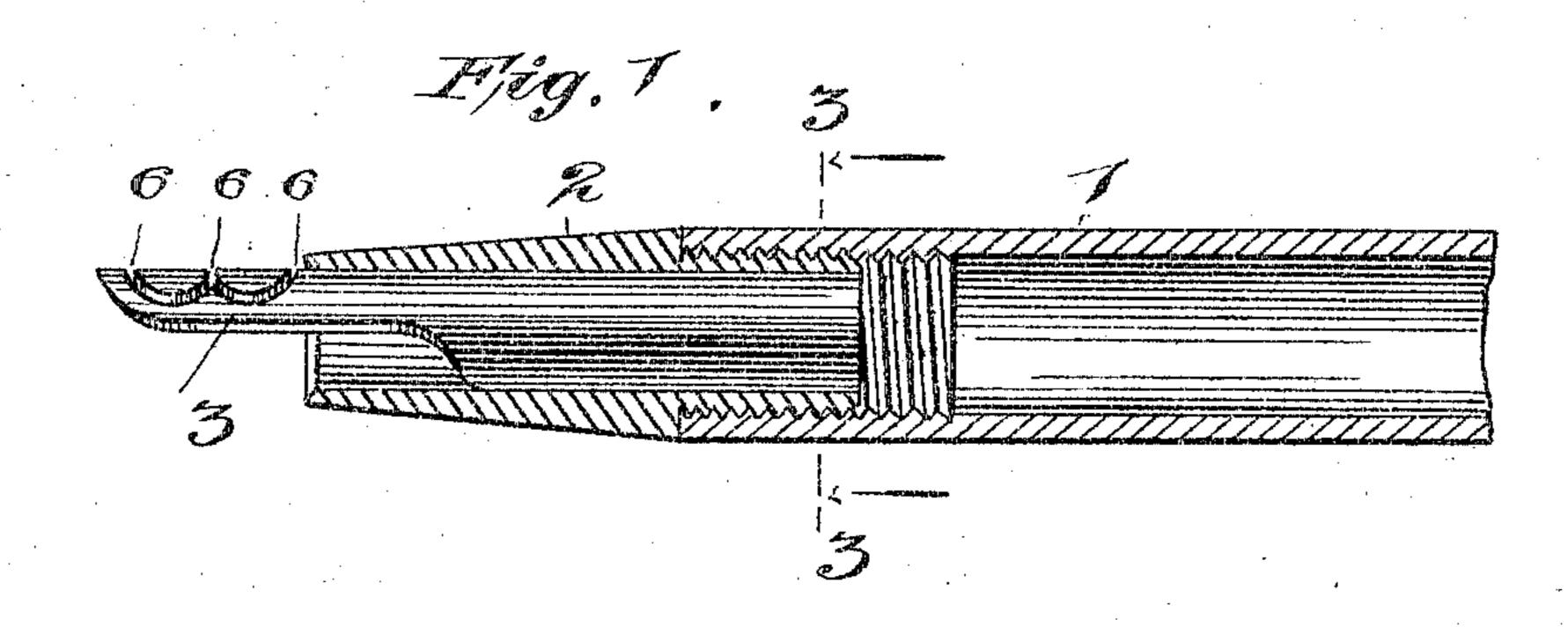
