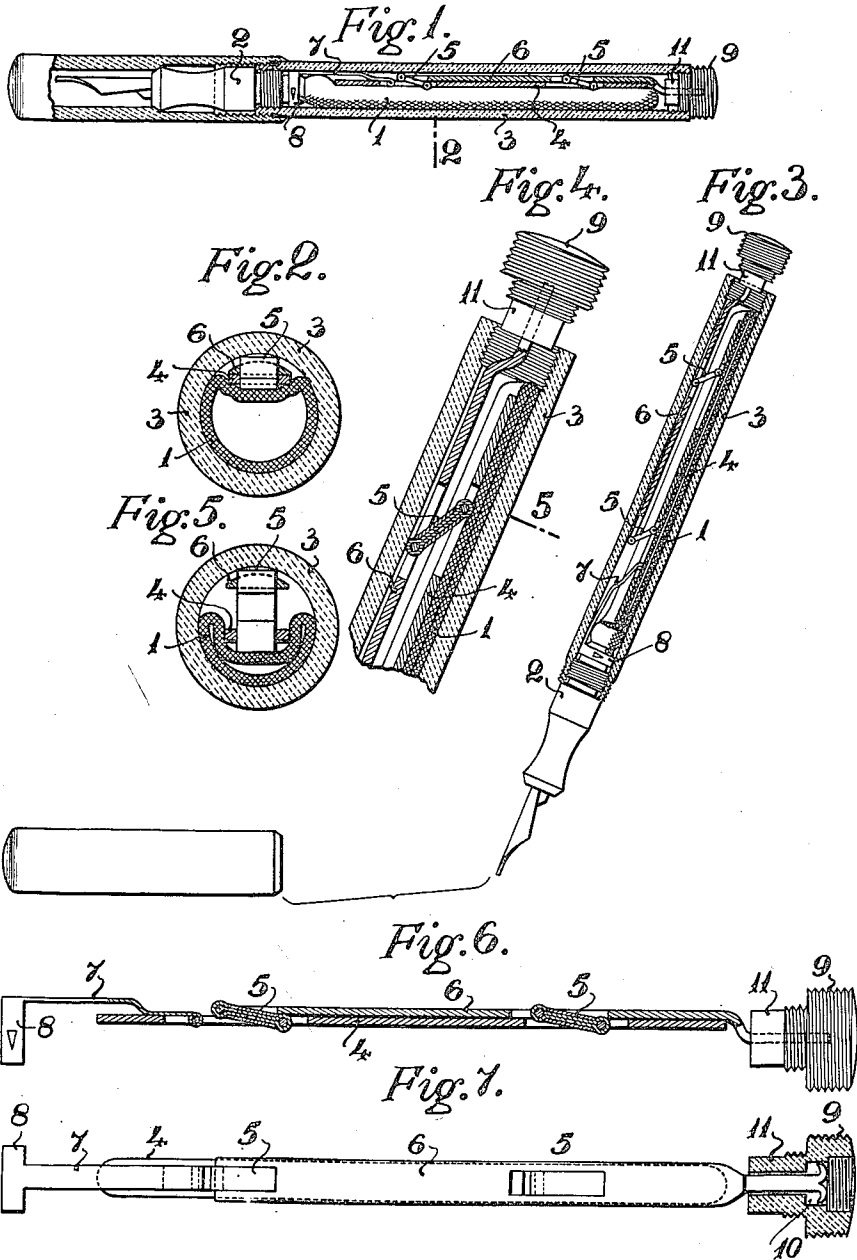


D. CAMERON.
FOUNTAIN AND OTHER RESERVOIR PEN.
APPLICATION FILED OCT. 29, 1920.

1,375,559.

Patented Apr. 19, 1921.



Inventor
Duncan Cameron
By *James L. Norris*
Attorney

UNITED STATES PATENT OFFICE.

DUNCAN CAMERON, OF EDINBURGH, SCOTLAND.

FOUNTAIN AND OTHER RESERVOIR-PEN.

1,375,559.

Specification of Letters Patent. Patented Apr. 19, 1921.

Application filed October 29, 1920. Serial No. 420,450.

To all whom it may concern:

Be it known that I, DUNCAN CAMERON, a subject of the King of Great Britain, residing at Edinburgh, Scotland, have invented certain new and useful Improvements in Fountain and other Reservoir-Pens, of which the following is a specification.

This invention relates to fountain and other reservoir pens of the self-filling type comprising a collapsible ink container which is adapted to be depressed by means of a pressure bar jointed to an operating bar, so that on the former being released by means of the latter the ink-container draws up the ink, so as to fill the pen.

