E. G. PECK.

SELF FILLING FOUNTAIN PEN.

APPLICATION FILED MAR. 19, 1915.

1,180,424.

Patented Apr. 25, 1916.

Fig. 1

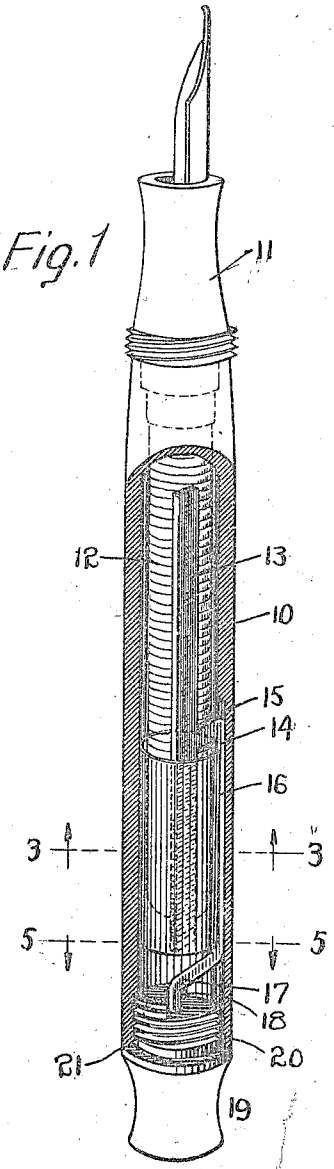


Fig. 3

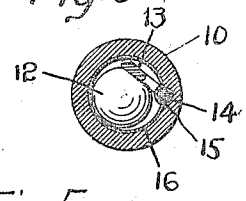


Fig. 4

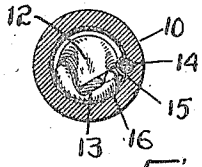


Fig. 5

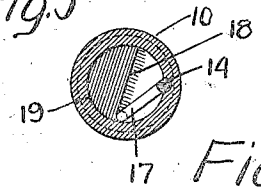


Fig. 7

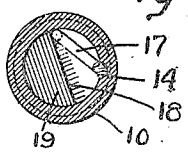


Fig. 6

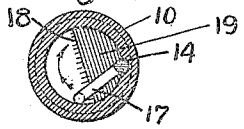
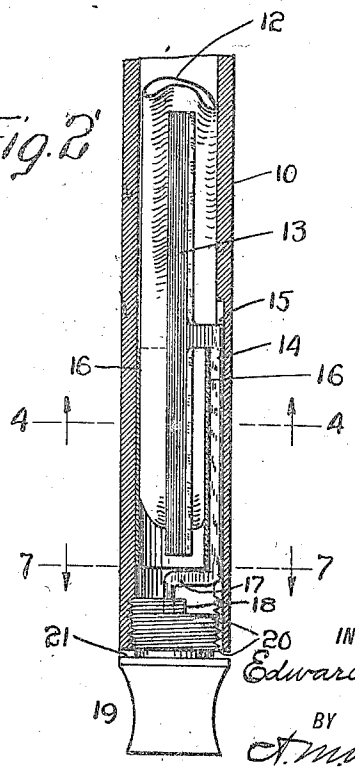


Fig. 2



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EDWARD G. PECK, OF SEYMOUR, CONNECTICUT.

SELF-FILLING FOUNTAIN-PEN.

1,180,424. Specification of Letters Patent. Patented Apr. 25, 1916.

Application filed March 19, 1915. Serial No. 15,455.

To all whom it may concern:

Be it known that I. EDWARD G. PECK, a citizen of the United States, residing at Seymour, county of New Haven, State of Connecticut, have invented an Improvement in Self-Filling Fountain-Pens, of which the following is a specification.

This invention has for its object to provide a self-filling fountain pen which shall be perfectly smooth exteriorly, that is, without projections of any kind, which shall comprise few parts, all simple and inexpensive to produce, shall provide a positive stop for the pressure bar in both directions of its movement, and which cannot leak should the ink-sac break, for the reason that the vent is closed except during the operation of filling.

With these and other objects in view, I have devised the novel fountain pen which I will now describe, referring to the accompanying drawing forming a part of this specification, and using reference characters to indicate the several parts.

