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FINGER STYLUS

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FIG. 1

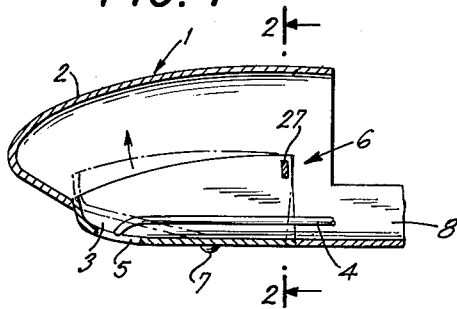


FIG. 2

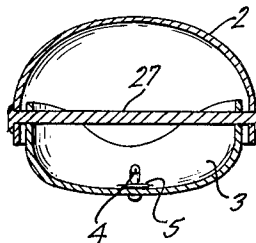


FIG. 3

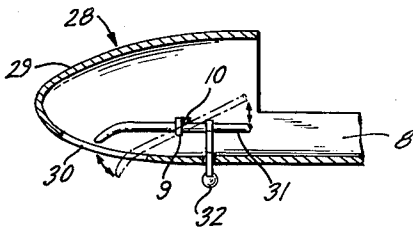


FIG. 4

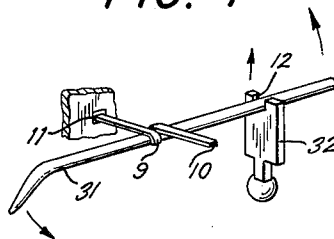
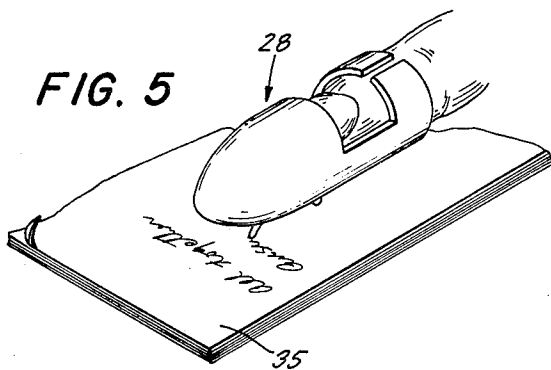


FIG. 5



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6 Claims. (Cl. 120—42.4)

The present invention is directed to an improved form of writing instrument, more specifically to a device designed to be worn on the fingertip, and having means to alternatively expose or cover the writing point.

In the past there have been many writing instruments capable of exposing or withdrawing their writing points but they have all suffered from a number of defects. Certain classes of people, such as bank tellers and clerks, are required during the course of their occupation to make brief notes and then use their hands for other tasks such as sorting, filing, counting etc. For these people there is a very definite need for a writing device which is always at hand and yet will not interfere with normal activities.

Therefore, it is among the objects of this invention to provide a pen which is adapted to be placed on the end of one finger.

If is further among the objects of this invention to provide a finger pen with a writing point capable of being exposed or withdrawn at the will of the user.

It is still further among the objects of this invention to provide a finger pen wherein the exposure or withdrawal of the writing point is controlled by the pressure of the pen on the writing surface.

It is also among the objects of this invention to provide a finger pen which is capable of being manufactured cheaply and with a minimum number of parts.

It is also among the objects of this invention to provide a finger pen which is of simple construction and fool-proof in operation.

In practicing this invention, there is provided a shell having a slotted portion therein. The shell is adapted to fit over the end of a finger of the wearer. Within the shell is placed a writing point and means are provided for obtaining relative motion between the point and the slotted portion, whereby the point may project from the slotted portion or withdraw within it.

In one form of this device, the slotted portion of the shell is independently movable with respect thereto and is pivotally mounted thereon. The writing point is fixed relative to the shell and when the slotted portion is pivoted about its pivotal axis, the writing point projects therefrom. When the portion is pivoted to the opposite extreme, it then substantially encloses the writing point and prevents inadvertent use thereof.

The portion is urged towards its closed or carrying position by a spring means which consists of a non-circular cross-sectioned bar mounted in a correspondingly shaped hole on the shell and also in a correspondingly shaped hole on the portion. The pivotal motion of the portion causes a torsional stress to be set up in the bar which urges the slotted portion back into carrying position.

Acting against the bias of the aforementioned spring means is a means for urging the portion towards the writing position, consisting of a button mounted on the portion at a point which is in contact with the writing surface at the same time that the writing point is being used.

In a second embodiment of this invention, there is provided a shell with a slotted portion on the end of the finger as before, containing a writing point therein. However, in this embodiment the slotted portion of the shell does not move but rather the writing point pivots about an axis substantially parallel to the writing surface when the pen is in use. This motion causes the writing point to project out of the slot when in writing position and to withdraw within the shell when in closed or carrying

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position. Spring means for urging the point into the carrying position is provided and consists of a bar of non-circular cross-section similar to that of the aforementioned embodiment anchored in correspondingly shaped recesses or openings in the shell. At a point intermediate the ends of said bar, the writing point is affixed so that when in its writing position, torsional stresses are set up in the bar, as in the case of the first embodiment, urging the point into the closed or carrying position.

