

(No Model.)

J. RAYNALD.
FOUNTAIN PEN.

No. 438,895.

Patented Oct. 21, 1890.

FIG. 1.

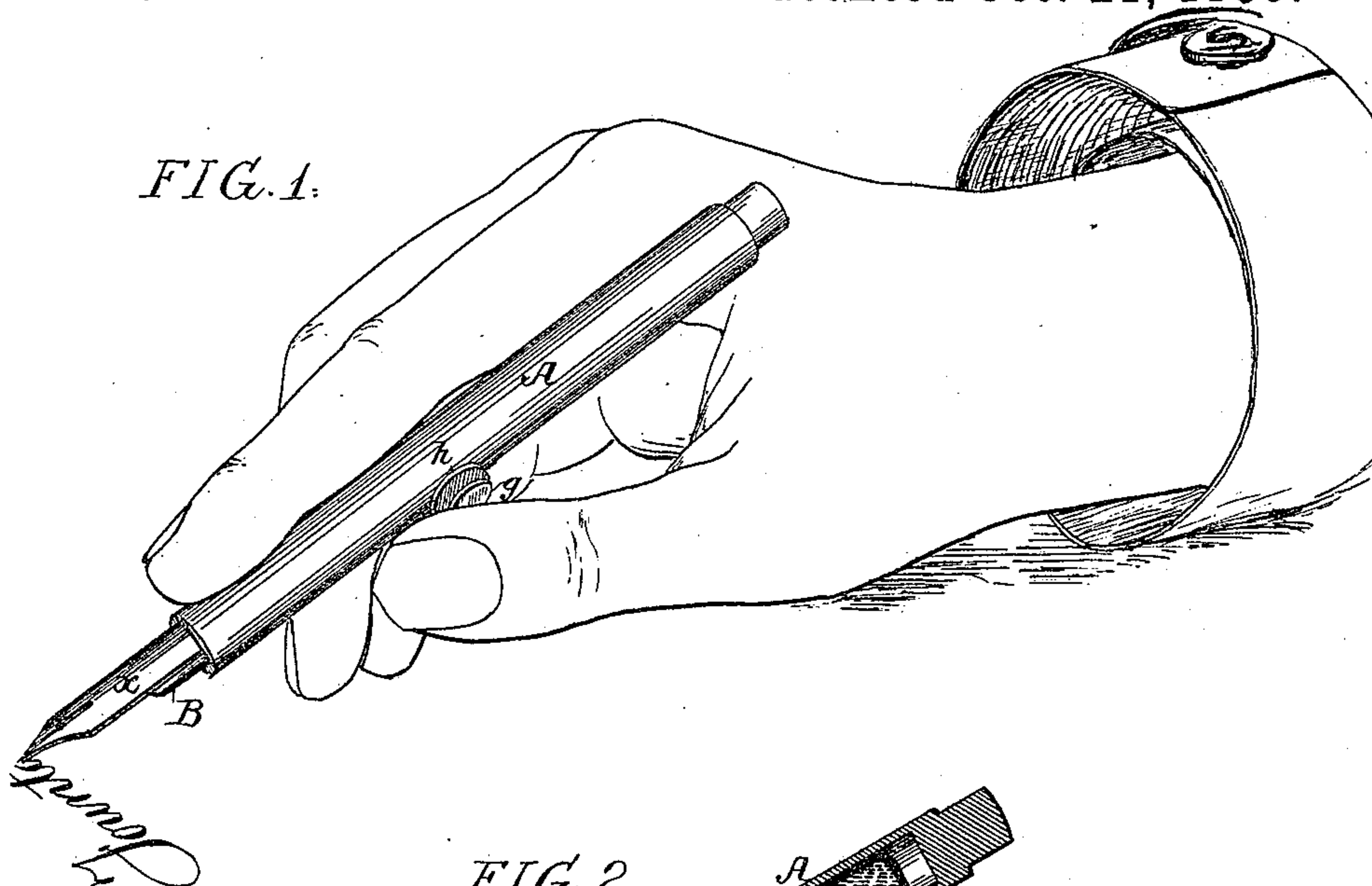


FIG. 2.

