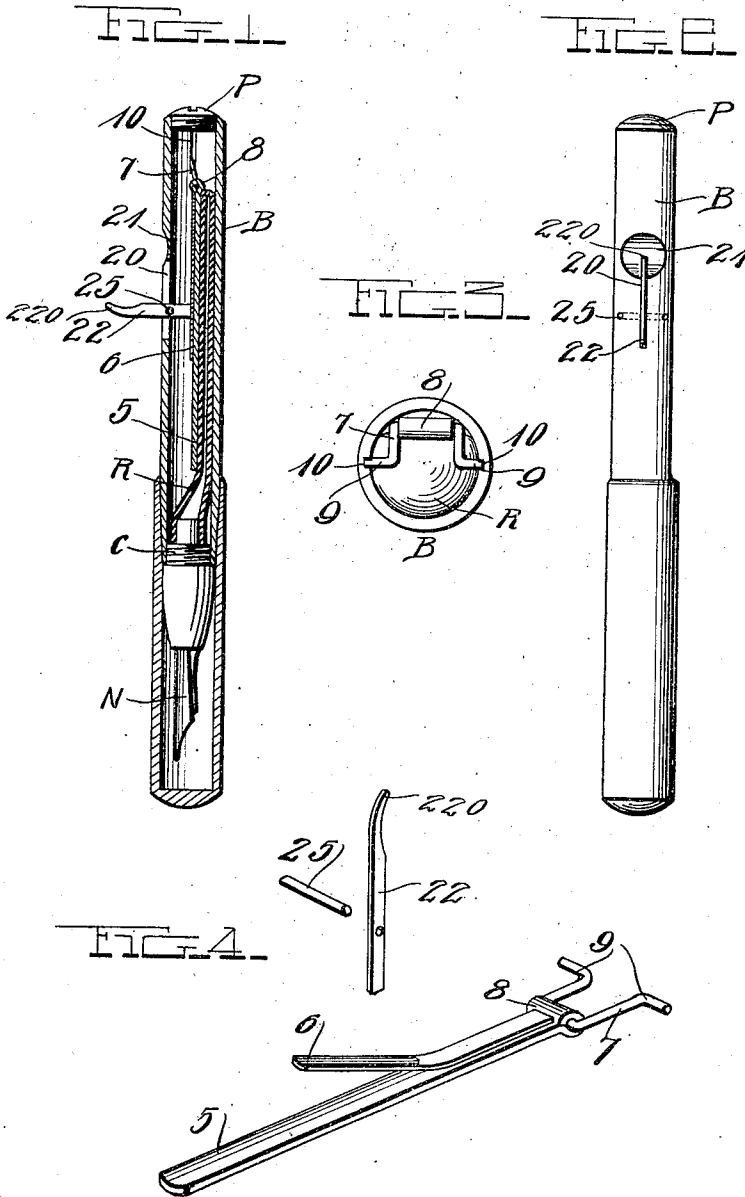


R. W. WHITNEY.
 FOUNTAIN PEN FILLER.
 APPLICATION FILED MAY 4, 1911.

1,005,387.

Patented Oct. 10, 1911.



Witnesses
 J. R. Pierce
 A. B. Hopkins

Inventor
 R. W. Whitney
 by *A. B. Wilson & Co.*
 Attorneys

UNITED STATES PATENT OFFICE.

RUEL W. WHITNEY, OF CLEVELAND, OHIO.

FOUNTAIN-PEN FILLER.

1,005,387.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RUEL W. WHITNEY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Fountain-Pen Fillers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to fountain pens, and more especially to the fillers thereof; and the object of the same is to simplify and improve that type of fountain pens which has an elastic ink reservoir contained within the barrel and means for manually compressing it when a charge of ink is to be taken up.

The present invention is more fully set forth in the following specification and claims, and shown in the drawings wherein—

Figure 1 is a central longitudinal sectional view of this device with the lever thrown upward and the reservoir compressed. Fig. 2 is a top plan view of the barrel with the lever lying flat. Fig. 3 is an end elevation of the barrel with the plug in its upper extremity removed. Fig. 4 is a perspective detail of the compressor withdrawn from the barrel.

In the drawings the letter B designates the pen barrel having a closing plug P in its upper end, N is the pen point or nib, and R is the ink reservoir connected therewith and generally made of rubber communicating with the nib through the collar C which screws into the lower end of the barrel. No novelty is claimed for these features of construction as they are all well known in the art of fountain pens.