Figure 1 is a perspective of my novel fountain pen, partly broken away and showing the parts in operative position; Fig. 2 a view partly in elevation and partly in section showing the ink-sac deflated; Fig. 3 a section on the line 3—3 in Fig. 1, looking in the direction of the arrows; Fig. 4 a section on the line 4—4 in Fig. 2, looking in the direction of the arrows; Fig. 5 a section on the line 5—5 in Fig. 1, looking in the direction of the arrows; Fig. 6 a similar view showing the operating projection in an intermediate position, and Fig. 7 is a section on the line 7—7 in Fig. 2, looking in the direction of the arrows.

10 denotes the barrel, 11 the pen carrier which has sliding engagement therewith and 12 the ink-sac which is secured to the pen carrier in the usual manner. As these parts may be of any ordinary or preferred construction they are not illustrated in detail.

13 denotes a pressure bar which is carried by a rock shaft 14 adapted to oscillate in a bearing 15 comprising half sockets formed respectively in the barrel and in a sleeve 16 which fits closely within the barrel. At the lower end of the rock shaft is an arm 17 which is adapted to be engaged by an operating projection 18 on a screw plug 19 having threaded engagement with the lower end of the barrel.

20 denotes the vent which is a continuation of the half-socket in the barrel forming a portion of the bearing for the rock shaft. The screw plug is provided with a shoulder 21 which in the operative position, as in Fig. 1, engages the end of the barrel and effectually closes the vent. It will be noted that the half-socket in the barrel extends beyond the rock shaft. This is to permit longitudinal movement of the rock shaft to disengage the arm from the projection on the screw plug in assembling. In use the screw plug is locked against removal by engagement of the projection thereon with the arm.

The operation is as follows: Figs. 1, 3 and 5 show the parts in the operative position. The ink-sac is supposed to be filled with ink and the pressure bar is lying against the side of the barrel, in which position it is locked by the engagement of projection 18 on the screw plug with the arm, the arm being forced against the wall of the barrel, as clearly shown in Fig. 5. To refill, the operator gives the screw plug something less than a rotation outward, as indicated in Fig. 4. The projection upon the screw plug will move past the position shown in Fig. 6 and will pick up the arm and carry it to the position shown in Fig. 7, in which position the arm is again locked between the projection and the wall of the barrel, but at the opposite extremity of its movement. The ink-sac will now be deflated by the pressure bar, as shown in Figs. 2 and 4. The operator now dips the pen in ink and turns the screw plug inward to the position shown in Fig. 1, which relieves the pressure of the bar on the ink-sac, as shown in Figs. 1 and 3, and the sac instantly fills with ink.

Having thus described my invention I claim:—

1. A fountain pen comprising a barrel having a vent, an ink-sac, means for compressing the ink-sac, and a screw plug for operating said compressing means, said plug also acting to close the vent when the parts are in their normal position and to open the vent when rotated to compress the sac.

2. A fountain pen comprising a barrel, an ink-sac, a pressure bar, a rock shaft by which said bar is carried and which is provided with an arm, a sleeve within the barrel, said sleeve and barrel being provided with half-sockets which form a bearing for the rock shaft and the half-socket in the barrel forming a vent, and a screw plug hav-

ing a projection to engage the arm, for the purpose set forth, and a shoulder to engage the end of the barrel to close the vent.

3. A fountain pen comprising a barrel having a vent at one end, an ink-sac, a pressure bar having an arm, a rock shaft by which said bar is carried, and a screw plug having a projection to engage the arm, for the purpose set forth, and a shoulder adapted to engage the end of the barrel to close the vent.

4. A fountain pen comprising a barrel, an ink-sac, a pressure bar having an arm, a rock shaft by which said bar is carried, and a screw plug having a projection to engage the arm and oscillate the bar and to force the arm into engagement with the barrel to lock the bar at either extremity of its movement and to lock the plug against removal.

5. A fountain pen comprising a barrel, an ink-sac, a pressure bar, a rock shaft by which said bar is carried and which is provided with an arm, a sleeve within the barrel, half-sockets in said sleeve and barrel which form a bearing for the rock shaft, said half-socket in the barrel extending beyond the rock shaft to permit longitudinal movement of said shaft in assembling, and a screw plug having a projection to engage the arm and oscillate the rock shaft.

6. A fountain pen comprising a barrel, an ink-sac, a pressure bar, a rock shaft by which said bar is carried, a sleeve within the barrel, said sleeve and barrel being provided with half-sockets which form a bearing for the rock shaft, and means for oscillating the rock shaft.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD G. PECK.

Witnesses:
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