

No. 654,500.

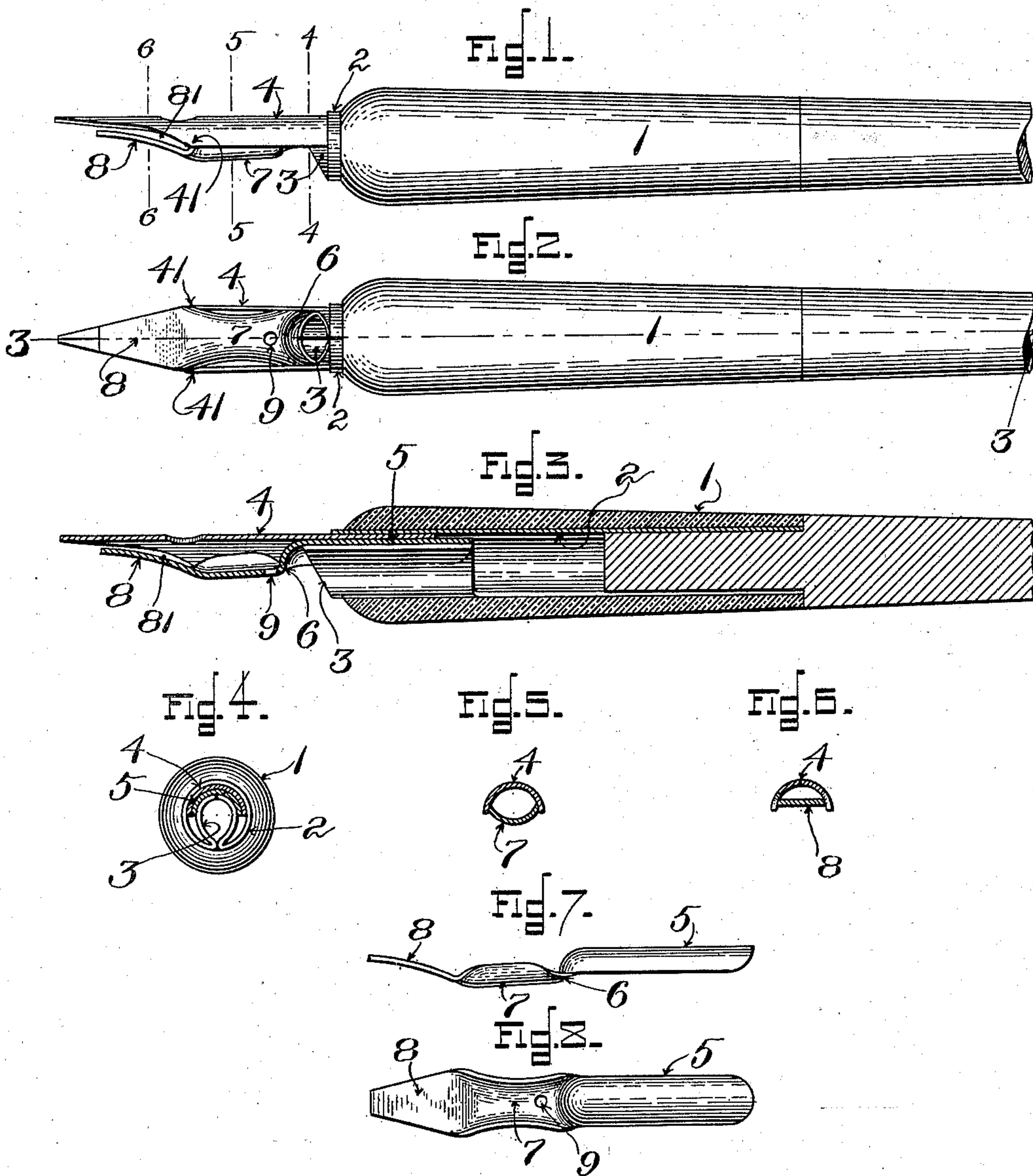
Patented July 24, 1900.

E. WALDEN.

DETACHABLE RESERVOIR FOR PENS.

(Application filed Oct. 23, 1899.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

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DETACHABLE RESERVOIR FOR PENS.

SPECIFICATION forming part of Letters Patent No. 654,500, dated July 24, 1900.

Application filed October 23, 1899. Serial No. 734,438. (No model.)

