(No Model.)

J. FRIEDMANN.

FOUNTAIN-PEN.

No. 267,180. Patented Nov. 7, 1882.

fig. 1

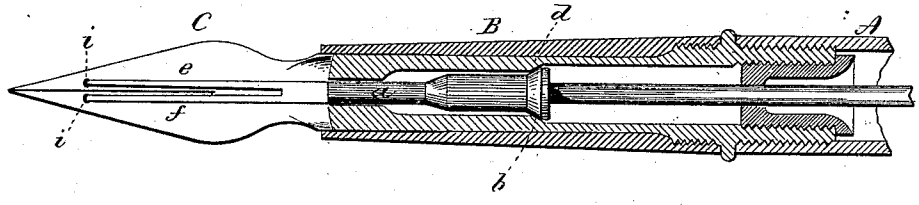


fig. 2

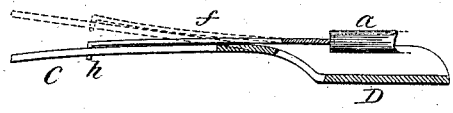
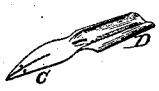


fig. 3



Witnesses.
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UNITED STATES PATENT OFFICE.

JOSEPH FRIEDMANN, OF SEYMOUR, CONNECTICUT.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 267,180, dated November 7, 1882.

Application filed March 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH FRIEDMANN, of Seymour, in the county of New Haven and State of Connecticut, have invented a new Improvement in Fountain-Pens; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a longitudinal section, looking on the back of the pen; Fig. 2, a longitudinal section through the pen; Fig. 3, a perspective view of the pen.

This invention relates to an improvement in that class of fountain-pens which employ substantially a common split pen with a conductor from the fount in the handle to the body of the pen.

Various devices have been applied in connection with the pen to operate the valve at the foot of the fount, so that the bend of the pen will open the valve and the reaction of the pen close the valve, whereby the flow of ink to the pen is regulated according to the quantity required.

It is especially to the connection between the pen and the valve that my invention relates; and it consists in the construction and combination of parts, as more fully hereinafter described, and particularly recited in the claim.

In the illustration I show only the lower part of the holder, with the pen inserted, and upon an enlarged scale.

A represents the upper part or fountain, which contains the ink; B, the shank, in which the pen C is inserted. The spindle *a* is arranged centrally through the shank and up into the fount, in the usual manner, and is provided with a valve, *b*, closing downward upon a seat, *d*, so as to cut off the downward flow of ink, this portion of the pen constituting no part of my invention, it only being essential that there shall be a rod extending down from and into connection with the valve, and any of the many constructions having such a rod may be employed in this connection, all too well known to require detailed description in this specification. From the lower end of the spindle two wires, *e f*, extend over the back of the pen, their ends turned down, as at *h*, through perforations *i*, one on each side the split of the pen and near the point.

In the normal condition of the pen the valve *b* is held close to its seat, and so as to cut off the flow of ink. In writing the pen springs backward, as indicated in broken lines, Fig. 2, which movement forces the wires or connections *e f* upward, and causes them to raise the valve from its seat. This movement of the valve depends upon the pressure upon the point of the pen. If it be heavy, then the valve will be opened more; if it be lighter, then the opening of the valve will be less.

In order to make the connection from the spindle over the back of the pen, and still have the pen occupy its usual relative position in the shank of the holder, and the spindle of the valve concentric in the holder, I construct the pen C with its head D reversed from the usual construction, as seen in Fig. 3—that is to say, instead of shaping the pen concavo-convex in transverse section throughout, in the usual manner, I make the head end concave upon its back in transverse section, while the pen retains the usual convex shape upon the back, drawing the material of the pen gradually from the reverse-shaped head into the body of the pen, as seen in Figs. 2 and 3.

An opening is made through the pen at the junction of the head and point portion, (shown in Fig. 2,) below the valve-rod, and through which the ink will flow into the hollow or inside part of the pen.

I claim—

The combination of the fountain-holder, the reverse-curved pen, and the spindle *a*, carrying the valve *b* at the foot of the fount, with extensions from the spindle down over the back of the pen, and connected to the two parts of the pen near the point, substantially as described.

JOSEPH FRIEDMANN.

Witnesses:

ADOLPH F. EIBEL,

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