Dec. 27, 1938. H. A. STILSON 2,141,565

BLADE HOLDER

Filed Sept. 28, 1936

Fig. 1.

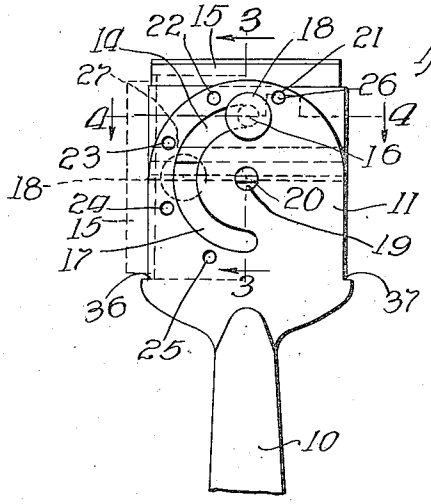


Fig. 2.

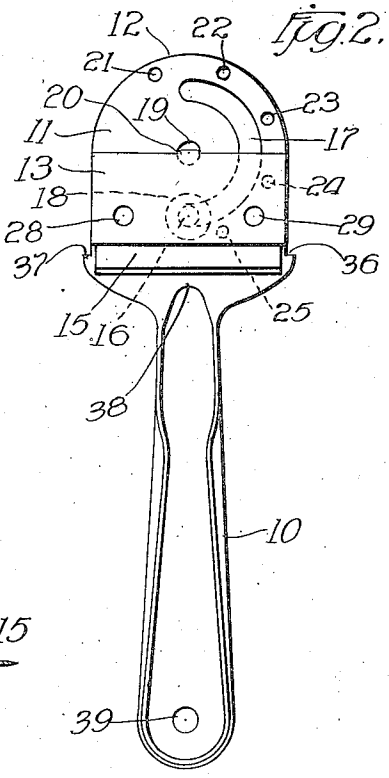


Fig. 8.

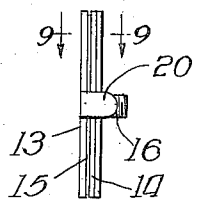


Fig. 9.

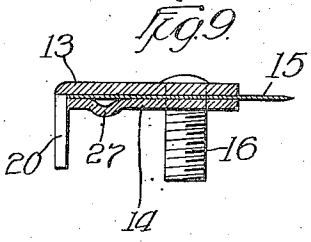


Fig. 3.

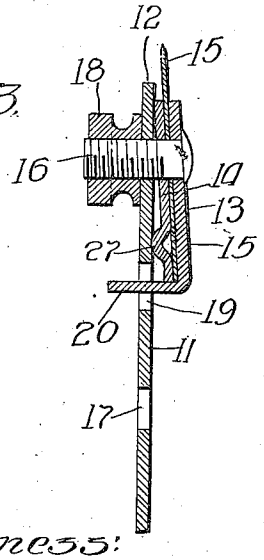


Fig. 4.

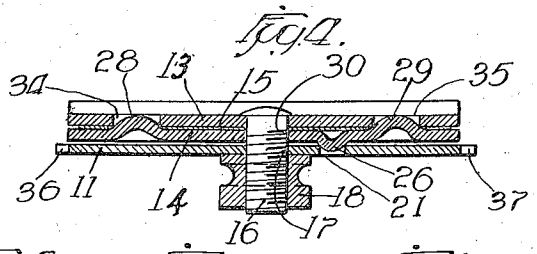


Fig. 5.

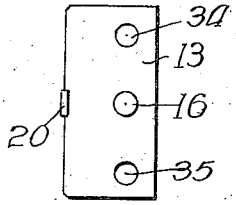


Fig. 6.

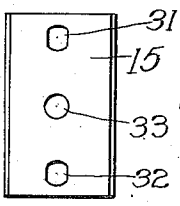
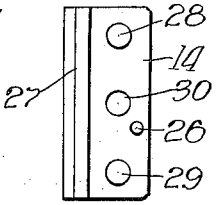


Fig. 7.



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UNITED STATES PATENT OFFICE

2,141,565

BLADE HOLDER

Herbert A. Stilson, Chicago, Ill., assignor to McGill Metal Products Company, Chicago, Ill., a corporation of Illinois

Application September 28, 1936, Serial No. 102,994

9 Claims. (Cl. 30—321)

The invention relates to a razor blade holder and particularly to a holder which secures and firmly holds a safety razor blade in a certain position and also permits the razor blade to be secured and firmly held in a number of other positions.