The object of the invention is to provide improved means and more efficient means for actuating the pressure bar in order to depress the ink container, when required.

According to this invention I provide fountain and other reservoir pens of the type specified, wherein the operating bar is jointed to the pressure bar by means of parallel-motion links, the one end of the pressure bar being anchored to the point-section of the pen.

Figure 1 of the accompanying drawings is a longitudinal section through a fountain pen constructed in accordance with this invention, showing the two bars closed together, as when the pen is in use.

Fig. 2 shows a section on the line 2—2, Fig. 1 upon a larger scale.

Fig. 3 represents a longitudinal section through the pen after the pressure bar has been forced down by the links so as to depress the ink container.

Fig. 4 is a section through one end of the pen upon a larger scale, showing more clearly the manner in which the pressure-bar depresses the ink-container.

Fig. 5 represents a section on the line 5—5, Fig. 4.

Fig. 6 is an edge view of the operating bar and pressure bar when closed together, and shown separated from the pen barrel.

Fig. 7 is plan view of same.

The same reference numerals indicate corresponding parts in each of the figures.

Referring to the drawings, the improved pen comprises a rubber ink-container 1 attached at its open end to the point section 2 of the pen, the said container lying within the barrel portion 3 as shown. Arranged within the barrel 3 so as to engage with one side of the flexible ink-container 1 is a lon-

gitudinally disposed pressure-bar 4 while jointed to the said bar 4 by means of a pair of parallel-motion links 5 is an operating bar 6, disposed immediately above the bar 4 and arranged between the latter and the pen barrel 3 at the points of attachment of the links 5 the bars 4 and 6 are preferably cut away so as to leave cross bars around which the extremities of the links 5 are curled. The inner end of the pressure bar 6 is anchored to the point section 2 of the pen by means of a flexible metal strip 7 having integral lateral extensions 8 which are bent around the reduced inner end of the point-section, so as to form a collar for securing the container as shown. The outer end of the barrel 3 is closed by a screw-plug 9 to which the outer end of the operating bar 6 is fixed, in such a manner as to admit of the rotation of the plug 9 without interfering with the bar 6 the end of the latter being cranked inward and attached to the center of the screw plug 9, as shown more clearly in Figs. 6 and 7. When the plug 9 is screwed into the end of the barrel 3 the two bars 4 and 6 are arranged so as to lie close together, and the links 5 lying in substantially the same plane as the said bars, so that no pressure is exerted on the ink-container 1. When it is desired to refill the pen, the point-section 2 is inserted in the ink and the plug 9 unscrewed, when it is drawn outward into the position shown in Fig. 4, thus moving the operating bar 6 longitudinally and causing the links 5 to open out so as to force the pressure bar 4 against the ink-container 1, the latter being thus depressed. The plug is then moved inward, causing the bars 4 and 6 to close together against the inner wall of the barrel 3, so that the ink-container 1 expands and assumes its normal condition, the ink being thus drawn into the same. The plug 9 is then screwed if necessary into the end of the barrel 3. To admit of the plug 9 being fully unscrewed without imparting motion to the operating bar 6, it is formed with a central recess 10 (see Fig. 7) within which the spread-out extremity of the bar 6 is housed, the said spread-out extremity normally lying within the recess 10 and being arranged so as to engage with a shoulder at the lower end of the recess when the plug 9 has been fully unscrewed, so that further longitudinal movement of the plug actuates the operating bar 6. To serve as a guide

when re-screwing the plug 8 it is provided with a plain extension 11 which remains in engagement with the end of the pen barrel 3 when the plug is drawn out.

5 Having fully described my invention, what I desire to claim and secure by Letters Patent is:—

1. Fountain and other reservoir pens of the self-filling type comprising a collapsible ink container, a pressure bar adapted to press upon the said container, an operating bar jointed to the said pressure bar by means of parallel motion links and means for preventing the pressure bar from moving endwise when the said operating bar is operated.

15 2. Fountain and other reservoir pens of

the self-filling type comprising a collapsible ink container, a pressure bar adapted to press upon the said container, an operating bar jointed to the said pressure bar by means of parallel motion links and also connected to a plug member adapted to fit into the end of the pen-barrel, and means for preventing the pressure bar from moving endwise when the said operating bar is operated. 20

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 25

DUNCAN CAMERON.

Witnesses:

A. SWANEY,
JESSIE BATCHELOR.