E. E. BRAILLY.

Fountain-Pen Holder.

No. 197,820. Patented Dec. 4, 1877.

Fig. 1

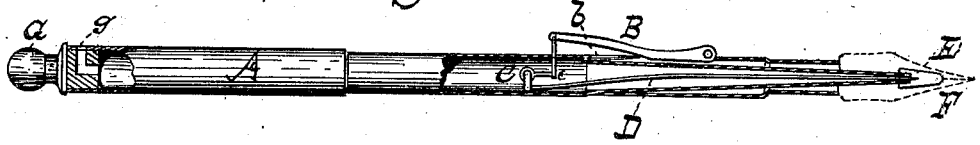


Fig. 2.

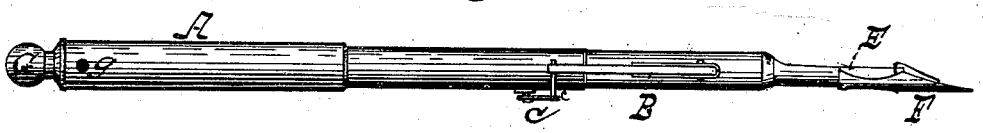
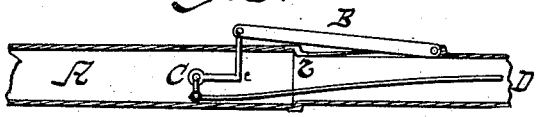


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

ERNEST E. BRAILLY, OF BELLAIRE, OHIO.

IMPROVEMENT IN FOUNTAIN-PEN HOLDERS.

Specification forming part of Letters Patent No. **197,820**, dated December 4, 1877; application filed April 28, 1877.

To all whom it may concern:

Be it known that I, ERNEST E. BRAILLY, of Bellaire, Belmont county, Ohio, have invented a new and useful Improvement in Pen-Holders, which is fully set forth in the following specification and accompanying drawings.

My invention consists of the combination of a crank pressure spring or knob and a shielded funnel, attached and made part of a fountain-pen holder, to govern and regulate the flow of ink from the holder to the pen, as hereinafter explained.

In the drawings, Figure 1 is a full view; Fig. 2, a side view of the combination and holder, and Fig. 3 a view of the combination within the holder.

A is the fountain-holder, consisting of a cylinder or reservoir to contain the ink. This reservoir can be of any desired length of the holder; the larger the reservoir the more ink it will hold. In this instance the holder is hollow from one end to the other, thus forming a cylinder or reservoir. On the lower end is a permanently-fixed funnel or tube, attached to the holder or reservoir at the termination where the pen usually enters a holder, tapering to an end, on which is a small shield, and extending to near the point of the pen. The channel in this tube is just wide enough to permit the necessary flow of ink to the shield, which is just wide enough to extend to both points of the pen, and produce an equal distribution of the ink. This small shield is an open spoon form, and just large enough to contain the deposit of ink required to supply the pen. Through this funnel or tube runs from crank C a feeding-rod or needle-bar, D, having a sharp end, the object of which is to keep the funnel and lower part of reservoir clean, and to regulate the flow of ink onto the shield, and thence to the pen.

B is the pressure spring or knob, located on the holder at the distance above the end thereof where the hand usually holds the pen-holder, and on that side which comes in contact with the thumb. The object of this is, that the thumb or finger can press it when desired, which will work crank C and draw up the rod D from the aperture of the funnel E, thereby regulating the flow of ink and keep the passage open. This can be a knob with a spring, or an elongated bar with a spring, as in Fig. 1, with or without elevation from the surface of the holder. A dent or groove is made in the holder, into which this bar fits, in which groove there is a spring, *b*. Affixed to the upper end of this bar B is a small rod extending to another rod at point *c*, and then another to a fixed fulcrum or base, made of small rods in the form of a right-angled triangle. This constitutes crank C or lever. Connected with this crank C is the feeding-rod or needle-bar D, and the object is, that when the thumb presses on pressure-bar B a small spring in said groove *b*, connected with this bar B, is depressed, crank C is worked, and feeding-rod D is drawn up from the aperture in the funnel E, and when the pressure is removed the needle-bar falls back to its place. To form this crank C a rod extends from spring B, either externally over the surface of the holder to a point on the top *c*, Fig. 2, where it connects with another rod, entering into the holder; or the rod can run from spring B immediately into the holder, as in Fig. 3, so that all of the crank C and the rods connecting therewith will be inside the holder, thus forming two right-angled triangles. The function and object of this crank is, by a pressure on, or in conjunction with, the spring B, to draw up and let down feeding-rod D from the aperture E, through which the ink passes to the pen, so that when, by a pressure on spring B, rod D is drawn up from aperture E, the flow of the fluid is increased, and when rod D is not so drawn up the flow is diminished. The ink can also pass along the rod D without any action of spring B, thus becoming self-feeding or self-adjusting.

D is the feeding-rod or needle-bar within the reservoir or cylinder, connected with the crank C, and extending to the pen near its point, so made and adjusted, with or without a channel or groove, that it will regulate, and upon it will pass, the ink in its passage from the cylinder to the pen and the point thereof, which, combined with the crank C and the shield and aperture E, regulates and governs the flow of the ink, as aforesaid, by increasing or diminishing it, as may be desired. E is the device annexed to the holder and forming part thereof, having at one end a shield extending to the point of the pen. Through this device, and

in it, the bar or rod D is contained or located, and through which the ink passes, regulated by rod D. The rod D passes a little beyond the aperture in this device, and the shield causes the ink to pass onto the pen.

The object of the rod D is to regulate the quantity of ink to pass or passing through this aperture in this device E.

F represents the place on the holder so designed and constructed that any pen, pen-point, or ordinary steel pen may be and can be attached to the holder. G *g* is the stopper on the end of the holder, which can be ornamental. It is removable, or attached by a hinge or a slide. It contains a hole or hollow center, connected with a hole or aperture on its side, to connect with a similar opening or hole in the holder or cylinder, so that air can pass into the cylinder, or be excluded therefrom, as may be desired, when in or not in use, thus permitting a current of air into and through the cylinder from aperture on the end of device E.

Now, therefore, what I claim as new, and pray to secure Letters Patent thereon, is—

As an improved article of manufacture, the hereinbefore-described fountain-pen, provided with the tapering tube E, having a needle, D, extending through the same, and operated by the pressure-bar B, having spring *b* and bell-crank C, substantially as and for the purpose described.

In testimony whereof I have hereunto attached my hand and seal this 7th day of April, 1877.

ERNEST E. BRAILLY. [L. S.]

Witnesses:

JOHN MCCORMICK,

JOEL STROHL.