

No. 834,542.

PATENTED OCT. 30, 1906.

W. A. WELTY,
FOUNTAIN PEN.
APPLICATION FILED FEB. 23, 1906.

Fig. 1.

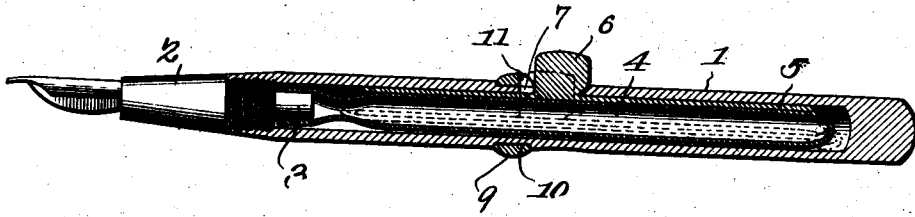


Fig. 2.

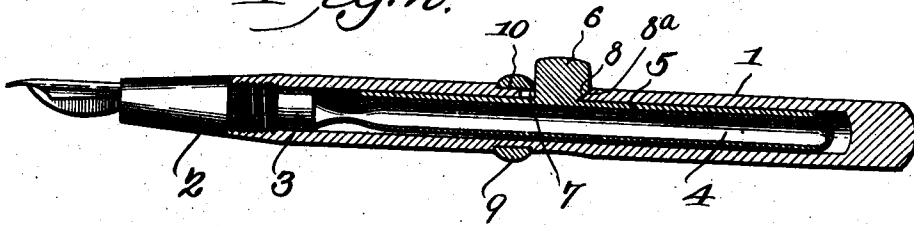


Fig. 3.

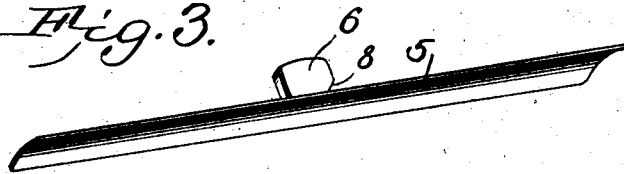
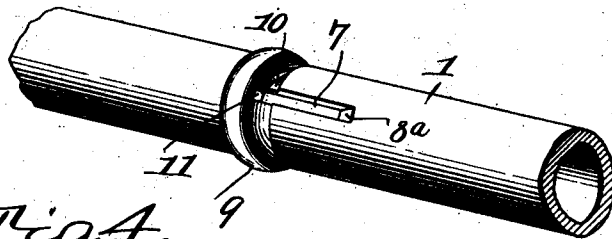


Fig. 4.



WITNESSES:

E. J. Stewart
R. M. Smith

William A. Welty,

INVENTOR,

By

C. Snowles

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM A. WELTY, OF WATERLOO, IOWA.

FOUNTAIN-PEN.

No. 834,542.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed February 23, 1906. Serial No. 302,554.

To all whom it may concern:

Be it known that I, WILLIAM A. WELTY, a citizen of the United States, residing at Waterloo, in the county of Blackhawk and State of Iowa, have invented a new and useful Fountain-Pen, of which the following is a specification.

This invention relates generally to fountain-pens, and more particularly to that class employing a compressible ink-reservoir that is combined with the pen-section.

The object of the present invention is to improve the means employed for compressing the reservoir whereby the filling thereof will be effected in a more rapid and positive manner than with articles of this character heretofore constructed and in which injury to the reservoir, as from cutting, is obviated.

A further object is to improve the manner of securing the compressing member against movement when its use is not desired.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a fountain-pen, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in longitudinal section through a fountain-pen constructed in accordance with the present invention, exhibiting the compressing member as it appears when capable of being actuated to compress the ink-reservoir, the latter being exhibited in its compressed condition in dotted lines. Fig. 2 is a view similar to Fig. 1, exhibiting the manner of locking the compressing member against operation. Fig. 3 is a perspective detail view of the compressing member. Fig. 4 is a perspective detail view of a portion of the barrel, the compressing member being omitted and showing more particularly the construction of the compressing-member locking-sleeve.

