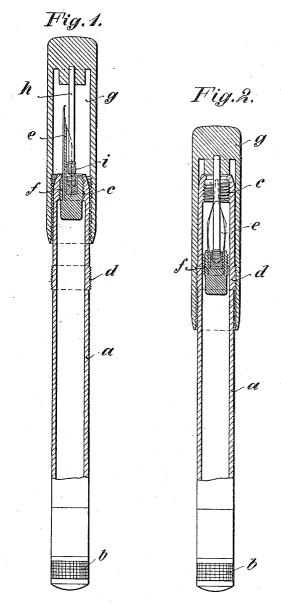
## K. RÄUCHLE & A. KOEHLER. FOUNTAIN PEN. APPLICATION FILED MAY 19, 1914,

1,208,653.

Patented Dec. 12, 1916.



Witnesses: 6. D. Swett. 13. 78. Dans

## UNITED STATES PATENT OFFICE.

KARL RÄUCHLE, OF HENNEF, AND ALBERT KOEHLER, OF KOLMAR, GERMANY, ASSIGNORS TO FIRM KLIO-WERK, FABRIK FÜR GEBRAUCHSGEGENSTÄNDE, G. M. B. H., OF HENNEF, GERMANY.

FOUNTAIN-PEN.

1,208,653.

Specification of Letters Patent.

Patented Dec. 12, 1916.

Application filed May 19, 1914. Serial No. 839,552.

To all whom it may concern:

Be it known that we, KARL RÄUCHLE, subject of the King of Prussia, German Emperor, and resident of Hennef-on-the-Sieg, in Rhine Province, Kingdom of Prussia, German Empire, and Albert Koehler, subject of the King of Prussia, German Emperor, and resident of Kolmar, Alsace, German Empire, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

The present invention relates to fountain

The present invention relates to fountain pens of the kind in which the nib is drawn into the hollow barrel of the pen when not in use. Hitherto, in this kind of pen the nib is usually pushed forward and retracted by means of a guiding member arranged in the interior of the barrel along its whole length and formed with a screw thread, being operated from the other end of the barrel by turning. This kind of nib-movement has the disadvantage on the one hand that it is comparatively complicated. On the other hand, the ink reservoir is considerably interfered with as regards its capacity by the guiding piece.

Now according to the present invention backward and forward movement of the nib, together with its carrier, is effected in an 30 entirely novel and special manner, that is to say, by providing the short body carrying the nib with an external screw thread and providing the forward end of the barrel with an internal thread. Further in the center 35 of the nib carrying part, toward the outside, a small tapped hole is provided into and out of which a rod mounted in the cap of the pen can be screwed. Thus, this rod engages the nib carrying member and takes it with it in 40 both directions, for it carries it into the ink barrel when the cap is screwed on and unscrews it from the barrel when the cap is unscrewed. At the same time the cap has an internal screw thread and the barrel is pro-45 vided with a short length of external threads at a certain distance from the forward end so that after the rod mounted in the cap has brought the nib carrying member into the inside of the barrel the cap can be still 50 further screwed down over the external screw thread, to such a distance until the bottom of the cap closes and seals the openings of the ink barrel.

The invention is more clearly described in

connection with the accompanying drawings, 55 in which—

Figure 1 shows the pen with the nib drawn out, and Fig. 2 shows it with the nib retracted.

The hollow ink barrel a is closed at the 60 rear end in the simplest manner by a screw top B. The barrel has the internal screw thread c at the forward end and has the external screw thread d upon the outer surface at a fixed distance from the end. The nib e 65 is mounted in a short nib-carrier f provided with an external screw thread which engages with the screw thread c. The pen cap g carries the fixed rod h at its bottom. This rod at its free end is provided with a screw 70 thread i and this engages in a corresponding tapped socket in the nib-carrier f. Finally, the cap has on its inner surface, near the middle, a screw thread which engages over the screw thread d upon the outer surface 75 of the pen. If, now the cap g is turned in the right-hand direction the screw end i of the rod h engages in the hole in the nibcarrier f so that it unscrews the bolt from the thread c and passes it into the inside of 80 the barrel. As soon as the length of thread c is passed the nib-carrier f moves freely in the interior of the hollow barrel. However, in this position the internal thread of the cap engages the external thread d of the bar- 85rel so that any free play of the cap and any sudden entry of the nib-carrier f into the hollow barrel is prevented. Now the cap is screwed slowly farther down until the bottom surface reaches the opening in the bar- 90 rel and seals it. In the same way, but reversely, the nib with its carrier f is withdrawn from the barrel, if the pen is to be got ready for writing. For this purpose the  $\operatorname{rod} h \operatorname{draws} \operatorname{out} \operatorname{the nib-carrier} f \operatorname{and} \operatorname{screws} 95$ it into the screw thread c. The rod h then leaves the nib-carrier f so that the cap can be taken off and can be placed on the other end of the pen.

Having now particularly described and 100 ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:

A fountain pen comprising a barrel portion having its open end formed slightly 105 frusto-conical and provided with an interior thread, said barrel having an exterior threaded portion intermediate its ends, a cap

member having an interior thread adapted to be screwed upon said exteriorly threaded portion of said barrel, a nib carrier adapted for engagement with the interiorly threaded portion of said barrel, a threaded socket formed concentrically of said nib carrier, and a rod supported centrally of said cap member and adapted for engagement with said threaded socket of said nib carrier.

In testimony whereof we have signed our 13 names to this specification in the presence of two subscribing witnesses.

KARL RÄUCHLE. ALBERT KOEHLER.

Witnesses:
Josef Eidhus,
Louis Vandorn.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents.

Washington, D. C."