To all whom it may concern:

Be it known that I, EDWIN WALDEN, a citizen of the United States, residing at Lynn, in the county of Essex, State of Massachusetts, have invented a certain new and useful Improvement in Detachable Reservoirs for Pens, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention consists in a fountain or reservoir of improved character and construction, as hereinafter set forth and specified in the claim, for use in connection with ordinary pens and capable of taking up at a single dip and holding a sufficient quantity of ink to enable a very large amount of writing to be done before the supply carried by the pen becomes exhausted. Many attempts in the same direction have been made heretofore, but without the attainment of practical and satisfactory results. As heretofore made and applied fountains or reservoirs used in connection with ordinary pens have in all cases known to me been found unsatisfactory and deficient. Some of them are incapable of taking up more than a minimum quantity of ink, hardly more than the pen alone would itself take up. In the case of all that I have yet become acquainted with the fountain or reservoir and the pen to which it is applied speedily become clogged up with the solid constituents of the ink and highly corroded, so as soon to render them both useless.

The objects of my invention are to produce a fountain or reservoir which shall be adapted to be applied to a great variety of the steel and other pens now in use and to be fitted, with such pens, to ordinary penholders of the characters commonly in use and which shall be adapted to take up a plentiful supply of ink when dipped into the latter, as well as retain the same safely until it has been consumed; also, to produce a fountain or reservoir from which any unused ink may readily be discharged when it is desired to discontinue writing and which shall admit of being cleaned readily and completely with the aid of any ordinary sponge or pen-wiper without separating the fountain or reservoir from the pen.

The accompanying drawings illustrate an embodiment of the invention.

In the drawings, Figure 1 shows in side elevation a well-known form of penholder having applied thereto a steel pen of ordinary pattern and also a fountain or reservoir made in accordance with my invention. Fig. 2 is a bottom view of the same. Fig. 3 is a view in longitudinal section on line 3 3 of Fig. 2. Fig. 4 is a view in cross-section on line 4 4 of Fig. 1. Fig. 5 is a view in cross-section on line 5 5 of Fig. 1. Fig. 6 is a view in cross-section on line 6 6 of Fig. 1. Fig. 7 shows in side elevation, detached, a device embodying the invention. Fig. 8 shows the same in plan, also detached.

1 designates the body of the penholder, it being herein supposed to be composed of some plastic material or composition molded into form. 2 is a sheet-metal lining for the pen-receiving end of the said body. 3 is what may be termed the "elastic" split plug, which is located inside the said lining. As is well understood, a pen 4 is secured in place in such a penholder by forcing the shank of the pen in between the lining 2 and the split plug 3. (See Fig. 3.)

My improved fountain or reservoir (see more particularly Figs. 7 and 8) comprises the shank portion 5, the shoulder 6, the body or waist portion 7, and the nib portion 8.

The shank portion 5 of my reservoir corresponds in curvature in its cross-section with the shank portion of a common pen 4. (See Fig. 5.) This enables it to be fitted snugly within the said shank portion of a pen and to be slipped along with the latter into place between the split plug 3 and the surrounding metal lining 2. Thereby the reservoir and pen are held securely in proper relations with each other during use.

The body or waist portion 7 of the reservoir bridges the wide portion of the pen above the angles 41 41 at the bases of the nibs of the pen. This portion usually is made slightly concaved or hollow, as in Fig. 5, in order to enable it to hold ink the more securely, although this feature is not essential, and it may be more or less perfectly flat.

The nib 8 inclines toward the nibs of the pen, so that while quite a space, comparatively speaking, exists between the waist or body of the reservoir and the corresponding portion of the pen the tip of the nib 8 ap-

proaches quite closely to the nibs of the pen, near their free extremities.

Characteristic features of the reservoir are the open spaces 81 81, which are left at the side edges of the nib 8, between the same and the converging edges of the forward part of the pen.

9 is an air-vent which is formed through the waist or body portion 7 at or closely adjacent the shoulder 6. The shoulder 6 determines the inner end of the ink-holding cavity or space between the body of the pen and the reservoir. When the pen and reservoir are dipped into ink, the latter passes immediately and quickly through the side openings 81 81 and fills the interior space, while the air finds its way out through vent 9. The said openings are not sufficiently wide to permit ink to drip from the pen under ordinary handling. However, inasmuch as no part of the nib is in actual contact with the tapering part of the pen it is readily possible to shake or jar by a properly-directed movement any unused ink from between the reservoir and pen, leaving the parts clean and free. These side openings, moreover, enable all the said ink to be re-

moved, if desired, by applying the pen to a wet sponge or ordinary pen-wiper. Thereby is obviated the serious trouble which has practically proved fatal to the success of prior endeavors in this line—namely, the tendency to clogging and filling up with solid matter and the tendency to corrosion.

I claim as my invention—

The combination with a penholder and pen, of the detachable or independent reservoir having the curved shank portion fitting within the shank of the pen and inserted with the latter into the penholder, the said reservoir having also the waist or body portion 7 bridging the hollow of the corresponding portion of the pen, the shoulder 6, the vent, and the tapering nib 8 separated at its edges and tip by spaces from the corresponding portion of the pen, and inclining at its tip toward the latter, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN WALDEN.

Witnesses:

CHAS. F. RANDALL,

WILLIAM A. COPELAND.