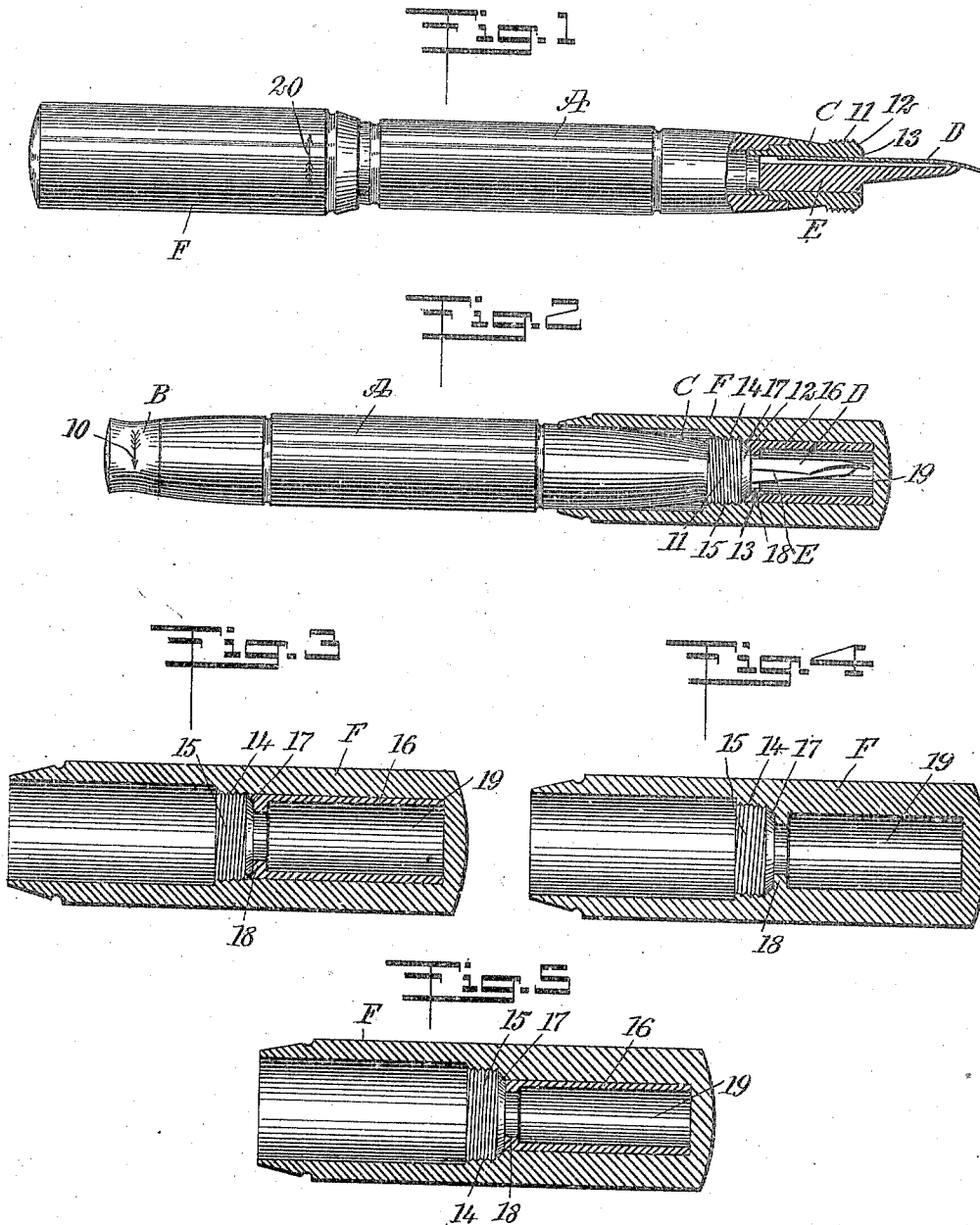


C. E. MARTLING & C. DUNN.
FOUNTAIN PEN.

APPLICATION FILED JUNE 4, 1908.

950,939.

Patented Mar. 1, 1910.



WITNESSES

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CLARENCE E. MARTLING AND CHARLES DUNN, OF NEW YORK, N. Y.

FOUNTAIN-PEN.

950,939.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed June 4, 1908. Serial No. 436,576.

To all whom it may concern:

Be it known that we, CLARENCE E. MARTLING and CHARLES DUNN, citizens of the United States, and both residents of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Fountain-Pen, of which the following is a full, clear, and exact description.

This invention relates to fountain pens, and is particularly useful with that class of pens having removable caps adapted to be screwed upon the bodies or barrels of the pens to protect the pen points, and forming ink-tight joints to prevent leakage.

