

No. 852,368.

PATENTED APR. 30, 1907.

P. E. WIRT.
FOUNTAIN PEN.
APPLICATION FILED JUNE 25, 1906.

Fig. 1.

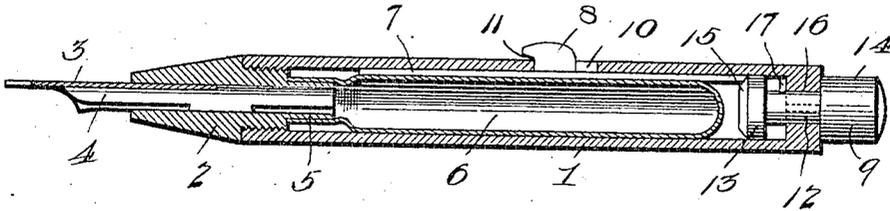


Fig. 2.

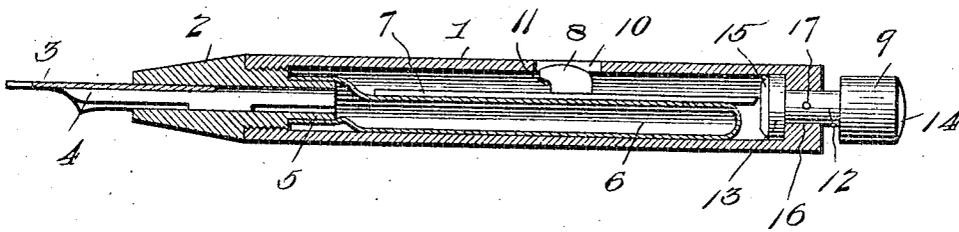
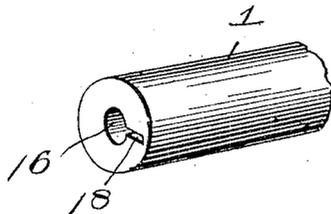


Fig. 3.



Witnesses

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FOUNTAIN-PEN.

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To all whom it may concern:

Be it known that I, PAUL E. WIRT, a citizen of the United States, residing at Bloomsburg, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

This invention relates to fountain-pens of the self-filling type, and has special reference to that class of self-filling pens embodying a collapsible soft rubber sack or bag constituting the reservoir for the ink.

To this end the invention primarily has in view a simple, neat, and practical construction of locking device for the press-bar of a self-filling fountain-pen of the type referred to.

A special object of the invention in this connection is to provide a press-bar locking device made up of a minimum number of parts and occupying a small amount of space, while at the same time having means for effectually and positively fastening or locking the press-bar in an inoperative position so as to prevent the same from being accidentally moved during the handling or carrying of the pen.

In that class of self-filling pens embodying an elastic reservoir sack and a press-bar for compressing the latter for filling purposes, unless the press-bar is securely locked after filling the sack with ink, accidental pressure upon any extension of the bar upon the outside of the holder will force ink out with the result of soiling the case and fingers. The possibility of this accident occurring is positively prevented through the medium of the present invention, and, in addition to this and the other advantages indicated, the improved locking device is so arranged as to be locked in an entirely out of the way position, and presents no obstruction whatever on the exterior of the holder or case.

With these and other objects which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts, which will be hereinafter more fully described, illustrated, and claimed.

The essential feature of the invention, involved in the construction and arrangement of the locking device, and the locking action thereof, is necessarily susceptible to structural modification from a manufacturing standpoint, without departing from the scope of the invention, but a preferred embodiment

thereof is shown in the accompanying drawings, in which:

Figure 1 is a longitudinal sectional view of a fountain pen embodying the invention and showing the press-bar locking device engaged with the press-bar to hold the same locked against accidental movement. Fig. 2 is a similar view with the locking device thrown to its inoperative position so as to release the press-bar from manipulation. Fig. 3 is a detail perspective view of the holder or case.

Like references designate corresponding parts in the several figures of the drawings.

