

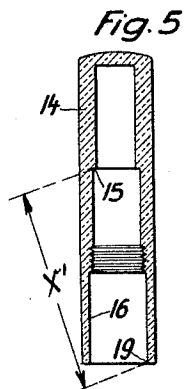
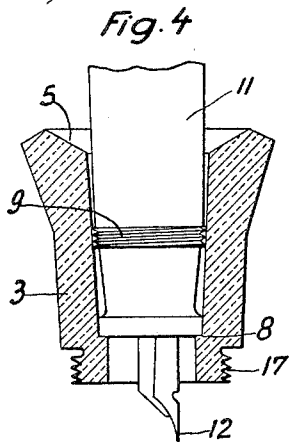
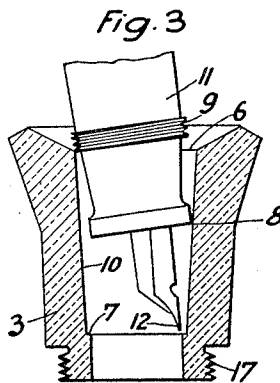
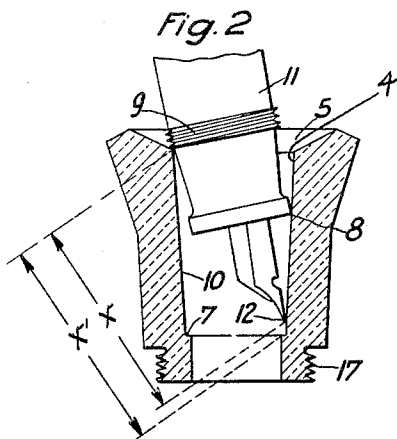
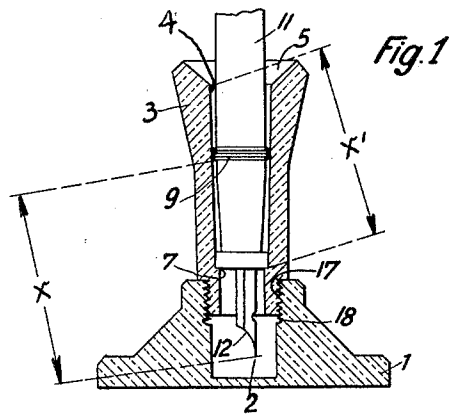
Jan. 26, 1932.

T. KOVÁCS

1,842,677

FOUNTAIN PEN PROTECTOR

Filed June 26, 1930



Inventor
Theodor Kovács
Emil Bömeljke
Attorney

UNITED STATES PATENT OFFICE

THEODOR KOVACS, OF BERLIN, GERMANY

FOUNTAIN PEN PROTECTOR

Application filed June 26, 1930, Serial No. 463,990, and in Germany July 4, 1929.

This invention relates to fountain pen protectors for pens of the kind in which the nib does not draw back into the holder, the protector being either of the type which is screw-threaded to screw on to the pen or of the type which is adapted for use as a pen stand.

With pens of the kind described it has hitherto been possible only by the exercise of great care, when placing the cap on the pen or inserting the pen in the pen stand, to prevent the pen nib from catching on the shoulder provided for sealing the pen and consequently both the pen nib and the shoulder were liable to be damaged. In order to prevent injuries to the pen point upon such catching, often requirements, which should have been met for reasons of cleanliness, have been ignored. In some cases, the shoulder has been made conical to cause the pen nib to glide along it and although this reduces the liability of damage to the nib, it does not prevent damage to the shoulder.

The object of the invention is to eliminate any damage from contact of the pen nib with the shoulder without changing the proper flat form of said shoulder. This is done first by making the diagonal distance, from one side of the edge of the bore of the protector to the opposite side of the shoulder, equal to or longer than the diagonal distance from the point of the pen to the opposite side of the front edge of the screw-thread provided on the pen barrel to engage the screw-thread on the cap, and second, by making the internal longitudinal section of the protector of such shape and size, in relation to the transverse dimensions of the pen and nib, that by laying the outer edge of the neck of the pen and the front edge of the screw-thread against the wall of the bore of the protector, the pen point will pass the internal shoulder without touching it. This requires the distance from the axis of the protector to the nib point to be smaller than the inner radius of the shoulder, if the pen touches the inside of the protector at opposite sides with the outer edge of its neck and with the front edge of its screw-thread, the nib point being at this time within the area of the shoulder. The expression "edge of the bore of the protector" as used in

the present case, means the outer edge of that part of the interior of the protector which really supports or guides the pen, and does not apply to the outer edge of a flared or countersunk portion which is sometimes provided at the outer end of the protector, as in the case of pen stands, for guiding the pen into the protector.

In order that the invention may be more clearly understood, reference is hereinafter made to the accompanying diagrammatic drawings whereon

Figure 1 illustrates a fountain pen stand according to the invention, in vertical section.

Figs. 2 and 3 show the pen protector in vertical section, removed from the pen stand base and with the pen in different positions during insertion.

Fig. 4 similarly shows the pen protector in vertical section, removed from the pen stand base, but with the pen fully in position in the protector.

