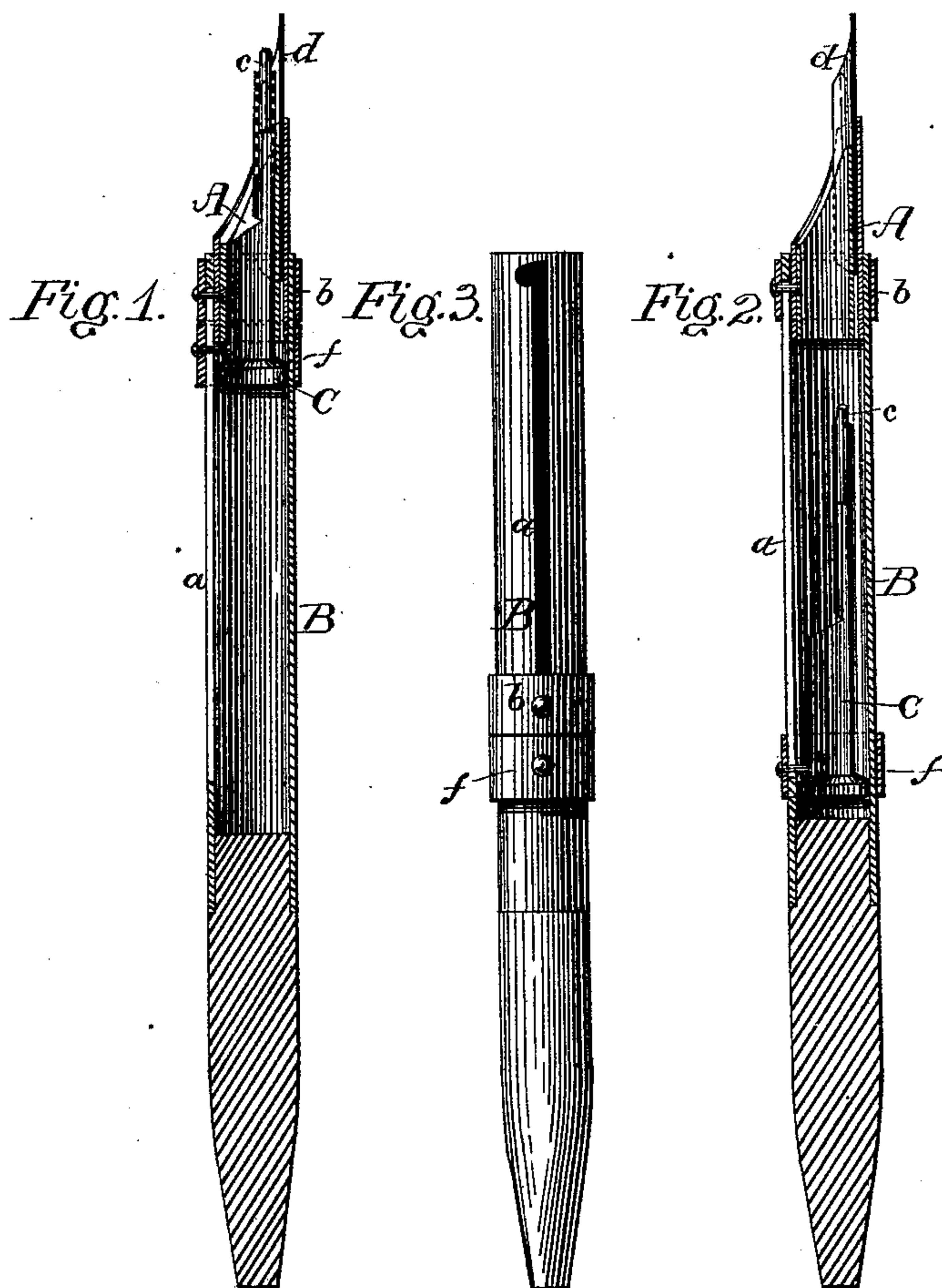


J. HOFFMAN.
Soluble-Ink Pen.

No. 213,570.

Patented Mar. 25, 1879.



Witnesses:
M. Georgii.
T. M. Elliott

Joseph Hoffman
Inventor:
by attorney
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UNITED STATES PATENT OFFICE.

JOSEPH HOFFMAN, OF NEW YORK, N. Y., ASSIGNOR TO JOSEPH RECKENDORFER, OF SAME PLACE.

IMPROVEMENT IN SOLUBLE-INK PENS.

Specification forming part of Letters Patent No. 213,570, dated March 25, 1879; application filed December 20, 1878.

To all whom it may concern:

Be it known that I, JOSEPH HOFFMAN, of the city, county, and State of New York, have invented certain new and useful Improvements in Soluble-Ink Pens, of which the following is a specification:

My invention relates to that kind of pen in which there is combined with the pen proper a soluble-ink solid, which, when the pen is dipped in water, will to a certain extent dissolve in the water held by the pen, and furnish an ink which will be given off by the pen in the usual way.

Such a pen is shown and described in Letters Patent No. 193,071, dated July 17, 1877.

It is desirable, in some instances, to have a pen which can be used either with ordinary ink or with the solid-ink composition. To this end I have made a pen in which the solid-ink holder can be moved up to or back away from the pen proper, according as it is desired to use the latter with or without the solid-ink composition. It is in this feature that my invention mainly consists.

In the accompanying drawings I have represented a pen embodying my invention.

Figure 1 is a longitudinal central section of the article with the ink-solid holder in position for use. Fig. 2 is a like section with the ink-solid holder retracted and out of the way. Fig. 3 is a view of the article with both the pen-holder and the ink-solid holder retracted within the case or handle.

In the device shown in illustration of my invention the pen-holder A is arranged to slide longitudinally in a case or hollow handle, B, being guided in its movements by a slot, *a*, in the case, through which passes the pin that connects the pen-holder with the external sleeve, *b*, by means of which it is moved back and forth.

The ink-solid holder is shown at C. It is intended to hold the ink-solid stick or composition (shown at *c*) in such manner as to bring it into proper position under the pen proper,

d, and to permit the water to have access to it when so positioned. For this purpose the ink-solid holder may be of any suitable construction. In this instance it is composed of metallic spring or elastic jaws, preferably perforated, and formed so as to clasp between them the stick of solid-ink composition. The jaws form parts of or are secured to a base-piece, which is connected by a pin to a sliding sleeve, *f*, on the exterior of the handle B, placed back of the pen-holder sleeve *b*, the pin passing through the guide-slot *a*.

When the pen-holder is pushed forward the ink-solid holder can either be moved out, as shown in Fig. 1, in which case the pen can be used by merely dipping it in water, or it can be kept back within the case or handle, in which event the pen can be used with ordinary ink.

When the pen is not in use both holders can be retracted within the case, as shown in Fig. 3.

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

The herein-described improvement upon the soluble-ink pen described in Letters Patent No. 193,071, the same consisting of the combination, with the hollow case or handle, provided with a longitudinal guide-slot, and the sliding pen-holder, connected through said guide-slot with a sleeve on the handle, of the ink-solid holder, formed with openings to permit water to have access to the ink-solid held within it, and connected through the same guide-slot with a separate and independent sleeve on the handle back of the pen-holder sleeve, as shown and specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOSEPH HOFFMAN.

Witnesses:

J. BRAISTED,
JOE. W. SWAINE.