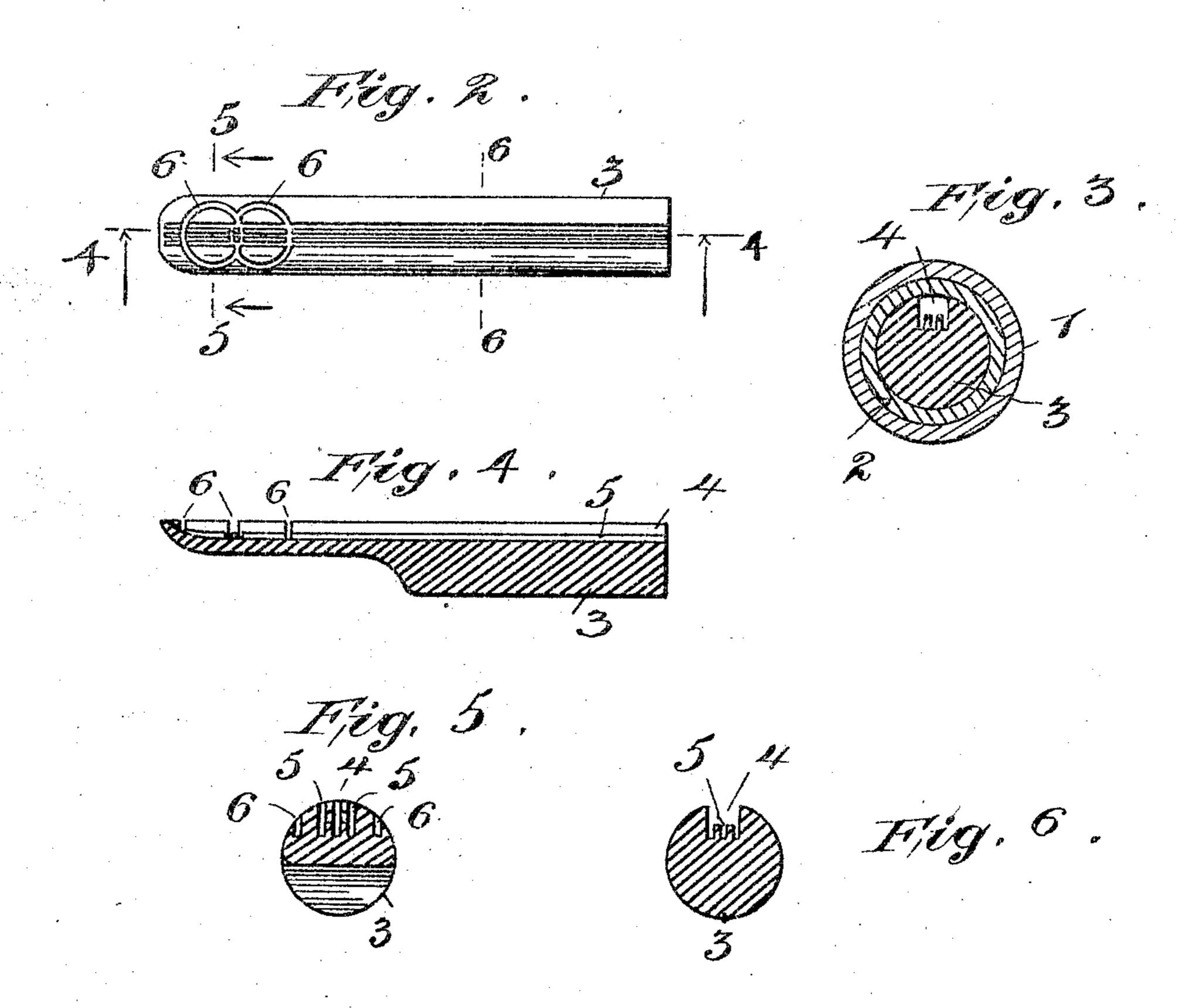
J. L. SCHNELL.