The point is maintained in writing position by a button located at a point on the shell in contact with the writing surface when the pen is in use and adapted to bear against the writing point itself and cause it to pivot against the bias of the spring means.

In the accompanying drawings constituting a part hereof, in which like reference characters indicate like parts,

FIG. 1 is a sectional view of the first embodiment of this invention, showing the writing position in dotted lines;

FIG. 2 is a section along line 2—2 of FIG. 1;

FIG. 3 is a sectional view of the second embodiment of this invention, showing the writing position of the pen in dotted lines;

FIG. 4 is a diagrammatic enlarged view of the operating mechanism of FIG. 3; and

FIG. 5 is a perspective view of the embodiment of FIG. 3 placed on a finger.

Referring more specifically to FIGS. 1 and 2, there is provided a finger pen 1 having a shell 2 and a slotted portion 3. Writing point 4 is fixedly mounted on shell 2 within said slotted portion by known means.

Slotted portion 3 is pivotally mounted at 6 on shell 2 by means by bar 27 of non-circular cross-section. Bar 27 spans shell 2 and extends into and/or through torsion holes in the corners of portion 3. Said torsion holes are preferably of a non-circular shape which corresponds to the cross-section of torsion bar 27. Button 7 is mounted on the bottom of slotted portion 3 and when pressed against a writing surface, causes portion 3 to twist bar 27 and permits writing point 4 to project out of slot 5. When the button is no longer in contact with the writing surface, the torsion in bar 27 causes portion 3 to assume the position shown in full lines in FIG. 2.

The second embodiment of this invention is shown in FIGS. 3 and 4. The pen 28 is comprised of a shell 29 having a slotted portion 30 and a writing point 31. Writing point 31 is connected to shell 29 through bar 10 which fits into opening 11 in shell 29. Button 32 bears against writing point 31 at 12 rearwardly of connection 9 of points 31 to shell 29 and extends through the bottom of shell 29 to contact the writing surface when the pen is in operation. Pressure against button 32 forces point 31, which is forward of connection 9, to pivot against the torsional stress in rod 10 into the exposed position, causing the tip of point 31 to extend out of slotted portion 30. Upon release of the pressure on button 32, the torsional stress in rod 10 causes point 31 to pivot into the retracted position.

While only two embodiments of this invention have been described, any such changes as would be apparent to one skilled in the art may be made without departing from the scope and spirit thereof and this invention is not to be limited except by the character of the claims appended hereto.

I claim:

1. A finger pen adapted to fit on the end of a finger comprising a shell having a slotted portion and a writing point within said shell movable relative to said portion whereby said point may alternatively project from said portion and withdraw within said portion, said portion being pivotally mounted on said shell (at a pivot point), said portion substantially enclosing said point when in a carrying position and allowing said point to project

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when in a writing position, spring means comprising a torsion bar, said portion affixed to said bar at least one torsion hole of substantially the same cross-section as said bar on said shell, an end of said bar in said torsion hole and gripped thereby, whereby the turning of said bar relative to said shell is prevented and said portion is urged toward said carrying position, and means for urging said portion toward said writing position.

2. A finger pen according to claim 1 wherein said torsion bar is of non-circular cross-section.

3. A finger pen according to claim 1 wherein said means for urging comprises a button mounted on said portion at a point thereof which is in contact with a writing surface while said pen is in use, said button being mounted on said shell at a point remote from said pivot point, whereby pressure on said button causes said portion to pivot against the urging of said spring means and to expose said writing point.

4. A finger pen adapted to fit on the end of a finger comprising a shell having a slotted portion and a writing point within said shell movable relative to said portion whereby said point may alternatively project from said portion and withdraw within said portion, said point being pivoted about a pivot point intermediate its ends for move-

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ment into a carrying position and a writing position, spring means comprising a torsion bar affixed to said writing point at a pivot point, said shell having at least one torsion hole of substantially the same cross-section as said bar, an end of said bar in said hole and gripped thereby, whereby the turning of said bar relative to said shell is prevented and said writing point is urged toward said carrying position, and means for urging said point into writing position.

5. A finger pen according to claim 4 wherein said bar is of non-circular cross-section.

6. A finger pen according to claim 4 wherein said means for urging comprises a button bearing against said writing point at a contact point rearward of said pivot point, said button being in contact with the writing surface when said pen is in use.

References Cited in the file of this patent

UNITED STATES PATENTS

2,882,859 Poritz ----- Apr. 21, 1959

FOREIGN PATENTS

118,130 Great Britain ----- Aug. 22, 1918

158,264 Australia ----- Aug. 16, 1954

810,719 Great Britain ----- Mar. 18, 1959

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