## W. I. FERRIS.

FOUNTAIN PEN.

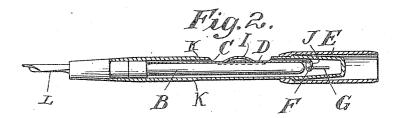
APPLICATION FILED AUG. 23, 1909.

950,817.

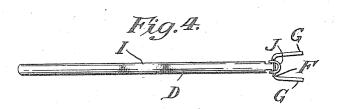
Patented Mar. 1, 1910.

Fig. 1.









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## UNITED STATES PATENT OFFICE.

WILLIAM I. FERRIS, OF WESTFIELD, NEW JERSEY, ASSIGNOR TO L. E. WATERMAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## FOUNTAIN-PEN.

950,817.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed August 23, 1909. Serial No. 514,264.

To all whom it may concern:

Be it known that I, WILLIAM I. FERRIS, a citizen of the United States, residing at Westfield, county of Union, State of New 5 Jersey, have invented a new and useful Improvement in Fountain-Pens, of which the following is a specification.

My invention relates to an improvement in fountain pens in which the ink supply is 10 contained within an elastic sack or reservoir of soft rubber, or other suitable material, contained within a hollow casing of hard rubber, or other suitable material, and which reservoir is filled with ink by the compression of the reservoir or sack and then immersing the open end of the pen into an ink supply and allowing the elastic sack to expand to its normal shape.

The objects of my invention are to provide improved means for compressing the elastic sack when it is desired to refill the fountain pen and to afford improved means for affording access to the compressing mechanism when required for use, and improved means for protecting same from accidental compression when not in use. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view in elevation of a fountain pen embodying my device, closed for carrying in the pocket; Fig. 2 is a horizontal sectional view of my device with the compression mechanism exposed ready for use in compressing the elastic sack; Fig. 3 is a side view of the compressor bar used for compressing the elastic sack; Fig. 4 is a top view of the compressing mechanism shown in Fig. 3.

Similar letters refer to similar parts 40 throughout the several views.

A, represents the outer casing of hard rubber or other suitable material; B, the inclosed elastic ink reservoir or sack of soft rubber or other suitable material; C, a slot, or finger-hole, cut in the outer casing, A, through which the finger or other convenient means, may be inserted to press against bowed projection, I, of the presser bar, D, which compresses the elastic sack; E, is a sleeve securely attached to the holder A, and horizontally sliding thereon, for opening and closing the slot C; F, is a spring attached to the presser bar D, the prongs G G of which spring against the sides of the

interior of the casing, A, and hold the 55 presser bar, D, in place in the casing A.

J, is the ink feeding device between the writing pen and the elastic ink reservoir.

K, is the conical surface of the outer casing at which the forward end of the sleeve 60 E is held by means of a tight conical frictional joint.

The operation of my device is as follows: When it is desired to fill the fountain pen, the sleeve, E, is moved toward the rear end 65 of the casing, A, (as shown in Fig. 2) exposing the slot C; the presser bar, D, is then depressed by the insertion of the finger, or other suitable means, and the front, or pen end, of the fountain pen is dipped into 70 an ink supply; the finger is then removed from the presser bar and the elastic sack resumes its normal shape and is filled with ink, the ink being forced into the elastic sack by atmospheric pressure. The sleeve, E, is 75 then moved forward toward the point of the pen where it is held firmly in place on the casing, A, and covering the slot C, by means of a tight conical frictional joint.

means of a tight conical frictional joint.

The presser bar, D, has a flat bearing sursace which bears on the elastic sack, B, for the entire length of the presser bar. At the point where the presser bar, D, is exposed through the slot, C, it has a bowed-outward projection I, thereby affording improved 85 means for contact with the finger when compressing the elastic sack. By means of the spring prongs, G G, secured to the presser bar, D, by a toggle joint, J, the presser bar, D, is securely held in place within the casing 90 A, by the action of the spring prongs, G G, springing against the interior sides of the casing, A.

The pen is supplied with the usual cap, H, for protecting the writing pen when carried in the pocket; this cap may be placed upon the rear of the holder as shown by the dotted lines in Fig. 1 when the pen is in use.

I claim:

In a fountain pen the combination of a syriting pen an inelastic casing or holder.

bowed projection, I, of the presser bar, D, which compresses the elastic sack; E, is a sleeve securely attached to the holder A, and horizontally sliding thereon, for opening and closing the slot C; F, is a spring attached to the presser bar D, the prongs G G of which spring against the sides of the

presser bar for holding the presser bar in place within the casing, said presser bar having an outward-bowed portion which projects into the slot in said outer casing, said outer casing having a slot for the insertion of the finger for compressing the presser bar and elastic reservoir said outer casing having a sleeve secured thereon but movable longitudinally on said casing to ex-

pose and to cover said slot which sleeve 10 when in position to cover said slot is securely held in place on said outer casing by a tight conical frictional joint.

## WILLIAM I. FERRIS.

Witnesses:

Frederick P. Seymour, W. J. B. Washburn.