UNITED STATES PATENT OFFICE.

ALICE EDNA WAIDE, OF ROCK FERRY, ENGLAND.

FOUNTAIN OR RESERVOIR PEN.

1,386,817.


To all whom it may concern:

Be it known that I, ALICE EDNA WAIDE, a subject of the King of England, residing at 65 Cavendish Drive, Rock Ferry, in the county of Chester, England, have invented certain new and useful Improvements in or Relating to Fountain or Reservoir Pens, of which the following is a specification.

This invention relates to fountain or reservoir pens of the “safety” type, that is of the kind wherein a rod or bar which carries the writing nib is reciprocated within the pen body or barrel (for the purpose of projecting or retracting the nib) by means of a revolvable helically-slotted sleeve or tube, through the slot whereof a pin secured to said nib-carrying rod projects into a stationary guide or positioning slot, and my invention has for its object to increase the ink-holding capacity, reduce the cost of manufacture, and facilitate the assembling together of the pen components.

According to the present invention, the rear portion or section of the body is of lesser length than now customary, so that the helically slotted sleeve or tube projects beyond same, and there is provided a nipple connecting piece which is externally screw-threaded and is screwed into said rear section, that is, between the interior wall thereof and the helically slotted sleeve or tube, and on which the main body or barrel is screwed.

In the interior wall of said nipple connecting piece (which constitutes a housing or casing for said helically slotted sleeve or tube) there is formed or provided a longitudinal guide or positioning slot wherein the lateral projection of the feed bar or stem engages.

I will further describe my invention with the aid of the accompanying sheet of explanatory drawings, in which:

Figure 1 is a longitudinal section of a “safety” pen (the nib being omitted) with housing showing interior parts of the pen in elevation; Figs. 2 and 3 being respectively, longitudinal and cross sections of interior parts viewed at right angles to Fig. 1; and Fig. 4 is a detached view of the housing.

\( a \) denotes the main body or barrel of the pen, \( b \) is the rear end or section and \( c \) is a revolvable sleeve or tube wherein is cut a helical slot \( d \); forming an extension of sleeve \( c \) is a shank \( e \) at the upper or outer end whereof is attached the head piece \( f \). \( f \) indicates a joint making sleeve of cork or similar material affording a bearing for the shaft \( c \). \( g \) is a nib-carrying rod or bar to which is secured the lateral pin \( h \). \( i \) represents a cylindrical piece or nipple in which is formed a longitudinal slot or recess \( j \); said nipple is exteriorly screw-threaded at \( k \) and forms a connecting piece between the barrel \( a \) and the rear end or section \( b \). Said nipple \( i \) which is constructed of vulcanite or other suitable material constitutes a housing or casing for the sleeve \( c \).

Said lateral pin \( h \) of the nib-carrying rod \( g \) projects through helical slot \( d \) of revolvable sleeve \( c \) into the longitudinal guide slot \( j \) of the stationary casing nipple \( i \).

In operation, when said head-piece \(-f\) is turned, and with it the revolvable helically-slotted sleeve or tube \(-c\), the nib-carrying rod or bar \(-g\) is projected or retracted through the engagement of the lateral pin \(-h\) which projects through the helical slot \(-d\) of the sleeve \(-c\) in the longitudinal slot or recess \(-j\) of the cylindrical piece or nipple \(-i\).

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

A reservoir pen comprising a nipple having a longitudinal guide slot formed in the inner wall thereof; a screw-threaded portion formed on the exterior of said nipple; an ink barrel screwed on said nipple; a rear section screwed on said nipple against said ink barrel; a revolvable head-piece; a sleeve connected with said head-piece and housed in said nipple and having a helical slot formed therein; a nib-carrying rod, and a lateral pin on said nib-carrying rod projecting through said sleeve slot and engaging in the longitudinal guide slot of said nipple.

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

ALICE EDNA WAIDE.

Witnesses:

JAS. C. MCRAE,
EMILY BURNETT.