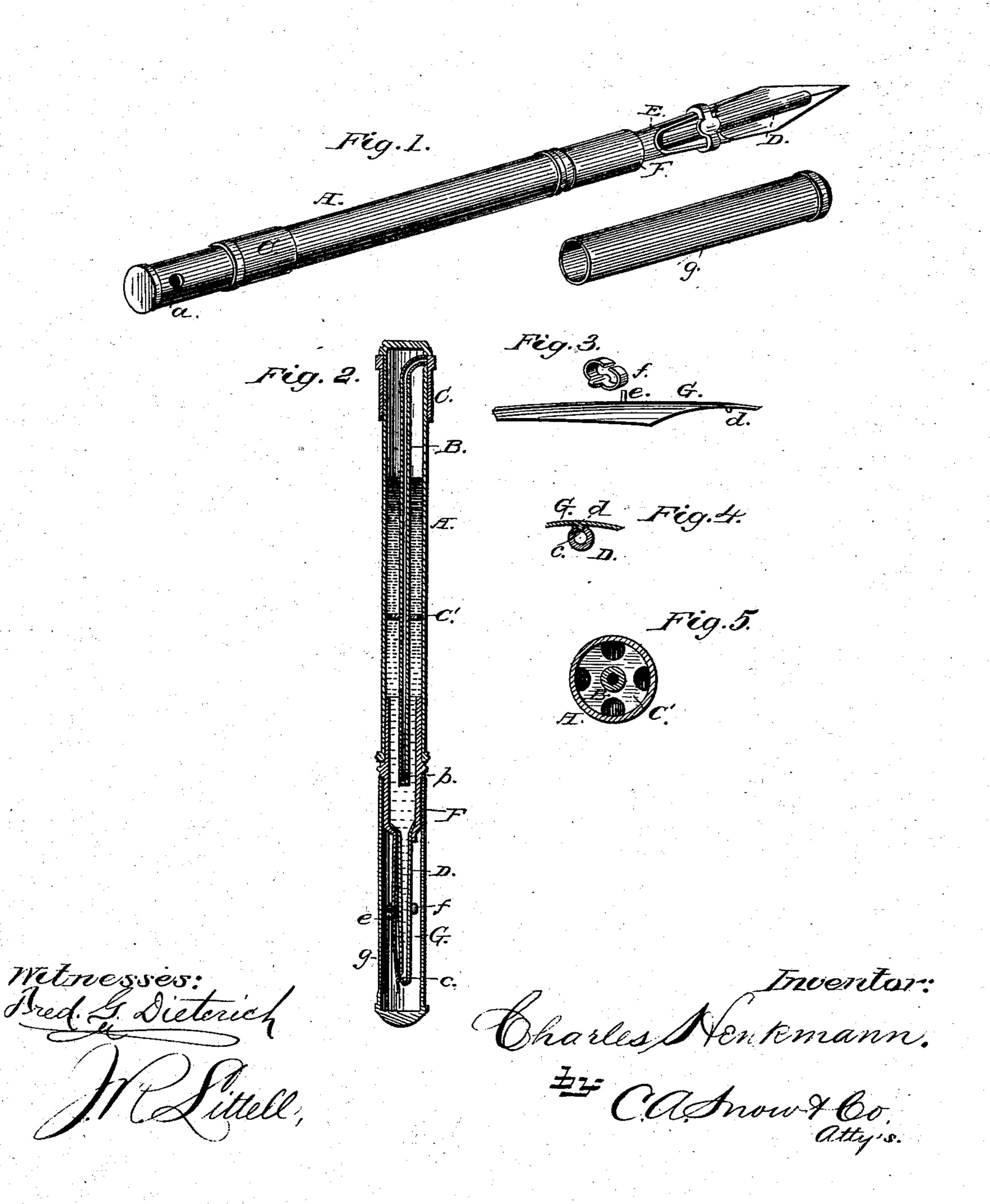
## C. HENKMANN. Fountain-Pen.