The scale of Figs. 2-4 is distorted, the width scale being twice the length scale, in order to accommodate the views better in the available space on the sheet.

Fig. 5 is a longitudinal section through a screw-on cap according to the invention.

Referring to Figs. 1-4 of the drawings, 3 designates the protector, 4 its central bore, 5 a countersunk enlargement of the bore, 7 a shoulder which seals the end of the pen, and 10 the wall of the central bore. 8 is the outer edge of the pen section or neck of the fountain pen 11 and 9 is the screw-threaded portion of the pen for receiving a screw-on cap.

Fig. 2 shows the outer edge 8 of the neck of the pen in contact with the wall 10 of the central bore with the pen point 12 just above the shoulder 7.

In Fig. 3 the screw-thread 9 lies against the outer edge 6 of the central bore. The pen has in consequence turned about the edge 8 and the pen point 12 is thus deflected inwards to such an extent that, on pushing the pen further into the protector, the pen point passes freely past the shoulder 7. In Fig. 4 the fountain pen has reached the final position.

It will be seen from the drawings that,

with the construction of the central bore shown in Figs. 1-4, the smooth part of the pen barrel 11 beyond the screw-thread does not touch the wall of the central bore, so that it does not become scratched.

5 As shown in Fig. 1 the protector 3, which is open at its lower end, and has a screw-threaded portion 17 at said end, is detachably fixed in a recess 2 in the base 1 of a pen stand, which has corresponding threads 18, being 10 screwed into the recess 2 in the example shown, so that ink dripping from the pen can collect in the recess 2. To clean the protector 3 it is removed from the base 1, whereby the recess 2 becomes easily accessible.

15 Fig. 5 shows a screw-on cap according to the invention for a fountain pen in which the pen nib cannot be drawn back into the holder. 14 is the body of the cap, 15 the internal shoulder, and 16 the wall of the bore in the cap.

The above-mentioned advantages are obtained by my invention by making the diagonal distance X' from the edge 7 (or 15) 25 to 6 (or 19) equal to or greater than the diagonal distance X from the pen point to the screw-thread 9 and by making the bore 4 (or 16) of the protector to suit the various transverse dimensions of the pen and the nib.

30 From the above specification it is clear that the invention comprises shaping the end of the fountain pen in such manner with respect to the shape of the corresponding cap or protector which is to receive same that upon inserting the pen into said other means it will be impossible for the point of the pen to come into contact with the sealing shoulder, thus preventing injury to either the pen point or the shoulder.

40 While I have disclosed the preferred embodiments of my invention, it is obvious that some or all of the advantages of the invention may be obtained without adhering strictly to the identical forms disclosed and, therefore, it will be understood that my invention is to be limited only in accordance with the accompanying claims.

I claim:—

1. In combination with a pen having a 50 screw-thread on its pen section and an irretractable nib, a protector having a central bore adapted to receive said nib and the pen section of said pen; a shoulder in this bore adapted to bear against the front edge of the 55 pen section, the diagonal distance of the operative front edge of the protector from this shoulder being longer than the diagonal distance of the pen point from the front edge of this screw-thread, the longitudinal section of the protector being such in size and shape 60 in relation to the transverse dimensions of said pen and said nib that the distance from the axis of the protector to the nib point is smaller than the inner radius of the shoulder; 65 when the outer edge of the pen section and

the front edge of its screw-thread, on its opposite side touch, the inner surface of the bore of the protector, the nib point being at this time within the opening in the shoulder.

2. In combination with a pen having a 70 screw-thread on its pen section and an irretractable nib, a protector having a central bore adapted to receive said nib and the pen section of said pen; a shoulder in this bore adapted to bear against the front edge of the 75 neck of said pen; a female thread in said bore adapted to be screwed on said screw-thread on the neck of the pen, the diagonal distance of the contacting front edge of the protector from this shoulder being longer 80 than the diagonal distance of the pen point from the front edge of this screw-thread, the longitudinal section of the protector being such in size and shape in relation to the transverse dimensions of said pen and said nib 85 that the distance from the axis of the protector to the nib point is smaller than the inner radius of the shoulder, when the outer edge of the pen section and the front edge of its screw-thread on its opposite side touch the 90 inner surface of the bore of the protector, the nib point being at this time within the opening in the shoulder.

3. In combination with a pen having a 95 protector engaging portion on its pen section and an irretractable nib, a protector having a central bore adapted to receive said nib and the pen section of said pen; a shoulder in this bore adapted to bear against the front edge of the pen section, the diagonal distance of 100 the operative front edge of the protector from this shoulder being longer than the diagonal distance of the pen point from the front edge of said protector engaging portion, the longitudinal section of the protector being such in 105 size and shape in relation to the transverse dimensions of said pen and said nib that the distance from the axis of the protector to the nib point is smaller than the inner radius of the shoulder, when the outer edge of the 110 pen section and the front edge of said protector engaging portion, on its opposite side, touch the inner surface of the bore of the protector, the nib point being at this time within the opening in the shoulder. 115

In testimony whereof I affix my signature:

THEODOR KOVÁCS

120

125

130