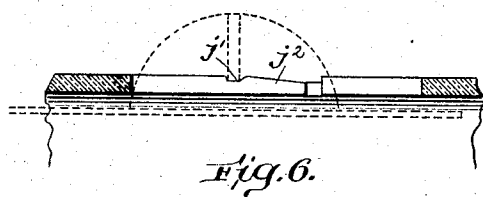
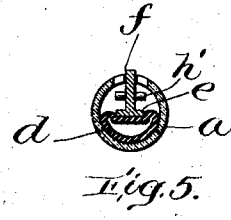
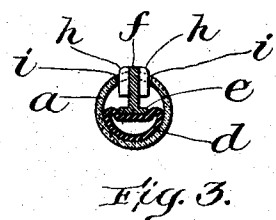
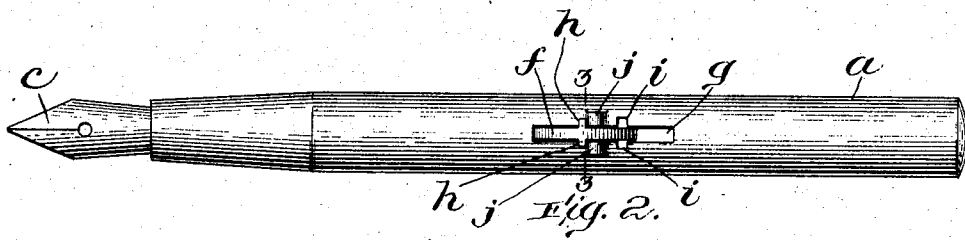
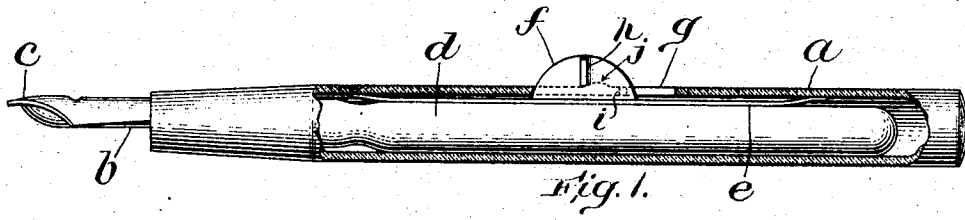


No. 772,467.

PATENTED OCT. 18, 1904.

R. G. LOCKWOOD.
SELF FILLING FOUNTAIN PEN.
APPLICATION FILED NOV. 16, 1903.

NO MODEL.



Witnesses:

Arthur F. Randall.
Joseph T. Brennan.

Inventor:

Rhodes C. Lockwood,
by Roberts & Mitchell
Attorneys.

UNITED STATES PATENT OFFICE.

RHODES G. LOCKWOOD, OF BOSTON, MASSACHUSETTS.

SELF-FILLING FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 772,467, dated October 18, 1904.

Application filed November 16, 1903. Serial No. 181,320. (No model.)

To all whom it may concern:

Be it known that I, RHODES G. LOCKWOOD, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Self-Filling Fountain-Pens, of which the following is a description, reference being had to the accompanying drawings, in which—

Figure 1 is a side view, partly in section, of a fountain-pen embodying my improvements. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a cross-section on line 3-3 of Fig. 2. Figs. 4 and 5 are views like Fig. 3, but of a slightly-modified form, Fig. 4 showing the normal position of the parts and Fig. 5 showing the position of the parts when the bulb is compressed. Fig. 6 shows a modified form of barrel and is hereinafter described.

This invention relates to improvements in self-filling fountain-penholders wherein an elastic ink-reservoir within the barrel of the fountain-pen is employed in connection with a presser-bar within the fountain-pen barrel having a finger-piece projecting through a slot in the barrel, whereby the presser-bar may be actuated to compress the elastic ink-reservoir at will.

In the drawings, *a* is the barrel of a fountain-pen, *b* the feed-piece, which is inserted in the open end of the fountain-pen barrel and secured in any well-known manner, and *c* the writing-pen, which is in operation held between the feed-piece and the inside of the fountain-pen nozzle, as shown in Fig. 1. The elastic ink-reservoir *d* is secured to the inner end of the feed-piece, with which it forms a fluid-tight joint.

e is a presser-bar arranged within the barrel of the fountain-pen, to one side thereof, and having a finger-piece *f* projecting through a slot *g* in one side of the barrel.

