June 14, 1932. N. AMOROSO 1,862,649

KNIFE HANDLE CONSTRUCTION

Filed Jan. 20, 1932

Fig. 1.

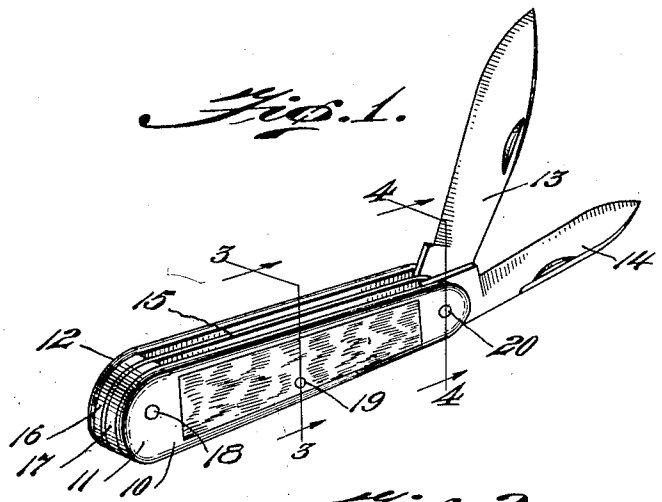


Fig. 2.

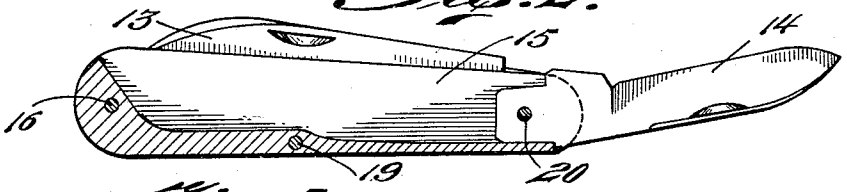


Fig. 3

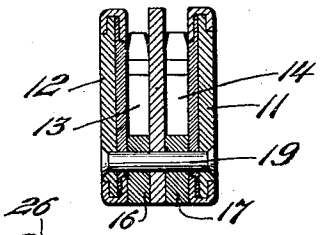


Fig. 4.

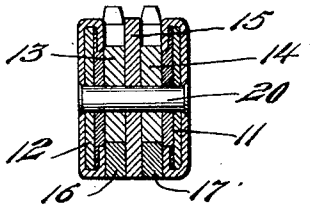


Fig. 5.

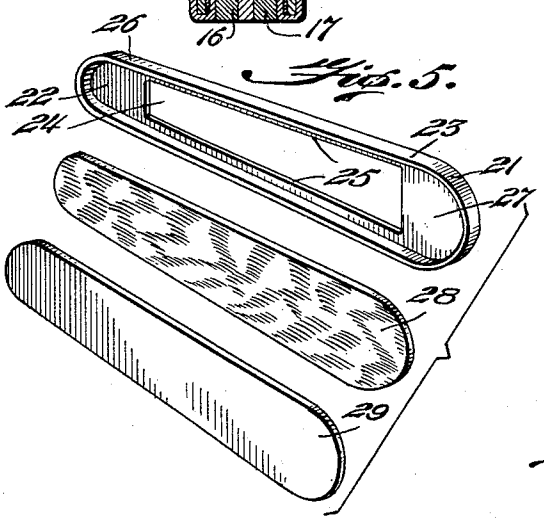
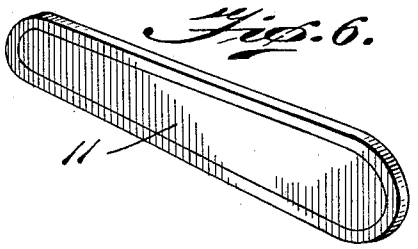


Fig. 6.



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UNITED STATES PATENT OFFICE

NICHOLAS AMOROSO, OF PROVIDENCE, RHODE ISLAND

KNIFE HANDLE CONSTRUCTION

Application filed January 20, 1932. Serial No. 587,632.

My present invention relates to the manufacture and assembly of knives, and has particular reference to the construction of knife handles equipped with non-metallic ornamental sections.

The use of non-metallic ornamental sections has heretofore necessitated end bolsters, attaching plates, and the like, to provide rigid areas in the handle halves for suitably securing the end rivets which function as blade pintles and spacing block rivets. The end bolsters have required heavy drilling operations, and the use of attaching plates has increased the assembly and manufacturing costs, has tended to produce looseness of the assembled parts, and has lessened the attractiveness of the assembled knives. It is therefore the principal object of my invention to provide a simple, sturdy, and inexpensive knife handle assembly with non-metallic ornamental sections.

Another difficulty encountered in previous handle assemblies has resided in varying the shape and apearance of the knife ends, and particularly in rounding the ends to present more pleasing end contours. Another object of my invention is to provide a knife handle construction that facilitates production of end designs of different appearance, without excessive expenditures for tools and manufacture.