FEEDER BAR FOR FOUNTAIN PENS.

APPLICATION FILED JAN. 29, 1904.

NO MODEL





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UNITED STATES PATENT OFFICE.

JULIUS L. SCHNELL, OF JERSEY CITY HEIGHTS, NEW JERSEY.

FEEDER-BAR FOR FOUNTAIN-PENS.

SPECIFICATION forming part of Letters Patent No. 776,428, dated November 29, 1904.

Application filed January 29, 1904. Serial No. 191,145. (No model.)

To all whom it may concern:

Be it known that I, Julius L. Schnell, a citizen of the United States, and a resident of Jersey City Heights, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Feeder-Bars for Fountain-Pens, of which the following is a specification.

The object of my invention is to provide a device of this class which will enable penpoints to be fed with an uninterrupted flow of liquid without regard to the size of the pen employed and the amount of its use. This object is accomplished by means of my invention, one embodiment of which is hereinafter described, and further pointed out in the claims.

For a more particular description of my invention reference is to be had to the accompanying drawings, forming a part hereof, in which similar reference characters designate similar parts throughout the several views.

Figure 1 is a longitudinal section of a portion of the barrel of a fountain-pen, the neck, and feed-bar. Fig. 2 is a plan view of the feed-bar. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 1 looking in the direction of the arrows. Figs. 4, 5, and 6 are sectional views taken on the lines 4 4, 5 5, and 6 6, respectively, and looking in the direction of the arrows.

The barrel 1 and neck 2, which are shown in Figs. 1 and 3, may be of any suitable form and size and form no part of my invention, so that a further description of them is believed to be unnecessary.

The feed-bar 3, which is adapted to fit against the under or concave side of a pen, is provided with the usual duct or passage 4, which extends nearly throughout the length thereof and is provided with the channels 5 in its bottom. Both the size of this duct and the number of channels vary with the size of the pen-point used and the amount of ink it requires, as is well understood.

Near the outer end of the feeder-bar and so situated as to be under the pen-point when the fountain-pen is in use are curved grooves 5° 6, which are so shaped as to form a closed

curve—that is to say, these grooves are so bent that they leave and return to the passage 4 without reaching the outer edges of the feed-bar 3 and are preferably made deep enough to intersect all the channels 5. The 55 size, shape, and number of these passages 6 is immaterial provided that they are so proportioned and disposed that the pen will be properly fed, it being understood that both their portion and number will have to be va- 60 ried to suit the size of the pen-point employed, as the amount of ink which a penpoint requires depends upon both the size and the nature of the pen, a stub pen requiring more ink than others. I find that the 65 best results are obtained when the curved grooves 6 are made a very little wider than the width of the channels 5, the proportion being shown with substantial correctness in Fig. 5.

When a pen provided with my improved feeder is in use, the ink flows through the passage 4 and channels 5 in the usual way to the pen-point and the curved grooves 6. These curved grooves then act as an auxiliary reser- 75 voir and receive the surplus ink and hold it against the under side of the pen-point, and as it is slightly separated from the bar, as is customary in writing, when making heavy lines an additional supply of ink is drawn from these 80 reservoirs or passages 6 to the pen-point and it is supplied with the necessary ink. When the writer is through with the pen and restores it to his pocket in the usual way, the surplus, but not all the ink, is withdrawn from the 85 passages 6 and flows back to the channel 4 and from thence back into the barrel of the pen—a result which would be impossible if the channels or passages 6 did not open from and return to the passage 4. As all the ink is not 90 withdrawn from the auxiliary reservoirs or passages 6, the pen is ready for immediate use at any time thereafter.

The result of my improvement is that the pen is never made inoperative by having its 95 passages clogged by ink which cannot return to the barrel when the pen is out of use, and the pen is always ready for immediate use and can be handled without soiling the fingers.

While I have shown and described one em- 100

bodiment of my invention, it is obvious that many others may be made which employ all its essential characteristics and which are different in form from the embodiment heretofore described, but which come within the scope of my invention, so that I should not be limited to the precise form shown, but regard all structures as equivalents which come within the terms of the annexed claims.

Having described my invention, what I

claim is—

1. A feed-bar for fountain-pens and the like, provided with a passage with channels in its bottom, and laterally-extending slots inter-

15 secting said passage and channels.

2. A feed-bar for fountain-pens and the like, comprising a bar with a passage and channels in the bottom thereof, slots extending across said passage and intersecting said channels

and not extending to the edges of the bar, so 20 that when the bar is in use, the passage and slots will be covered by the under or concave side of a pen.

3. A feed-bar for fountain-pens or the like, comprising a passage with channels and 25 curved slots opening from said passage and

intersecting said channels.

4. A feed-bar for fountain-pens or the like, provided with auxiliary reservoirs and a passage connected therewith, said reservoirs each 3° consisting of grooves cut so as to form a closed curve.

Signed in the city, county, and State of New York this 28th day of January, 1904. JULIUS L. SCHNELL.

Witnesses:

CHARLES G. HENSLEY, SOPHIE SEKOSKY.