One of the objects of the invention is to construct the holder with various members which may be adjustably secured in a number of positions and be free from slipping by means of a curved slot, apertures, studs and a securing member so that, as desired, the safety razor blade may be placed in a position to be used as a scraper, scratcher, knife or cutter for removing stickers, paint, putty and other substances, for cutting thread, string, seams, fabric, paper and other substances and for a wide variety of other uses.

Another object of the invention is to construct the various parts in such a manner that when the implement is not in use, the safety razor blade may be moved to such a safe position with respect to the holder that no harm can occur, in other words, that the sharp or exposed cutting edge of the blade is placed completely out of the way and the user is protected from injury by the cutting edge.

A further object of the invention is to construct the blade supporting members with relation to the main holder member so that the blade may be held rigidly and securely in position at any suitable angle with respect to the main holder and against the possibility of sliding or slipping out of position between the main holder and the supporting member.

In order to obtain the plurality of positions of the razor blade, it is a further object of the invention to employ a curved slot, a series of specially positioned apertures and a number of supporting and guiding studs in the various parts of the blade holder.

The invention may be more fully understood by reference to the following description and the accompanying drawing showing an embodiment of the invention, but it will be understood that I do not limit myself to the precise and exact construction shown and illustrated, but in the claims hereinafter set forth, I intend to cover all variations and modifications of the invention.

In the drawing:

Figure 1 is a top plan view of the safety razor blade holder of the invention showing the main body member with its curved slot, the apertures and studs and showing the razor blade in one position by full lines and in another position by dotted lines.

Figure 2 is a bottom plan view of the safety razor blade holder with the blade and holding elements in the safety position.

Figure 3 is an enlarged vertical sectional view of the blade and holding members on the line 3—3 of Fig. 1.

Figure 4 is an enlarged transverse sectional view of the blade and holding members on the line 4—4 of Fig. 1.

Figure 5 is a plan view of one of the clamping or holding members showing the supporting post and also the pivot member.

Figure 6 is a plan view of the safety razor blade which is placed between the two holding or clamping members.

Figure 7 is a plan view of the second holding or clamping member showing a longitudinal rib used for canting the members and also studs to fit in apertures in the razor blade and in the clamping member shown in Figure 5 and the main supporting member or handle.

Figure 8 is a rear elevational view of the supporting members of Figs. 5 and 7 in assembled position and with the razor blade between.

Figure 9 is a view partly in elevation and partly in section taken on the line 9—9 in Fig. 8.

Like reference numerals in the various views indicate like parts of the blade holder.

The safety razor blade holder of the invention has the handle 10 and the main body portion 11, the outer edge 12 of the main body portion 11 being semi-circular. It will be understood that the handle 10 and the supporting body portion 11 may be of one integral piece of material or of two pieces secured together in any approved manner and that the handle portion may be of metal, wood or other desirable material while the supporting body portion is preferably made of metal.

The holder or clamping members 13 and 14 with the apertured safety razor blade 15 between them are held to the main body supporting member 11 by means of the screw threaded clamping stud or post 16 permanently secured or riveted to the member 13.

The members 13 and 14 with the safety razor blade 15 between them turn and pivot on the holder 11 with the stud 16 moving in the curved slot 17 located in the holder 11. A thumb nut 18 is screwed down upon the free end of the inserted screw threaded stud 16 and draws and assists in holding and pressing the razor blade and the holding members together against the body portion 11.

The main holder member 11 is provided with the central aperture 19 for the reception of the flat tongue or pivot pin 20 which is an integral

part of the holding member 13 and is bent at a right angle thereto. The main holder portion 11 is also provided with a series of preferably five apertures 21, 22, 23, 24 and 25. These apertures are for the reception of the finding and guiding stud or punching 26 which is located on the holding member 14. It will be understood that there may be any number of these apertures to receive the stud 26.

The holding or clamping member 14 is provided with a longitudinal bead or rib 27 which extends along one side portion of the member 14. The longitudinal bead or rib 27 is for the purpose of canting the razor blade and having it set at a proper working angle in conjunction with the holding members as best shown in Fig. 3. The clamping member 14 is also provided with two punchings or studs 28 and 29 which are larger than the relatively small punching or stud 26. These studs 28 and 29 extend outwardly from the clamping member 14 in a direction opposite to the punching or stud 26 and the longitudinal rib 27.

The clamping member 14 is also provided with the aperture 30 for the reception of the screw threaded stud 16.

