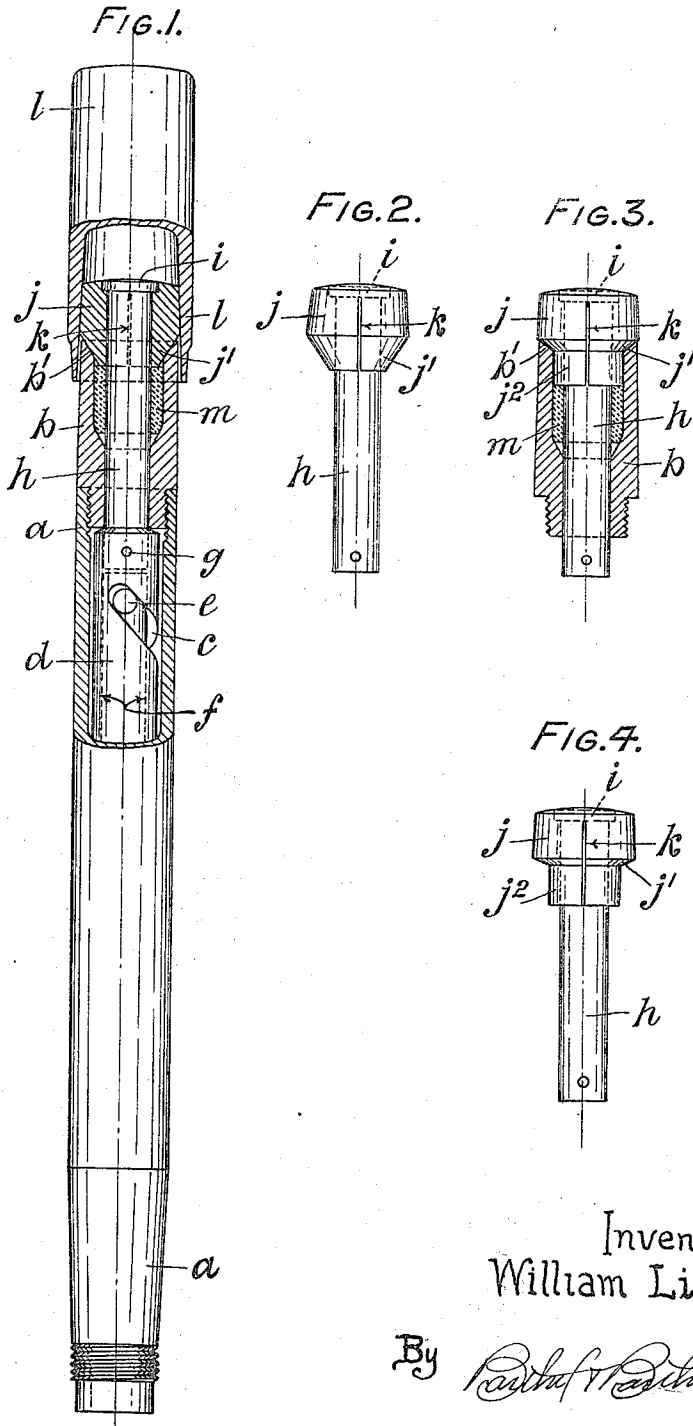


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FOUNTAIN AND STYLOGRAPHIC PEN.
APPLICATION FILED DEC. 29, 1917.

1,277,613.

Patented Sept. 3, 1918.



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WILLIAM LIVSEY, OF WALLASEY, ENGLAND.

FOUNTAIN AND STYLOGRAPHIC PEN.

1,277,613.

Specification of Letters Patent.

Patented Sept. 3, 1918.

Application filed December 29, 1917. Serial No. 209,422.

To all whom it may concern:

Be it known that I, WILLIAM LIVSEY, a subject of the King of England, residing at 11 Groveland road, Wallasey, in the county of Chester, England, engineer, have invented certain new and useful Improvements in or Relating to Fountain and Stylographic Pens, of which the following is a specification.

This invention relates to fountain and stylographic pens of the "safety" type, that is, of the kind wherein the pen nib or stylus, as the case may be, is connected with a feed-bar or stem longitudinally arranged within the pen body or barrel, which nib or stylus is projected from or withdrawn into the barrel on the actuation of a rotary head-piece arranged on the barrel top usually through the engagement of a lateral pin provided on said bar or stem in a helical slot formed in a surrounding tubular element which is revolved, to effect the reciprocation of said feed-bar, by reason of its connection through a rod or stem with said rotatable head-piece; and the object of my invention is to provide improved means for revolving said rod or stem in order to minimize the likelihood of fracture thereof or of parts connected therewith or operated thereby.

