

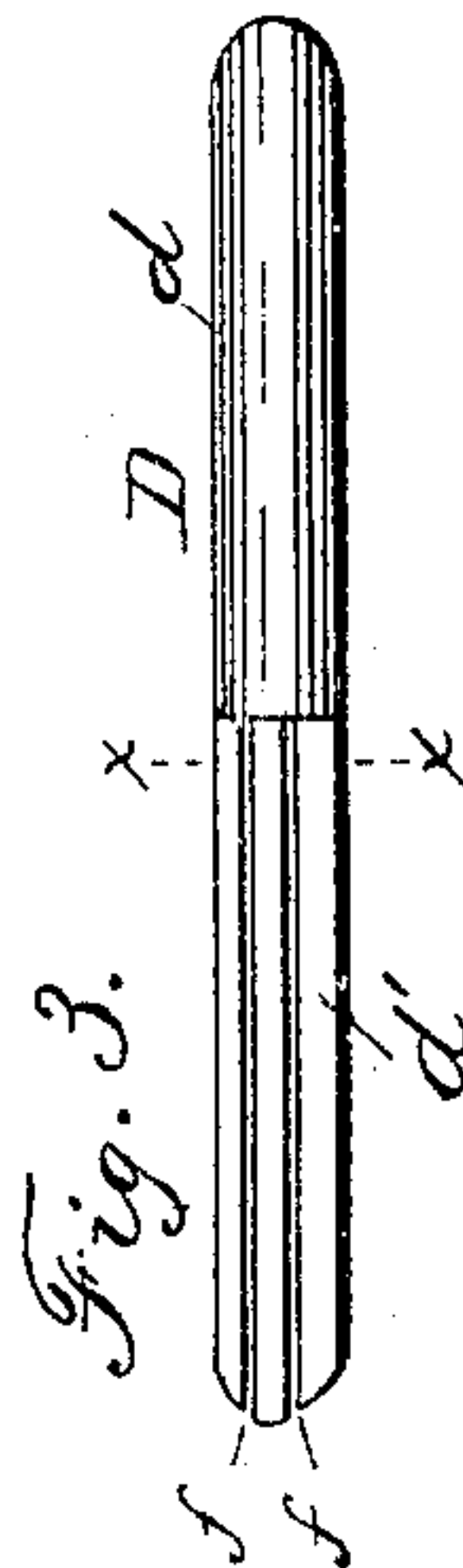
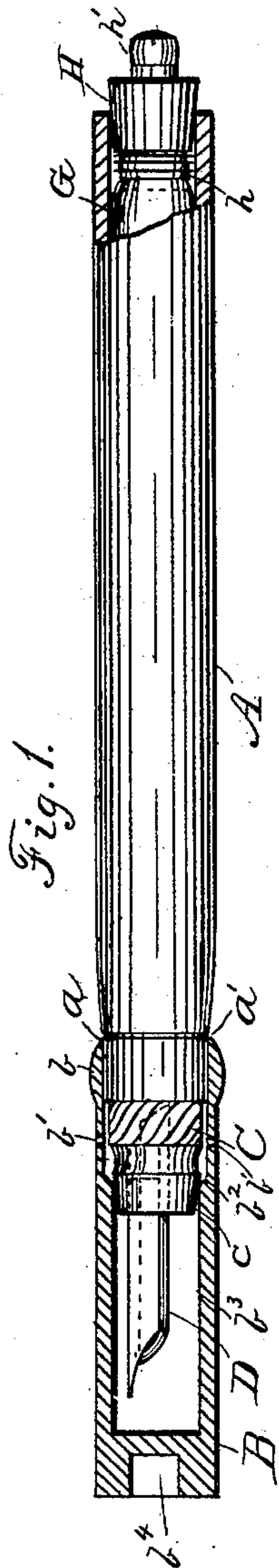
No. 713,735.

Patented Nov. 18, 1902.

J. BLAIR.  
FOUNTAIN PEN.

(Application filed May 28, 1902.)

(No Model.)



WITNESSES:

C. K. Hickox  
R. Q. Beane

INVENTOR

John Blair  
BY  
Chas. D. Smith  
ATTORNEY

# UNITED STATES PATENT OFFICE.

JOHN BLAIR, OF NEW YORK, N. Y.

## FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 713,735, dated November 18, 1902.

Application filed May 28, 1902. Serial No. 109,262. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BLAIR, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Fountain-Pens; 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention embodies improvements in the feed-bar of fountain-pens and also in the means for twisting the ink-sack in self-filling and force-feed fountain-pens.

The accompanying drawings illustrate the improvements, Figure 1 being a longitudinal side view partly in section; Fig. 2, the upper side of a feed-bar, on which the nib is placed; Fig. 3, the under side of a feed-bar, and Fig. 4 an enlarged cross-section on the line  $xx$  of Fig. 3.

Like letters denote corresponding parts in the several views.

The letter A indicates the hollow case or body of a fountain-pen, and  $a$  the cap-seat thereon.

B is the cap, and  $b$  is a thickened portion at its mouth to give it strength and which fits upon the seat  $a$ . A narrow space  $a'$  is left between the edge of the cap and the shoulder of the body A. Air-vents  $b'$  are provided in the cap at a point about midway between the outer end of the pen-case and outer end of the nozzle. An inclined shoulder  $b^2$  is formed at the beginning of the reduced bore  $b^3$ . A socket  $b^4$  at the outer end of the cap engages the cap-rest at the other end of the case.

C is the nozzle, having the tapering end  $c$ , which is adapted to enter and tightly fit into the reduced bore  $b^3$  of the cap and to form therewith an ink-tight joint to prevent ink from working out upon the surface of the nozzle.

D is the feed-bar, having the well-known round portion  $d$  and a half-round portion  $d'$ , with parallel grooves  $e e$  cut along the entire length of the rounded side  $d$ . In order to obtain a more constant and copious flow of ink, I cut the slits  $f f$  through the entire length of the half-round portion coincident with and into the bottoms of said grooves.

G is an elastic ink-sack secured in the barrel in any preferred way.

H is a tapered plug to partly enter the upper end of the body A.

$h$  is an extension of the plug into the body to serve as a mount for the ink-sack G.

$h'$  is an exterior extension to engage the socket  $b^4$  in the cap. A part of the extension is milled, and by it the plug is turned to twist and untwist the ink-sack G. The parts are adjusted so that there will always be a tension on the plug from the elastic sack to draw the plug with moderate pressure into the end of the body. Thus the sack may be twisted either way by turning the plug without the addition of a screw-thread or other accessory, as heretofore employed.

Having now described my invention, what I claim is—

1. In a feed-bar having a round and a half-round portion with grooves cut along the entire length of the rounded side, slits cut through the entire length of the half-round portion, coincident with, and into the bottoms of, said grooves, as herein set forth.

2. In a self-filling and force-feed fountain-pen, having an elastic ink-sack secured in the lower end of the pen-body, a plug fastened to said ink-sack and resting against the inner edge of the end of the pen-body by the tension of the elastic sack, substantially as herein set forth.

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

JOHN BLAIR.

Witnesses:

JULIETTE Q. LEACH,

LURINDA A. WILLIAMS.