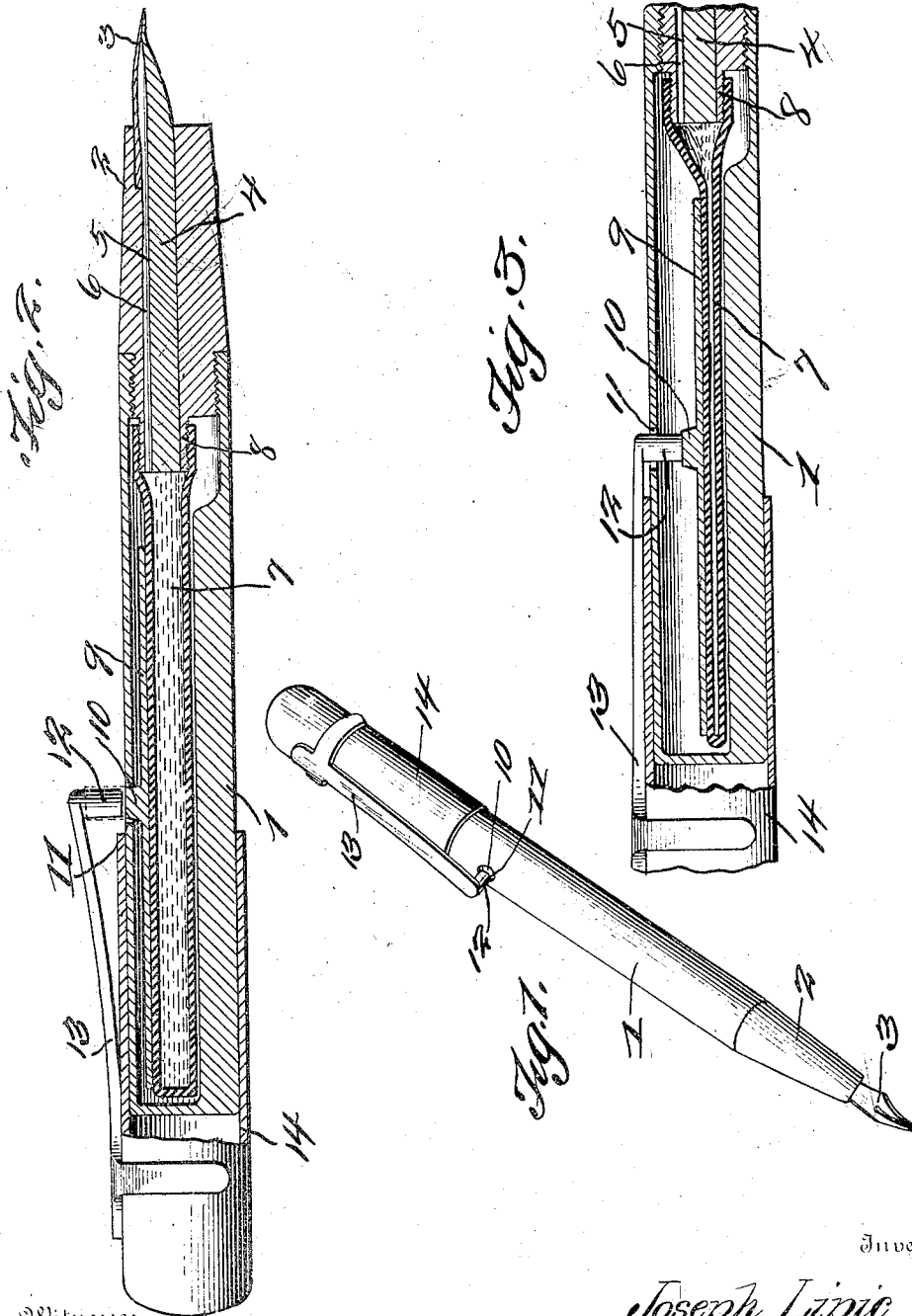


J. LIPIC.
 SELF FILLING FOUNTAIN PEN.
 APPLICATION FILED DEC. 9, 1909.

976,815.

Patented Nov. 22. 1910.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH LIPIC, OF ST. LOUIS, MISSOURI.

SELF-FILLING FOUNTAIN-PEN.

976,815

Specification of Letters Patent.

Patented Nov. 22, 1910.

Application filed December 9, 1909. Serial No. 532,162.

To all whom it may concern:

Be it known that I, JOSEPH LIPIC, a citizen of the United States of America, residing at St. Louis, Missouri, have invented a new and useful Self-Filling Fountain-Pen, of which the following is a specification.

The invention about to be set forth and claimed belongs to the art of pens, and particularly pertains to a new and useful self-filling fountain pen.

The primary object of the invention resides in the insertion of a rubber bag or sack within the pen, which can be so depressed by means of a pen-holder (which secures the pen in the pocket of a person's wearing apparel) so as to cause a vacuum within the bag or sack, in order to fill the bag or sack with ink when pressure is relieved thereupon.

A further object of the invention is to provide means extending the entire length of the bag or sack, and secured thereto by any suitable means, in order to be engaged by a portion of said pen-holder, in order that one entire side of said bag or sack may be depressed its entire length in order that a complete vacuum may be obtained.

