

No. 692,009.

Patented Jan. 28, 1902.

F. GILBERT.
SAFETY FOUNTAIN PEN.

(Application filed May 16, 1898.)

(No Model.)

Fig-1.

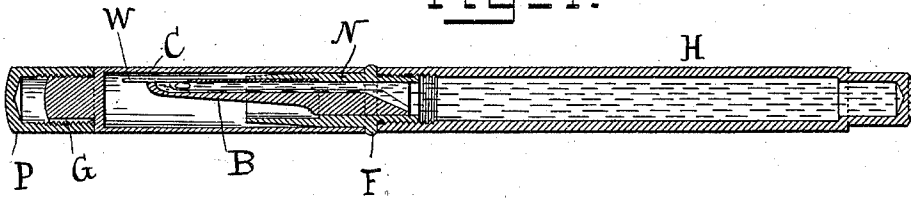


Fig-2.

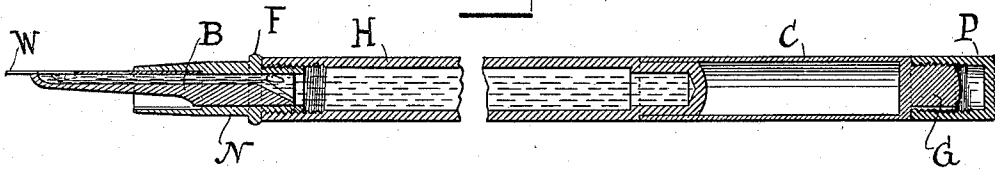


Fig-3.

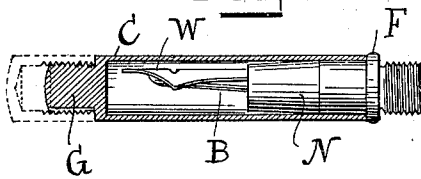


Fig-4.

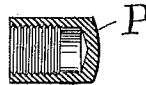
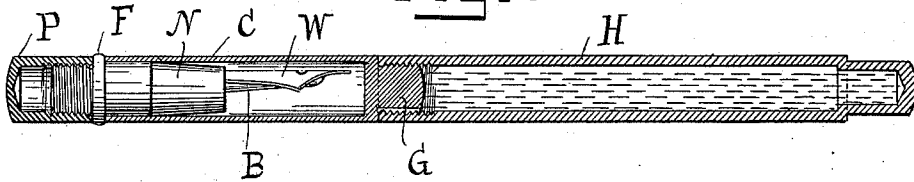


Fig-5.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERICK GILBERT, OF SEYMOUR, CONNECTICUT, ASSIGNOR TO LEWIS E. WATERMAN, OF BROOKLYN, NEW YORK; FRANK D. WATERMAN EXECUTOR OF SAID LEWIS E. WATERMAN, DECEASED.

SAFETY FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 692,009, dated January 28, 1902.

Application filed May 16, 1898. Serial No. 680,770. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK GILBERT, a citizen of the United States, residing in the town of Seymour, county of New Haven, and State of Connecticut, have invented an improved, new, and useful Safety Fountain-Pen, of which the following is a specification.

My invention relates to improvements in fountain-pens which are provided with a barrel, fountain, or reservoir to hold the ink and to which the other parts of the pen, consisting of a nozzle, a cap, and a writing-pen supplied through feeding devices with ink from the fountain, are attachable, and the completed invention is a safety fountain-pen of the peculiar type set forth in the claims.

The objects of my invention are, first, to provide on the outer and closed end of the cap a screw safety plug or stopper by which, being fitted thereto so as to form a screw-thread shoulder-joint therewith, the open end of the fountain or barrel may be positively or absolutely or hermetically closed to prevent the escape of ink under any and all circumstances, in handling or carrying in a bag or in any other manner, without taking pains to keep one particular end of the fountain upward, and, second, to provide a secondary screw-cap adapted to fit and cover either the screw safety-plug end of the cap or the screw end of the nozzle at will for the purpose of retaining and covering the ink in the nozzle, the threads of the nozzle-screw, and the feed-bar when the cap and the nozzle are reversed for the purpose of closing the fountain hermetically. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of the entire safety fountain-pen with the ordinary cap in its usual position for the purpose of protecting and covering the writing-pen. Fig. 2 is a horizontal sectional view of the same pen broken away in the center of the barrel or fountain and shown with the cap applied to the other or upper end of the reservoir or barrel. Fig. 3 is a part-sectional view of the cap and nozzle with nozzle in the cap and the secondary screw-cap removed. Fig. 4 is a sectional view of the screw-cap; and Fig. 5 is a horizontal sectional view of the entire safety

fountain-pen with the ordinary cap reversed, its safety screw-plug reversed and inserted in the mouth of the reservoir, and the secondary cap in position on the screw end of the nozzle.