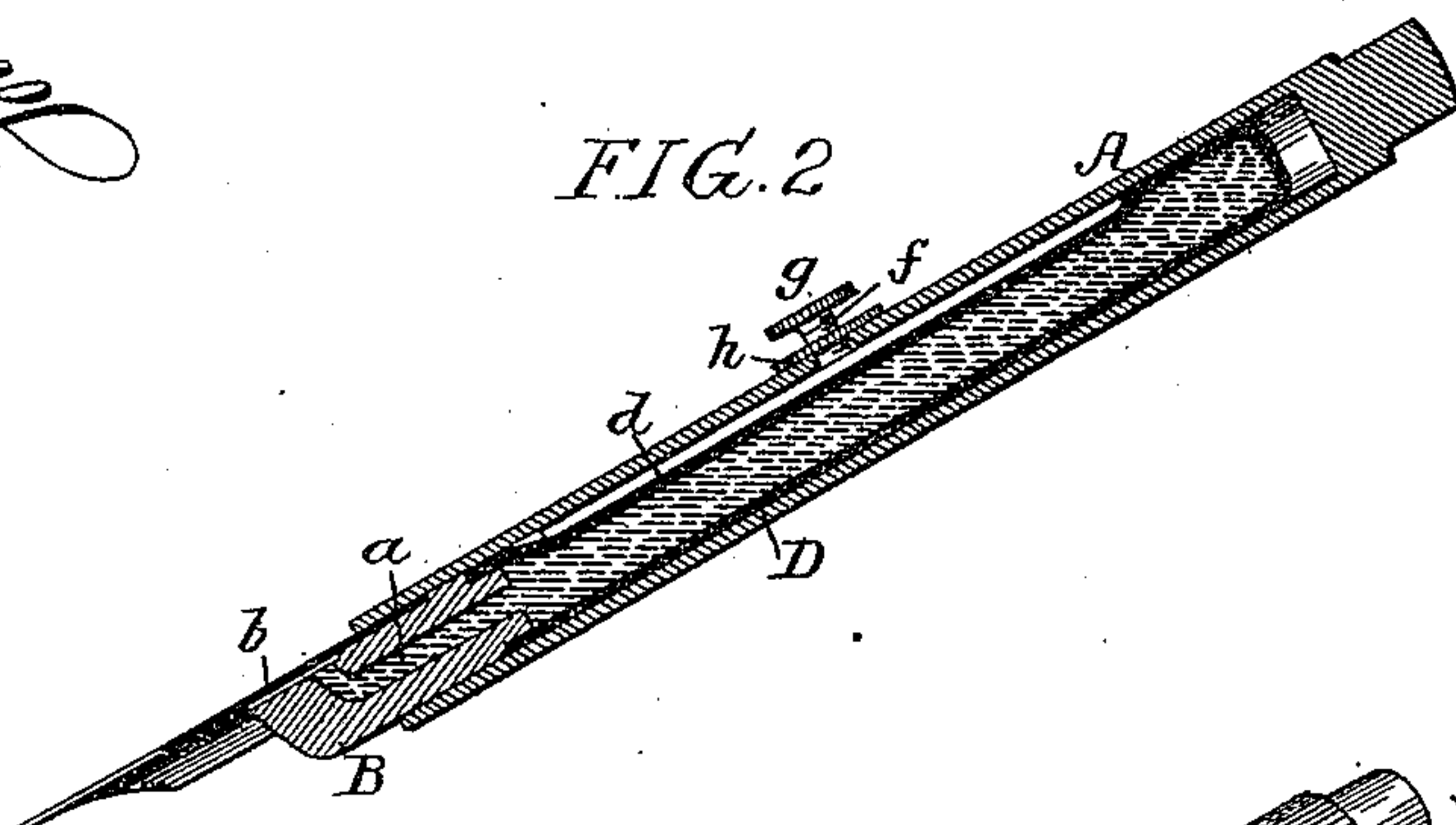


FIG. 4.

