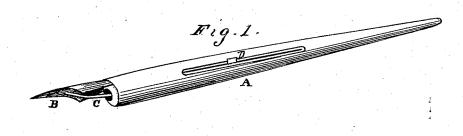
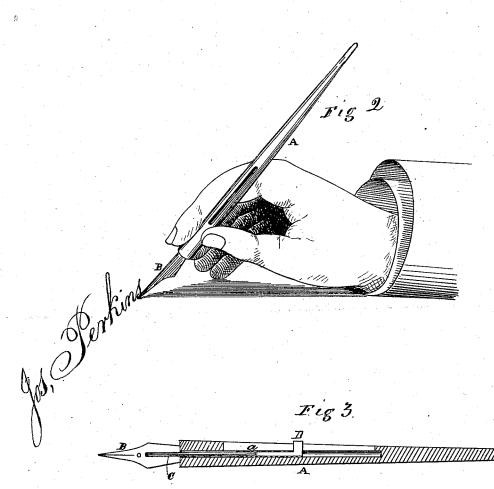
## J. PERKINS. Soluble-Ink Pen.

No. 198,812.

Patented Jan. 1, 1878.





Witnesses Dry L. Borne Frank a. Brooks Poseph Perkins by Devey &

## UNITED STATES PATENT OFFICE.

JOSEPH PERKINS, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN SOLUBLE-INK PENS.

Specification forming part of Letters Patent No. 198,812, dated January 1, 1878; application filed October 22, 1877.

To all whom it may concern:

Be it known that I, JOSEPH PERKINS, of the city and county of San Francisco, and State of California, have invented an Aquatic Writing-Pen; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the ac-

companying drawings.

My invention relates to a novel method of supplying a writing-pen with ink without the necessity of dipping it in fluid ink; and it consists in the combination of a slotted pen-holder, provided with a stationary pen and longitudinal bore, and a sliding tube provided with a rod or bar of solidified, soluble, coloring compound, arranged to be adjusted in the longitudinal bore of the pen-holder, and in such relation to the pen-point that, if the pen-point be dipped in water far enough to wet the compound, the adhering water will become saturated with the coloring compound and flow to the point of the pen and provide a writing ink or fluid.

Referring to the accompanying drawings, Figure 1 is a perspective view. Fig. 2 shows the operation, and Fig. 3 is a sectional view.

Let A represent a pen-holder, and B an or-

dinary writing-pen.

In order to provide a ready means of supplying this pen with an ink or writing-fluid, I take a rod or bar of solidified coloring compound, which will dissolve slowly when dipped in water, and secure it in the pen-holder, so that its forward end will lie against or close to the concave or under side of the pen a short distance back of its point. This rod or bar I place in a hole or bore which extends longitudinally through the pen-holder, so that its forward end projects out from the lower end of the holder close to the concavity or under side of the pen, the inner end fitting snugly in the hollow sliding tube a, as shown in Fig. 3.

This rod or bar of solidified ink, as I will call it, is arranged to be projected forward as

its point dissolves away, so as to preserve its proper position with reference to the penpoint.

To write with this pen it is not necessary to dip it in fluid-ink; water only is necessary. The point of the pen is dipped into the water far enough to allow the end of the ink-rod C to be immersed. A drop of water will adhere to the rod, and, by dissolving, its outside becomes colored, so as to form a writing-fluid. This supplies the pen until it is exhausted and the pen requires dipping in water again.

When the pen is not in use the rod or bar of solidified ink can be drawn back into the holder by means of the sliding tube a, operated by the thumb-catch D, and thus be out of the way, and thus avoiding any danger of

its being broken.

I am aware that a solidified coloring compound has been heretofore used in connection with a writing-pen; but the arrangement which I have represented and described, of a penholder provided with an adjustable rod or bar of solidified coloring compound, which can be drawn into the pen-holder or projected forward into the concavity of the pen, is much more convenient and useful.

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

is—

The combination of a slotted pen-holder provided with a stationary pen and a longitudinal bore, and a sliding tube provided with a rod or bar of solidified soluble coloring compound, arranged to be adjusted in the longitudinal bore of the pen-holder, and in relation to the pen-point, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

JOSEPH PERKINS. [L. S.]

Witnesses:

FRANK A. BROOKS, WILL L. TAYLOR.