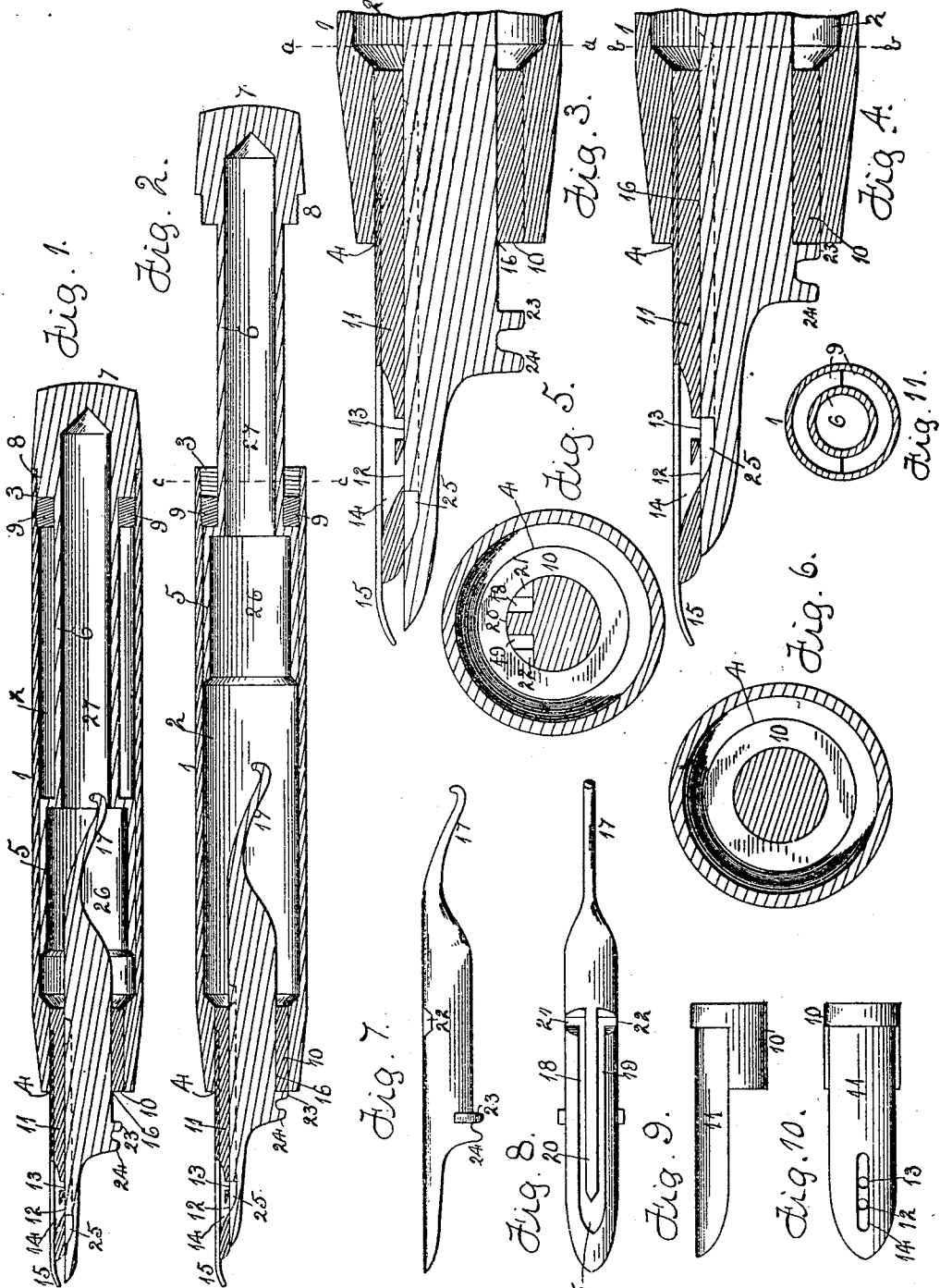


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J. S. BARNES.
FOUNTAIN PEN.

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UNITED STATES PATENT OFFICE.

JOHN S. BARNES, OF ROCKFORD, ILLINOIS.

FOUNTAIN-PEN.

No. 844,576.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN S. BARNES, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

The object of this invention is to construct a fountain-pen with a movable feeder adapted to cut off the flow of ink to the pen-point at two points.

The further object of this invention is to provide the barrel of the pen with a bore larger than the diameter of the pen-holding section, thereby increasing the holding capacity of the barrel.

