

No. 834,373.

PATENTED OCT. 30, 1906.

F. O. ELLIS.
FOUNTAIN PEN.

APPLICATION FILED NOV. 7, 1904.

Fig. 1.

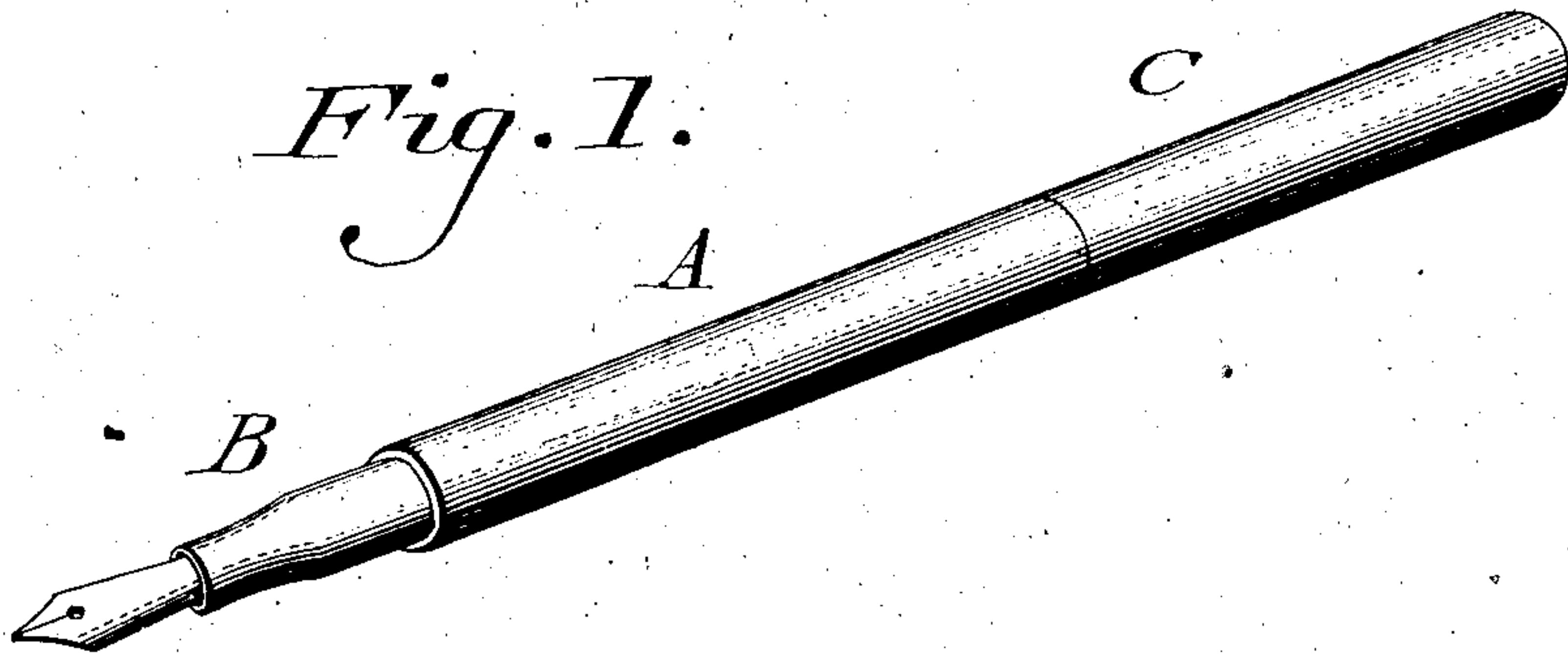


Fig. 2.

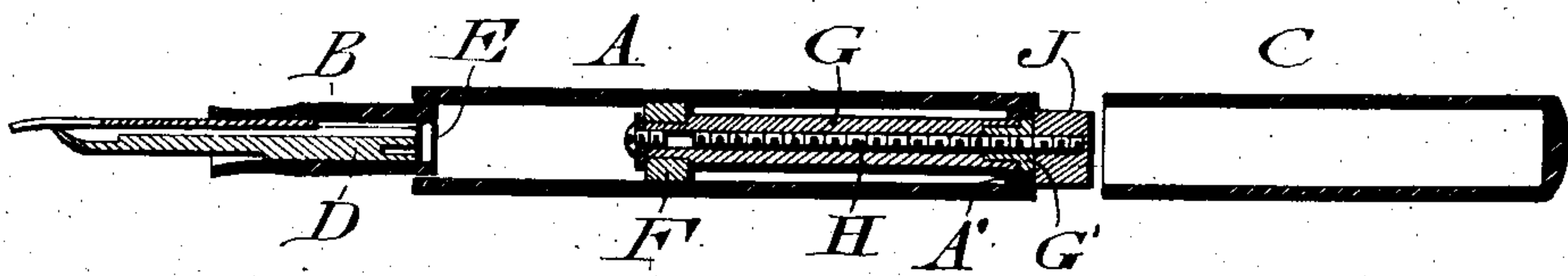


Fig. 3.

