No. 819,719. PATENTED MAY 8, 1906.

F. C. BROWN.

FOUNTAIN PEN.

APPLICATION FILED JULY 7, 1905.

Fig. 1.

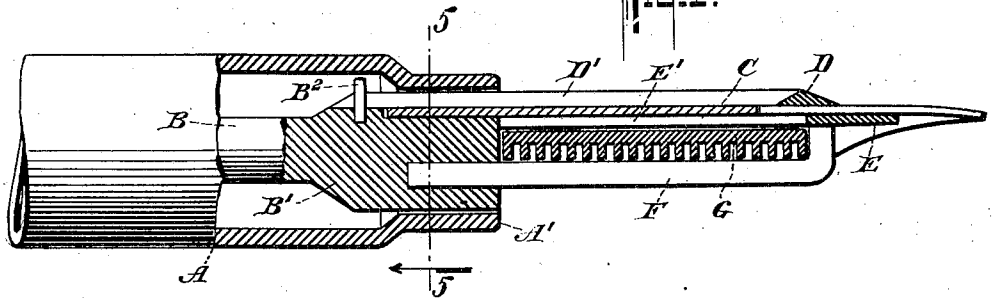


Fig. 2.

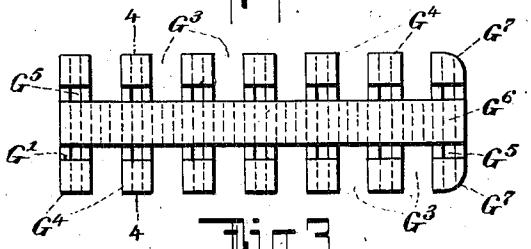


Fig. 3.

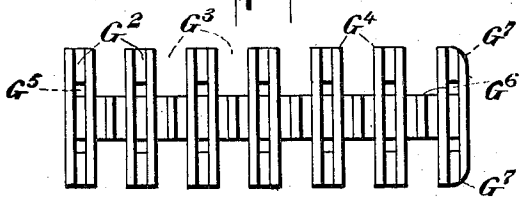


Fig. 4.

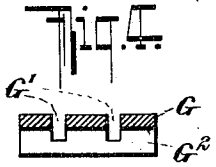
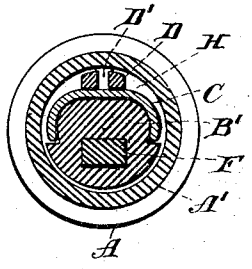


Fig. 5.



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FRANCIS C. BROWN, OF NEW YORK, N. Y.

FOUNTAIN-PEN.

No. 819,719. Specification of Letters Patent. Patented May 8, 1906.

Application filed July 7, 1905. Serial No. 268,711.

To all whom it may concern:

Be it known that I, FRANCIS C. BROWN, a citizen of the United States, and a resident of New Brighton, in the borough and county of Richmond, city and State of New York, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

My invention relates to fountain-pens, and has for its object to provide improved means for holding a body of ink adjacent to the nib or writing-point and also for preventing a bending of the nib-carrier.

The invention will be fully described hereinafter and the features of novelty pointed out in the appended claims.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a longitudinal section of a portion of a fountain-pen embodying my invention. Fig. 2 is a top view of the ink-retainer employed by me. Fig. 3 is a bottom view of such ink-retainer. Fig. 4 is a cross-section on line 4 4 of Fig. 2, and Fig. 5 is a cross-section on line 5 5 of Fig. 1.

A indicates the barrel of the pen provided with a contracted mouth A′, adapted to receive the forward end B′ of the nib-carrier or feed-bar, which in the particular construction illustrated has a rearwardly-extending stem B for sliding the nib C into and out of the barrel by any suitable mechanism; but my invention is not restricted to pens having retractible nib-carriers. The nib-carrier is provided with an upper feed-tongue D and a lower feed-tongue E, provided with longitudinal slots D′ and E′, respectively, and adapted to receive the nib C between them. The rear end of the nib fits into a suitable seat of the nib-carrier B′, as shown in Figs. 1 and 5. A brace F extends from the lower portion of the nib-carrier B′ into engagement with the forward portion of the lower tongue E, leaving a space between the main portions of said brace and lower tongue. In this space is located the ink-retainer G, which is provided on its upper face with two longitudinal grooves G′ and on its lower face with a series of transverse grooves G^2. The ink-retainer preferably is not of the same width throughout, but is provided with cut-out portions G^3 at regular intervals, so as to form a series of spaced arms G^4. The combined depth of the grooves G′ and G^2 is greater than the thickness of the ink-retainer, and thus the intersection of the longitudinal and transverse grooves produces two series of through-apertures G^5 at each side of the longitudinal central body G^6 of the ink-retainer. The forward portion of the ink-retainer may be rounded, as shown at G^7, to facilitate the insertion of said retainer in its place. The ink is fed to the nib through the feed-space H, which is shown upon an exaggerated scale in Fig. 5 and also through the slot D′ of the upper tongue D. The ink also passes from the lower part of the channel H to the lower surface of the nib, to the lower tongue E, and to the ink-retainer G. The grooves on the lower surface of said ink-retainer form means for holding a considerable quantity of ink, it being understood that the grooves are so small as to hold the ink by capillary attraction, the drawings representing the construction upon a very much enlarged scale. The apertures G^5 will allow the ink to pass from the lower surface of the retainer G to the upper surface thereof, so as to reach the nib C through the slot E′ of the lower tongue E.

While I have described the ink-retainer G as a separate piece, this is not essential to my invention, and, if desired, the ink-retainer may be made integral with some other part of the device—as, for instance, the lower feed-tongue E.

In order to brace the nib-carrier B′, especially when such carrier is retractable, as hereinbefore referred to, I provide at its rear portion a pin B^2, arranged to project close to the inner wall of the barrel A, so as to limit and practically prevent any bending of the nib-carrier.

I claim—

1. In a fountain-pen, the combination of the upper and lower feed-tongues adapted to receive the nib between them, the brace arranged to engage the forward portion of the lower feed-tongue, and the ink-retainer located between the lower feed-tongue and the brace and grooved transversely on the side facing said brace.

2. In a fountain-pen, the combination of the upper and lower feed-tongues adapted to receive the nib between them, the brace arranged to engage the forward portion of the lower feed-tongue, and the ink-retainer located between the lower feed-tongue and the brace and grooved lengthwise on the side facing the lower tongue and crosswise on the side facing said brace.

3. In a fountain-pen, the combination, with a feed-tongue one side of which is adapt-

ed to engage the nib, of an ink-retainer arranged on the other side of said tongue and separate therefrom, said ink-retainer being provided with transverse grooves on the side facing away from said tongue.

4. In a fountain-pen, the combination, with a feed-tongue one side of which is adapted to engage the nib, of an ink-retainer arranged on the other side of said tongue and grooved lengthwise on the side facing the feed-tongue and crosswise on the opposite side.

5. In a fountain-pen, the combination, with a feed-tongue one side of which is adapted to engage the nib, of an ink-retainer arranged on the other side of said tongue and grooved lengthwise on the side facing the feed-tongue and crosswise on the opposite side, the said grooves intersecting so as to form passages or openings leading through from one side of the ink-retainer to the other.

6. In a fountain-pen, the combination, with a feed-tongue one side of which is adapted to engage the nib, of an ink-retainer arranged on the other side of said tongue and separate therefrom, said ink-retainer being provided with transverse grooves on the side facing away from said tongue, and with passages or openings leading through from one side of the ink-retainer to the other.

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

FRANCIS C. BROWN.

Witnesses:
JOHN LOTKA,
JOHN A. KEHLENBECK.