Dec. 23, 1941. J. A. DICKERMAN 2,267,325

CUTLERY ARTICLE

Filed Oct. 17, 1938

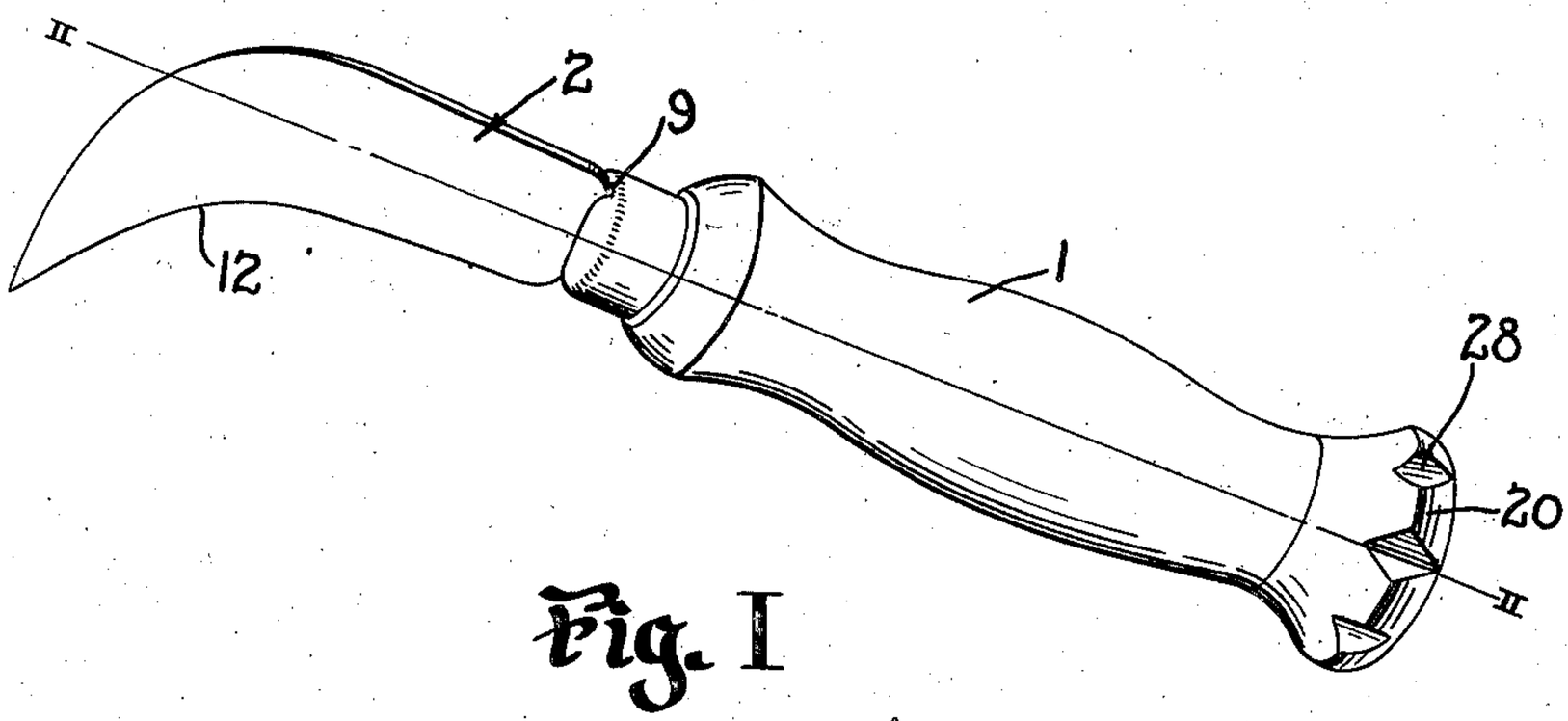

Fig. I

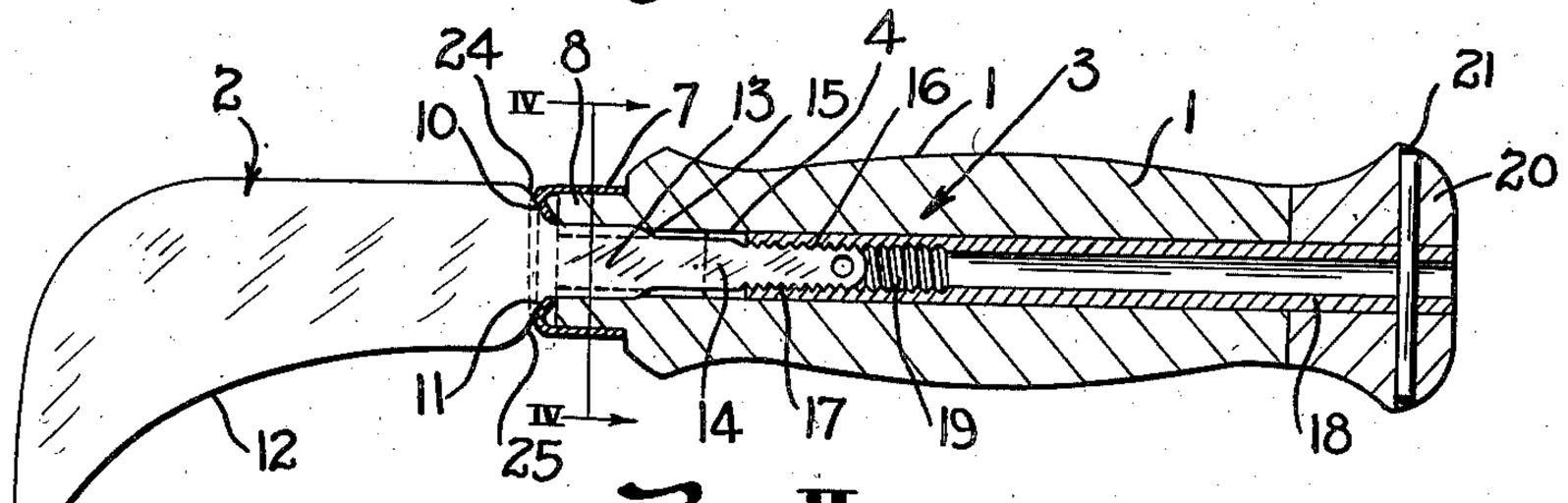

Fig. II

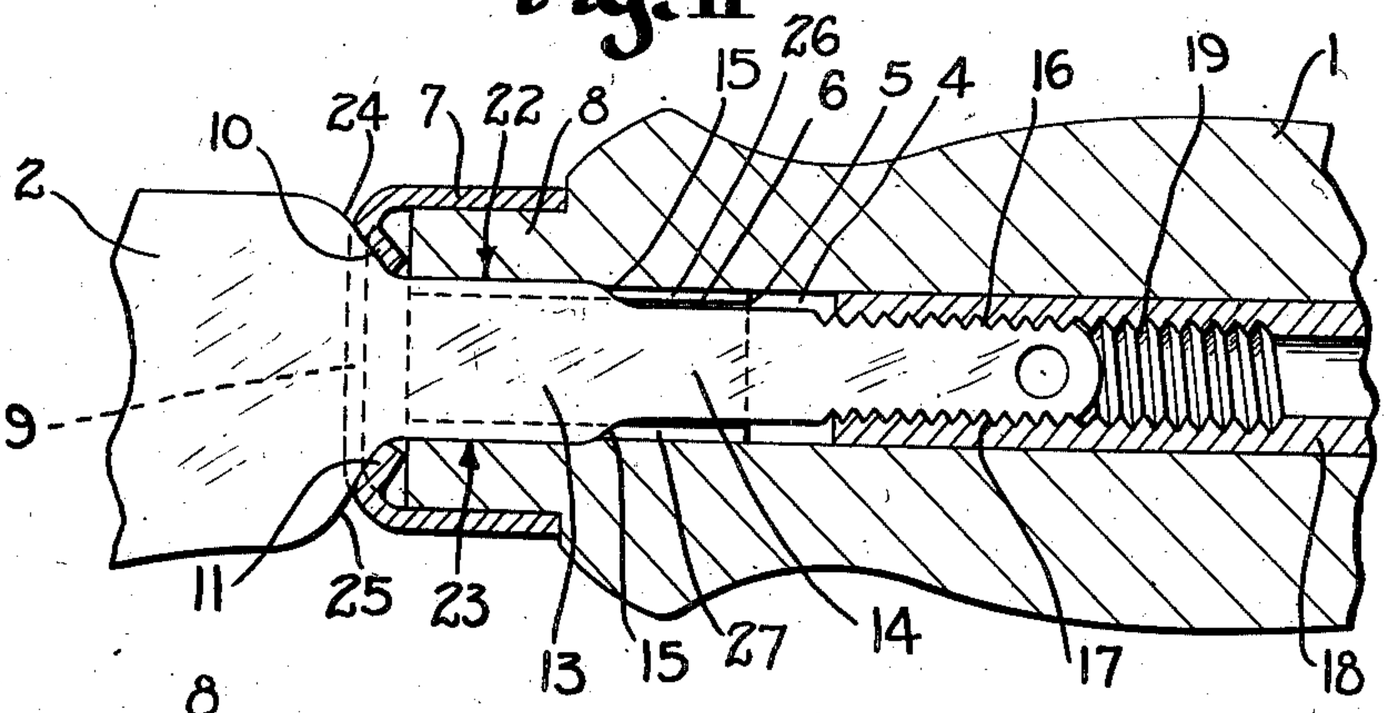

Fig. III

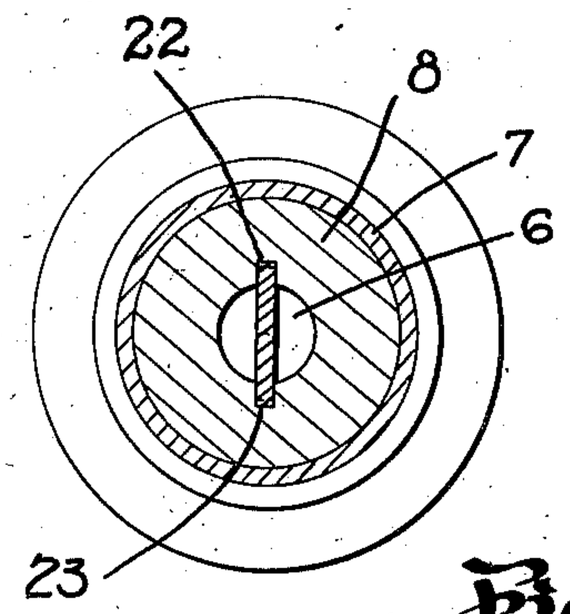

Fig. IV

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CUTLERY ARTICLE

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Application October 17, 1938, Serial No. 235,407

1 Claim. (Cl. 306—38)

This invention relates to cutlery articles and has particular reference to new and improved means for detachably securing the parts of said articles together.

One of the principal objects of the invention is to provide new and improved means for securing the parts of cutlery articles together whereby said parts may be easily and quickly connected or separated. This application is a continuation in part of my co-pending application Serial No. 102,562, filed September 25, 1936.

Another object of the invention is to provide new and improved means for securing the parts of cutlery articles together whereby any of the parts may be quickly and easily replaced.

Other objects and advantages of the invention will become apparent from the following description taken in connection with the accompanying drawing, and it will be apparent that many changes may be made in the details of construction and arrangement of parts shown and described as the preferred form only has been shown by way of illustration.

