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(Patent of Addition to No. 245,448: dated Jan. 7, 1925.)

351,734

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COMPLETE SPECIFICATION.

Improvements in or relating to Fountain Pens.

I, ISAIA LEVI, an Italian Subject, trading as FABBRICA ITALIANA DI PENNE A SERBATOIO "AURORA", of 9, via Basilica, Turin, Italy, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to improvements in the fountain pen described and claimed in Specification No. 245,448, in which the body carrying the metal nib and the ink reservoir is provided with a button projecting through a slot in the outer casing so that the body can be given, in addition to the closing position, also a writing position and a filling position.

According to the present invention the button comprises an arc-shaped part mounted in a transversely adjustable manner in an opening in a sleeve and capable of being locked between the body of the pen and the casing in order to lock the pen in the writing position.

The accompanying drawing shows by way of example a construction of a fountain pen according to the invention.

In the drawings,
Figure 1 shows the closed pen in axial section,

Figure 2 is an outside elevation at 90° relatively to Figure 1, of the pen in the working, but not the locked position.

Figure 3 shows on an enlarged scale the part of the pen comprising the operating button in the position of Figure 2, the outer casing being shown in axial section and the engagement member omitted in the right hand half of the Figure.

Figure 4 is a cross-section on line X—X of Figure 3, and

Figure 5 shows separately the member engaging with the inner body of the pen.

In the said Figures, 1 is the inner body of the pen, 2 the metal pen or nib, 3 the deformable reservoir, 4 a rod arranged at the side of the said reservoir and capable of being moved in any suitable manner for producing the compression of the reservoir. The rod 4 can be moved for instance by means of a blade 5 on which a thrust can be exerted by means of a button 6.

The body 1 is mounted in the interior
[Price 1/-]

of a casing 7 closed at one end by a cap 8 and at the other end by a hinged cover 9. The casing 7 is provided with a longitudinal slot 10 through which passes the stem of a button 11 by which the body 1 is moved.

In order to couple together the button 11 and the body 1, the button 11 is mounted on a part 20 engaging, with a transverse play, in an opening of a cylindrical sleeve 21 surrounding the body 1 and capable of moving in the axial direction in the casing 7. On the inner face of the part 20 there is provided further a projection 20¹.

The sleeve 21 in its turn comprises an inner tooth 22 (see Figures 3 and 5) engaging with a groove 23 provided in the surface of the body 1 and extending from the rear end of the latter to the point occupied by the sleeve 21.

The sleeve 21 comprises moreover an outer tooth 24 intended to engage with the slot 10 of the casing 7, the inner end of which comprises two extensions 25 and 26 extending in opposite directions (Figure 2).

The groove 23 of the body 1 is slightly to one side of the slot 10 as indicated in Figure 3 by the relative position of the teeth 22 and 24, and terminates at its inner end in a lateral recess 27, the bottom of which rises from the groove 23.

In these conditions, the button 11 can be moved in the slot 10 from one of its ends to the other (Figures 1 and 2), and during the said movement the button drives the sleeve 21 to which is rigidly secured in the axial direction the part 20 which can move only transversely relatively to the sleeve 21. During the said movements, the position of the button 11 relatively to the sleeve 21 is fixed owing to the stem of the button 11 as well as the tooth 24 of the sleeve being both situated in the slot 10. Consequently the inner projection 20¹ of the part 20 carrying the button 11, is engaged in the axial direction with the front edge of the recess 27 of the groove 23 so that the button 11 with the sleeve 21 is coupled to the body 1 which is forced to follow the movements of the button 11.

When the button 11 reaches the inner end of the slot 10 (Figure 2), it can be deflected so as to bring its stem into one or the other of the extensions 25 and 26 of the slot 10.

5 By moving the button 11 to the right so as to bring the stem into the extension 25, the tooth 20¹ which is situated in the extension 27 of the groove 23 of the body 1, is forced up the slope which constitutes the bottom of the said recess 27, and still remains in engagement with the front wall of the said recess.

15 The button 11 with the base part 20 and with the inner tooth 20¹ is then jammed between the body 1 and the casing 7, so that the body 1 with the metal nib 2 is securely locked in the casing 7.

20 The pen is then in the writing position, and any pressure exerted on the metal nib, cannot force the body 1 back into the casing.

25 If on the contrary the button 11 be moved to the left so as to bring its stem into the extension 26 of the slot 10, the inner projection 20¹ of the part 20 will be in line with the inner tooth 22 of the sleeve 21, that is to say it will be in the groove 23. By exerting then a pull on the body 1 at the end where the nib is mounted, the said body can be withdrawn completely outside the casing 7, since the axial movement of the body 1 relatively to the casing 7 is no longer prevented by the projection 20¹.

35 The body 1 of the pen can thus be pulled out of the casing 7 or separated completely from the same for the purpose of filling, whilst the sleeve 21 remains in the casing 7 because the stem of the button 11 abuts against the wall of the extension 26 of the slot 10 in the casing 7¹¹.

40 After filling and cleaning, the body 1 is re-inserted into the casing 7. During this insertion, the button 11 should occupy a position such that the inner projection 20¹ of the part 20 is in line with the tooth 22 of the sleeve 21, so that both are located in the groove 23. After the body 1 has been inserted, the button 11 is moved into the position shown in Figures 2 and 3, when the projection 20¹ will again engage the sleeve 21 with the body 1.

55 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A fountain pen as described and claimed in Specification No. 245,448, in which the body carrying the metal nib and the ink reservoir, is provided with a button projecting through a slot of the casing, characterised by the button comprising an arc-shaped part mounted in a transversely adjustable manner in an opening in a sleeve and capable of being locked between the body of the pen and the casing in order to lock the pen in the writing position.

2. A pen according to Claim 1, characterised by the sleeve on which the button is mounted, comprising an inner tooth engaging with a longitudinal groove in the body of the pen, and an outer tooth arranged at the side relatively to the first tooth and engaging with the slot of the casing, and by the arc-shaped piece which is integral with the button comprising an inner tooth movable in a groove in the body and in a lateral recess of the said groove.

3. A pen according to Claims 1 and 2, characterised by the forward end of the slot of the casing, forming two lateral branches for the purpose of permitting lateral movements of the button.

4. A pen according to Claims 1—3, characterised by the bottom of the lateral recess of the groove provided in the body of the pen, being inclined for the purpose of producing the locking of the inner tooth of the arc-shaped part when, by a lateral movement of the button, the said part is moved in the direction in which the bottom rises.

5. A pen according to Claims 1—4, characterised by the groove of the body of the pen on the one hand terminating at the point of the tooth of the sleeve, and on the other hand extending up to the end of the body of the pen, so that the said body can be completely pulled out of the outer casing.

6. The fountain pen substantially as described or substantially as shown in Figures 1 and 2 of the accompanying drawings.

Dated this 21st day of June, 1930.

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[This Drawing is a reproduction of the Original on a reduced scale.]