The pen so far described is substantially similar to the pen shown in patent to Conklin, No. 685,258, dated October 29, 1901, and patent to Oliphant, No. 448,360, dated March 17, 1891, both of which show a fountain-pen barrel with a presser-bar arranged at one side thereof, which may be actuated to compress a compressible bulb within the barrel and so to diminish its capacity. The patent to Conk-

lin, above mentioned, is provided with a projecting finger-piece and means to lock the finger-piece against accidental actuation. The object of my invention is also to provide means for locking the finger-piece of the presser-bar against accidental actuation. To this end I provide a slot in the walls of the fountain-pen barrel somewhat longer than the finger-piece *f*, so that the finger-piece and the presser-bar to which it is secured may be moved lengthwise of the barrel of the pen. I also provide vertical wings *h* upon the finger-piece. The finger-piece *f* is normally positioned at one end of the slot *g*, the wings *h* resting upon the surface of the fountain-pen barrel behind two small projections *j* upon the outer surface of the barrel. When it is desired to compress the bulb within the fountain-pen barrel, the finger-piece *f* is forced toward the other end of the slot *g*, the pins *h* riding over the projections *j* until the pins *h* register with the cross-slot *i*, when the finger-piece may be depressed to force the presser-bar *e* down to compress the bulb *d*, as shown in Fig. 6. The effect of this is to greatly decrease the capacity of the bulb, so that when the lower end of the fountain-pen is immersed in ink and the pressure upon the finger-piece released the bulb by its inherent elasticity will expand and the ink will be forced into the bulb by atmospheric pressure in the well-known manner. The bulb having been filled with ink in this manner, the finger-piece is pushed back along the slot, the wings *h* riding over the projections *j*, and the finger-piece is thus locked against longitudinal movement unless considerable force is employed. The wings *h* upon the side of the finger-piece serve to prevent the depression of the finger-piece when the finger-piece is not arranged to cause wings *h* to register with slot *i*. They also serve to engage the walls of slot *i* when the finger-piece is depressed to prevent the longitudinal movement of the finger-piece. When mere pins are employed instead of wings, it is not uncommon for the pins to pass through slot *i* and engage the inner surface of the barrel, thus preventing the elastic ink-reservoir from expanding.

I have shown in Figs. 1, 2, and 3 the finger-

piece as fitted with wings *h*, which is the preferred construction. It will be obvious, however, that a cylindrical pin *h'*, as shown in Figs. 4 and 5, is functionally an equivalent of the wings, except when the finger-piece is depressed.

Bar *e*, besides its function as a presser to operate on bulb *d*, also serves as a spring to hold the wings or pins of finger-piece *f* against the outer side of the pen and to yieldingly resist their passage over the projections *j*; but the spring action of said bar is not sufficient to compress bulb *d*, which is effected by thumb-pressure on finger-piece *f*.

In Fig. 6 I have shown an alternate construction of barrel wherein instead of a projection *j*, extending beyond the surface of the barrel, I provide a socket *j'*, within which wings *h* are held by the spring action of presser-bar *e*. Also the tracks *j''* on the barrel for the wings *h*—that is, the parts over which said wings travel to reach slots *i*—are inclined toward said slots, so that the wings are guided thereby directly into said slots.

I claim—

1. In a self-filling fountain-pen, the combination of a barrel having slots *g* and *i*; an elastic ink-reservoir within the barrel; a presser-bar within the barrel, having a finger-piece projecting through the slot *g*; a projection upon the finger-piece, adapted, when the finger-piece is moved longitudinally of the slot *g*, to register with the slot *i*, to permit the finger-piece to be depressed.

2. In a self-filling fountain-pen, the combination of a slotted barrel; an elastic ink-reservoir within the barrel; a presser-bar within the barrel having a finger-piece projecting through the slot in the barrel; a projection upon the finger-piece; a projection upon the surface of the barrel cooperating with the projection on the finger-piece to lock the finger-piece in inoperative position.

3. In a self-filling fountain-pen, the combination of a barrel having slots *g* and *i*; an elastic ink-reservoir within the barrel, a presser-bar within the barrel; a finger-piece fast to the presser-bar and having a projecting wing *h* adapted to register with slot *i* to permit the finger-piece to be depressed and to engage the walls of slot *i* when the finger-piece is depressed to prevent longitudinal movement of the presser-bar.

4. In a self-filling fountain-pen, the combination of a slotted barrel; an elastic ink-reservoir within the barrel; a spring presser-bar within the barrel having a finger-piece projecting through the slot in the barrel and a projection on the finger-piece held in engagement with the surface of the barrel by said spring presser-bar.

Signed by me at Boston, Massachusetts, this 13th day of November, 1903.

RHODES G. LOCKWOOD.

Witnesses:

OLIVER R. MITCHELL,
JOSEPH T. BRENNAN.