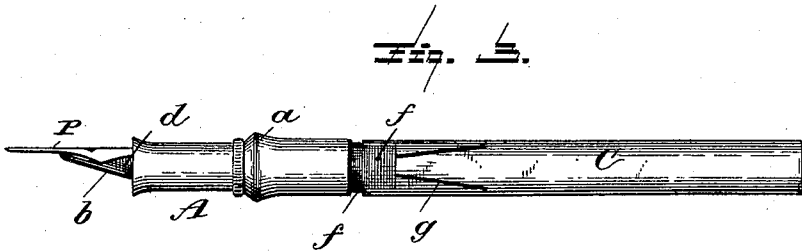
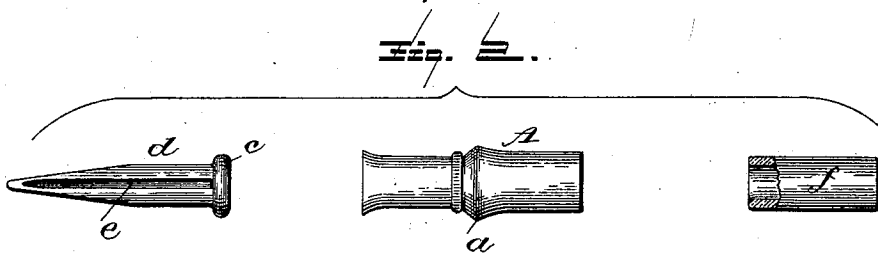
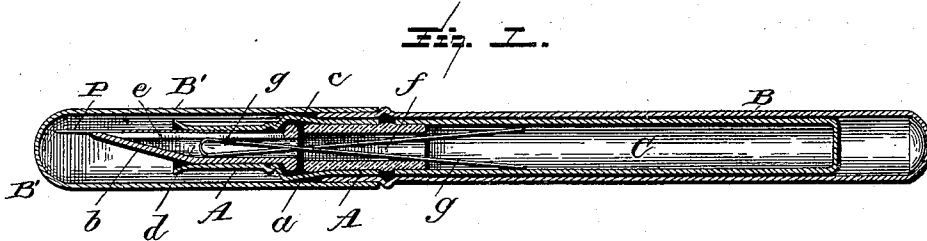


(No Model.)

C. W. BOMAN.  
FOUNTAIN PEN.

No. 426,758.

Patented Apr. 29, 1890.



Witnesses

*L. C. Hills.*  
*Wellford*

Inventor:

*C. W. Boman*

By his Attorney

*Marshall Bailey*

# UNITED STATES PATENT OFFICE.

CLAES WM. BOMAN, OF NEW YORK, N. Y., ASSIGNOR TO THE EAGLE PENCIL COMPANY, OF SAME PLACE.

## FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 426,758, dated April 29, 1890.

Application filed January 9, 1890. Serial No. 336,360. (No model.)

*To all whom it may concern:*

Be it known that I, CLAES WILLIAM BOMAN, of the city, county, and State of New York, have invented a new and useful Improvement in Fountain-Pens, of which the following is a specification.

The fountain-pen in which my improvement is embodied is one having a tubular handle, a removable pen-holder which closes the front end of the handle and is provided with a duct for inducting ink from the reservoir to the pen, and a reservoir or supply-vial contained in the handle and attached to the pen-holder, so as to be removable therewith from the handle. A fountain-pen of this general character is, broadly considered, not new with me.

My improvement resides in the particular construction and arrangement of the pen-holder and the ink vial or reservoir connected to the same, and it can best be explained and understood by reference to the accompanying drawings, in which—

Figure 1 is a longitudinal axial section of the complete pen. Fig. 2 is a view of the three parts of the pen-holder—viz., the barrel, the tip, and the elastic tube upon which the open end of the ink vial or reservoir fits. Fig. 3 is a view of the holder and the ink vial or reservoir connected together and removed from the handle.

B is the tubular handle, made of sheet metal, hard rubber, or other suitable material, closed at its rear end and open at its front, where it is closed by the removable pen-holder, which has on it a swelled knurl *a*, which, when the holder is fitted into the handle, makes a tight joint with the latter.

The pen-holder itself consists in the main of a barrel A and a tip *d*. The barrel is of general tubular form, open from end to end, and is provided with the swelled knurl *a*, as hereinbefore indicated. Within it is the tip *d*, between which and the barrel the pen P is inserted and held. This tip may be made of any suitable material, preferably, however, hard rubber. It is tubular and cylindrical for a portion of its length, and at the rear end of this cylindrical portion it has an external annular flange *c*, which is received in the swelled knurl *a*, and is thereby held in the barrel A, so as to prevent the tip from being

withdrawn. In advance of its incline *b* one side only tapers to a point. This side is the under side relatively to the pen. The other or upper side of the tip continues in line with the cylindrical portion, so that the tip on this side is straight from end to end, and in this portion of the tip is formed a longitudinal ink-feed or supply-slot *e*, which terminates at the front—say about three-sixteenths of an inch from the extreme point of the tip. The pen is inserted between the barrel and the tip, so that it shall be over the ink-slot *e* in the latter. Back of the tip there is the rubber or other elastic tube *f*, the rear end of which projects from the rear of the holder far enough to permit the ink vial or reservoir C to fit closely thereon. This vial may be of any suitable material, preferably glass, and is a simple straight tube closed at one end. It is intended to fit closely upon the tube or neck *f*, and when so fitted there is a continuous channel for the ink from the vial through the tube *f* and tip *d* and the slot *e* in the latter to the pen.

The vial can be readily removed and replaced by another one whenever desired. In practice I propose to furnish a supply of such vials, filled and corked, with each pen. They are very cheap, so that as soon as the supply of ink in one vial has been exhausted that vial can be removed and thrown away and a fresh vial can be substituted for it.

The elastic tube projecting from the rear end of the pen-holder furnishes a most convenient and efficient means of connecting the vial to the holder.

In order to draw or lead the ink back again to the vial or reservoir when the pen is put up after having been used, I insert in the pen-holder one or more wires *g* to serve as a leader to conduct the ink back from the point of the pen to the reservoir. The wire *g* in this instance is a bent one, having its loop end inserted from the rear of the barrel A up into the tip *d*, with its two free ends projecting from the rear of the holder into the vial or reservoir connected with the latter.

The handle is provided as usual with a cap B' for covering the free end of the article when not in use.

Having described my improvement, what I

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

1. The pen-holder consisting of the barrel A, the tubular ink-supply tip through which ink from the reservoir is conducted to the pen, and the elastic tube contained in the barrel back of the tip, with its rear end projecting from the barrel in position to fit into the mouth of the ink vial or reservoir to be connected to said holder, in combination with the vial and the handle, as and for the purposes hereinbefore set forth.

2. The pen-holder having a duct through which ink is supplied from the reservoir to the pen, and provided with an elastic tube *f*, projecting from its rear end, in combination with the ink vial or reservoir fitting on said tube, and the leader *g*, inserted in the duct in

the pen-holder and extending back therein into the ink-reservoir, as and for the purposes hereinbefore set forth. 20

3. A fountain-pen having an ink-reservoir, a pen-holder provided with a duct through which ink from the reservoir is supplied to the pen, and a leader *g*, inserted in the duct in the pen-holder to conduct the ink back from the holder into the reservoir when the pen is not in use, substantially as and for the purposes hereinbefore set forth. 25

In testimony whereof I have hereunto set my hand this 6th day of January, 1890. 30

CLAES WM. BOWMAN.

Witnesses:

SAMUEL KRAUS,

C. S. BRAISTED.