The punching or studs 28 and 29 register with and extend through the apertures 31 and 32 in the safety razor blade 15. The post 16 extends through the aperture 33 in the safety razor blade 15. The clamping member 13 is also provided with registering apertures 34 and 35. After passing through the apertures 31 and 32 in the safety razor blade 15, the punchings or studs 28 and 29 pass into the apertures 34 and 35 of the clamping member 13. As thus assembled, that is, with clamps 13 and 14 having the razor blade 15 between them and in proper registry and alignment, the screw threaded stud 16 extends through the central aperture 33 of the razor blade and the central aperture 30 of the clamp 14, and the studs or punchings 28 and 29 extend through the apertures 31 and 32 of the razor blade and into the apertures 34 and 35 of the clamp 13.

When the members 13 and 14 with the intervening razor blade 15 are in normal assembled position and properly associated with the main body portion 11, the flat pivot pin 20 extends through the aperture 19 of the body portion 11, the screw threaded stud 16 extends through the curved slot 17 and the stud 26 extends into one of the apertures 21, 22, 23, 24 or 25. When the thumb nut 18 is screwed down on the screw threaded post or stud 16, it draws the assembled members 13, 14 and 15 toward the body portion 11 and holds the assembled members in firm and rigid position with the longitudinal bead 27 closely pressing against the underside of the body member 11, and with the member 13 closely pressing the safety razor blade against the member 14.

Upon release of the thumb nut 18 on the post 16 and the release of the stud 26 from the particular aperture 21, 22, 23, 24 or 25 by slightly raising the handle portion 11 from the assembly, the assembled members 13, 14 and 15 may be turned as a unit on the pivot pin 20 in the aperture 19 to any desired position on the handle portion 11.

It will be seen that when the stud 26 is in the aperture 21, the screw threaded post or stud 16 is at the top or outer end of the curved slot 17 and the razor blade 15 is at the outer and upper end of the blade holder portion 11 and when the parts are securely held together by the thumb screw 18, the implement may then be used as a scraper. Further, it will be seen that on release of the post 16 and the stud 26 and the movement of the assembled members to the dotted line position shown in Figure 1 where the stud 26 is in the aperture 23, the razor blade is in a position at the left side of the body member 11 transverse to its first position. In this position of the razor blade when the parts are securely held together by the thumb screw 18, the implement may be used as a knife or cutter.

It will be seen further that upon release of the studs 16 and 26, the assembly of the parts 13, 14 and 15 may be turned and pivoted as a unit to the safety position as shown in Figure 2 wherein the entire razor blade is within the outer limits of the main body portion 11, and the stud 26 is in the aperture 25. It will also be obvious that the assembly of the parts 13, 14 and 15 may be turned and pivoted to other positions as when the stud 26 enters the apertures 22 and 24, respectively. The assembly of the parts 13, 14 and 15 as a unit may be placed and pivoted on the front face of the main body portion 11 or upon its rear face. This is effected by the temporary removal of the thumb nut 18 and the reversal of the handle and holder 10 and 11 respectively, on the assembly. The principal reason for having so many possible positions for the razor blade is because of the wide variety of uses to which the razor blade holder with its razor blade may be put.

The body portion 11 of the holder is provided with the protective projections 36 and 37 to insure that the sharp edge of the razor blade when in its safety position is entirely within the outer limits of the holder. The handle 10 and the body portion 11 are also constructed so that the edge 38 is well below the edge of the razor blade when the razor blade is in its safety position. The hole 39 is to be used for hanging the implement when not in use.

From the above description, it will be apparent that the razor blade may be firmly held in any of the various positions desired with the razor blade held rigidly and firmly in position between the two holding members in association with the third or main body member thus avoiding any possibility of slippage of the parts and placing them in inoperative position.

Having thus described the invention, what I claim and desire to secure by Letters Patent is:

1. In a razor blade holder, the combination of a main body portion, a pair of blade holding members adapted to receive a razor blade between them, one of said holding members being provided with a clamping stud, the other of said holders being provided with a longitudinal bead along one of its side portions, the bead being for the purpose of canting said razor blade and the holder provided with a clamping stud, said body portion having a longitudinally extending, semicircular slot, said stud being adapted to pass through said slot and be clamped in any desired position in said slot.

2. In a razor blade holder, the combination of a main body portion, a pair of blade holding members adapted to receive a razor blade between them, one of said holding members being provided with a clamping stud, the other of said holders being provided with a longitudinal bead along one of its side portions, said body portion having a curved slot, said stud being adapted to pass through said slot and be clamped in any desired position in said slot, each of said blade holding members being provided with apertures, the holding member having the longitudinal bead being provided with studs which fit into the respective apertures in the other holding member

to hold the same firmly and rigidly against movement.