Broadly, my invention consists in the provision around an actuating member of a compressible member which is normally revoluble about said actuating member and wherein is or are formed a slit or slits or saw-cuts so that on the application of a pen cap or closure—the lower interior end whereof is of appropriate shape or configuration—to the compressible member the latter is squeezed or closed on to and grips the actuating member, which is turned when said cap is revolved.

According to one—a preferred—mode of embodying my invention, there is formed on the upper end of said rod or stem, to which the helically slotted tube hereinbefore referred to is secured, a flange or head-piece. The collar, which is slit or saw-cut from the lower edge, is bored to fit in a revoluble manner around said rod or stem and head-piece: the upper portion of said collar tapers or is coned outwardly from the top and the lower portion is reduced in diameter, being adapted to fit within and also make joint with the upper adjacent section of the pen body or barrel.

I will further describe my invention with

the aid of the accompanying sheet of explanatory drawings, wherein:—

Figure 1 is a longitudinal section of a "safety" reservoir pen embodying my improvements;

Fig. 2 being an elevation of said collar and rod or stem.

Figs. 3 and 4 illustrate slightly modified constructions of the lower portion of said collar.

In the several views like characters of reference denote like or equivalent parts wherever they occur.

a designates the pen body or barrel and *b* the upper section which is screwed into said barrel *a*. *c* is the helical slot formed in tube *d* in which slot the lateral pin *e* (which projects into longitudinal groove or recess formed in the barrel *a*) engages, said pin *e* being fitted to the feed-bar or stem *f* the end whereof carries the pen nib.

To the upper portion of said tube *d* is secured by means of pin *g* the lower end of an actuating member preferably in the form of a rod or stem *h* at the top whereof is formed the head piece or flange *i*.

Disposed around said head-piece *i* and the top part of said rod or stem *h* is a compressible member, preferably in the form of a vulcanite collar *j* *j*¹ wherein is formed a saw-cut *k* extending upwardly from the bottom edge.

The upper portion *j* of said collar *j* *j*¹ tapers or is coned outwardly from the top face, and the interior wall of the lower part of the cap *l* is of corresponding shape or configuration. The lower portion *j*² of said collar is reduced and enters the top of said section *b* the upper part *b*¹ whereof is so shaped as to make a good face-to-face-joint when the pen is assembled.

m represents a joint-making sleeve of cork or the like.

In the modifications illustrated in Figs. 3 and 4, the collars have—as compared with the construction shown in Figs. 1 and 2—comparatively short shoulders *j*¹ and also parallel portions *j*².

When it is desired to project or retract the pen nib, the lower open end of the pen cap or closure *l* is pushed onto the upper tapered or conical portion *j* of said collar (see Fig. 1) causing same by reason of the provision of the saw-cut *k* to squeeze or close around the rod or stem *h*, and, through the consequent frictional grip between said

cap and collar, and between said collar and rod or stem, the pen nib is reciprocated in well known manner when the cap is revolved.

3 It is to be understood that I do not desire to confine myself to the precise details of construction and arrangement of parts illustrated in the accompanying drawings which are given by way of examples only, as various modifications may be made without departing from the spirit and scope of the invention. For instance, a split or saw-cut collar of appropriate construction, may be adapted to grip a suitably shaped head-piece 10 *per se* or in addition to the rod or stem.

15 Having now described my invention what I claim as new, and desire to secure by Letters Patent is:—

1. In a fountain pen, a nib actuating member, a compressible member normally loose about said actuating member adapted to be compressed to grip said actuating member, and means about said compressible member adapted to compress it to establish an actuating connection with said actuating member.

2. In a fountain or stylographic pen of the "safety" type, a ring, band, or collar constructed of vulcanite or other suitable material disposed around a head-piece, rod or stem, through the rotational movement

whereof the pen nib or stylus is projected and retracted; a slit or slits or saw-cuts formed in said ring, band, or collar; and a cap closure the interior whereof is of such shape or configuration that when pressed on 35 to said ring, band, or collar the latter is caused to grip said rod, stem or head piece, so that the pen nib is reciprocated through the rotational movement of said cap.

3. In a fountain or stylographic pen of 40 the "safety" type, a ring, band, or collar in which is or are formed a slit or slits or saw-cuts constructed of vulcanite or other suitable material, the upper portion of said collar being tapered or coned, and the lower 45 portion reduced so that it enters and makes joint with the adjacent section of the pen barrel; and a cap closure the interior whereof is of such shape or configuration that when the cap is pressed on to said collar, 50 the latter is caused to grip said rod or stem, so that the pen nib may be reciprocated through the rotational movement of said cap.

In testimony whereof I affix my signature 55 in the presence of two witnesses.

WILLIAM LIVSEY.

Witnesses:

JOHN HENDLEY WALKER,
WILLIAM PIERCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."