

**No. 705,958.**

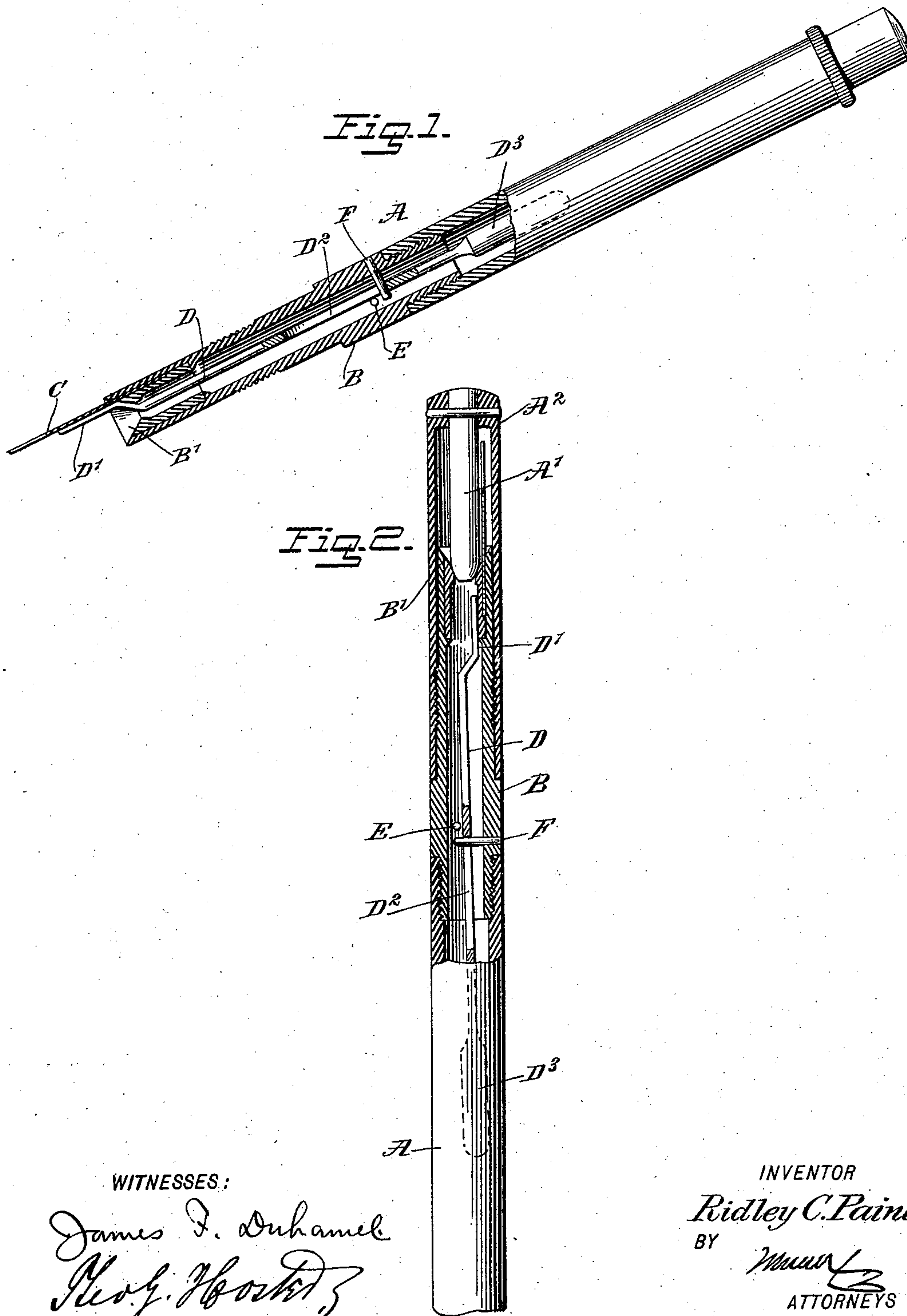
Patented July 29, 1902.

**R. C. PAINE.**  
**FOUNTAIN PEN.**

(Application filed Nov. 21, 1901.)

(No Model.)

**2 Sheets—Sheet 1.**



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2 Sheets—Sheet 2.

Fig. 3.

