

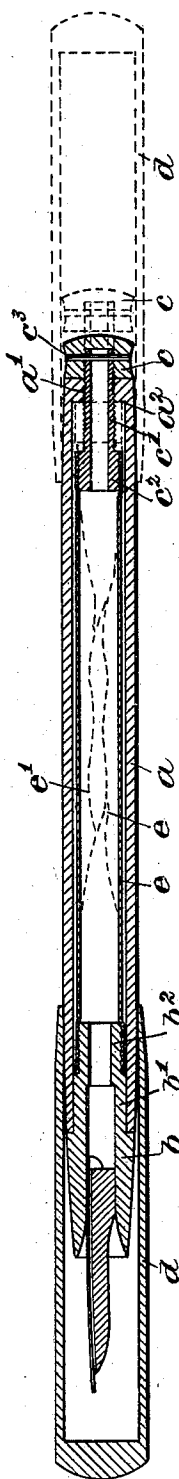
No. 744,642.

PATENTED NOV. 17, 1903.

H. W. STONE.
FOUNTAIN PEN.

APPLICATION FILED FEB. 19, 1903.

NO MODEL.



Witnesses,
Ernest S. Emery
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UNITED STATES PATENT OFFICE.

HARRY W. STONE, OF NEW YORK, N. Y., ASSIGNOR TO ARTHUR A. WATERMAN, OF WINCHESTER, MASSACHUSETTS, AND WILLIAM G. FRAZER AND HOBART W. GEYER, OF NEW YORK, N. Y.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 744,642, dated November 17, 1903.

Application filed February 19, 1903. Serial No. 144,031. (No model.)

To all whom it may concern:

Be it known that I, HARRY W. STONE, a citizen of the United States, residing in the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Fountain-Pens, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

This invention relates to fountain-pens wherein a flexible sack within the barrel of the pen is used as an ink-reservoir.

The object of the invention is to provide a construction whereby the pen may be easily filled without soiling the hands and without the use of extraneous means, such as a dropper.

One form of my invention is illustrated in the accompanying drawing, in which *a* represents the barrel or body of the pen, and *b* the pen-stock proper, which is mounted in one end of the hollow barrel. This pen-stock is provided with a shank *b'*, which forms a friction-joint with the barrel. The part *b* is also provided with an extension or neck *b²*, to which the flexible ink-sack or reservoir *e* may be attached by any desirable means, such as wire or thread. This sack or reservoir may be made of a section of flexible rubber tubing or any other suitable material. The opposite end of the main barrel is provided with a screw-threaded bore *a'*, which is of less diameter than the bore of the barrel, leaving an integral shoulder *a²* at this extremity of the barrel. Mounted in this bore is a screw-threaded shank *c'*, having a neck *c²*, similar to the neck *b²*, upon which the opposite end of the flexible sack *e* is mounted. The outer end of this shank *c'* is provided with a knob or nut *c*, which is firmly secured thereto by any suitable means, such as a rivet *c³*. The diameter of this nut *c* is somewhat smaller than that of the barrel *a* for a reason hereinafter set forth.

The device is also provided with a cap *d*, which may be slipped over the end of the bar-

rel and which covers the pen when the latter is not in use and which may be transferred to the opposite end thereof when the pen is in use.

As will be seen from the drawing, the opposite ends of the barrel or body portion are somewhat tapered, and the pen-stock and the nut are correspondingly tapered in continuation thereof. The internal diameter of the cap *d* is larger than that of the pen-stock or the nut, and therefore engages the barrel of the pen when in position without contacting with either the pen-stock or nut.

When it is desired to fill the pen, the cap *d* is removed and the nut *c* is screwed to the left, thereby extending the same, together with the shank *c'* and the attached sack *e*, as shown in dotted lines, and at the same time twisting the sack *e*, as shown in dotted lines *e* and *e'*. This movement serves to collapse the sack and expel the greater part of the air therefrom. Upon now submerging the pen-stock *b* in ink and screwing the nut to the right or back into normal position the sack *e* will assume its normal distended condition, thereby drawing up a supply of ink by atmospheric pressure.

Should it be necessary from time to time to cause the ink to flow more copiously out upon the pen, this may be done by turning the nut *c* to the left slightly, thereby expelling a slight amount of ink from the reservoir of the pen.

When the pen is in use, the cap *b* may be removed from the pen and slipped upon the opposite end of the barrel, as shown in dotted lines. By reason of the fact that the nut *c* is tapered to a diameter slightly less than that of the bore of cap *d* it is obvious that it would be at all times impossible for the cap *d* to rotate said nut, and thereby accidentally agitate the ink-reservoir, when the cap is being placed upon or removed from the shank of the pen. This construction makes it practically impossible to accidentally cause the pen to spurt.

My invention is not restricted to the par-

ticular embodiment thereof herein disclosed, but obviously may be varied within the spirit and scope of the invention.

I claim—

- 5 1. A fountain-pen comprising a barrel, a cap adapted to cover the pen and also to fit over the rear end of said barrel, a flexible reservoir within said barrel, an exposed twisting member therefor at the rear end of said barrel and of less diameter than the bore of said cap, whereby the latter may be freely applied to and removed from the rear of said barrel without danger of turning said twisting member and twisting said reservoir.
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- 15 2. In a fountain-pen, a barrel, a body portion having oppositely-tapered ends, a pen-point mounted at one of said ends and a cap adapted to fit over either tapering end of said

barrel to cover the pen-point when the latter is not in use, and to be carried upon the rear end when the pen-point is in use, a flexible reservoir within said barrel or body portion, and an exposed reservoir twisting member at the rear of said barrel or body portion, and of less diameter than the bore of said cap to permit the latter to be freely applied to and removed from the rear of the said barrel or body portion without danger of turning said twisting member and its reservoir.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRY W. STONE.

Witnesses:

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