

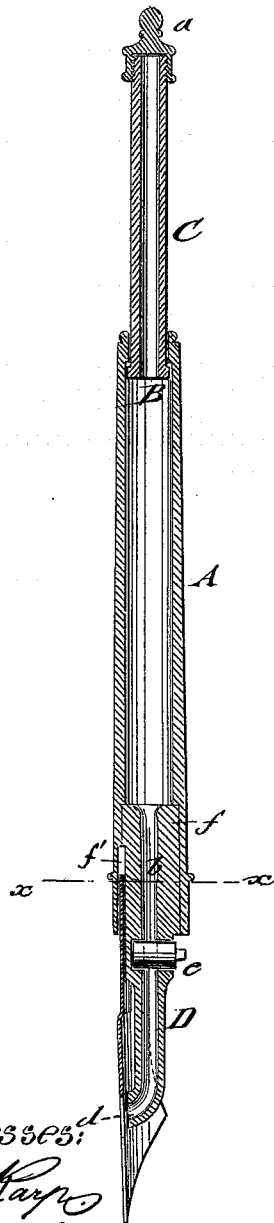
H. MADEHEIM.

Fountain-Pen.

No. 220,483.

Patented Oct. 14, 1879.

Fig: 1.



Witnesses:
Carl Harp
Fr. Mayer

Fig: 3.

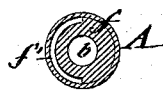


Fig: 4.

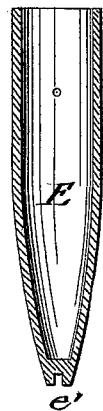
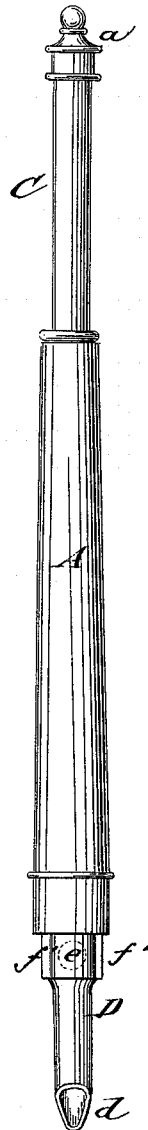


Fig: 2.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN FOUNTAIN-PENS.

Specification forming part of Letters Patent No. **220,483**, dated October 14, 1879; application filed February 7, 1879.

To all whom it may concern:

Be it known that I, HERMANN MADEHEIM, of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a vertical longitudinal section of my improved fountain-pen; Fig. 2, a side view with cap removed, showing the curved and beak-shaped supply-spout. Fig. 3 is a horizontal section of the pen in line *x x*, Fig. 1; and Fig. 4, a vertical central section of the removable cap or pen-protector.

Similar letters of reference indicate corresponding parts.

This invention refers to improvements on the fountain-pen for which Letters Patent have been granted to me heretofore under date of August 14, 1866, and numbered 57,162, the object being to simplify the construction of said pen, and to make it less expensive, while preserving at the same time its efficacy.

The invention consists of a pen-holder having a hollow body or barrel in connection with a sliding piston and hollow piston-rod having a detachable screw-cap at the end. The ink passes from the reservoir or fountain, at the interior of the barrel, through a valved conducting-tube with a curved and beak-shaped spout to the pen. The conducting-tube is secured by a cylindrical rear portion into the barrel, its spout and rear portion being turned out of one continuous piece, and provided with a semi-circumferential recess, which, in connection with the barrel, holds the pen in position.

Referring to the drawings, A represents the hollow body or barrel of my fountain-pen, into the fore end of which the pen is inserted in the customary manner. At the opposite end of the barrel is arranged a tightly-fitting piston, B, and a hollow piston-rod, C, which telescopes into the barrel. The outermost end of the hollow piston-rod is provided with a screw-cap, *a*, which, when screwed down, closes tightly the end of the piston-rod, but which, when slightly unscrewed, admits the entrance of air, owing to the breaking of joint,

for the ready flow of the ink from the barrel to the pen whenever vent is required.

A channel, *b*, leads from the fountain to an ink-conducting tube, D, that extends toward the nib of the pen, and is curved upward and made with a beak-shaped end, *d*, which fits closely to the under side of the pen, and supplies the ink thereto. The ink-conducting tube D is arranged with an axially-turning valve, *e*, that is set into open or closed position by means of a nick, *e'*, at the end of the cap or protector E, which nick engages a diagonal rib of the valve *e*. The cap or protector E is fitted onto the end of the barrel and placed over the pen when the fountain-pen is to be carried in the pocket. The conducting-tube D is secured by means of a cylindrical rear portion, *f*, into the barrel A, the rear portion and spout being made of one piece, and turned or pressed into the required shape. The cylindrical end portion is turned off for one-half of its circumference at that part that is fitted into the barrel, as shown in Figs. 1 and 3, so as to form a recess, *f'*, into which the pen may be inserted, the same being then held firmly by the semi-cylindrical end portion and the barrel.

When the fountain-pen is desired to be used the protecting-cap E is removed and the valve *e* opened. The pen and spout are then inserted into the ink-stand and the piston and piston-rod slowly drawn back, so that the space at the interior of the barrel is filled with ink, the same forming the reservoir or fountain from which the ink is supplied to the pen.

The hollow piston-rod is filled with air, and admits the free flow of ink until a certain quantity of the same is spent, when vent has to be given by a turn or two of the screw-cap *a*.

When the fountain-pen is desired to be placed into the pocket, the valve of the conducting-tube is closed, the ink in front thereof jerked off, the cap replaced, and the piston-rod slowly pushed into the barrel.

A reliable fountain-pen of cheap and simple construction is thus obtained that may be conveniently carried in the pocket, as the valve and joints close tightly, and prevent thereby the escape of ink and the soiling of the pocket.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a fountain-pen, a hollow body or barrel having a valved ink-conducting tube provided with a curved and beak-shaped spout, in combination with a piston and hollow piston-rod having outer screw-cap, substantially as set forth.

2. In a fountain-pen, the combination of the barrel A, having sliding piston B and piston-rod C, with a valved ink-conducting tube, D, that is secured by its cylindrical rear end into

the barrel, and provided with a curved and beak-shaped spout, and with a semi-circumferential recess for the pen, for the purpose described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two witnesses this 5th day of December, 1878.

HERMANN MADEHEIM.

Witnesses:

PAUL GOEPEL,
ADOLF DENGLEK.