R. N. SAHA.

FOUNTAIN PEN.

APPLICATION FILED MAY 7, 1908.

962,982.

Patented June 28, 1910.

Fig. 1.

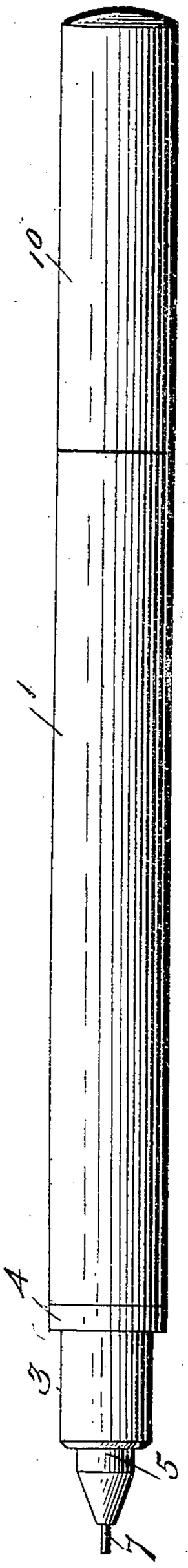



Fig. 2.

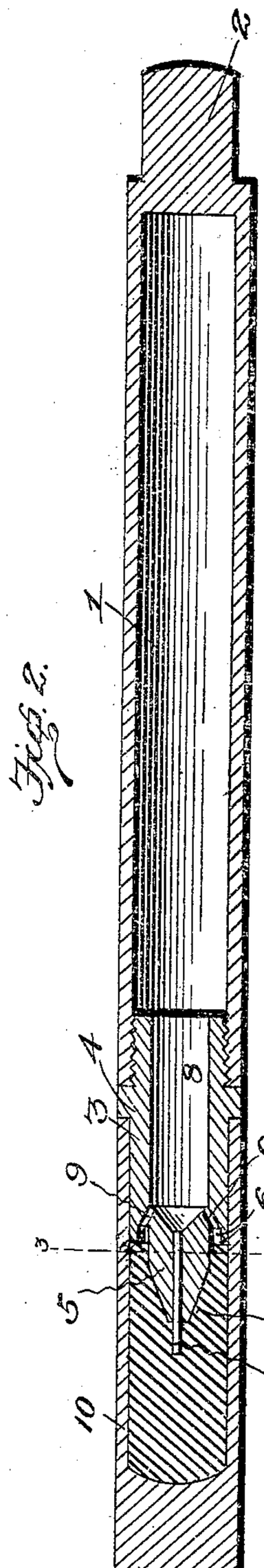



Fig. 4.

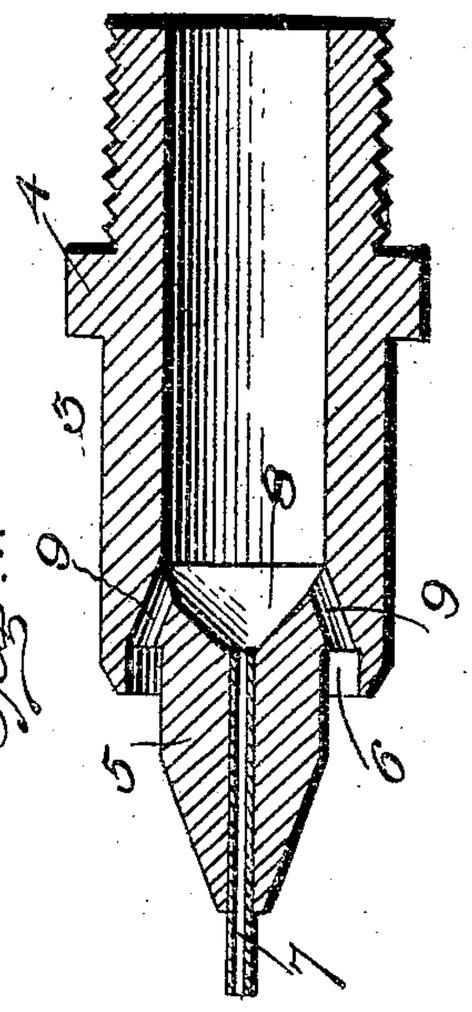
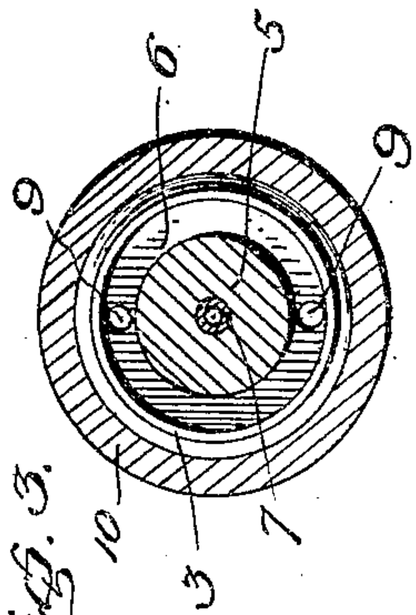



Fig. 3.




