

W. F. DURYEA.
 SELF FILLER LEVER PEN.
 APPLICATION FILED OCT. 27, 1916.

1,260,165.

Patented Mar. 19, 1918.

Fig. 1.

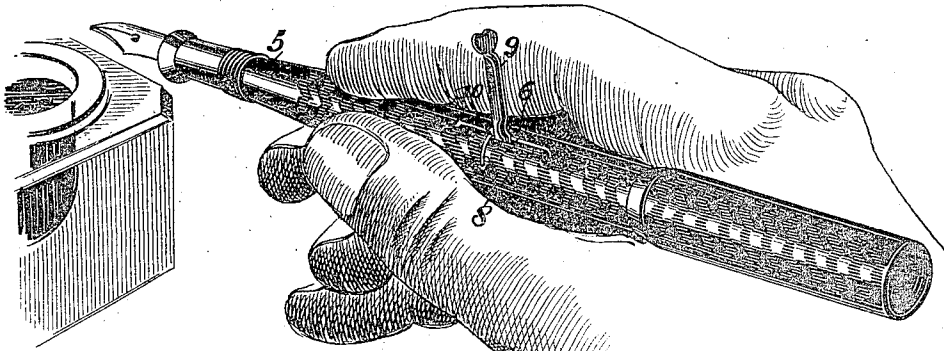


Fig. 2.

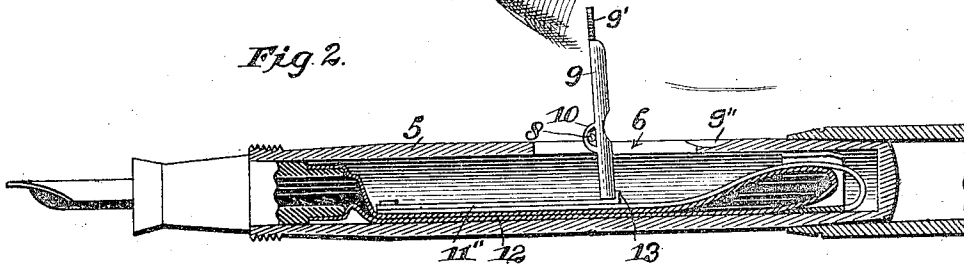


Fig. 3.

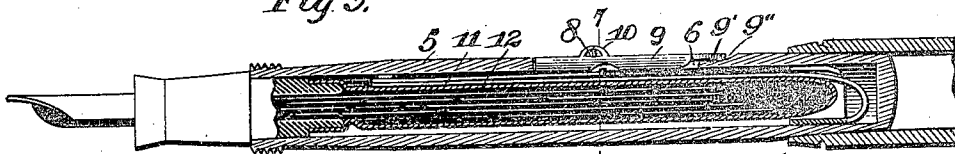


Fig. 4.

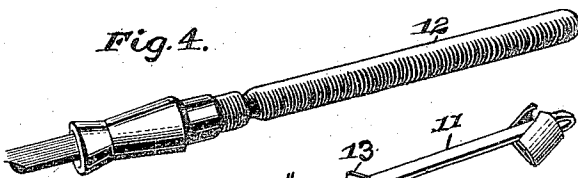


Fig. 5.

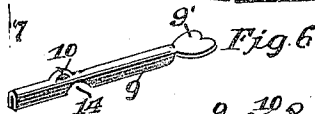
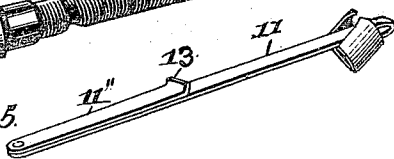


Fig. 7.

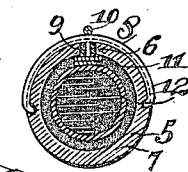
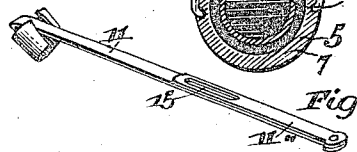


Fig. 8.



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UNITED STATES PATENT OFFICE.

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SELF-FILLER LEVER-PEN.

1,260,165.

Specification of Letters Patent.

Patented Mar. 19, 1918.

