

1,078,513.

Patented Nov. 11, 1913.

2 SHEETS—SHEET 1.

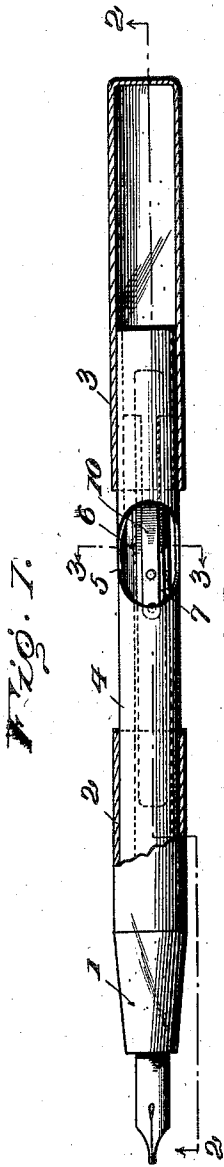


Fig. 1.

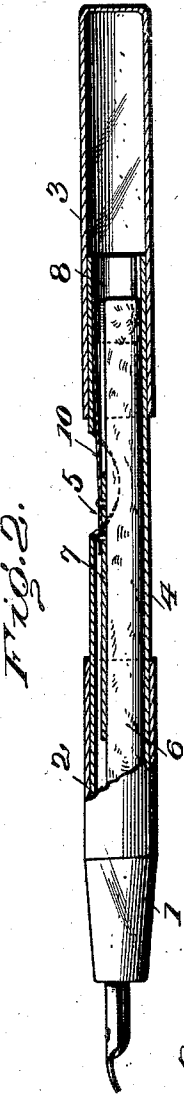


Fig. 2.



Fig. 3.



Fig. 4.

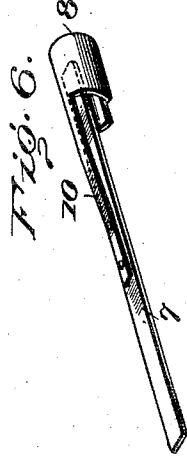


Fig. 6.

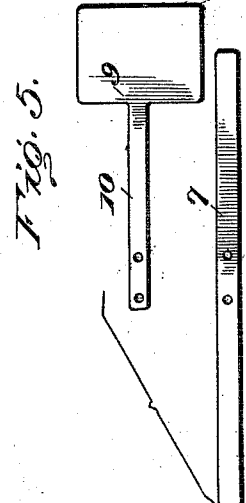


Fig. 5.

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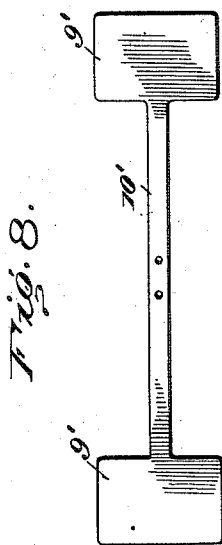
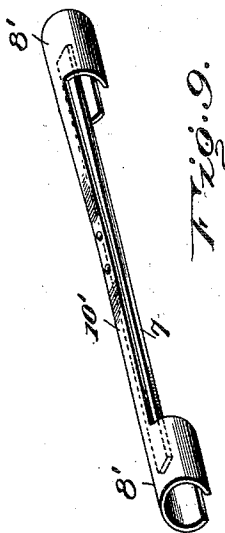
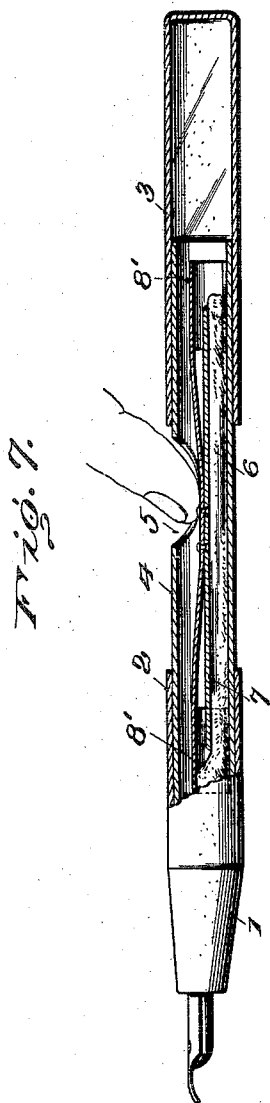
Attorneys

G. S. PARKER.
 FOUNTAIN PEN.
 APPLICATION FILED JULY 8, 1911.

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

GEORGE S. PARKER, OF JANESVILLE, WISCONSIN.