3. In a razor blade holder, the combination of a main body portion, a pair of blade holding members adapted to receive a razor blade between them, one of said holding members being provided with a clamping stud, the other of said holders being provided with a longitudinal bead along one of its side portions, said main body portion having a curved slot and also a series of apertures, said stud being adapted to pass through said slot and be clamped in any desired position in said slot, each of said blade holding members being provided with apertures, the holding member having the longitudinal bead being provided with studs which fit into the respective apertures in the other holding member to hold the same firmly and rigidly against movement, and said holding member having said longitudinal bead also being provided with a stud, said stud fitting into any desired aperture in said main body portion for use in adjusting said holding members with respect to said main body portion, said longitudinal bead contacting against said main body portion to cant said holding members and razor blade with respect to said main body portion.

4. In a razor blade holder, the combination of a main body portion, said body portion having a rounded outer edge and a curved slot concentrically arranged with respect to a portion of said outer edge and also having a series of apertures concentrically arranged between said slot and said outer edge, a pair of blade holding members, one of said blade holding members having a stud, which stud may be secured for reciprocation in said slot and the other of said holding members having a stud adapted to be received in any one of the series of openings between said slot and said rounded outer portion of the main body of said holder.

5. In a razor blade holder, the combination of a main body portion, said body portion having a rounded outer edge and a curved slot concentrically arranged with respect to a portion of said outer edge, said main body portion having a series of apertures concentrically arranged between said slot and said outer edge and also having a centrally disposed pivot pin aperture, a pair of blade holding members, one of said blade holding members having a stud, which stud may be secured for reciprocation in said slot and the other of said holding members having a stud adapted to be received in any one of the series of openings between said slot and said rounded outer portion of the main body of said holder, said holding member having the stud which passes into the slot also having a pivot pin in alignment with one of the edges of said holding member, said pivot pin passing through the pivot pin aperture in said main body portion.

6. In a razor blade holder, the combination of a main body portion, said body portion having a rounded outer edge and a curved slot concentrically arranged with respect to a portion of said outer edge, said main body portion having a series of apertures concentrically arranged between said slot and said outer edge and also having a centrally disposed pivot pin aperture, a pair of blade holding members, one of said blade holding members having a stud, which stud may reciprocate in said slot and the other of said holding members having a stud adapted to be received in any one of the series of openings between said slot and said rounded outer edge of the main body of said holder, the individual apertures of said series of apertures being so spaced in said body portion that said holders and blade may be held in place longitudinally, obliquely and transversely, successively, of said main body portion.

7. In a razor blade holder, the combination of a main body portion, said body portion having a rounded outer edge and a curved slot concentrically arranged with respect to a portion of said outer edge, said main body portion having a series of apertures concentrically arranged between said slot and said outer edge and also having a centrally disposed pivot pin aperture, a pair of blade holding members, one of said blade holding members having a stud, which stud may reciprocate in said slot and the other of said holding members having a stud adapted to be received in any one of the series of openings between said slot and said rounded outer edge of the main body of said holder, the individual apertures of said series of apertures being so spaced in said body portion that said holders and blade may be held in place at the outer end or a side of said main body portion.

8. In a razor blade holder, the combination of a main body portion, said body portion having a rounded outer edge and a curved slot concentrically arranged with respect to a portion of said outer edge, said main body portion having a series of apertures concentrically arranged between said slot and said outer edge and also having a centrally disposed pivot pin aperture, and portions extending from its sides to afford protection from the cutting edge of the razor blade, a pair of blade holding members, one of said blade holding members having a stud, which stud may reciprocate in said slot and the other of said holding members having a stud adapted to be received in any one of the series of openings between said slot and said rounded outer edge of the main body of said holder, the individual apertures of said series of apertures being so spaced in said body portion that said holders and blade may be held in place longitudinally and in two transverse positions with respect to said main body portion, successively, one of said transverse positions being a safety position whereby the cutting edge of said razor blade is entirely within the outer limits of said main body portion and its extending side portions.

9. In a razor blade holder, the combination of a main body portion, a pair of blade holding members adapted to receive a razor blade between them, one of said holding members being provided with a clamping stud, the other of said holders being provided with a longitudinal bead along one of its side portions, said body portion having a curved slot, said stud being adapted to pass through said slot and be clamped in any desired position in said slot, each of said blade holding members being provided with apertures, the holding member having the longitudinal bead being provided with studs which fit into the respective apertures in the other holding member to hold the same firmly and rigidly against movement, said razor blade and blade holder provided with the clamping stud being canted with respect to said main body portion by the other blade holder because of its longitudinal bead.

HERBERT A. STILSON.