No. 221,815.

Patented Nov. 18, 1879.



## UNITED STATES PATENT OFFICE.

CHARLES HENKMANN, OF LA SALLE, ILLINOIS.

## IMPROVEMENT IN FOUNTAIN-PENS.

Specification forming part of Letters Patent No. 221,815, dated November 18, 1879; application filed April 17, 1879.

To all whom it may concern:

Be it known that I, CHARLES HENKMANN, of La Salle, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Fountain-Pens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal sectional view. Fig. 3 shows the pen detached. Fig. 4 is a cross-section taken through the point of the pen and feeding-tube, and Fig. 5 is a cross-section through the main tube or ink-reservoir.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to fountain-pens; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, A represents the main ink tube or reservoir, which is closed at one end, as shown. In one side of tube A, near the closed end, is an opening, a, from which a tube, B, extends centrally and longitudinally through tube A a short distance beyond the open end of the latter, where it is provided with a small opening, b.

A sleeve, C, sliding upon tube A, may be made to cover the opening a, or be withdrawn therefrom, as may be desired. A perforated diaphragm, C', is arranged in tube A to hold tube B in position.

D represents the feeding-tube, which is conical or tapering in shape. It and the penholder E are closely fitted in a tube, F, adapted to fit in the end of tube A, as shown, the end of tube B projecting a short distance into the tube F.

Upon the upper side of the feeding-tube, near its outer extremity, is the outlet or opening c for the escape of ink. Said opening is conical or cup-shaped, as clearly shown in Figs. 2 and 4.

The pen G is provided, near its point, with

a conical projection, d, adapted to fit in the opening c, and thus prevent the flow of ink. Said projection is attached to one of the penpoints only, thus leaving the elasticity of the pen unimpaired. The pen is also provided with a gage-pin, e, so arranged as to abut against the end of the holder when the projection d is directly above cup c. A clasp, f, embracing the pen and feeding-tube, serves to hold these parts as firmly together as may be desired, said clasp being slotted to enable it to pass the gage-pin upon the pen, and thus be adjusted at any desired point.

A cap or tube, g, is adapted to be adjusted upon tube F, in order to protect the pen.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation of my invention will be readily understood. From the tube or reservoir A the ink flows into the feeding-tube. The pressure upon the point of the pen exerted in writing disengages the plug d from cup c, thus permitting the ink to flow as freely as may be desired.

In order to start the flow, it may be found necessary to wet the point of the pen before commencing to write; but if at any other time the ink refuses to flow, this may be instantly remedied by uncovering the vent-hole  $\alpha$ .

I am aware that a feeding-tube provided with a loose plug to close its opening is not new in fountain-pens, and such I do not claim.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a fountain pen, the combination, with the feeding-tube having a conical or cupshaped opening, of a pen having a plug adapted to fit in said opening, to be released by pressure upon the pen in writing, as set forth.

2. The combination of the pen-holder, the feeding-tube having a conical or cup-shaped opening, and the pen provided with a plug adapted to fit in said opening, and a gage-pin, as set forth.

3. The combination, with the pen-holder, feeding-tube, and pen provided with the gagepin e, of the adjustable slotted clasp adapted to hold the pen and feeding-tube together with any required degree of pressure, as set forth.

4. As an improvement in fountain-pens, the

combination of a reservoir-tube having an interiorly-located vent-tube, a sliding sleeve adapted to cover the opening of the latter, a plug or tube carrying the pen-holder and the feeding-tube, the latter being provided with a conical or cup-shaped opening, a pen provided with a plug adapted to fit in the opening of the feeding-tube, and an adjustable clasp adapted to hold the pen and feeding-tube to-

gether, all arranged and operating as described, for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 14th day of April, 1879.

ĆHAS. HENKMANN. [L. s.]

Witnesses:

C. A. Scherzer, Thomas Pepson.