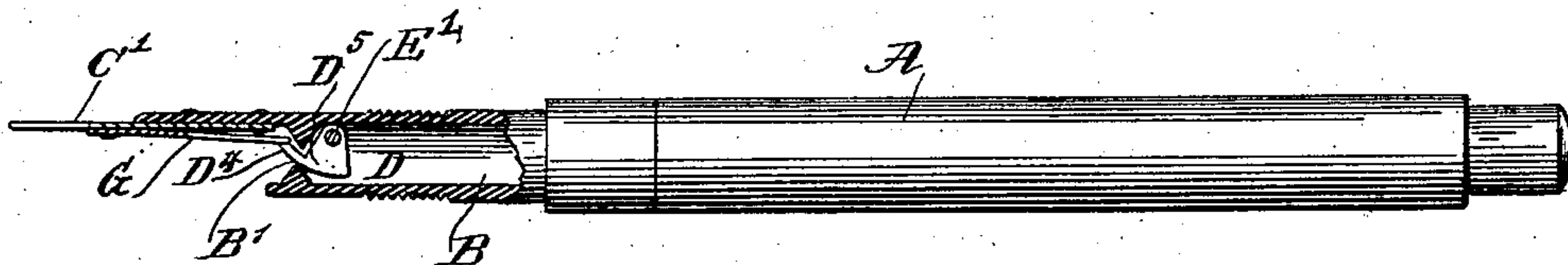


Fig. 4.

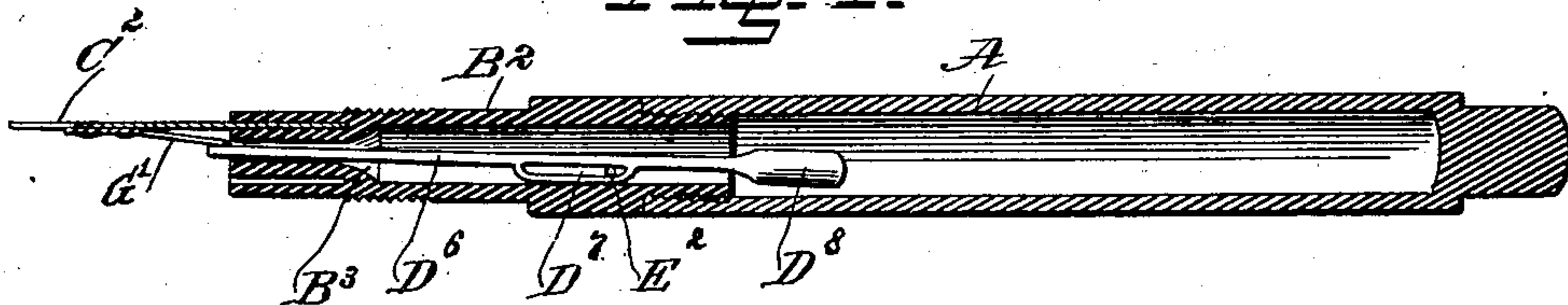


Fig. 5.

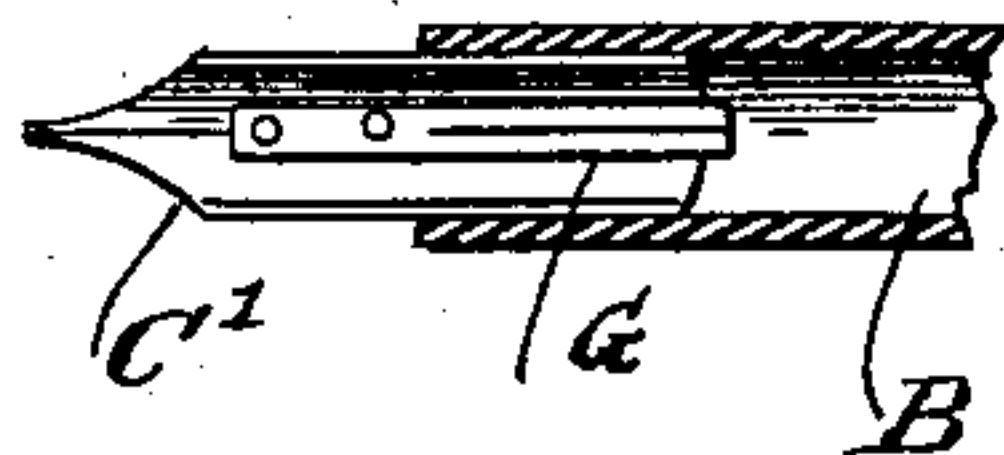


Fig. 6.