In the accompanying drawings, Figure 1 is a lengthwise section of my improved fountain-pen, showing the piston in its normal position and the feeder drawn out, cutting off the flow of ink. Fig. 2 is a similar section in which the piston is withdrawn its full length and the feeder moved in to permit a full flow of ink. Fig. 3 is an enlarged section of the pen end like that shown at Fig. 1. Fig. 4 is an enlarged section of the pen end like that shown at Fig. 2. Fig. 5 is a transverse section on dotted line *b b*, Fig. 4. Fig. 6 is a transverse section on dotted line *a a*, Fig. 3. Fig. 7 is a side elevation of the feeder. Fig. 8 is a top view of the feeder. Fig. 9 is a side elevation of the pen-holding section. Fig. 10 is a top view of the pen-holding section. Fig. 11 is a transverse section on dotted line *c c*, Fig. 2, showing the split collar.

The barrel 1 of the pen has a lengthwise central bore 2 extending nearly its length, and one end has an opening 4 of smaller diameter than the central bore 2. The end is formed integral with the barrel. The barrel 1 covers a piston at its rear end, and the detailed construction of this piston and its connection with the barrel will form the subject-matter of a copending application.

Within the opening 4 of the barrel of the pen is located a pen-holding section having a portion 10 fitted closely within the opening and a reduced portion 11 extending beyond the end of the barrel. This reduced portion 11 of the pen-holding section has two holes 12 and 13 located in the lengthwise direction of the section, and a groove 14 is formed in the upper face of this portion and connects the holes. This groove extends beyond the holes, as shown in the various views of the drawings. A pen 15 overlies the pen-hold-

ing section, and the slit of the pen communicates with the groove 14. This pen-holding section has a lengthwise central opening 16. Within the lengthwise central opening 16 of the pen-holding section is located a feeder. (Shown in detail at Figs. 7 and 8.) This feeder is cylindrical in cross-section and has a tail extension 17. The upper face of this feeder is provided with two lengthwise-extending grooves 18 and 19, leaving a central tongue 20. The outer end of the tongue 20 is pointed, as shown at Fig. 8, and the grooves communicate through the space 25 around this end. The groove 18 terminates in a side opening 21, and the groove 19 terminates in a side opening 22. The under face of the feeder is provided with two projections 23 and 24, the former acting as a stop and limiting the inward movement of the feeder and the two forming a recess within which the thumb-nail may be inserted to withdraw the feeder. The tongue 20 is of a width to cover the holes 12 and 13 in the pen-holding section.

When the feeder is in the position shown at Figs. 2 and 4, the side openings 21 and 22 of the feeder will communicate with the central bore of the pen-barrel. Ink will enter one of the side openings—22, for instance—and flow down the groove 19 to the hole 12 in the pen-holding section and give access to the pen-point. Air will enter by the hole 13 and pass by way of the groove 18 and side opening 21 into the central bore of the barrel.

When the feeder is moved into the position shown at Figs. 1 and 3, the side openings 21 and 22 will pass within the pen-holding section 10, thereby cutting off the flow of ink to the pen-point. At the same time the tongue 20 will close the holes 12 and 13, so that any ink remaining in the grooves 18 and 19 will be prevented from escaping. When the feeder is moved in, the ink remaining in the grooves 18 and 19 will readily pass to the pen-point, and it will not be necessary to jar the ink down in order to start the flow. When the feeder is drawn out, the pen can be carried in the pocket with perfect safety, as the ink cannot escape from the central bore.

At Fig. 4 it will be noticed that the ink has an easy path to travel from the groove 14 to the pen-point. This is accomplished by gradually tapering the end of the groove 14 in the pen-holding section from the hole 12, and the long tapering end of the groove 14 permits air to readily enter the hole 13. By

enlarging the central bore 2 ink can readily gain access to one of the side openings 21 and 22 and more room is provided around the feeder.

5 I claim as my invention—

1. A fountain-pen comprising a barrel portion, a pen-holding section supported by the barrel portion and a feeder for the pen-holding section having a lengthwise-extending
10 groove, the pen-holding section having two holes communicating with the groove.

2. A fountain-pen comprising a barrel portion, a pen-holding section supported by the barrel portion, and a feeder for the pen-holding
15 section having two lengthwise-extending grooves, the pen-holding section having two holes communicating with the grooves.

3. A fountain-pen comprising a barrel portion, a pen-holding section supported by the
20 barrel portion, and a feeder for the pen-hold-

ing section having two lengthwise-extending grooves leaving a tongue between them, the pen-holding section having two holes communicating with the grooves, the tongue adapted
25 to be moved to close the holes.

4. A fountain-pen comprising a barrel portion, a pen-holding section supported by the barrel portion, and a feeder for the pen-holding section having two lengthwise-extending
30 grooves leaving a tongue between them, the pen-holding section having two holes communicating with the grooves, the tongue adapted to be moved to close the holes, also to cut off connection between the grooves and bore of the barrel.

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Witnesses:

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