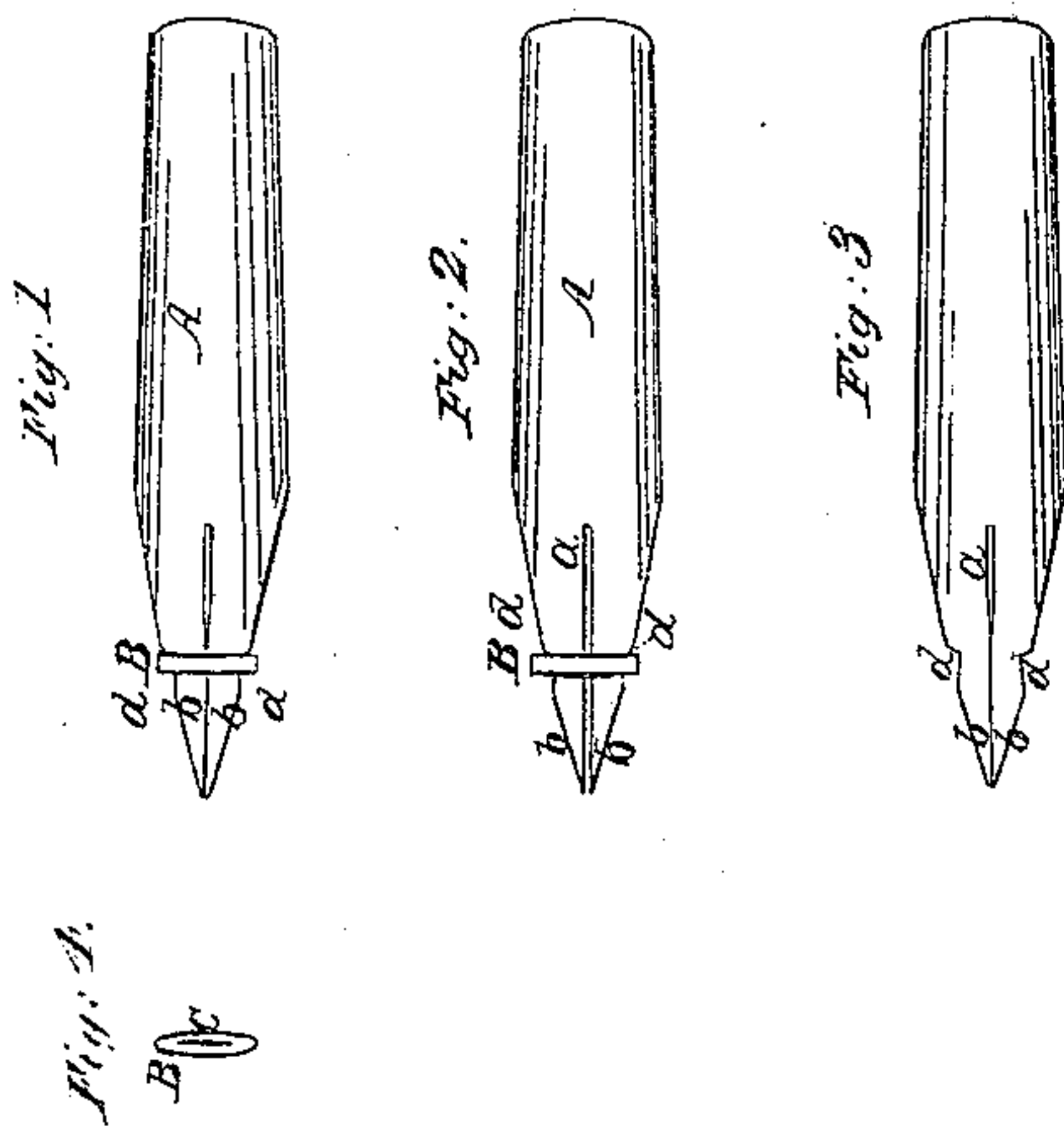


A. F. Warren,
Pen

No. 39084

Patented June 30. 1863.



Witnesses:
Mr. S. Partidge
Daniel Robertson

Inventor:
A. F. Warren

UNITED STATES PATENT OFFICE.

A. F. WARREN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PENS.

Specification forming part of Letters Patent No. 39,084, dated June 30, 1863.

To all whom it may concern:

Be it known that I, A. F. WARREN, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Pens; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of a pen with my improvement applied, representing it in its normal condition. Fig. 2 is a similar view of the pen representing it in the condition it assumes when the nibs are pressed upon the paper to make the downstroke in writing. Fig. 3 is a top view of the pen having the elastic band or clasp which constitutes my invention removed. Fig. 4 is an edge view of the elastic band or clasp detached from the pen.

Similar letters of reference indicate corresponding parts in the several figures.

The object of my invention is to convert an ordinary gold or other pen into a fountain-pen; and to this end it consists in the application to and around the wick of such pen of a band or clasp of vulcanized india-rubber, or other flexible and elastic substance, such band or clasp retaining above it in the pen a considerable quantity of ink, and so forming a fountain, but not interfering with the elasticity of the pen or with the flow of ink down the slit to the point thereof.

To enable others skilled in the art to make and apply my invention, I will proceed to describe its construction and operation.

A is the pen, made of the common or of any suitable form. *a* is the slit, and *b b* are the nibs. B is the band or clasp, made of elastic or soft vulcanized india-rubber in preference to any other material now known. This band

or clasp is of elliptical or oblong form, and may be cut from a piece of sheet-rubber with a suitable punch or cutting instrument, which will also produce its slit *c*, which is of suitable length to fit the nibs of the pen at some distance from the point thereof. In order to retain the said band or clasp upon the pen the outer edges of the nibs should be preferably notched, as shown at *d d*, at the points where it is desired that the said band or clasp shall embrace them. The band or clasp is simply slipped over the nibs of the pen, and is retained in place by its own elasticity.

The pen, having the band or clasp B applied, is charged by dipping it into ink to a suitable depth beyond the said band or clasp, above and below and around which the ink is retained in the form of a globule of considerable volume, though in writing it is only supplied to the point of the pen by running down the slit *a* as fast as required, when the said slit is opened by the pressure applied in the act of writing. The band or clasp, though expanding with the opening action of the nibs in making the heaviest downstrokes, contracts upon the nibs as they close, and so prevents the ink from flowing down between it and the outer edges or upper and lower surfaces of the nibs. Besides forming a fountain, the band or clasp tends to keep the nibs in their proper relative positions, and prevents them from riding over each other.

What I claim as my invention, and desire to secure by Letters Patent, is—

The flexible and elastic band or clasp B, applied to a pen substantially as and for the purpose herein specified.

A. F. WARREN.

Witnesses:

M. S. PARTRIDGE,
DANIEL ROBERTSON.