Another object of the invention is the provision of means to admit of a portion of the pen-holder or attachment, whereby the bag or sack may be depressed. That portion of the pen which receives and holds the pen point is of the usual construction, and may be connected to the bag or sack in any suitable manner. For instance, it may be secured to the bag or sack by an adhesive material, or this said portion, at the point of connection between the bag and said portion, is provided with threads or similar means, over which the rubber bag or sack may be forced in order to prevent its displacement.

In this specification and the drawings annexed hereto, a particular design of device is adhered to, but the invention is not to be confined to this particular design. The device, in its actual reduction to practice, may require changes and variations; the right thereto belongs to the applicant, provided such changes and variations are comprehended by the appended claims.

In the drawings:—Figure 1 is a perspective view of a fountain pen, showing the usual attachment by which a fountain pen is secured in a pocket of a person's wearing apparel, and further showing an aperture through which a portion of this attachment extends, in order to depress the bag or sack

located within the barrel of said pen. Fig. 2 is a longitudinal sectional view through the pen, showing the vacuum bag or sack in position, and the bag filled with ink. Fig. 3 is a sectional view similar to Fig. 2, with the exception that the vacuum bag or sack is depressed.

Referring to the drawings associated with this specification, 1 denotes the barrel portion of the pen, which may be of the usual structure.

2 represents the pen-holder proper in which is secured the pen-point 3, by means of the core 4 which fits snugly with sufficient friction within the holder 2, in order to hold the pen-point securely in position. The friction between the core 4 and the holder 2 is also for the purpose of holding the core securely in position. This core 4 is provided with a groove 5.

When the core 4 is removed, for any desired reason, the groove 5 is clearly opened, and when the core 4 is removed, this groove may be cleansed, if desired; but while the core is in its proper position within the holder 2, the groove 5 is completely covered by the holder 2, thereby providing an ink duct 6, through which the ink from the vacuum bag or sack 7 may readily flow. This vacuum bag or sack is secured to a threaded restricted portion 8 of the holder 2, and may be made of any suitable material, for instance, rubber or the combination of rubber and fabric or canvas, or any other material which will have a tendency to expand or open up, when inflated by the inflow of ink. This bag or sack is located and supported within the barrel 1 of the pen, as shown clearly in Figs. 2 and 3.

Secured to a portion of the outer circumference of the bag or sack, by any suitable means, such as adhesive material, is a metallic plate 9 (which acts as means for depressing approximately the entire length of the bag or sack). This plate 9 is almost the same length as the said bag or sack, as will be observed, in order to insure the proper depressing of the said bag or sack. This plate 9 may be made of aluminum or other suitable material, and is provided with a lug or projection 10 (which extends partially through an aperture 11 of the barrel 1) and is contacted with by a lateral projection 12 of a spring clip 13 (which is carried by the cap member 14) and serves two purposes. Firstly, when the cap is placed in position

upon the pen, in order to cover the pen-point, the clip engages that portion of a person's wearing apparel adjacent to the pocket, in order to retain the pen securely in one's pocket. Secondly, when the cap is placed upon the end of the pen opposite the pen-point, the cap is so adjusted in position that the projection 12 of the clip 13 is positioned directly above or in registration with the aperture 11, in order that when the spring portion of the clip is depressed, the said projection 12 will contact with the lug 10, in order to depress the bag or sack, thereby causing approximately a complete vacuum within the bag or sack. When pressure is relieved upon the spring portion of the clip, the bag will then again be inflated, but prior to the relieving of the pressure upon the spring portion of the clip, the end of the pen (which carries the pen-point) is held within any suitable writing fluid, and as the bag or sack inflates, the writing fluid will be drawn therein.

After the bag has been completely filled or inflated by the writing fluid, the cap 14 may be adjusted, in order to remove the projection 12 of the spring portion of the clip from registration or above the said aperture 11, and while in such position, one may readily use the pen in writing.

When it is desired to use the pen for writing, you simply detach the pen from the pocket of a person's wearing apparel, and after removing the cap from the point of the pen (which carries the pen-point) and placing it upon the other end of the pen, the pen is in readiness to be used. But, if it is desired to fill the pen before using, the

cap is placed in such a position as to position the projection 12 of the spring portion of the clip over or in registration with the aperture 11 of the pen, so that, by pressing the spring portion, the extension 12 will contact with the lug 10 which will depress the bag or sack, and cause a vacuum therein. This operation is accomplished while the pen-point holding end of the pen is held in a writing fluid. After pressure is relieved upon the spring portion of the clip, the bag or sack expands and draws in the writing fluid.

Having thus fully set forth the invention, what is claimed as new and useful is:—

1. A self-filling fountain pen having a chamber provided with an aperture in its wall, a vacuum bag or sack located in said chamber, said pen having a duct extending from the pen's pen-point and communicating with the interior of said bag or sack, said bag or sack having an elongated plate secured thereto provided with a lug extending through the aperture, a pocket pen clip carried by the pen and provided with a spring portion having means adapted to extend through the aperture to engage the lug.
2. A self-filling fountain pen having a chamber, a vacuum bag or sack located in said chamber and provided with a plate having a member penetrating the wall of the chamber, and a pocket pen clip carried by the pen and provided with a spring portion having means to engage the member.

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