Witnesses

C. E. Hunt.

C. H. Griesbauer.

Inventor

R. N. Saha

By A. B. Wilson & Co

Attorneys

# UNITED STATES PATENT OFFICE.

RADHIKA NATH SAHA, OF BENARES, INDIA.

## FOUNTAIN-PEN.

962,982. Specification of Letters Patent. **Patented June 28, 1910.**

Application filed May 7, 1908. Serial No. 431,413.

*To all whom it may concern:*

Be it known that I, RADHIKA NATH SAHA, a subject of the King of Great Britain, residing at Benares city, in the United Provinces, India, have invented certain new and useful Improvements in Fountain-Pens; and I do 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 appertains to make and use the same.

This invention relates to improvements in fountain pens.

The object of the invention is to provide a pen of this character in which the customary feed needle or wire is dispensed with and the flow of ink from the pen produced by the admission of air through suitably arranged vents provided for the purpose.

A further object of the invention is to provide a pen in which the air vents are protected and hidden from view.

With these objects in view, the invention consists of certain novel features of construction, combination and arrangements of parts as will be described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a side view of the pen with the parts arranged in position for use; Fig. 2 is a longitudinal sectional view on an enlarged scale, showing the protecting cap in place; Fig. 3 is an enlarged cross sectional view taken on the line 3—3 of Fig. 2; and Fig. 4 is an enlarged longitudinal sectional view of the point section of the pen.

Referring more particularly to the drawings, 1 denotes the tubular portion or barrel of the pen having on its closed outer end a reduced extension, 2, adapted to receive the protecting cap when the latter is removed from the writing end of the pen. The opposite or open end of the barrel is provided with a series of interior threads and into said threaded end is adapted to be screwed the threaded inner end of a writing section, 3, said section having formed thereon an annular shoulder, 4, which is adapted to engage and form a flush joint with the end of the barrel when said section is screwed therein, said threaded end and shoulder forming a fluid-tight joint at this point.

The writing section, 3, is provided on its outer end with a reduced tapered extension, 5, and around the base or inner end of said reduced extension is formed an annular groove, or recess, 6. In the outer end of the tapered extension, 5, is arranged a tubular metal writing point, 7, the inner end of which communicates with a tapered bore or socket, 8, formed in the writing section, as shown. In the groove or recess, 6, and beneath the overhanging flange formed thereby, are arranged air vents, 9, said vents being preferably arranged at diametrically opposite points on each side of the reduced extension, 5. The inner ends of the vents, 9, communicate with the bore or socket, 8, of the writing section, and provide means for the admission of air to the interior of the pen, thus permitting the ink to flow through the tubular writing point, 7, when the pen is in use, and dispenses with the necessity of the usual feed wire for conducting the ink to the writing point.

Adapted to be engaged with the outer cylindrical portion of the writing section is a protecting cap, 10, said cap being preferably provided in its closed end with a rubber pad, or cushion, 12, in which is formed a tapered recess to receive the tapered extension and writing point of the pen. When the pen is in use the cap 10 is removed from the writing section and is preferably placed upon the reduced extension on the opposite end of the pen barrel. When the cap is placed upon the writing section with its edge abutting the shoulder 4, the inner portion of the cushion 12 tightly engages the flange formed by the recess 6 and forms a secondary closure which positively seals the channels 9 from the entrance of air and at the same time the cushion thoroughly protects the writing point.

Having thus described my invention, what I claim as new and desire to secure by Letters-Patent, is:

In a fountain pen, the combination with a hollow barrel and a writing section comprising a tubular body threaded on one end to engage the barrel, an annular flange arranged midway of its length adapted to limit the movement of the section in the barrel, a centrally disposed reduced extension carried by the tubular body and provided with a central longitudinal bore, a flange on the section concealing a series of inwardly extending air openings communicating with the interior of the writing section, a writing point extending through and beyond the reduced extension, a tubular cap adapted to fit over the outer end of the writing section

and abut against the annular flange, and a solid elastic pad secured in one end of the cap with a socket to receive the reduced extension of the writing section and the projecting end of the writing point arranged in said cap and to abut against the concealing flange whereby a secondary closure is formed.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RADHIKA NATH SAHA.

Witnesses:
HEMONTO KUMAR SHAHA,
SURESH CHANDER BOSE.