

(No Model.)

W. W. STEWART.
Fountain Pen Holder.

No. 237,139.

Patented Feb. 1, 1881.

Fig. 1.

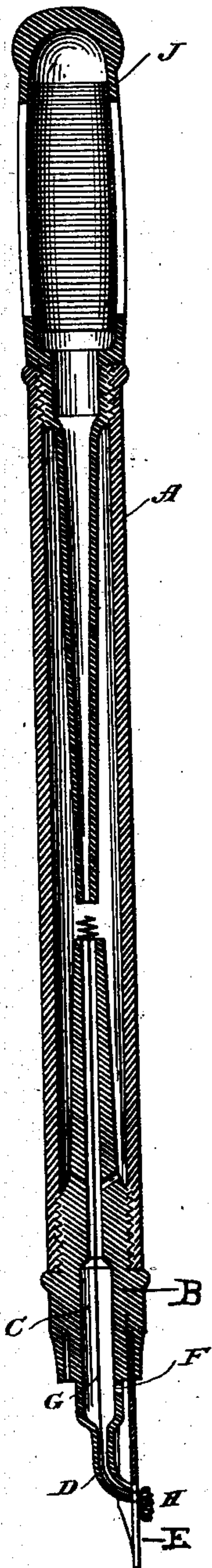
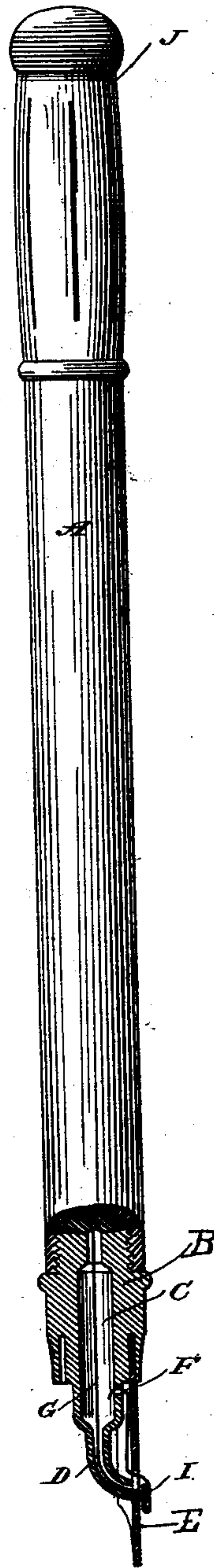


Fig. 2.



Attest:

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UNITED STATES PATENT OFFICE.

WILLIAM W. STEWART, OF BROOKLYN, NEW YORK.

FOUNTAIN PEN-HOLDER.

SPECIFICATION forming part of Letters Patent No. 237,139, dated February 1, 1881.

Application filed September 13, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. STEWART, of Brooklyn, Kings county, in the State of New York, have invented new and useful Improvements in Fountain Pen-Holders; and I do hereby declare that the following is a full and complete description of the same.

My improvements relate to that class of fountain pen-holders heretofore described in specifications filed by me in the United States Patent Office, and they now have special reference to pens adapted to the use of stenographers, and to means for moistening the nibs of the pen, and so keeping them in condition for immediate use, and also in means for momentarily increasing the air-pressure within the reservoir to force the ink through the supply-tube and charge the pen quickly.

That others may fully understand my improvement I will particularly describe it, having reference to the accompanying drawings, wherein—

Figure 1 is a longitudinal section. Fig. 2 is an elevation of my pen.

A is my reservoir pen-holder, having at one end a hollow plug, B, the cavity in which forms a lower ink-chamber, C, which forms a small reservoir, from which the ink is discharged directly upon the pen. The ink in the chamber C is practically separated from the ink in the principal reservoir by the small quantity of air which is always imprisoned by the viscosity of the ink, and interposes a cushion of great elasticity between the ink in the reservoir A and that which is in the chamber C, and the latter, owing to its small quantity, is therefore practically undisturbed by the fluctuations of the larger quantity in the reservoir A while the pen is in use. The ink-chamber C discharges through a small tube, D, which delivers its ink in the belly of the pen E, close to the inner termination of the slit. The ink-chamber C may also have a vent, F. The capillary wire G passes through the chamber C and through the ink-tube D, to collect the small bubbles of air as they enter the chamber C and conduct them to the upper end of said chamber, and thereby prevent them from impeding the uniform flow of ink to the pen. I now propose to pass it through the pen also, and so fashion its extremity that it will hold

a small piece of sponge or other absorbent material upon the back of the pen over the slit.

I prefer to fashion the end of the wire in a cylindrical coil, as shown at H, within which the sponge or other like material may be inserted. This will hold its charge of ink for a considerable time after the pen has ceased to be used, and until its water has evaporated it will keep the back of the pen moist and in a condition to receive a fresh charge of ink from the reservoir instantly, which a dry pen will not do.

The coil described is more particularly adapted for gold pens, which are seldom disturbed in their sockets and last for a very long time; but to accommodate steel pens, like the "Falcon" and other steel pens which have openings in the back, and, being made of perishable material, require frequent renewal, I prefer to make the loop I in the wire at the back of the pen, and it is convenient to take the returned end of the wire and bend it through the vent F to secure it. The loop I may be readily passed through the opening in the back of the pen, either for its removal or its replacement. Of course, the bit of sponge or other absorbent will also require removal and replacement at the same time.

At the upper end of the holder A an air-chamber, J, is formed to equalize the internal pressure under varying temperatures, &c., and I make the walls of said air-chamber elastic by slitting them, or in some other proper manner, so that when the pen has not been used for a considerable time, by pressing the walls inward the internal pressure may be momentarily increased and a charge of ink quickly forced out upon the pen. The slitted portion is formed of some rigid material, such as hard rubber, and is lined with a flexible lining, and is situated at the head of the holder, where it will never be encountered by the fingers or hand in the ordinary process of writing, and can only be manipulated by a positive and designed act; also, it is in a portion of the holder which is only occupied by the inclosed air. In these material respects it is essentially different from the invention of a slitted elastic ink-reservoir heretofore patented to me.

Having described my improvements, what I claim as new is—

1. A reservoir or fountain pen-holder, A, provided with an ink-chamber and capillary wire, G, and a pen combined with a sponge-holder formed at the back of the pen by proper
5 convolutions of the capillary wire, adapted to receive and hold a portion of sponge or other absorbent material, as and for the purpose set forth.

2. A reservoir or fountain pen-holder, A, provided with an ink-chamber, C, and a discharge-tube, D, and a vent, F, combined with
10 a capillary wire, G, which is passed through said chamber and discharge-tube and formed into a loop, I, and the end of said wire returned and secured, substantially as set forth.
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3. A reservoir or fountain pen-holder, A, provided at its head and removed from the grasp with an air-chamber, J, with elastic walls, substantially as set forth.

4. A reservoir or fountain pen-holder provided with an air-chamber, J, in its head and
20 an exterior wall for said chamber formed of rigid material similar to hard vulcanite, and with longitudinal slits to make said head elastic, for the purpose set forth.

WILLIAM W. STEWART.

Witnesses:

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