Jan. 20, 1931. E. FRITSCH 1,789,522

FOUNTAIN PEN HOLDER

Filed May 9, 1929

Fig.6

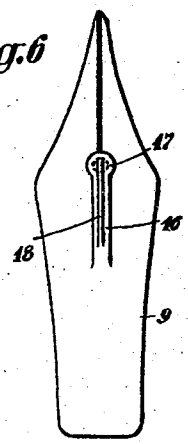


Fig.2

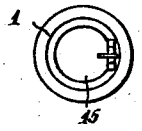


Fig.1

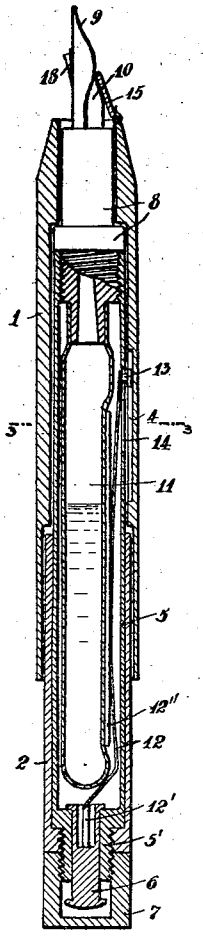


Fig.4

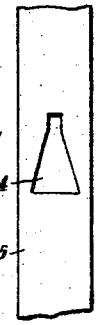


Fig.3

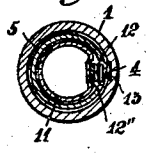


Fig.5

Fig.7

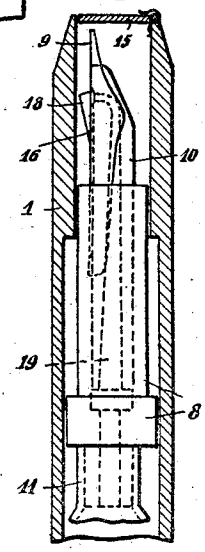
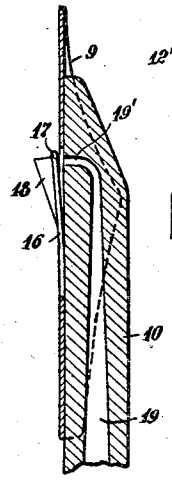


Fig.8



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Patented Jan. 20, 1931 1,789,522

UNITED STATES PATENT OFFICE

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FOUNTAIN PEN HOLDER

Application filed May 9, 1929, Serial No. 361,758, and in Austria May 18, 1928.

This invention has particularly for its object to provide an arrangement by which the moving of the pen into its working position is effected by merely pressing the holder against an abutment, which can be accomplished by one hand only. This is achieved by composing the tube of the holder of two tube parts telescopically slidable the one in the other, of which parts the one contains the pen with the ink guide, the reservoir and the filling device while the other carries a flap for covering the opening through which the pen emerges. The flap is especially of the kind which springs into its closing position and is opened by the emerging pen.

The accompanying drawing shows an embodiment of the invention by way of example.

Fig. 1 is a longitudinal sectional view of the device with the pen in writing position.

Fig. 2 is an end view of the holder.

Fig. 3 is a cross sectional view of the device on line 3—3 of Fig. 1.

Fig. 4 is a fragmentary view of an element of the inner tube part.

Fig. 5 is a side view of a flat spring serving for filling the reservoir.

Fig. 6 is an enlarged plan view of the pen.

Fig. 7 is an enlarged longitudinal sectional view of the upper part of the holder with the pen in the retracted position.

Fig. 8 is an enlarged longitudinal sectional view of the ink guide.

The fountain pen consists of two parts 1 and 2, telescopically slidable the one in the other. The tube part 1 carries the closing flap 15 and a groove 4 serving to limit the movement of the tube parts 1, 2. The tube part 2 contains the fountain pen proper with the filling device. The fountain pen proper consists of a tube 5 (of sheet metal) provided at its lower end with a projection of smaller diameter which is threaded and bored through for receiving a press button 6 and being closed with a cover 7. To the upper end of the tube 5 a tubular part 8 is secured into which the ink guide 10 is inserted. Between these two parts the pen 9 is wedged in. To the lower end of the part 8 the tubular ink reservoir 11 is secured.

It is convenient that the tube part 1 carrying the closing flap 15 is slid over the second tube part 2 so that the thicker part of the pen holder comes to lie in the hand of the writer.

The filling of the reservoir is effected in known manner by means of a flat spring 12 (Fig. 1 and 5) which is inserted with its end 12′ into a cavity provided in the press button 6 and extends upwards between ink reservoir 11 and tube 5. By pushing the button 6 in, the pen which is supported at its upper end compresses with the strip 12″ the reservoir 11 which on being released sucks the ink up through the ink guide 10. According to the invention this spring 12 serves at the same time as a stop which prevents the tube parts 1, 2 from being separated due to any essential twisting or sliding movement of the tube parts. For this purpose the flat spring 12 carries at its upper end a suitably flanged button 13 which penetrates through a slot 14 in the tube 5 (Fig. 1 and 4) into the guiding groove 4 of the tube part 1. The slot 14 is suitably made narrower at its upper end. The button 13, therefore, can be easily inserted in the wider part of the slot and is prevented from leaving the narrow part of the slot by its flange 13′. Thereby the limited guide 4, 13 of the two tube parts 1, 2 as well as the supporting of the spring 12, when it compresses the ink reservoir 11 is secured.