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# UNITED STATES PATENT OFFICE.

RIDLEY COLE PAINE, OF BETHEL, NEW YORK.

## FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 705,958, dated July 29, 1902.

Application filed November 21, 1901. Serial No. 83,144. (No model.)

*To all whom it may concern:*

Be it known that I, RIDLEY COLE PAINE, a citizen of the United States, and a resident of Bethel, in the county of Sullivan and State of New York, have invented a new and Improved Fountain-Pen, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved fountain-pen arranged to insure a ready and continuous flow of ink from the reservoir to the pen-point at the time the fountain-pen is held in the usual position for writing, to automatically drain the pen-point of all ink when the pen is held with the pen-point in an upward position, and to hermetically close the pen when the cap is screwed on to prevent leakage of the ink when the pen is held or carried in an upside-down position.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a longitudinal sectional elevation of the improvement in position for writing. Fig. 2 is a like view of the same when closed. Fig. 3 is a longitudinal sectional side elevation of a modified form of the improvement, part being shown in elevation. Fig. 4 is a longitudinal sectional elevation of another modified form of the improvement. Fig. 5 is an inverted plan view of the pen-point in position in the nozzle, the latter being shown in section; and Fig. 6 is a plan view of the feed.

The improved fountain-pen illustrated in Fig. 1 is provided with a casing in the form of a hollow handle or reservoir A for containing ink, and on the open end of the said hollow handle is screwed or otherwise secured a nozzle B, carrying a pen-point C, and having a valve-seat B' adapted to be engaged by a valve A', held in the cap A<sup>2</sup>, screwing on the nozzle B, for closing the reservoir when the fountain-pen is not in use, it being understood that when the cap is screwed up the valve A' is firmly ground and seated in the

seat B' to render escape of ink from the reservoir A impossible even if the fountain-pen is held or carried upside down. The gravity-feed D is adapted to extend through the valve-seat B' to contact with the pen C to feed the ink to the pen at the time the cap A<sup>2</sup> is removed and the fountain-pen is held in an inclined position for writing, as shown in Fig. 1, or held in a horizontal position when placed on a table, as indicated in Figs. 3 and 4.

The gravity-feed D may be of various constructions. For instance, as shown in Fig. 1, it is in the form of a rod having an offset outer end D' for engagement with the under side of the pen-point C, so that the ink flows along the rod from the reservoir A to the pen-point C. The rod slides over and is mounted to swing on a transverse pivot E, and the rod is formed with an elongated slot D<sup>2</sup>, into which projects a stop-pin F, carried by the nozzle B and serving to limit the sliding motion of the feed-rod. The inner end of the feed-rod is provided with a weight D<sup>3</sup> to cause the feed-rod to swing on the pivot E to bring the outer end D' in feeding contact with the pen-point C, as will be readily understood by reference to Fig. 1. When the fountain-pen is held in a vertical position, the feed-rod slides inward and into the position shown in Fig. 2, so that the valve-seat B' is completely free and clear of the feed-rod to allow the valve A' to be rested on the said seat when screwing on the cap A<sup>2</sup>, as previously explained. It will be seen that when the fountain-pen is moved into position with the pen upward the feed-rod in sliding inward causes the end D' to completely drain the pen-point of the ink thereon.

The gravity-feed shown in Fig. 3 consists, essentially, of an arm D<sup>4</sup>, projecting from a weighted body D<sup>5</sup>, pivoted at E' in the rear of the valve-seat B', so that when the fountain-pen is held in position for writing or laid down on a table then the weighted body D<sup>5</sup> swings into such a position that the arm D<sup>4</sup> projects through the valve-seat B' and makes feed contact with the pen-point C, either directly or by means of a split tongue G, secured to the under side of the pen-point C'.

In the modified form shown in Fig. 4 the feed-rod D<sup>6</sup> is mounted to swing and to slide in the nozzle B<sup>2</sup>, and the forward end of the feed-rod D<sup>6</sup> is adapted to make contact with



a tongue G' on the pen-point C<sup>2</sup>. The feed-rod D<sup>6</sup> is provided with an elongated slot D<sup>7</sup>, through which projects the pin E<sup>2</sup>. The inner end of the feed-rod D<sup>6</sup> carries a weight D<sup>8</sup> to hold the forward end of the feed-rod in contact with the tongue G'.

