No. 822,432. PATENTED JUNE 5, 1906.

L. U. CRAWFORD.

KNIFE.

APPLICATION FILED NOV. 13, 1903.

Fig. 1.

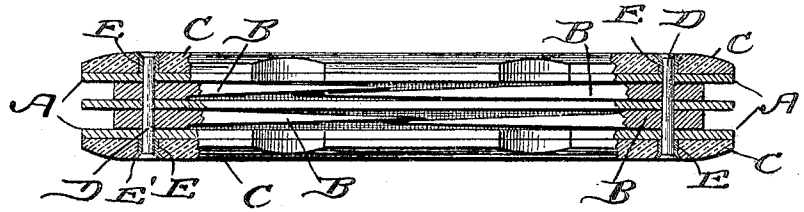


Fig. 2.

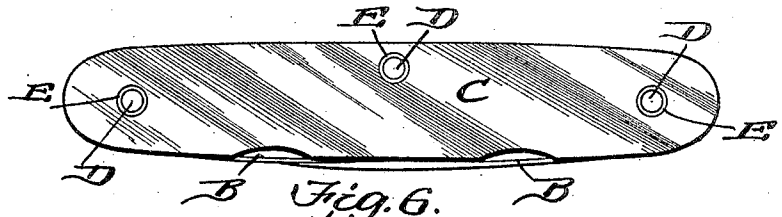


Fig. 6.

Fig. 5

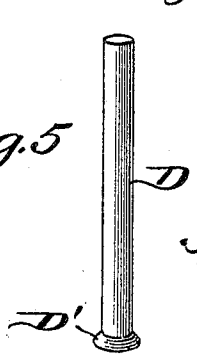


Fig. 7.



Fig. 3.

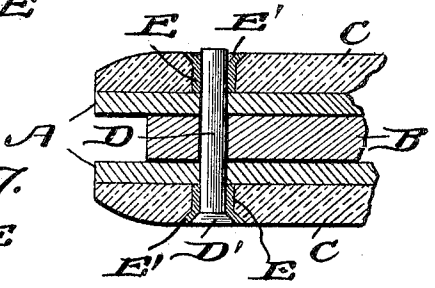


Fig. 4.

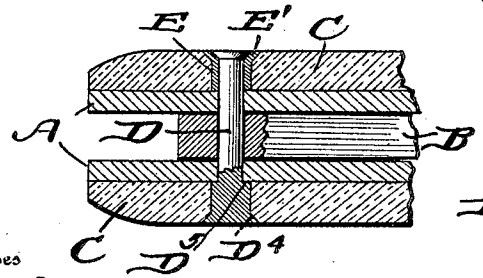


Fig. 8.

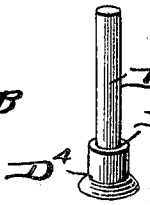




Fig. 9.

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UNITED STATES PATENT OFFICE.

LEWELLYN U. CRAWFORD, OF KANSAS CITY, MISSOURI.

KNIFE.

No. 822,432. Specification of Letters Patent. Patented June 5, 1906.

Application filed November 13, 1903. Serial No. 181,052.

To all whom it may concern:

Be it known that I, LEWELLYN U. CRAWFORD, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Rivet for Knives, of which the following is a specification.

This invention relates to an improved means for riveting together parts of a knife.

Heretofore various methods have been employed for connecting the blade, cheek-pieces, and shell-pieces of an ordinary pen-knife; but so far as I am aware all of these methods are more or less destructive to the shell-pieces if the rivets are headed down, and if the rivets are not headed the shell-pieces soon become loose and disconnected from the cheek-pieces.

The object of my invention, therefore, is to provide for securely connecting the several parts of the knife and also to provide against breaking or impairing the shell-pieces, and another object of my invention is to provide a connection in which the strain upon the rivets will be placed directly upon the cheek-pieces and almost entirely removed from the shell-pieces.

With these objects in view the invention consists in the employment of a sleeve which is located in an opening produced in the shell-pieces, said sleeve bearing upon the cheek-pieces at its inner end, the outer end of said sleeve being expanded and adapted to rest in the countersunk which surrounds the opening in which the sleeve is located, said sleeve being adapted to have a rivet passed therethrough, the end of said rivet being headed down in the expanded end of the sleeve, thereby securely connecting the parts of the knife, and inasmuch as the sleeve surrounds the rivet and bears directly upon the cheek-pieces all strain is removed from the shell-pieces.

The invention consists, also, in providing a rivet with a head and shoulder at one end, said head and shoulder serving the purpose of the sleeve with an expanded end.

The invention consists, also, in certain details of construction hereinafter fully described, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a sectional view a of knife the parts of which are united according to my improved means. Fig. 2 is a side view of the knife. Fig. 3 is an enlarged sectional view of one end of the knife. Fig. 4 is an enlarged sectional view showing a slight modification. Fig. 5 is a detail perspective view of the rivet. Figs. 6 and 7 are detail perspective views of the sleeves employed in connection with the said rivet. Fig. 8 is a detail perspective view of the modified form of rivet. Fig. 9 is a perspective view of the sleeve used in connection with said modified form of rivet.

Referring to the drawings, A indicates the usual cheek-pieces of a pocket-knife, and B the blade. The shell-pieces C may be of pearl, bone, or any other suitable material. These parts are connected by means of a rivet D, which passes through the said shell and cheek pieces and is headed down at each end, said rivet being formed with a head D′ at one end, so that it will only be necessary to head the opposite end. It is almost impossible to properly head a rivet upon the shell-piece without damage to the said shell-piece, and, furthermore, if the said rivet should be properly headed without damage to said shell-piece any severe lateral strain upon the rivet is very likely to injure the shell-piece, and in order to avoid these objections I employ a sleeve E, which is located in the opening produced in the shell-piece and surrounds the end of the rivet. The inner end of this sleeve rests directly against the cheek-piece, and the outer end is expanded, as shown at E′, and fits snugly in the countersunk portion of the opening in which the body of the sleeve is located. In assembling the parts of the knife these sleeves are placed in the shell-piece and the rivet passed through said sleeves, shell and cheek pieces, and blade, as most clearly shown in Fig. 3, and the head D′ will snugly fit the expanded end of one of the sleeves, and the opposite end of the rivet is then headed down flush with the outer end of the other sleeve, as most clearly shown in Figs. 1 and 4. Thus it will be seen that all danger of chipping or breaking the shell-pieces is avoided, and, furthermore, it will be noted that the strain which would otherwise be thrown upon the shell-pieces is thrown directly upon the cheek-pieces, inasmuch as the sleeves bear against the said cheek-pieces. In Figs. 4 and 8 I have shown a rivet D^3 having a head D^4 at one end and a shoulder D^5 adjacent

thereto, said shoulder and head occupying exactly the same space that would be occupied by the sleeve E. This construction enables me to dispense with one of the sleeves, as most clearly shown in Fig. 4, and inasmuch as the shoulder D^5 rests against the cheek-piece exactly the same results will be accomplished.

Knives have sometimes been constructed without swelling the rivets; but a knife constructed in such manner will spread, so that the blades will slip out between the cheeks and the springs, thereby rendering it practically worthless. These objections are entirely overcome by my invention, which permits the end of the rivet to be thoroughly swelled or expanded without endangering the cheek-pieces.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination with a knife having a shell handle and cheek-plates, said handle and cheek-plates having alining perforations, those of the shell having the large diameter and being countersunk, of sleeves fitting in the perforations of the shell and having expanded heads, the inner ends of the sleeves bearing on the cheek-plates and a rivet fastened through said sleeves and cheek-plates and drawing the shell and plates together.

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