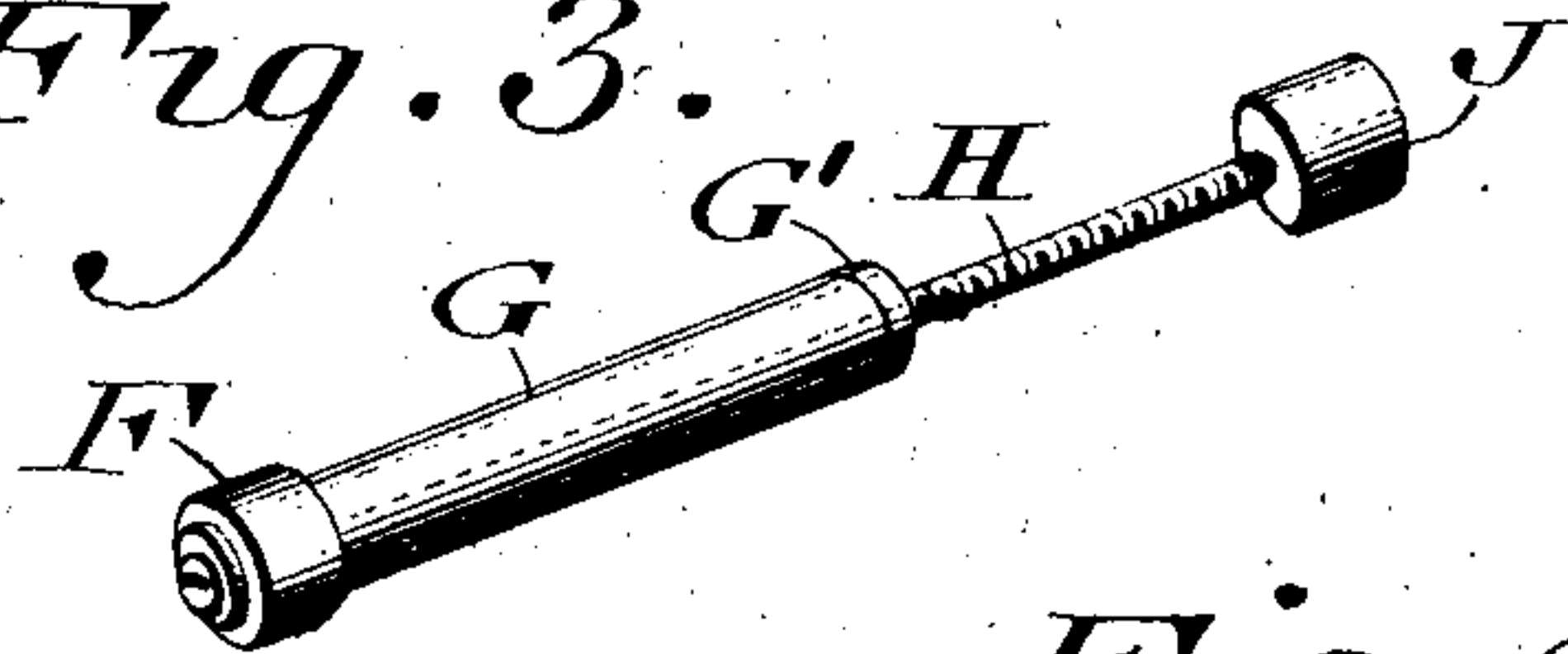


Fig. 4.

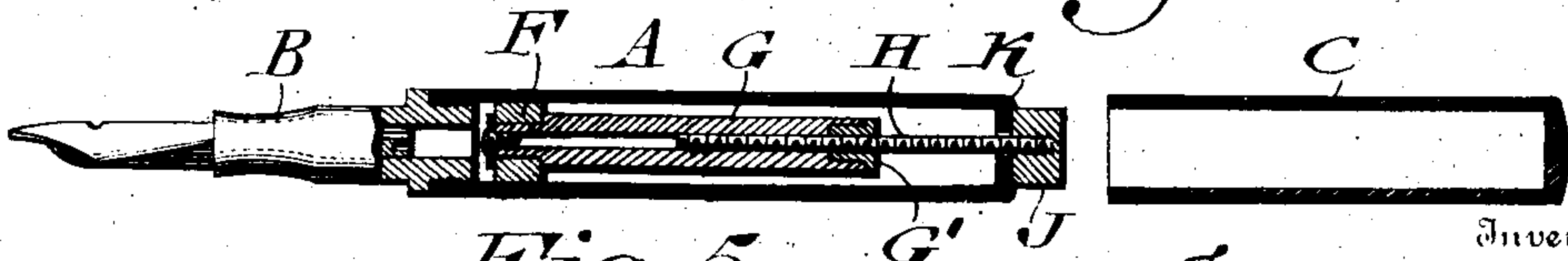


Fig. 5.



Witnesses

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FOUNTAIN-PEN.

No. 834,373.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK O. ELLIS, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Fountain-Pen, of which the following is a specification.