The device is very simple and durable in construction and is arranged to insure a proper flow of ink from the reservoir to the pen-point whenever the fountain-pen is in position for writing, and when the fountain-pen is held with the pen-point upward the gravity-feed drains the pen-point from ink and moves out of the seat B', so that the latter can be occupied by the valve A' when screwing on the cap A<sup>2</sup>.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A fountain-pen, comprising a casing having in its end carrying the pen a contracted opening, the outer wall of which flares outwardly to form a conical valve-seat, a rocking feeder adapted to move in and out through the valve-seat by gravity to feed the ink to the pen and to drain the ink therefrom, and a cap adapted to be secured on the casing and provided with a valve for engaging the said valve-seat when the cap is in position, as set forth.

2. A fountain-pen, comprising a casing having in its end carrying the pen a contracted opening, the outer wall of which flares outwardly to form a conical valve-seat, a weighted feeder mounted to slide and rock, whereby the feeder will be first moved out through the valve-seat and then swung into contact with the pen-point automatically, and a cap adapted to be secured on the casing and provided with a valve adapted to engage the said valve-seat when the cap is in position, as set forth.

3. A fountain-pen, comprising a casing provided with a conical valve-seat at its end forming a contracted opening leading into the casing, said end being adapted to carry a pen-point, a weighted feeder mounted to slide and rock in the casing and having an offset near its outer end, the portion beyond the offset being parallel with the body of the feeder and adapted to engage the pen-point when projected out through the valve-seat, and a cap adapted to be secured on the casing and provided with a valve for engaging the valve-seat when the cap is in position, as set forth.

4. A fountain-pen, comprising a casing provided with a nozzle having at its end a conical valve-seat forming a contracted opening leading into the casing, said end being adapted to carry a pen-point, a feeder mounted to swing and slide on a transverse pivot and provided with a weight at its inner end, said feeder having an offset near its outer end, the portion beyond the offset being parallel with the body of the feeder and engaging the pen-point when projected, means for limiting the sliding movement of the feeder, and a cap

adapted to be secured on the nozzle and provided with a valve for engaging the said valve-seat when the cap is in position, as set forth.

5. A fountain-pen, comprising a casing provided with a nozzle having a conical valve-seat at one end and adapted to carry a pen-point at said end, a feeder slotted intermediate of its ends and provided with a weight at its inner end and having an offset outer end for engaging a pen-point a transverse pin forming a fulcrum for the feeder, a pin extending into the slot of the feeder, and a cap screwing on the nozzle and provided with a valve engaging the valve-seat, as set forth.

6. In a fountain-pen, the combination of a casing adapted to carry a pen at one end and having a contracted opening in said end, the outer wall of which opening flares outwardly, and a weighted feeder mounted to rock and slide in the casing, said feeder being provided with an offset near its outer end, for engaging the wall of the said opening, the portion beyond the offset being parallel with the body of the feeder and adapted when projected to engage the pen-point, as set forth.

7. In a fountain-pen, the combination with a casing adapted to carry a pen-point at one end and having an opening in said end, the outer wall of which opening flares outwardly, and a feeder slotted intermediate of its ends and provided with a weight at its inner end and with an offset near its outer end, the offset being adapted to engage the wall of the opening and the portion beyond the offset to engage the pen-point, a transverse pin in the casing upon which the feeder is fulcrumed, and a second pin projecting into the slot of the feeder, as set forth.

8. A fountain-pen, comprising a casing provided with a nozzle having a contracted opening at its end, the outer wall of the opening being flared outwardly, a pen-point carried by the nozzle and provided with a tongue having its rear end longitudinally split, and a weighted and rocking feeder adapted to move in and out through the contracted opening by gravity to engage the tongue of the pen to feed the ink thereto and to drain the ink therefrom.

9. A fountain-pen, comprising a casing provided with a nozzle having in its end a contracted opening, the outer wall of which is flared outwardly, a pen-point carried by the nozzle and provided with a tongue having its rear end slit longitudinally, and a weighted feeder mounted to slide and swing on a transverse pivot arranged between its ends, the end of the feeder when projected engaging the tongue of the pen-point, as set forth.

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

RIDLEY COLE PAINE.

Witnesses:

EDWARD WALKER,  
ALFRED A. GILLESPIE.