Further objections to the previous handle assemblies utilizing non-metallic ornamental sections have resided in the necessity for drilling the frame parts prior to assembly and for riveting the assembled parts accurately, thus requiring skilled labor for drilling and assembly. It is a further object of my invention to provide a frame assembly that is simple to manufacture, that is rigidly locked together, and that is easily assembled and riveted without danger of looseness, by unskilled labor.

With these and other objects and advantageous features in view, by invention consists of a novel arrangement of parts more fully disclosed in the detailed description following, in conjunction with the accompanying drawing, and more particularly defined in the claims appended hereto.

In the drawing,

Fig. 1 is a perspective view of a knife assembly in accordance with my invention;

Fig. 2 is a longitudinal section therethrough, the knife blade being shown in side elevation;

Fig. 3 is a section on the line 3—3 of Fig. 1;

Fig. 4 is a section on the line 4—4 of Fig. 1;

Fig. 5 is a perspective detail of the frame parts prior to assembly; and

Fig. 6 is perspective rear view of a frame assembly.

Referring to the drawing, the specific embodiment of my invention illustrated includes a handle 10 comprising two handle scales 11, 12 of identical appearance and construction, two knife blades 13, 14, a separation plate 15, and two blade springs 16, 17 being locked between the frame assemblies by means of rivets 18, 19 and 20, as hereinafter described. Although two knife blades are shown, it is evident that the number of knife blades and their location at one or both ends of the handle may be varied as desired, in accordance with any selected knife design.

The two handle scales which form the walls of the blade pockets are identical; each includes a cup-shaped frame piece 21 which has a base 22 provided with an upstanding rim portion 23, the base having an opening 24 which is spaced from the edges to provide peripheral flanges 25 and end sections 26, 27; a non-metallic ornamental section 28 is adapted to fit into the frame piece so as to expose its outer surface through the opening 24, and a spacing or liner plate 29 of similar form fits over the ornamental plate to increase the assembly thickness and thus permit use of a thinner ornamental plate.

The frame piece is preferably of sheet metal stock, of relatively rigid material; the ornamental plate is preferably of celluloid, but may be of any suitable non-metallic or metallic material; the liner plate is preferably of relatively soft metal. In assembling the handle scale, the ornamental plate and the liner plate are placed in the frame piece in the order named, and the outer edge of the frame piece rim is pressed over the

liner plate as indicated in Fig. 6 to lock the parts together. Preferably, as indicated in Figs. 3 and 4, the harder frame piece material indents the softer ornamental plate and liner plate, so as to make both surfaces of the assembly flush; the ends 26, 27 may be shaped during the pressing operation, if desired. The flanges and ends thus serve to support and protect the handle scales against injury.

The handle scale being drilled to receive the rivets, the knife is readily assembled, and the rivets 18, 20 are expanded in the end sections 26, 27, which thus form very sturdy, rigid supports for the two rivets functioning as knife blade pintles. The central rivet 19 may, if desired, terminate in the liner plates 29, as the ornamental plates are rigidly locked to the liner plates by the flanges of the frame.

The improved construction thus utilizes inexpensive parts that are easily manufactured and assembled, and that are rigidly locked together with no tendency for looseness, the completed knife presenting a neat and attractive appearance.

While I have described a specific constructional embodiment of my invention, it is obvious that such changes in the general arrangement, proportion, and shape of the parts may be made as are required to produce a desired knife handle design, within the spirit and the scope of the appended claims.

I claim:

1. In a knife assembly, handle scales each comprising an ornamental piece, a liner plate contiguous thereto, and a frame piece having spaced peripheral flanges which engage and hold the ornamental piece and the liner plate in the frame piece in assembled relation, a blade and a blade spring between said handle scales, and rivets extending through said blade and blade spring and seated in said handle scales.

2. In a knife assembly, handle scales each comprising an ornamental piece, a liner plate contiguous thereto, and a frame piece having an open base provided with end sections and a peripheral flange engaging the ornamental piece, and a peripheral flange engaging the liner plate, whereby the ornamental piece and the liner plate are held in the frame piece in assembled relation, a blade and a blade spring between said handle scales, and rivets extending through said blade and blade spring and seated in said handle scales.

3. In a knife handle construction, a handle scale comprising a frame piece, an ornamental piece seated therein, and a liner plate also seated therein, said frame piece having peripheral flanges engaging the sides of said ornamental piece and said liner plate to retain them in said frame piece in assembled relation.

4. In a knife handle construction, a handle scale comprising a frame piece, an ornamental piece seated therein, and a liner plate also seated therein, said frame piece having an open base provided with end sections and a peripheral flange engaging the ornamental piece, and a peripheral flange engaging the liner plate, whereby the ornamental piece and the liner plate are held in the frame piece in assembled relation.

Signed at Providence, in the county of Providence and State of Rhode Island, this 18th day of January, A. D. 1932.

NICHOLAS AMOROSO.