The object of the invention is to provide a fountain pen having a screw cap which forms an ink-tight joint when in position to cover the pen point, so that the ink cannot escape to any part of the holder or pen section, and in which evaporation of the ink in the barrel is prevented.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a side elevation of an embodiment of our invention, showing parts in longitudinal section and having the cap positioned upon the body of the pen at the end remote from the pen point; Fig. 2 is a side elevation of one form of our invention, showing the cap covering the pen point and in longitudinal section; Fig. 3 is an enlarged longitudinal section of one form of the cap used in connection with our invention; Fig. 4 is a similar view showing a cap of modified form; and Fig. 5 is a similar view showing a cap of still further modified form.

Before proceeding to a more detailed explanation of our invention, it should be clearly understood that the same is applicable to different types of fountain pens. The cap when screwed into position upon the pen section to cover the pen point, engages at the end of the pen section to form a tight joint and thereby prevents the leakage of the ink on to any part of the body of the pen or the pen section. The engagement of the cap with the body of the pen is at

adjacent angularly disposed surfaces, that is, at an annular, transverse face and at a beveled edge. We have found that leakage cannot be prevented by providing contact between the cap and the pen section at an annular flange or at a beveled edge alone, and for this purpose we provide a combination of these features, which both in the cap and at the pen section are adjacent. Consequently, for the ink to escape it is necessary for the same to pass between the contacting surfaces and around an angle formed at the intersections of the surfaces. It is practically impossible for the ink to flow around an edge or angle of this kind, and leakage is thereby substantially obviated.

Referring more particularly to the drawings, in the form of fountain pen shown for example, the body or barrel A which contains the ink has at one end a rotatable head or button B which controls the filling mechanism for the pen. By turning the button in one direction ink can be drawn into the pen through the feed and the pen section. An arrow or other indicating mark upon the head B shows the direction in which the head must be turned to effect a predetermined operation, that is, either the drawing into the pen barrel of ink, or the expelling therefrom of ink. At the opposite end the barrel has a pen section C which preferably has successively constricted portions adapted to fit into the correspondingly formed end of the barrel and which is cemented or otherwise rigidly and permanently secured in place. A pen point D of any preferred or common form, together with a suitable feed E, is carried by the pen section. At the end of the pen section is formed a series of threads 11 adjacent to an annular beveled edge 12 which is concentric with and close to the annular end face 13 of the pen section. The end of the barrel and the pen section are preferably slightly tapered as is shown most clearly in Fig. 1.

We provide a cap F which in general may be of any preferred or common form, and at the open end is tapered slightly to fit upon the correspondingly tapered ends of the barrel, either at the pen section or at the end having the head B. In the form of the cap shown in Figs. 2 and 3 a constricted portion 14 intermediate the ends of the cap has formed thereon threads 15 adapted to engage the threads 11 of the pen section. A

sleeve 16 is permanently secured within the cap at the closed end thereof and at the side of the threads 15 remote from the open end of the cap. The sleeve 16 has at the end
5 adjacent to the threads and close to the same, an annular beveled edge 17. The sleeve further, adjacent to the beveled edge 17 has an inwardly extending annular flange 18 which forms a chamber or pocket 19
10 within the sleeve. The beveled edge 17 and the flange 18 at the outer side, are adapted to engage closely at the beveled edge 12 and the end face 13 of the pen section to form an ink-tight joint when the cap is in position
15 with the pen point D in the pocket 19. We wish to emphasize that the pairs of angularly disposed annular surfaces or edges upon the pen section and the cap, respectively, which in each pair are in juxtaposition,
20 serve to prevent leakage when the cap is screwed home upon the barrel. The threads themselves, furthermore, tend to prevent the leakage of the ink therethrough and consequently the ink cannot escape to
25 the barrel or pen section, regardless of the position in which the pen may be held, and even despite jarring of the pen. In the form of the cap shown in Fig. 4, the threads 15, the beveled edge 17, and the flange 18 are
30 formed integral with the cap, and we then dispense with the sleeve. In the form of the cap shown in Fig. 5, the threads 15 and the beveled edge 17 are formed integral with the cap while the sleeve 16 has a flange
35 18 at the outer end and adjacent to the beveled edge 17. An arrow 20 or other indicating mark is provided upon the cap to show in which direction it must be turned to

screw it into position upon the body or to release it, as is desired.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. In a fountain pen, the combination of a body having an annular end face, and contiguous thereto and concentric therewith a beveled edge, with a cap movable longitudinally of said body, and having a beveled edge and a flange adapted to engage respectively at said beveled edge and said end face of said body, the line between said end face and said beveled face contiguous thereto being in juxtaposition with said line between said other beveled edge and said flange when said cap is placed upon said body.

2. In a fountain pen, the combination of a body having a pen section provided with a pen point, a threaded portion, a beveled edge, and contiguous therewith an annular end face, with a cap having a threaded portion, a beveled edge and contiguous therewith an annular flange, said annular flange forming a pocket adapted to receive said pen point carried by said pen section, whereby the air in said pocket is compressed as said cap is screwed upon said pen section in one direction.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CLARENCE E. MARTLING.
CHARLES DUNN.

Witnesses:

JOHN K. BRACHVOGEL,
JOHN P. DAVIS.