No. 768,216. PATENTED AUG. 23, 1904.

A. EBERSTEIN.

FOUNTAIN PEN.

APPLICATION FILED JUNE 25, 1904.

NO MODEL.

Fig. 1.

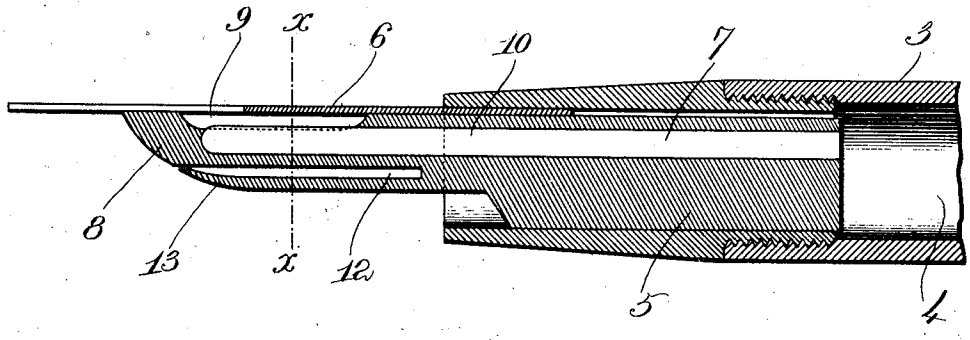


Fig. 2.

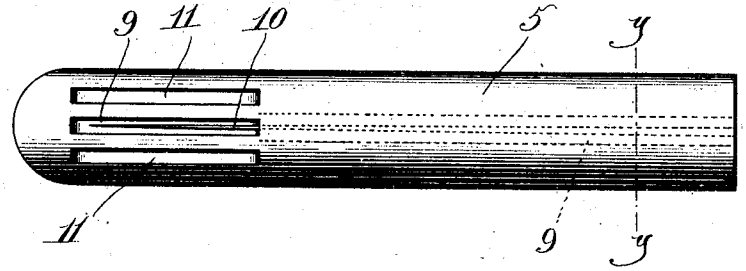


Fig. 3.

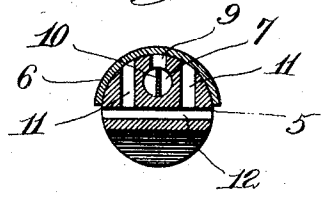
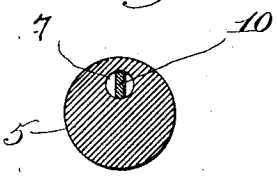


Fig. 4.



Witnesses.
Thomas J. Drummond.
T. Wm. Lutton.

Inventor.
August Eberstein,
by Crosby Gregory
Attys.

No. 768,216. Patented August 23, 1904.

UNITED STATES PATENT OFFICE.

AUGUST EBERSTEIN, OF WINTHROP, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO CHARLES BRANDT, OF BOSTON, MASSACHUSETTS.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 768,216, dated August 23, 1904.

Application filed June 25, 1904. Serial No. 214,084. (No model.)

To all whom it may concern:

Be it known that I, AUGUST EBERSTEIN, a citizen of the United States, residing at Winthrop, county of Suffolk, and State of Massachusetts, have invented an Improvement in Fountain-Pens, of which the following description, in connection with the accompanying drawings, is a specification, like numerals on the drawings representing like parts.

This invention relates to fountain-pens, and has for its object to provide a novel feed device which is simple and inexpensive to manufacture and which effectually prevents the flooding or gushing to which many fountain-pens are addicted.

The particular features will be more fully hereinafter described and then pointed out in the claim.

Figure 1 is a longitudinal central section of a pen having my improved feed applied thereto. Fig. 2 is a top plan view of the feed-bar removed. Fig. 3 is a section on the line x x, Fig. 1; and Fig. 4 is a section on the line y y, Fig. 2, the feeder in Fig. 4 having been turned through ninety degrees to the position shown in Fig. 2.

3 designates the pen end of the usual barrel or holder, having the usual ink-reservoir 4 therein, and 5 designates the feed-bar, which conducts the ink to the pen-point 6. This feed-bar is provided with a longitudinal bore or ink-duct 7, which communicates at one end with the ink-reservoir 4 and extends nearly to the end 8 of said feed-bar, said duct communicating at the outer end of the feed-bar with a slot or slit 9, which opens through the top of the feed-bar and through which the ink is delivered to the pen-point 6. To facilitate the flow of the ink through the ink-duct 7 and break up any bubbles of air therein, I prefer to divide said duct into two or more channels by means of a partition 10, said partition being tapered at its forward end, as shown in Figs. 2 and 3.

Situated either side of the central slot 9 is an auxiliary slot 11, which extends from the top of the feed-bar down to and communicates with a transverse slot 12. This transverse slot 12 is situated entirely beneath the ink-duct 7 and has no communication therewith, and it extends entirely across the feed-bar, as shown in Fig. 3, and also clear to the end 8 thereof, as shown in Fig. 1. In making the slot 12 I preferably cut it straight into the feed-bar by any suitable tool and thereafter slightly bend the end 13 of the portion beneath the slot, so as to cause said end to curve up toward the main portion of the feed-bar and partially close the mouth of the slot. This special curvature to the end 13, however, is not absolutely essential to my invention.

If when the pen is in use more ink is delivered to the pen-point than can be used in writing, such surplusage finds its way into the auxiliary slots 11 and thence into the transverse slot 12, these slots forming storage-reservoirs to contain the surplus ink and prevent it from dropping off from the end of the pen. The slot 12, it will be noticed from Fig. 3, is entirely below the pen-point 6, and therefore the sides of said slot are open to the air. This is important, because the air-pressure on the ink prevents it from flowing out through the sides of said slot.

I have found from extensive experiments with a pen having the improved feed herein shown that the auxiliary slots furnish sufficient room for surplus ink and at the same time are so related to each other and so placed that such surplusage will not be dislodged during the ordinary use of the pen.

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

In a fountain-pen, a holder having a feed-bar at one end, said feed-bar having an ink-duct leading to the pen-point, and auxiliary slots, as 11, extending from the top of the feed-bar to, and terminating at a transverse slot, as 12, said latter slot extending entirely across the feed-bar and being open at the sides and end of said feed-bar.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

AUGUST EBERSTEIN.

Witnesses:
LOUIS C. SMITH,
CHARLES BRANDT.