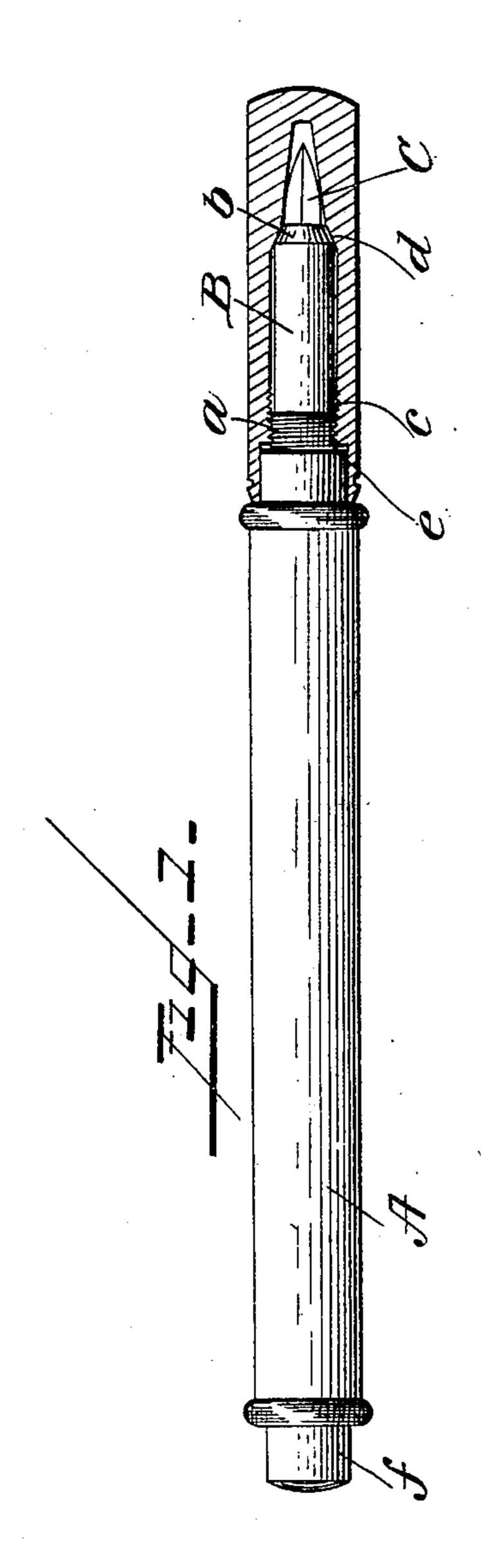
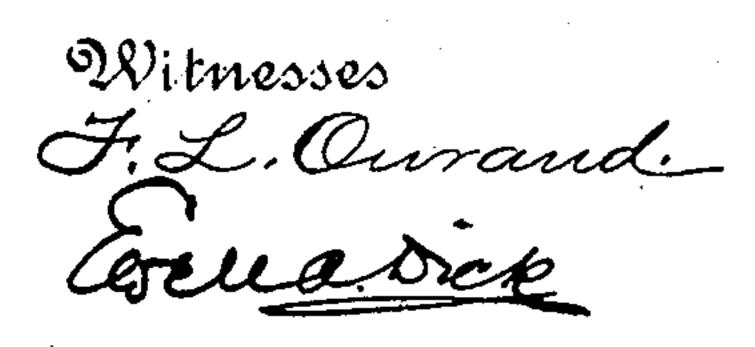
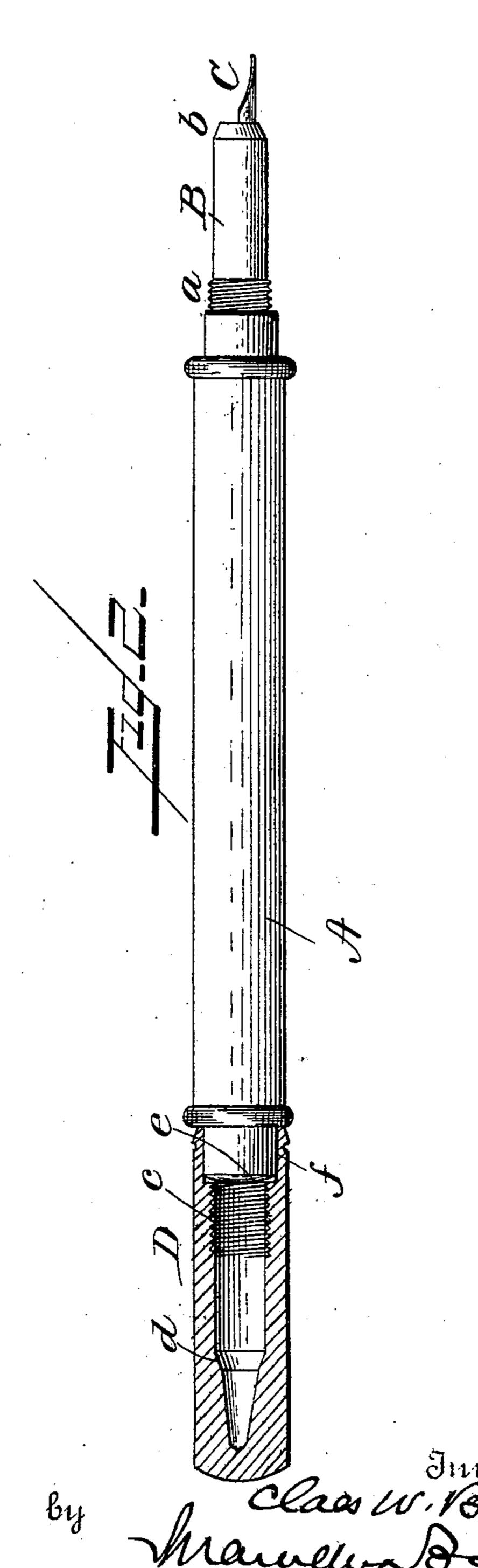
## C. W. BOMAN. FOUNTAIN PEN.