Referring to the drawing:

Fig. I is a perspective view of a knife embodying the invention;

Fig. II is a sectional view taken on line II—II of Fig. I;

Fig. III is a fragmentary view of Fig. II on an enlarged scale; and

Fig. IV is a sectional view taken on line IV—IV looking in the direction of the arrows.

It is apparent that in the use of cutlery there are various occasions when it is preferable to change certain parts such as when the blade of a knife becomes worn, broken or otherwise damaged. This substitution of a new blade is preferable as it obviates discarding the entire piece of cutlery. It is, therefore, one of the prime objects of this invention to provide new and improved means for detachably securing together the various parts of cutlery whereby any of the parts may be easily and quickly detached and a new part substituted therefor.

Referring again to the drawing wherein similar reference characters designate corresponding parts throughout the several views, the knife embodying the invention comprises broadly a handle 1 having a blade member 2 attached thereto by securing means 3. The handle 1 is provided with a longitudinal bore 4 of a given diameter extending substantially throughout the length thereof to a point 5 adjacent the blade end of the handle, at which point the diameter of the bore is reduced, as indicated at 6, throughout the remainder of the length of the handle. A ferrule 7 is secured to the reduced end 8 of the handle and is provided with a slit 9 and inwardly deflected lip portions 10 and 11 adjacent the opposed ends of the slit.

The blade 2 is provided with a cutting edge 12 and has a relatively long and narrow shank portion adapted to extend inwardly and be embedded in the bore of the handle. The shank comprises two distinct sections 13 and 14 of different diameters joined with each other along opposed tapered edges 15.

The section 13 is of a width slightly wider than the diameter of the bore 4 and the width of the section 14 is slightly smaller than the diameter of the bore 6. The section 14 is provided with opposed threaded edges 16 and 17.

The blade 2 is secured to the handle 1 by means of a rod-like connection member 18 having a hollow threaded bore 19 adjacent one end thereof adapted to threadedly engage with the threaded shank section 14 and having an enlarged nut-like member 20 secured to said rod-like connection means 18 by means of a pin 21 or other suitable means as illustrated in Fig. II. The nut-like member 20 is adapted to have engagement with the main handle portion 1 so as to draw the shank portion of the blade member 2 inwardly of the hollow bore of the handle when the member 18 is threaded into the threaded portion 14 of the shank.