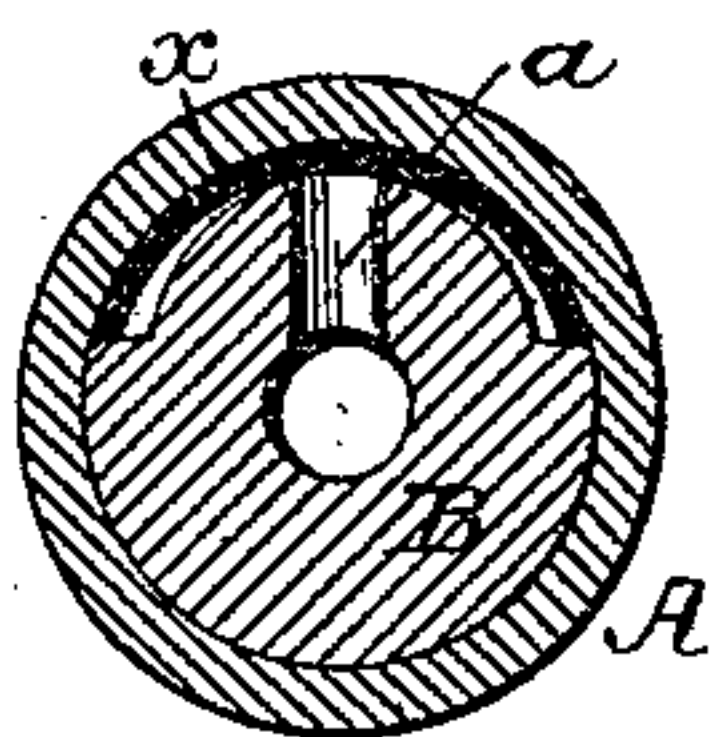


FIG. 5.