Similar letters relate to similar parts throughout the several views.

H is the holder, reservoir, or barrel.

N is the nozzle.

F is the joint-forming boss on the nozzle.

G is the screw-plug on the outer or closed end of the cap.

C is the otherwise ordinary cap or cover of the writing-pen.

P is the secondary screw-cap covering the screw-plug or the screw end of the nozzle at will, and W is the writing-pen.

Fig. 1 shows the pen with the different parts disposed in the manner intended when the fountain-pen is in condition for ordinary use or like any other fountain-pen and without the safety devices or functions called into play, the nozzle being in its normal position in the mouth of the reservoir, the cap being in position on the nozzle, and the screw-cap being in position on the ordinary writing-pen cap. In Fig. 2 the writing-pen cap C and the secondary screw-cap P are in their normal position on the closed end of the reservoir. When the safety features and functions of the pen are to be called into action, the parts are disposed and caused to be related in the manner shown in Fig. 5, the ordinary cap C being reversed, together with the nozzle N, contained therein, the screw-plug G being inserted in the open mouth of the reservoir H until the shoulder-joint surface on the cap makes contact with the shoulder-joint surface on the fountain, and thereby in the usual way or by the action of the ordinary screw-thread shoulder-joint hermetically seals the ink-fountain, and the secondary screw-cap P being placed on the screw end of the nozzle, so as to seal that end. Before the screw safety-plug G and end of the cap C can thus be inserted in the fountain the secondary screw-cap P must be removed therefrom, and either before the sealing up of the fountain, as described, or afterward the screw-cap P should be applied to the screw end of the nozzle N until its joint-sur-

face comes into joint bearing relations with the joint-surfaces on the nozzle-boss F. When the parts are in this condition, which is shown in Fig. 5, not only is the fountain itself hermetically sealed, but a non-capillary joint is made at the other end of the nozzle, and the ink in the nozzle, in the feed-bar, and in the writing-pen is all occluded, protected, or prevented from escaping or soiling the hands, clothing, or contiguous articles. This joint is formed between the cap P and the joint-forming boss F on the nozzle and is a non-capillary or hermetical joint.

Since ink is likely to remain in the screw-threads of the nozzle and be transferred therefrom to the screw-threads of the secondary screw-cap P and to the interior of the secondary cap itself, it is desirable to wipe and clean the parts—that is to say, the screw-threads on each part—at least externally before applying the secondary screw-cap P to the nozzle N in the manner shown in Fig. 5. This being done, the fountain-pen itself becomes a cleanly instrument throughout and is in little danger of soiling things with which it comes in contact, and the entire structure or safety fountain-pen may be used as a hermetically-sealed and portable ink stand or holder without hesitation or danger.

I claim as my invention—

1. In safety fountain-pens, a cap provided at its closed end with a safety screw-plug adapted to fit and close the open end of the reservoir hermetically and the reservoir in combination.

2. In safety fountain-pens, a cap provided at its closed end with a safety screw-plug adapted to fit and close the open end of the reservoir hermetically, in combination with the reservoir, and also provided with a secondary cap adapted to fit and cover the safety screw-plug in or on the closed end of the cap and also adapted to fit, cover and hermetically close the inner end of the nozzle.

3. In safety fountain-pens, a cap C provided with a safety screw-plug G in combination with the barrel or reservoir.

4. In safety fountain-pens, a cap C provided with a screw safety-plug G and with the screw safety secondary cap P in combination with the barrel or reservoir.

5. In safety fountain-pens, a cap C provided with a screw safety-plug G and with the screw safety secondary cap P in combination with the screw-nozzle N and with the barrel or reservoir H.

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Witnesses:

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