the rib 23. The lower edge of the rib 23 abuts the upper edge 21 of the blade 16, the rear end 24 of said rib abuts the front edge of the lug 20, and the projection 25 abuts both the lower end of the lug 20 and the rear end 19 of the blade. It will thus be seen that if this blade be tightly held against the finger 14, it cannot move in any direction with respect to said finger. This holding function is performed by the finger 15 which lies tightly against the blade 16 under the rib 23, the upper edge of said finger 15 being preferably stepped to provide it with a major portion 26 underlying the rib 23, and with a minor portion 27 behind said rib to clamp the lug 20.

It will be seen from the foregoing that the blade 16 will be rigidly held between the two fingers 14 and 15 to provide an effective knife for any of various uses. By simply pressing the spring arms 10 and 11 toward each other to separate the fingers 14 and 15, the blade 16 may be readily removed and another substituted.

Obviously the fingers 14 and 15 may either be straight as shown in the form of construction first illustrated, or curved as shown in Fig. 6. When the fingers are curved, even though the blade 16 may be normally flat, the pressure of said fingers against opposite sides of the blade due to the tension of the arms 10 and 11 and to the flexibility of the blade, will curve said blade in the proper manner. While I have referred to constructing the blade from part of an ordinary safety razor blade, it is to be understood that the invention is not so limited. The blades may be especially made of various thicknesses of metal and with variously shaped cutting edges depending upon the particular uses intended for the instrument. It will also be clear

that within the scope of the invention as claimed, variations may be made over the present disclosure.

I claim:

1. A holder for a blade having a lug projecting both rearwardly and upwardly from its rear end, said holder comprising an elongated handle, a blade-clamping finger projecting forwardly from said handle and having an inner side to lie against the blade, said finger being provided along its upper edge with a rib projecting laterally beyond said inner side to abut the upper edge of the blade, the rear end of said rib being spaced forwardly from the rear end of said finger to abut the front edge of the blade lug, said finger being also provided on said inner side with a lateral projection to abut the lower end of the blade lug and the rear end of the blade, and a second blade-clamping finger independent of the aforesaid blade-clamping finger, said second finger projecting forwardly from said handle and cooperating with the first mentioned finger in forming a two-part clamp for the blade, said fingers being connected with the handle for relative movement to and from blade clamping position.

2. A holder for a blade having a lug projecting both rearwardly and upwardly from its rear end, said holder comprising an elongated handle, a finger projecting forwardly from said handle and having an inner side to lie against the blade, said finger being provided along its upper edge with a rib projecting laterally beyond said inner side to abut the upper edge of the blade, the rear end of said rib being spaced forwardly from the rear end of said finger to abut the front edge of the blade lug, said finger being also provided on said inner side with a lateral projection to abut the lower end of the blade lug and the rear end of the blade, and a second finger projecting forwardly from said handle for clamping the blade against the first mentioned finger, said second finger having a stepped upper edge providing it with a major portion underlying said rib to lie against the blade, and with a minor portion behind said rib to lie against the blade lug, said fingers being connected with the handle for relative movement to and from blade clamping position.

3. A holder as specified in claim 1, wherein the handle embodies diverging spring arms united at their rear ends and tensioned to move away from each other, the front ends of said arms being crossed and carrying said fingers.

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