The improved locking device claimed here-in may be adapted to any self-filling fountain pen embodying an elastic reservoir sack and a press-bar for compressing the same. Hence, for illustrative purposes, there is shown in the drawings an ordinary form of fountain pen including in its organization a reservoir holder 1 carrying the usual pen bearing section or nozzle 2 fitted with the pen point 3 and the co-operating feeder 4. Also, in the construction shown, the pen bearing section or nozzle 2 is provided at its inner end with a neck or equivalent element 5 over which is fitted the open end of the interior elastic sack 6 usually occupying, when filled, practically the entire interior area of the holder 1 and designed to receive and hold the supply of ink for the pen point.

To provide for filling the sack 6 there is employed a bodily movable press-bar or plate 7 arranged longitudinally within the holder and bearing against one side of the sack 6 on the exterior thereof. The said press-bar 7 operates in the usual way to provide for collapsing the sack to substantially the condition shown in Fig. 2 for expelling the air and permitting the filling of the reservoir by atmospheric pressure in the manner common to this type of pens. After the reservoir sack is thus filled with its supply of ink, the present invention provides for securely locking the press-bar in a normally retracted inoperative position. This result is accomplished by the movement of the improved locking device which may be properly said to consist of the press button 8 on the press-bar and a reciprocal or sliding fastening plug 9 mounted in the upper end of the holder or case 1. The button 8 is rigidly secured to or carried by the press-bar and is designed to move into and out of a keeper opening or slot 10 provided in one side of the holder or case, and at one edge

said press button 8 is undercut, as at 11, to form a catch hook adapted to engage and interlock with the holder or case at one end of the opening or slot 10 as plainly shown in Fig. 1 of the drawings.

The reciprocal or sliding fastening plug 9 essentially consists of a stem portion 12, and the inner and outer heads 13 and 14, respectively. The inner of said heads is beveled, as at 15, for engagement with one end portion of the press-bar 7, while the other head 14 is locked on the outside of the holder or case and constitutes an operating head. The stem portion 12 slides in a guide opening 16 formed in the upper end of the holder or case, and said stem also carries a retaining stud or pin 17 adapted to slide through a guiding groove 18 formed in the wall of the guide opening 16.

From the construction described it is obvious that when the sack is filled and the button 8 projecting through the opening or slot 10, it is simply necessary to slide the fastening plug 9 inward to cause the engaging head 13 to bear against the press-bar and move the same longitudinally with the result of locking the hook 11 over one end of the opening or slot 10. When the fastening plug is thus pressed inward it is simply necessary to partially turn the same to carry the stud 17 behind the outer end of the holder out of alinement with the groove 18, thus retaining the parts in their locked position. To release the press-bar so that the press button 8 may be brought to a position for being moved inward, it is simply necessary to bring the stud or pin 17 into alinement with the groove 18, and draw the plug outward as shown in Fig. 2.

I claim:

1. In a fountain pen, a holder having a side opening, a collapsible reservoir, a longitudinally shiftable compressor for the reservoir provided with a button projecting through said side opening and having an in-

terlocking engagement with the holder, a fastening device operating inside of one end of the holder and movable against the compressor to shift the latter longitudinally in one direction, and locking means for said fastening device.

2. In a fountain pen, a holder having a side opening, a collapsible reservoir, a press bar having a button projecting through the side opening and provided with a catch hook for engagement with the holder, and a reciprocal fastening plug mounted in one end of the holder and engaging one end of the press bar for moving the same longitudinally, said plug having locking means.

3. In a fountain pen, a holder having a side opening, a press-bar having a button projecting through said opening and provided with a catch hook for engagement with the holder at one end of the side opening, and a reciprocal fastening plug slidably mounted in the rear end of the holder and provided with an inner engaging head for engagement with one end of the press-bar, and with an outer operating head, said plug being also provided with a retaining stud or pin guided through the rear end of the holder and adapted to be turned to a locking position at the inner side of said end of the holder.

4. In a fountain pen, a holder having a side opening, a collapsible reservoir, a press-bar having a button projecting through said side opening and having a catch hook for engagement with the holder, and a fastening plug slidably mounted in one end of the holder and having an inner engaging head for the press-bar and also provided with locking means.

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

PAUL E. WIRT.

Witnesses:

R. L. ORANGE,
KARL F. WIRT.