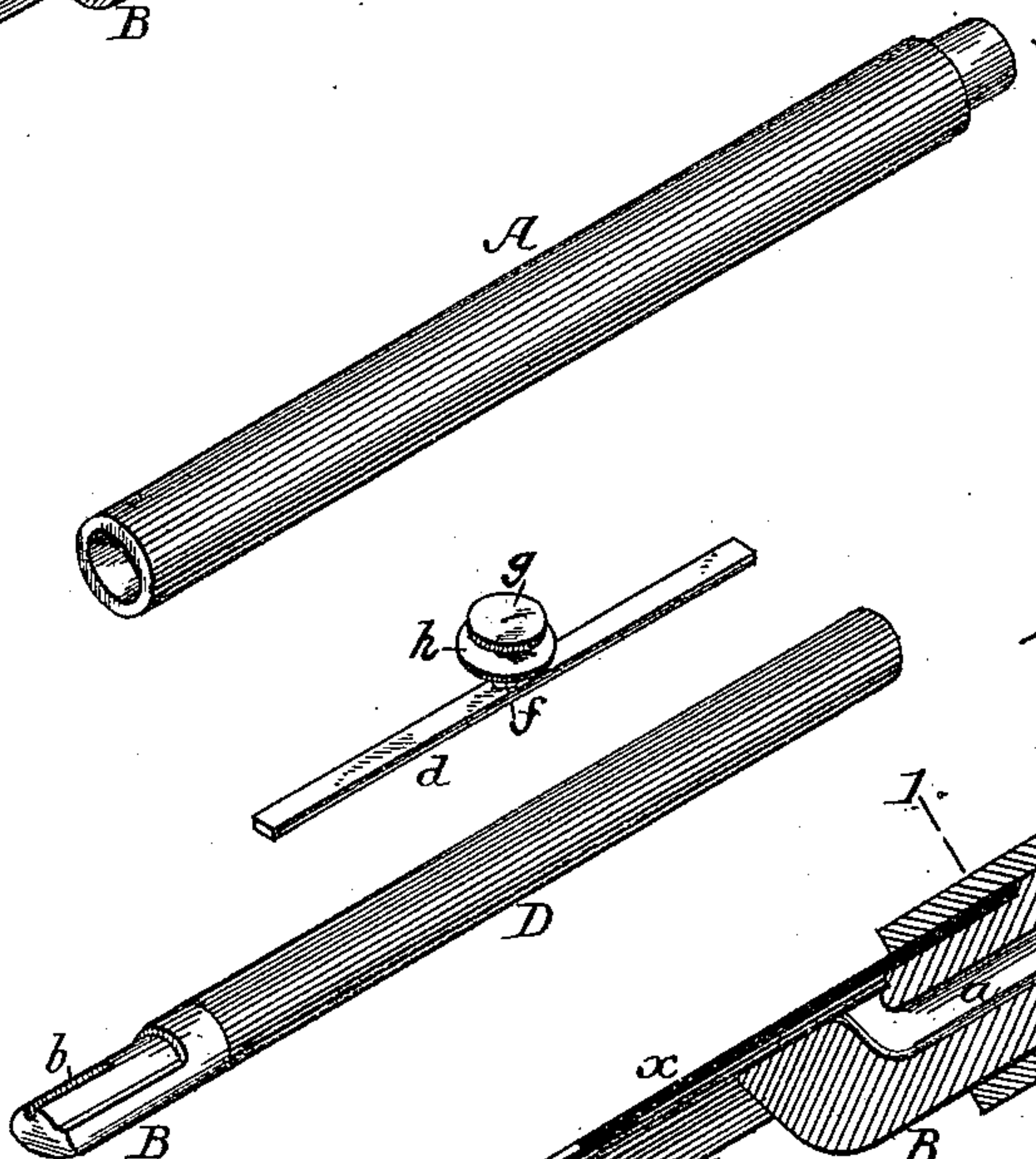
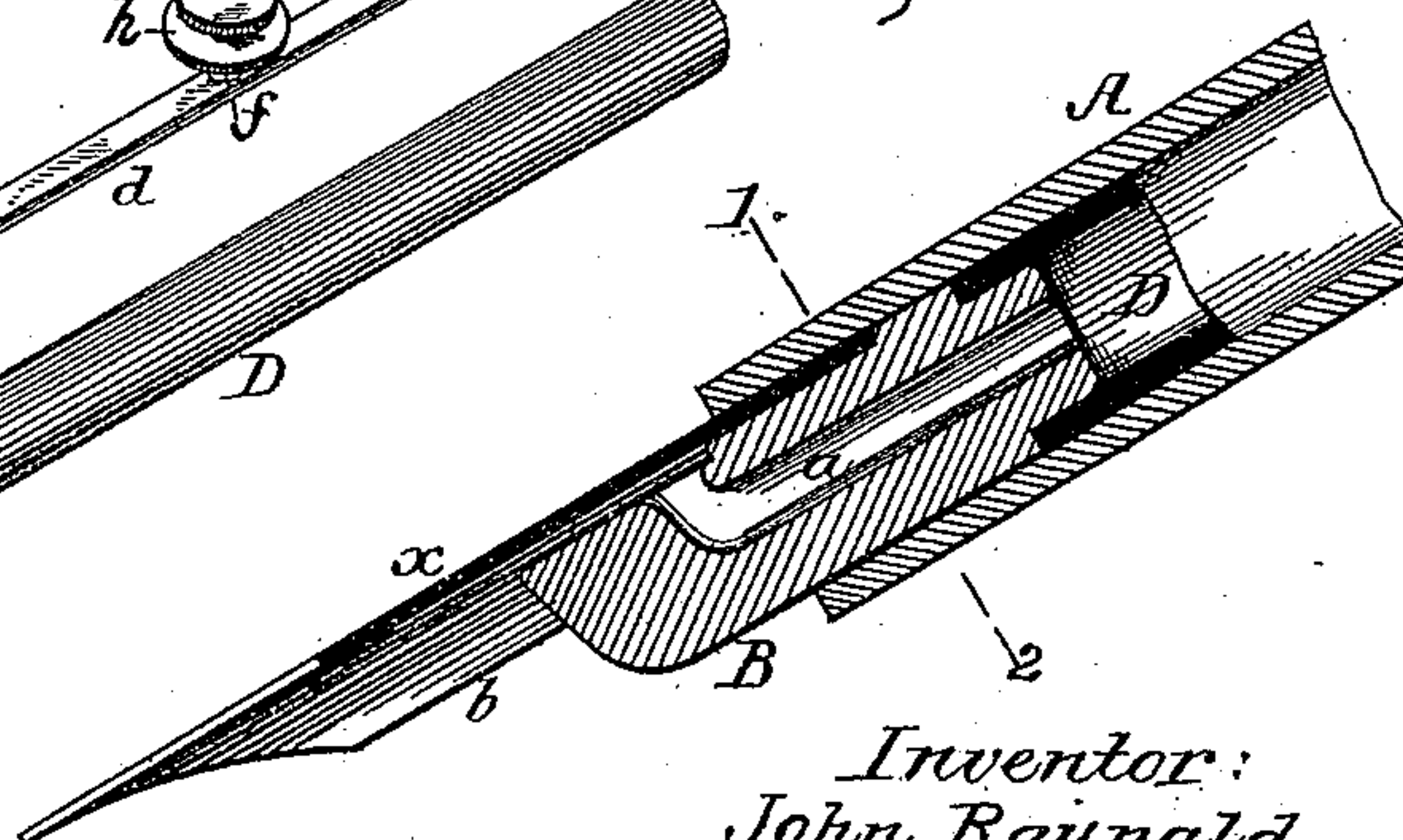


