

No. 778,291.

PATENTED DEC. 27, 1904.

J. WEEKS.
FOUNTAIN PEN.
APPLICATION FILED OCT. 11, 1904.

Fig. 1.

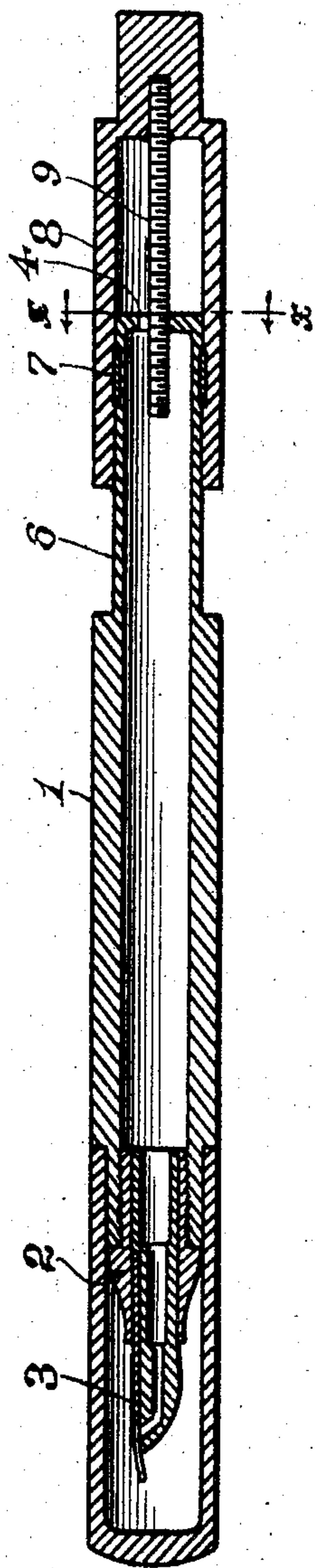


Fig. 2.

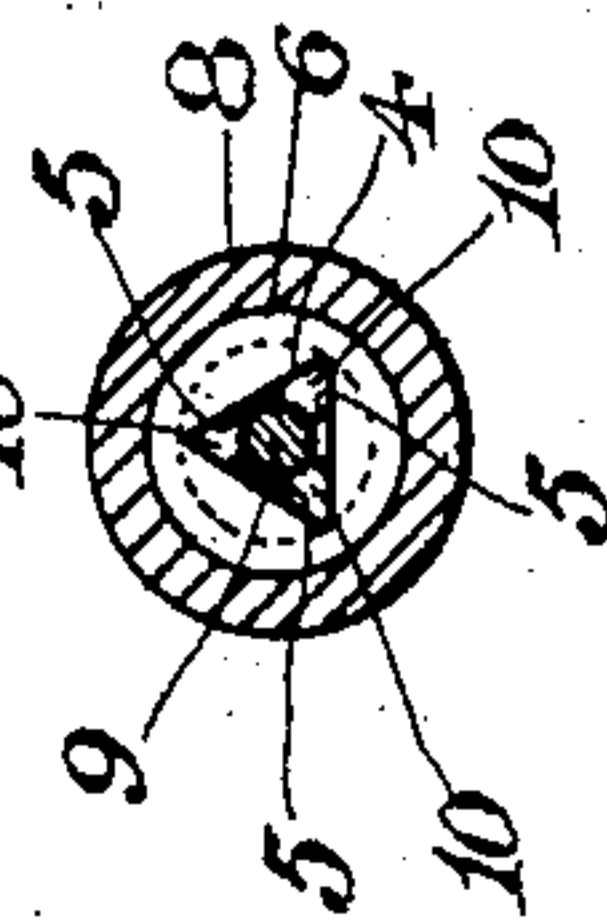
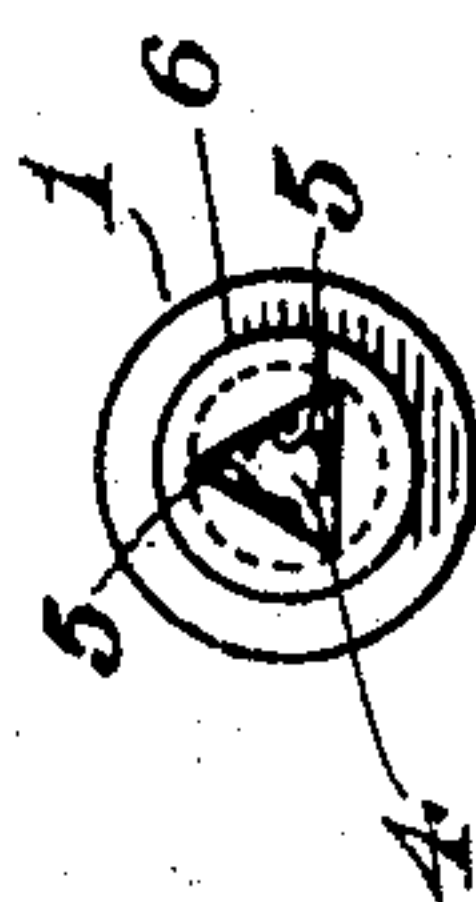


Fig. 3.