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To all whom it may concern:

Be it known that I, WILLIAM F. DURYEA, a citizen of the United States, residing at Hackensack, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Self-Filler Lever-Pens, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in fountain pens, and more particularly to the self-filler type of pen in which a lever is used to compress the flexible ink reservoir.

Heretofore, it has been the practice to rivet this lever to the casing or barrel, whereby the rivet constitutes a fulcrum which receives all of the strain incident to the opening and closing operations of the lever. The wall of the casing is very thin, and will manifestly only permit the use of a correspondingly small rivet, so that the concentrated strain at this point soon results in tearing out or dislodging the rivet from the vulcanized rubber, of which the casing is made.

The object of my invention is to eliminate this inherent disadvantage by the provision of means which will uniformly distribute the strain exteriorly and circumferentially of the casing, and which may be quickly and cheaply assembled to virtually form a component part of the casing. Another object of the invention is to improve the construction and operation of the lever.

To the accomplishment of the recited objects, and others coordinate therewith, the preferred embodiment of my invention resides in the construction and arrangement shown in the accompanying drawings, hereinafter described and embraced within the scope of the appended claims.

In said drawings:

Figure 1 is a perspective view of the pen in position for filling.

Fig. 2 is a longitudinal section view showing the position which the parts are caused to assume just prior to the filling of the pen.

Fig. 3 is a similar view of the pen when filled.

Fig. 4 is a detail perspective view of the nib carrying portion and the ink reservoir.

Fig. 5 is a detail perspective view of the presser bar.

Fig. 6 is a detail perspective view of its lever.

Fig. 7 is a transverse sectional view taken along lines 7—7 of Fig. 3.

Fig. 8 is a perspective view of another modified form of presser bar.

Generally speaking, my invention comprises a casing provided with a longitudinal slot, and a ring-like or arcuate member which partially encircles the casing and bridges the slot, combined with a lever which is pivoted to the member at its point of bridging the slot, so that the same may be freely oscillated therein with respect to the compressible ink reservoir. In addition I provide an extremely simple form of lever for cooperation with the pressure bar.

Referring more particularly to the drawings, 5 is the casing, and 6 the longitudinal slot formed approximately midway of its length. Circumferentially of the casing and intersecting the slot 6, I form a groove or depression 7 in which is partially buried a ring, as 8, the terminals 11' thereof being preferably anchored in the walls of the casing. At the point where it bridges the slot, I pivot a lever 9, which may be constructed from stock, properly gaged, and doubled upon itself and presents a flat head or nail-engaging portion 9' which lies perfectly flush in the recess 9'' of the casing, as exhibited in Figs. 3 and 6. I provide an off-set bearing portion 10 substantially medially of the length of the lever which embraces the ring between the walls of the slot and precludes lateral thrust of the lever, or always maintains the lever in proper relative position to the pressure bar 11.

The pressure bar, normally lying above the compressible ink reservoir 12, is of the same general type as the one shown in my Patent No. 1,049,465, of January 7, 1913, but in addition, is constructed with a supplemental strip 11'' provided with a struck-up portion 13, which serves the function of a stop for limiting the outward movement of the lever. With this type of bar, the under surface which engages the reservoir, is flat throughout its length, and may be employed with less likelihood of abrading or rupturing the reservoir. In this connection it will also be noted that the underneath portion of the lever is cut away as at 14 to receive the projection 13 of the pres-

sure bar, thus preventing the application of any undue pressure upon the reservoir and at the same time preserving the flush fit of the lever in the casing.

5 In Fig. 8 still another form of presser bar is exhibited. Here it will be noted that the supplemental strip 11" is perfectly flat throughout its entire length, and has an elongated slot 15 in which the end of the
10 lever 9 operates.

What is claimed is:

The combination with a fountain pen having a casing with a slot therein, and a com-

pressible ink reservoir within said casing, of a device partially surrounding the casing 15 and having its ends deflected to engage the walls of the casing, and means pivoted to said device and operable through said slot for compressing said reservoir.

In testimony whereof, I hereunto affix my 20 signature, in the presence of two witnesses.

WILLIAM F. DURYEA.

Witnesses:

EDGAR H. LEE,

T. HOWARD BRUSH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."