FOUNTAIN-PEN.

1,078,513.

Specification of Letters Patent.

Patented Nov. 11, 1913.

Application filed July 8, 1911. Serial No. 637,555.

To all whom it may concern:

Be it known that I, GEORGE S. PARKER, a citizen of the United States, and a resident of Janesville, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

My invention relates to fountain pens and more particularly to pens of the class known as "self-fillers" in which it has been customary to employ a flexible ink reservoir extending lengthwise of the pen barrel together with a bar extending along the reservoir for the purpose of collapsing the same in filling, and means for returning the bar to its normal position after it has been relieved of pressure. Such devices have, however, been cumbersome or unsatisfactory for various reasons.

The object of my invention is to provide an improved and much simplified construction which is separate from the rest of the pen and readily removable and replaceable. To this end I make the presser bar and its support a distinct structure removable together, the support being retained frictionally and removably in position. The simplest and best support for this purpose is a sheet metal collar which by its tendency to expand retains itself in place. I prefer to so construct this support that it will move down as a whole when pressure is applied to the presser bar and will assist the return of the same by springing back into place when pressure is removed. I prefer to use a plurality of collars having a common tongue.

My invention therefore consists in the subject matter described in the specification and more particularly pointed out in the appended claims.

Referring to the accompanying drawings: Figure 1 is a top plan view of the pen showing parts of the outer casing in section, one part thereof being slipped to one side as is done when the pen is to be filled. Fig. 2 is a side elevation and section similar to Fig. 1. Fig. 3 is a cross section on line 3-3, Fig. 1. Fig. 4 is a perspective view of the inner tubular casing. Fig. 5 is an enlarged plan view of the blank from which the presser bar support is formed and of the presser bar. Fig. 6 is a perspective view of the presser bar and its support. Fig. 7 is a side elevation and section similar to Fig. 2 but showing the preferred form of support the parts being in the position they assume

when the ink reservoir is partially collapsed. Fig. 8 is an enlarged plan view of the blank from which the preferred form of support is made. Fig. 9 is a perspective view of the presser bar together with the preferred form of support.

In the pen, as thus illustrated, 1 is the usual nozzle; 2 is a part of the outer tubular casing or barrel; and 3 another part which may be moved into or out of contact therewith. Within this outer casing, I have shown a tubular inner casing 4 provided with a cut out or slot 5 and inclosing the flexible ink reservoir 6 which runs lengthwise of the pen.

7 is the usual presser bar accessible through the slot 5 when the parts of the outer casing are separated so that the pen may be filled. In accordance with my invention the bar is part of a distinct structure which is removable as a whole from the rest of the pen. The part of this structure constituting the support for the bar I have illustrated as a spring collar 8 formed from a sheet metal blank 9 (see Fig. 5) having a tongue 10 extending lengthwise of the pen and to which the presser bar is secured. The material for this collar is preferably sheet steel to give it the requisite strength and elasticity. The part of the blank designed to form the collar is bent into tubular form to fit the bore of the casing within which it is to be placed, the collar by virtue of its tendency to expand retaining itself and the presser bar in position frictionally and removably in the casing. I prefer to employ an inner casing and to locate the spring collar in the open end thereof.

I find it advantageous to make the support for the presser bar in such a manner that the entire support as well as the longitudinal tongue will yield when pressure is applied to depress the presser bar and will, by its spring action, assist in returning the bar to its normal position. This I find is accomplished by separating the ends of the collar so that the entire collar may move downward and spring back again when pressure is removed.

The above description has dealt more particularly with the construction illustrated in Figs. 1-6. It remains to describe the preferred form of support for the presser bar as illustrated in the remaining figures. I have found that by providing a plurality of spring supports with a common tongue, to which the presser bar is secured, the motion

of the said part is made more direct and certain. I prefer to employ two such spring supports, one at each end of the connecting tongue, and to make each of them a
 5 spring collar like the collar 8 described above. I prefer to construct the collars and the common tongue so that each of the collars may move downward with the common tongue and spring back again when pressure
 10 is removed.