Coming now more particularly to my present invention, the compressor best seen in Fig. 4 includes a stiff metal strip 5 long enough to extend substantially throughout the length of the flexible reservoir, a leaf spring 6 secured at its upper end to what might be called the back of the strip 5 and having its lower end bent upward and dished a little transversely, and a U-shaped bail 7 whose bend is by preference mounted loosely in an eye 8 across the upper end of the strip 5 and whose arms have outturned feet 9. This bail may be of light wire, and I can conceive the possibility that it might be

formed as a piece of one of the metal members although I prefer to pivot it in the eye as shown. Said members are by preference of separate pieces secured together as by soldering, brazing, or riveting, because one must be stiff and the other resilient; but I can conceive the possibility of making these two members in one piece having two legs which possess these attributes. In the upper end of the pen barrel B are cut two notches or grooves 10 in which the feet of the bail engage.

Longitudinally through the top of the barrel I form a slot 20, and across its upper end a depression 21 of sufficient size to admit the tip of the finger nail. In said slot is mounted a lever 22 pivoted between its ends on a cross pin 25 which extends across the slot and is secured in the wall of the barrel, and the upper end of the lever is bent inward as at 220 so that it will be impossible for it to catch on the pocket of the wearer's garment.

In assembling the parts of a pen made of this construction, the reservoir is inserted into the barrel while the lever lies flat, and the collar screwed into the lower end of the barrel to hold the parts in place. Next the compressor is inserted into the upper end of the barrel, the operator pressing the spring close against the strip and inserting the lower end of the latter between the top of the reservoir and the lever which still lies flat. The grooves in the barrel are so disposed with relation to the lever that as the compressor is fully inserted and the feet of the bail passed into said grooves, the dished end of the spring will pass beneath the inner end of the lever. Finally the upper end of the barrel is closed by the plug and the device is ready for use. To fill this pen it is only necessary to hook the finger nail under the upper end of the lever and raise the latter to the position shown in Fig. 1; this causes its lower end to turn inward and it slides upon the spring rather than upon the rubber reservoir, and said reservoir is of course compressed. Then the pen point or nib is inserted in the ink and the lever laid down flat; this permits the rubber reservoir to open and suck in a charge of ink. When the pen again becomes empty, it is necessary only to raise the lever, insert the pen point in ink, and drop the lever so that another charge can be sucked into the reservoir.

Thus it will be seen that I have produced

a fountain pen filler wherein the lever never comes in contact with the rubber reservoir and cannot tear it, and wherein the outer extremity of the lever lies within a cross notch or depression in the barrel so the finger nail can be easily inserted under it although it be hooked as shown, and yet no article of clothing can get under such hooked end accidentally. Another feature is the wire bail whose bend is pivoted to the strip and whose out-turned feet lie in grooves in the upper end of the barrel, thus permitting it to swing upon its feet as the strip rises and falls in the operation of filling the pen. Still another important feature is the spring which is of course of less strength than the normal expansive tendency of the rubber reservoir in order to permit the latter to expand and suck in a charge of ink. The function of this spring is to prevent rattling of parts, accurately guide the inner end of the lever, and hold the strip down with gentle force even after the lever has been swung back to its normal position, so that the rubber reservoir may expand and suck in a charge of ink rather slowly. The parts are of course of the desired sizes, proportions, and materials, and the pen is susceptible of other features of improvement without conflict with this invention.

What is claimed as new is:

1. In a fountain pen filler, the combination with the barrel having a pair of longitudinal grooves within its upper end and a longitudinal slot through its wall, a lever pivoted in said slot, a pen point, and a normally expansible reservoir contained within the barrel and connected with said point; of a stiff strip between the inner end of the lever and said reservoir, an eye in the upper

end of the strip, a U-shaped bail having its bend pivoted in said eye and its arms provided with out-turned feet loosely engaging said grooves, and a plug for closing the upper end of the barrel.

2. In a fountain pen filler, the combination with a barrel, a pen point, and an expansible reservoir connected with the latter and contained within the barrel; of a lever pivoted between its ends within the wall of the barrel, a stiff strip lying upon said reservoir, a spring weaker than the expansive force of the reservoir and having one end connected with the strip and the other end dishd and lying under the inner end of the lever, and a flexible connection between said strip and barrel.

3. In a fountain pen filler, the combination with a barrel, a pen point, and an expansible reservoir connected with the latter and contained within the barrel; of a lever pivoted between its ends within the walls of the barrel, a stiff strip lying upon said reservoir, a spring weaker than the expansive force of the reservoir and having one end connected with the strip and the other end dishd and lying under the inner end of the lever, an eye at the upper end of the strip and a U-shaped bail having its bend pivoted in said eye and its arms pivotally connected with the interior of the barrel at its upper end.

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

RUEL W. WHITNEY.

Witnesses:

C. NELSON RICHARDS,
GEORGE F. WATERS.