Referring more particularly to Figs. III and IV, it will be noted that the opposed longitudinal edges 22 and 23 of the section 13 of the shank are embedded within the material of the handle with a tongue and groove-like connection. This may be brought about in two different manners as follows:

The first arrangement is to form diametrically opposed grooves internally of the bore 6 through the initial connecting of the blade member 2 with the handle, the said grooves being formed by forcibly drawing the wider section 13 into the bore 6 which is of considerably smaller diameter than the width of said portion 13 with the said tapered portions aiding in displacing the material on the handle as the section 13 is drawn inwardly thereof. The amount of inward movement is such as to draw the shouldered edges 24 and 25 of the blade into contact with the inturned lips 10 and 11.

Another arrangement is to perform diametrically opposed longitudinal grooves 26 and 27 in said bore 6. It is particularly pointed out, however, that even in this instance the distance be-

tween the bottoms of the grooves 26 and 27 is slightly less than the width of the portion 13 so that when said portion 13 is drawn inwardly of the bore and into said grooves 26 and 27 the longitudinal edges 22 and 23 of said portion 13 will bite or cut into the material of the handle and form a frictional tight connection therewith internally of the ferrule 7.

It is to be understood that the members 18 and 20 may be formed integral with each other if desired and that the said member 18 may be in the form of a slender bar having a threaded bore adjacent one end thereof or may be formed hollow throughout its length with a portion of its bore threaded as indicated at 19.

The portion 20 may be notched or knurled, as indicated at 28, to form a better grip if desired.

The function of the tongue and groove-like connection between the section 13 and the grooves 26 and 27 is to prevent rotation of the blade relative to the handle during use.

To assemble the blade with the handle in instances where the grooves 26 and 27 are not preformed, the shank or tang of the blade 2 is inserted through the slot 9 in the ferrule 7 and into the aligned longitudinal bores 6 and 4 of the handle 1 until the tapered portions 15 engage the material of the handle adjacent the blade end thereof. The member 18 is then threaded onto the threaded portion of the section 14 forcing the nut-like member 20 into engagement with the adjacent end of the handle 1 thereby drawing the portion 13 inwardly of the bore 6. The tapered edges 15 function as means for displacing the material of the handle to aid in drawing the portion 13 inwardly thereof. The blade is drawn inwardly of the handle to a point whereby the shouldered edges 24 and 25 will engage with the inwardly deflected lips 10 and 11 of the ferrule. The said lips engage the inner adjacent end of the handle and provide durable backing means for preventing the shouldered portions cutting into and ruining the adjacent end of the handle.

To remove the blade the nut-like member 20 is backed off for a slight distance and the said nut is then tapped in a direction towards the handle 1 with the said handle being gripped firmly during said tapping so as to force the blade out of binding relation with the handle. The nut may then be completely backed out and the blade easily removed.

In instances wherein the grooves 26 and 27 are preformed, care is taken that the portion 13 is suitably aligned therewith prior to tightening the nut-like member 20. The function from this point is similar to that stated above.

The handle 1, while preferably formed of wood, may be formed of any material having desirable characteristics.

It will be apparent that the construction can be used on other cutlery articles than knives, such as forks, etc., by using other parts in place of the blade 2.

From the foregoing, it will be seen that I have provided simple, efficient and economical means for connecting the parts of an article of cutlery together whereby they may be easily and quickly connected or detached, and whereby other or new parts may be easily and quickly substituted for old or broken parts.

Having described my invention, I claim:

In a device of the character described the combination of a main blade member detachably connected with a main handle member having a reduced end portion and having a longitudinal bore, said blade having a shank portion comprising two integral sections of a thickness substantially equal to the thickness of the blade and of different widths with the wider of said sections being located adjacent the blade member and of a width less than said blade member and a narrower section having a threaded portion on the end thereof opposite the first section, a slotted ferrule member fitting over said reduced end portion and a connection member fitting within the longitudinal bore of the handle member and having a threaded bore adjacent one end thereof threadedly connected with the threaded portion of the narrower section of the shank for drawing said shank portions inwardly of the longitudinal bore and for causing the wider section of said shank portion to become embedded in the material of the adjacent inner walls of the longitudinal bore, said wider shank portion being of a length substantially equal to the width of the ferrule with the shank portion being embedded in the material of the handle substantially only throughout the length of said wider section.

JOHN A. DICKERMAN.