WITNESSES:

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FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 778,291, dated December 27, 1904.

Application filed October 11, 1904. Serial No. 228,020.

To all whom it may concern:

Be it known that I, JOHN WEEKS, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Fountain-Pens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-
 10 pertains to make and use the same.

My invention has reference to fountain-pens, but more particularly relates to means for positively regulating the flow of ink to the pen and preventing the latter from leaking.

15 With these ends in view my invention consists in the novel construction hereinafter described, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is
 20 a sectional elevation illustrating a fountain-pen equipped with my improvement; Fig. 2, a section at the line *x x* of Fig. 1, and Fig. 3 a rear end view of the main ink-reservoir.

Similar numbers of reference denote like
 25 parts in the several figures of the drawings.

1 is the tube-reservoir for the ink, 2 the pen-head, and 3 the pen, said parts being secured together in the usual manner.

The rear end of the reservoir-tube 1 has a
 30 triangular-shaped opening 4, the sides of which opening are provided with screw-threads 5, and said reservoir-tube throughout a portion of its length at the rear is preferably reduced in diameter, as shown at 6, and
 35 is encircled for a short distance by a ring 7 of any suitable packing.

8 is a regulator-cap which is hollow and adapted to closely fit the outer surface of the portion 6, the packing-ring 7 serving to make
 40 an air-tight joint between said portion and cap.

9 is a threaded pin secured to the rear end of the cap 8 and interior thereof and projecting forwardly. The diameter of this pin is such that when the cap 8 is placed on the por-
 45 tion 6 and turned around said pin will engage with the threads 5 on the sides of the triangular-shaped opening 4, and it will be noted particularly that when said pin is engaged with the threads 5 air-spaces 10 will be pro-
 50 vided at the angles of said opening, whereby

communication is established between the interior of the tube 1 and the interior of the cap 8.

Presupposing the parts to be in the position shown at Fig. 1, the pin is filled from the front end in the usual manner. By turning the cap 8 in one direction, so as to advance the same along the portion 6, a pressure is exerted upon the ink and the latter is caused to flow freely to the pen, and by turning this
 55 cap in the reverse direction the ink is withdrawn from the pen back into the reservoir, since this has a tendency to create more or less of a vacuum within the rear end of said cap. During a continued use of the pen the ink will
 60 of course be withdrawn from the reservoir-tube, and this would tend to create a vacuum at the rear end of said tube and would ordinarily cause a stoppage of the flow of ink; but by the use of my improved regulator-cap the
 65 rear end of the reservoir-tube is provided with vents that communicate with an air-chamber, the size of which latter may be increased or diminished, and whenever the flow of ink to the pen becomes sluggish or ceases altogether
 70 the regulator-cap 8 is simply advanced along the portion 6, so as to compress the air in said cap, and thereby relieve the vacuum at the rear of the reservoir-tube. A slight advancement of this regulator-cap every half hour
 75 during the course of writing is sufficient to cause the ink to flow continuously along the pen, and my improvement thus obviates the necessity of violently jarring the pen, which is a practice quite common among users of
 80 fountain-pens.

In some grades of pens I will not reduce the diameter of the rear end of the reservoir-tube, but will fit the regulator-cap so as to slide snugly along the outside of the reservoir-tube,
 85 utilizing, of course, any suitable packing-ring in the manner shown and heretofore described.

I do not wish to be understood as claiming, broadly, an adjustable cap for regulating the
 90 flow of ink in a fountain-pen device; but

What I do claim as new, and desire to secure by Letters Patent, is—

In a fountain-pen, the combination of the reservoir-tube having in its rear end the tri-
 100

angular-shaped opening the sides of which are threaded, the packing-ring around said tube near its rear end, the regulator-cap adapted to slide up along said tube and across said
5 packing-ring, and the threaded pin interior of said cap and projecting forward from the rear thereof and engaging the threaded portions of said opening, whereby vents are pro-

vided at the angular portions of said opening around said pin, substantially as set forth. 10

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

JOHN WEEKS.

Witnesses:

THOS. LUPIEU,
JOSEPH HARLACH.