FIG. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN RAYNALD, OF PHILADELPHIA, PENNSYLVANIA.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 438,895, dated October 21, 1890.

Application filed May 16, 1889. Serial No. 310,998. (No model.)

To all whom it may concern:

Be it known that I, JOHN RAYNALD, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Fountain-Pens, of which the following is a specification.

My invention relates to that class of fountain-pens in which the ink is contained in a compressible reservoir within the holder and is fed to the pen as required by pressure upon said reservoir, one object of my invention being to construct a simple and efficient fountain-pen of this character which is adapted for use with an ordinary pen, a further object being to insure the complete discharge of the ink from the reservoir, and a still further object being to prevent the accidental discharge of ink when the pen is not in use. These objects I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved fountain-pen as it appears when in use. Fig. 2 is a longitudinal sectional view of the pen. Fig. 3 is an enlarged longitudinal section of the front end of the same. Fig. 4 is a transverse section on the line 1 2, Fig. 3; and Fig. 5 is a perspective view of the various parts of the pen detached from each other.

A is the body of the pen-holder, permanently closed at the upper end and having at the opposite end a plug B, which fits snugly to the body of the holder and serves to confine the pen *a*, as shown in Fig. 4, that portion of the plug which actually bears upon the pen being eccentric in respect to the tube constituting the body, so that pens of different sizes can be held in place by the plug, the upper portion of the pen being always nipped firmly between the plug and the interior of the tubular body, as shown in Fig. 4.

Formed in the plug B is a passage *a*, which at its front end is carried to the upper face of the plug and communicates with a longitudinal channel *b*, through which the ink flows to the nib of the pen.

To the inner end of the plug is secured the front end of an elastic reservoir D, which contains the supply of ink; and bearing upon one side of this reservoir, along almost the whole length of the same, is a bar *d*, which

has a stem *f*, projecting through an opening in the body of the holder, and provided at its outer end with a head or button *g*, the stem being threaded and provided with a nut *h*. When this nut is run down on the stem until it bears against the body of the holder, it prevents any depression of the stem and its bar, and thus prevents the forcing of any ink from the elastic reservoir—as, for instance, when the pen is being carried in the pocket. When the pen is in use, however, the nut is backed off on the stem, so as to permit any desired extent of movement of the latter and its bar, and in use the pen is held in the hand in such position that the button *g* may be conveniently pressed by the thumb, as shown in Fig. 1, so that the elastic ink-reservoir in the handle may be compressed and the proper supply of ink fed to the pen whenever such supply becomes desirable, air being drawn into the reservoir when it expands, so as to take the place of the ink expelled therefrom. By a succession of operations, therefore, the entire supply of ink in the reservoir may be expelled, and when it is desired to refill the reservoir the latter may be first compressed to its full extent, so as to expel the air therefrom, and the pen then dipped in the ink and the reservoir permitted to expand, so as to draw a fresh supply of ink up into said reservoir.

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

1. The combination of the holder, the elastic ink-reservoir contained therein, a presser-bar having a stem projecting through the holder, and a nut on said stem for locking the same or regulating its movement, substantially as specified.

2. The combination of the body of the holder, the pen, and the plug adapted to the body of the holder and serving to confine the pen, the confining portion of the plug being on a curve eccentric in respect to the body of the holder, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN RAYNALD.

Witnesses:

WILLIAM D. CONNER,
HARRY SMITH.