My invention relates to improvements in a fountain-pen in which provision is made for supplying the barrel or reservoir thereof with ink through the pen-holding end thereof, thus avoiding a separate filler and the requirement of uncovering either end of said barrel or reservoir for such purposes, while also simplifying and vastly improving an article of the class, the means employed and the operation thereof being hereinafter described and the novel features thereof pointed out in the claims.

Figure 1 represents a perspective view of a fountain-pen embodying my invention. Fig. 2 represents a longitudinal section thereof. Fig. 3 represents a perspective view of a detached part thereof. Fig. 4 represents a longitudinal section of a form of the invention with slight changes over that shown in the previous figures. Fig. 5 represents a portion of Fig. 4 with certain parts thereof in different positions.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates the barrel or reservoir of a fountain-pen; B, the pen-holding member thereof, the same being removably held in said barrel, and C the covering-cap thereof, said member having therein the ink-supplying duct D and the port E, the latter forming a communication between said duct and the interior of the reservoir A. Within said reservoir is the piston F, whose stem G is tubular and has an internally-threaded collar G' for the engagement of the screw-threaded rod H, which stem passes freely through an opening in the flat flange A' on the end of the reservoir and has on its outer terminal the head J, which resting flat against said flange serves to close said opening and prevent ink in said reservoir from escaping at said end, as most plainly shown in Fig. 2.

When the reservoir is to be supplied with ink, the head J is rotated, whereby the rod H is unscrewed, thus extending the stem G, as shown in Fig. 3. The pen-nib is now placed in ink and the piston F is operated in the reservoir after the manner of a pump, the head

J, which may be grasped, now serving as a knob or handle, it being evident that ink by suction is drawn through the duct D and passing through the port E enters the reservoir, thus supplying the latter. The threads of the rod H are continuous, preferably from end to end, so that said rod may remain connected with the tubular stem G whether said rod is screwed into the stem to a folded condition, as in Fig. 2, or screwed out therefrom to operative position, as in Fig. 3, without disconnecting the telescopic connection of the piston and preventing play of the inner member or rod H and rattling of the same. Owing to the collar G', which is secured within the bore of the stem G at one end thereof, I avoid the threading of said bore, the short thread of said collar being sufficient for the connection of the rod H with said stem in the in-and-out position of said rod. The rod H is now screwed into the stem G and the head J reaches the adjacent flange A' of the reservoir, the parts resuming their normal positions, as shown in Fig. 2. The open end of the cap is then fitted on the head J and abuts against the adjacent terminal of the reservoir, thus firmly sustaining said cap and forming a continuity of the latter, as shown in Fig. 1, and as the pen-nib is now supplied with ink the writing may be proceeded with as usual in an article of the kind.

In Figs. 4 and 5 I show the rod H passing through an opening in a rounded flange K on the reservoir and also show the pen-holding member B as separate from the reservoir and adapted to be screwed into the latter, while in Figs. 1 and 2 the reservoir and pen-holding member are found in one piece or integral, without, however, producing different results.

Various changes may be made in the details of construction shown without departing from the general spirit of my invention, and I do not, therefore, desire to be limited in each case to the same.

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

1. In a device of the class described, the combination with a pen-barrel having an end wall provided with an opening, of a piston-rod threaded throughout substantially its entire length and movable freely through said opening, and a piston threaded onto the rod within the barrel.

2. In a device of the class described, the

combination with a pen-barrel having an end wall provided with an opening, of a rod threaded through substantially its entire length and movable freely through said opening, a head provided on the outer end of the rod and a piston threaded onto the latter within the barrel.

3. In a fountain-pen, a reservoir, a piston, a telescopic stem connected with said piston, said stem consisting of a threaded member, an exterior tubular section, and a threaded collar secured within said section, and having said threaded member engage solely therewith, and a head with a flat inner face on the outer end of said threaded member on the exterior of said reservoir, said head being adapted to abut against the adjacent end of the latter.

4. In a fountain-pen, a reservoir having an inturned flange at an end thereof, a piston, a telescopic stem connected with the latter and formed of a tubular section which freely occupies said flange and a threaded member which engages with the interior of said tubular section, a head which is secured to the outer end of said member and adapted to abut against said flange forming a shoulder therewith, and a covering-cap adapted to be fitted on said head and engage said shoulder.

5. In a fountain-pen, a reservoir, a piston, a telescopic stem connected with said reservoir, said stem consisting of a threaded member, an exterior tubular section, and a threaded collar secured within said section, and having said threaded member engage solely therewith, and a head on the outer end of said threaded member on the exterior of said tubular section, said reservoir having an inturned flange against which said head is adapted to abut and form a shoulder therewith and a covering-cap adapted to be fitted on said head and engage said shoulder.

6. In a fountain-pen, a reservoir, a piston, a telescopic stem for said piston formed of a tubular section having an unthreaded bore, and an internally-threaded collar secured within said bore, a threaded member engaging said collar, a head on the outer end of said member and exterior of the adjacent end of said reservoir, the same being adapted to abut against said end of the reservoir and a covering-cap adapted to be fitted on said head.

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