The flap 15 jointed to the tube part 1 suitably springs back into its closing position and is fitted with an automatic spring joint for instance, whereby the necessity of closing the flap by hand is avoided, after the pen has been pushed in.

The pen holder is further provided with a closing member 17 (Fig. 6, 7 and 8) for the orifice of the ink guide 10, which opens automatically when the pen is pushed out so that the ink can flow out and is brought back to its closing position when the pen is retracted in so that the ink is closed up.

In the example illustrated in the drawing, the pen 9 carries a spring tongue 16 which is formed in one piece with the pen or is secured to it. This tongue is formed at its free end as a closing member 17 and is provided at

its back with an inclined noselike part 18. The duct 19 of the ink guide 10 opens into the orifice 19′ opposite the closing member 17 of the pen. In the position for use of the pen holder (Fig. 1 and 8) the orifice 19′ is full so that the ink can flow out to the pen. On retracting the pen (position of rest Fig. 7), however, the nose 18 runs against the inner surface of the tube 1 whereby the orifice 19′ is closed by means of the closing member 17. Therefore, flowing out of the ink cannot take place even if the pen holder is kept lying or with the pen turned downwards.

The pen holder is brought into working position by simply grasping the tube part 1 and pressing the closing cover 7 against any suitable base, whereby simultaneously the tube part 1 is pushed downwards and the point of the pen opens the flap 15. By this process, at the same time, the point of the pen is cleaned from adherenet impurities. It is advantageous to make the underside of the flap 15 of softer material than the material of which the point of the pen happens to be made.

When the pen is used the spring flap 15 fits closely against the underside of the ink guide 10 adjacent to the pen (Fig. 1). Thus the flap lies out of the way where the fingers grip and does not impede writing.

What I claim is:

1. A fountain pen comprising a holder including two tubular parts telescopically slidable one within the other and of which the inner part protrudes from one end of the outer part, an ink guide mounted at the inner end of the inner part and adapted to be projected through the other end of the outer part, a pen point engaged in the outer end of said guide, an ink reservoir connected to the guide and arranged within the inner part, a closure flap for the outer end of the outer part, one of the parts having a longitudinal externally inaccessible groove, and an externally inaccessible button operably connected with the other part and movable therewith and cooperating with the groove for preventing relative twisting of the two tubular parts and for limiting relative sliding movement thereof in both directions and for enabling the pen to be simply brought into the position for use.

2. A fountain pen in accordance with claim 1, wherein a flat spring is provided and is inserted in the inner tubular part and serves for compressing the ink reservoir during the suction of ink, and the button being mounted on the end of the spring extended through the inner tubular part.

3. A fountain pen in accordance with claim 1, wherein the inner part is provided with a longitudinal groove having one end widened and wherein the button is flanged.

4. A fountain pen in accordance with claim 1, wherein the closure flap is resiliently mounted on the outer tubular part while its return to closing position is so arranged with respect to the length of stroke of the tubular parts that when the holder parts are in the position for use the closure flap bears against that part of the ink guide which engages with the pen point.

5. A fountain pen in accordance with claim 1, wherein the closure flap on the outer tube springing back into the closing position is covered on the underside with a coating whereby the pen point is cleaned when pushing the flap open.

6. A fountain pen in accordance with claim 12, wherein the pen point is provided with an aperture aligning with the outlet of the ink guide, a closure member on the pen point cooperating with the outer tubular part in such a manner that when extending the pen point the closing member is opened automatically and when retracting the pen point it is closed automatically.

7. A fountain pen in accordance with claim 1, wherein a resilient closing member is provided on the pen point for the orifice of the ink guide so that when the pen point is extended it springs into the open position and is formed with a projection so that when the pen is pushed in it is closed by abutting against the outer end of the outer tubular part.

8. A fountain pen in accordance with claim 1, wherein a closing member is provided for the orifice of the ink guide and consists of a spring tongue struck out from the pen point.

9. A fountain pen in accordance with claim 1, wherein a closing member is provided for the orifice of the ink guide and consists of a spring tongue struck out from the pen point, and a wedge-like projection on the outer surface of the member for coacting with the inner surface of the outer tubular part, substantially as and for the purposes set forth.

10. A fountain pen in accordance with claim 1, wherein a closing member is provided for the orifice of the ink guide next to the pen point, and also means for cooperating with the outer tubular part in such a manner that when extending the pen point the closing member is opened automatically and when retracting the pen point it is closed automatically.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

EGON FRITSCH.