Referring to the drawings, 1 designates the barrel of the fountain-pen; 2, the pen-section, which is provided with a reduced teat 3, and 4 the compressible ink-reservoir, which, as usual, is held in engagement with the teat by frictional contact therewith. These parts may be of the common or any preferred construction, and therefore need no further description.

Housed within the barrel is the compressing member 5, which may be made of any suitable material, preferably of a non-oxidizable metal, and which is approximately semicircular in cross-section to conform to the exterior of an ink-reservoir and being substantially commensurate in length therewith, whereby when compressed practically the entire length of the reservoir will be operated upon instead of only a short length of the intermediate portion thereof, as heretofore. Furthermore, by having the member of the contour described in cross-section it will conform closely to the inner wall of the pen-barrel, and thereby permit the employment of a larger ink-reservoir than would be possible if the element were flat.

Combined with the compressing member in any preferred manner is a finger-piece 6, that is adapted to work in a longitudinal slot 7 in the barrel and is provided at one end with an angular rabbet 8 to engage with the end wall 8^a of the slot, which is oppositely inclined to the rabbet and serves to hold the finger-piece against movement when the other end is engaged with a locking-sleeve 9, carried by the barrel and mounted in a circumferential channel 10 therein. In order to permit the finger-piece to be depressed, thus to compress the ink-reservoir, the sleeve is provided in the edges that abut the finger-piece with an angular rabbet 11, that is of a depth to permit the finger-piece to move forwardly or in the direction of the pen-point when pressed upon to clear the end wall 8^a of the slot and downward to the position indicated by dotted lines in Fig. 1. When the finger-piece is released, the ink-reservoir will expand, and thereby lift the compressing member 5 and project the finger-piece to the position shown in Figs. 1 and 2, and upon the sleeve being turned the inclined wall of the recess will ride against the finger-piece, and thus force it backward until its rabbet interlocks with the wall 8^a, and thereby holds the finger-piece against compression.

By making the compressing member substantially equal in length the ink-reservoir more rapid and positive filling of the reservoir is effected than where only a short length of it is compressed, and by having the compressing member substantially semicircular in cross-section or of a contour to conform to the exterior of the reservoir danger of cutting the latter is entirely obviated.

The improvements herein defined while simple in character will be found thoroughly efficient for the purposes designed and will obviate certain objections heretofore inherent in fountain-pens of the character described.

I claim—

1. In a fountain-pen, the combination with a barrel having a slot provided with an inclined wall, of a compressing member housed in the barrel, a finger-piece carried by the member which projects through the slot and is provided with an inclined surface adapted to interlock with the inclined wall of the slot, a rotatable means on the barrel for moving said finger-piece in a direction to cause its inclined surface to engage the wall of the slot, and means on the barrel for preventing end-wise movement of the first-mentioned means.
2. In a fountain-pen, the combination with a barrel having an annular groove and a slot provided with an inclined wall, of a compressing member housed in the barrel, a finger-piece carried by the member which projects through the slot and is provided with an in-

clined surface adapted to interlock with the inclined wall of the slot, and a rotatable sleeve in the annular groove which is held from longitudinal movement by the latter and provided with an angular recess whose wall engages the finger-piece and moves the same so that the inclined surface on the latter interlocks the inclined wall of the slot.

3. In a fountain-pen, the combination with a barrel having a longitudinal slot provided with an inclined end wall, of a compressing member housed by the barrel, a finger-piece carried by the member and projecting through the slot and provided with an angular recess to coact with the inclined wall of the slot, and a rotary sleeve to engage the finger-piece to lock it against movement and provided with a recess to permit it to have movement.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM A. WELTY.

Witnesses:

R. R. TEETER,
J. E. SEDGWICK.