Referring to Figs. 7-9 the nozzle 1, outer casing parts 2 and 3, inner casing 4, slot 5, collapsible ink reservoir 6 and presser bar 7 are the same as the corresponding parts in
 15 the other figures. The support for the presser bar 7 however, is formed from a double blank 9' of sheet metal (see Fig. 8) whose ends are connected by the common tongue 10' the said ends being bent to form
 20 spring collars 8', 8'. I prefer to secure the presser bar 7 to the tongue 10' midway between the collars 8', 8', and to locate the point of connection at the middle of the presser bar 7. The action is more even and
 25 accurate when this is done.

It will be evident that my invention has the merits of extreme simplicity, economy and convenience.

What I claim as my invention is:—

30 1. A fountain pen comprising a tubular casing, a flexible ink reservoir extending lengthwise of the pen in said casing, a presser bar extending along said reservoir, and a removable spring collar frictionally
 35 retaining itself within said casing by its tendency to expand and having a part extending lengthwise of the pen beyond the plane of the collar and to which said presser bar is secured whereby the presser bar and
 40 collar may be inserted and removed together.

2. A fountain pen comprising an outer tubular casing, an inner tubular casing, a flexible ink reservoir extending lengthwise
 45 of the pen in said inner casing, a presser bar extending lengthwise of the pen along the reservoir, a tongue connected to the presser bar and extending lengthwise of the pen, and a spring support for said tongue yieldable therewith.
 50

3. A fountain pen comprising an outer tubular casing having a displaceable part, an inner tubular casing in said outer casing and having an open end and a slot, a flexible ink reservoir extending lengthwise in
 55 said inner casing, a removable spring collar frictionally retained within said inner casing and having a tongue extending lengthwise of the pen in said slot, and a presser bar carried by said tongue and extending lengthwise of the pen along the reservoir.
 60

4. A fountain pen comprising a tubular casing, a flexible ink reservoir extending

lengthwise of the pen within the casing, a presser bar extending lengthwise of the pen
 65 along the said reservoir, and a piece of sheet metal bent to conform to the bore of said casing but having its ends separated and acting outward frictionally against the same to retain itself removably and yieldably
 70 in place, said collar having a tongue extending lengthwise of the pen and secured to the presser bar so that said bar, tongue and collar will move downward together on the application of pressure and
 75 will spring back when the pressure is removed and so that said parts will be removable and replaceable together.

5. A fountain pen comprising a tubular casing, a flexible ink reservoir extending
 80 lengthwise of the pen in said casing, a plurality of collars frictionally retained within said casing and having a common tongue extending lengthwise of the pen, and a presser bar carried by said tongue and extending
 85 lengthwise of the pen along the reservoir.

6. A fountain pen comprising a tubular casing, a flexible ink reservoir extending
 90 lengthwise of the pen in said casing, a presser bar extending along said reservoir, and a pair of removable spring collars frictionally retaining themselves within said casing by their tendency to expand and carrying
 95 said presser bar whereby said collars and bar may be inserted and removed together.

7. A fountain pen comprising an outer tubular casing, an inner tubular casing, a flexible ink reservoir extending lengthwise
 100 of the pen in said inner casing, a presser bar extending lengthwise of the pen along the reservoir, a tongue connected to the presser bar and extending lengthwise of the pen, and a spring support for said tongue
 105 at each end thereof and yieldable therewith.

8. A fountain pen comprising an outer tubular casing having a displaceable part, an inner tubular casing in said outer casing and having an open end and a slot, a
 110 flexible ink reservoir extending lengthwise in said inner casing, a pair of removable spring collars frictionally retained within said inner casing and having a common tongue extending lengthwise of the pen in
 115 the slot, and a presser bar secured to said tongue midway between the said collars and extending lengthwise of the pen along the reservoir.

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

GEORGE S. PARKER.

Witnesses:

MAMIE BORKENHAGEN,
 HELEN MORISSEY.