(Application filed May 11, 1901.)

(No Model.)







## United States Patent Office.

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

## FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 680,117, dated August 6, 1901.

Application filed May 11, 1901. Serial No. 59,815. (No model:)

To all whom it may concern:

Be it known that I, CLAES W. BOMAN, a citizen of the United States, and a resident of the city, county, and State of New York, have in-5 vented a new and useful Improvement in Fountain-Pens, of which the following is a specification.

The ordinary fountain-pen must be carried point upward in the pocket. If carried point 10 downward the ink will spill and overflow; but, on the other hand, when carried point upward the ink recedes from the pen, the latter becomes dry, and in course of time the pen gets in such a condition that when used again for 15 writing purposes it is difficult to start the flow of ink.

It is my object to produce a fountain-pen which when not in use can be carried in the pocket point downward without danger of 20 the overflow or escape of ink.

To this end my invention consists of the parts and combinations which will first be described in connection with the accompanying drawings, forming part of this specification, 25 and will then be more particularly pointed out in the claim.

In the drawings, Figure 1 is a side elevation of the pen with the cap applied to the front end of the pen and represented in longitudi-30 nal section. Fig. 2 is a like view of the pen with the cap applied to the rear end of the pen and partly broken away to expose the slip-joint between it and the rear end of the pen-barrel.

35 In the drawings, A is the barrel or reser-

voir of the pen.

B is the nozzle, applied and secured to or formed on the front end of the barrel in any convenient way and containing the pen C, as 40 well, of course, as the feed-plug, which in fountain-pens is usually associated with the pen. On the nozzle near its base is a screw-threaded portion a, and the front end of the nozzle is fashioned as a valve or stopper b.

The cap is shown at D. It is provided internally with a screw-threaded portion c to screw upon the screw-threaded portion a of the nozzle or front end of the body of the pen

and with an annular shoulder d, which forms a seat for the valve end b of the nozzle, the 50 relations between the screw-threaded parts and the valve parts being such that the valve b is up against its seat d slightly before the cap D is screwed home, thus permitting a slight additional movement of the cap in a 55 direction to seat the valve b more firmly and tightly. Beyond the annular shoulder between it and the closed end of the cap there is a cavity within the cap of sufficient dimensions to receive the protruding point of the 60 pen C. The cap is shown thus applied to the front end of the pen in Fig. 1. Under these conditions it will be noted that the pen can be turned point downward and carried in this position indefinitely, the tight joint at b d 65 effectually preventing the ink from overflowing and confining it to the small space in the cap beyond the shoulder d, which contains the pen-point. When the pen is reversed, as it will be before taking off the cap, the small 70 quantity of ink contained in said space will at once pass back into the pen through the front end of the nozzle.

Between the internally-screw-threaded portion c of the cap and the open end of the lat- 75 ter is a smooth cylindrical portion e of somewhat greater diameter, which is designed to fit upon a corresponding portion f of the barrel A at the rear of the latter when the pen is in use. The cap is shown in this position 80 in Fig. 2.

Having described my improvements and the best way now known to me of carrying the same into practical effect, I state in conclusion that I do not restrict myself narrowly 85 to the structural details herein shown and described in illustration of my invention; but,

What I claim, and desire to secure by Let-

ters Patent, is as follows:

The cap provided internally with an annu- 90 lar seat d, a screw-threaded portion c, and a smooth cylindrical portion e of greater diameter than the screw-threaded portion c located between the latter and the open end of the cap, and the pen-body, comprising the pen-95 barrel and the nozzle, provided at the front

with a valve end or portion b to engage the seat d and a screw-threaded portion a to engage the screw-threaded portion c and at the rear with a smooth cylindrical portion f to enter and fit the part e of the cap, substantially as and for the purposes hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 10th day of May, 1901.

CLAES W. BOMAN.

Witnesses:

SAMUEL KRAUS, P. H. BUCKMASTER.