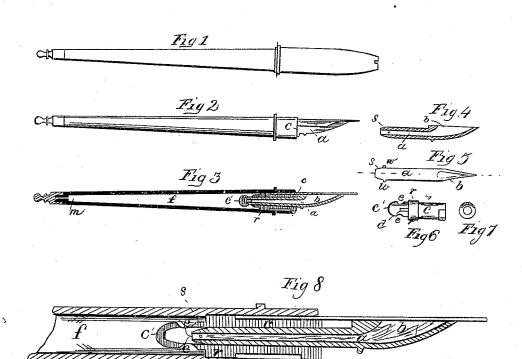
## G.F. Hawkes, Fountain Fen. Moso270. Extented Oct 17 1865.



Tes F. Hawkes

Witnesses, & Renaud

## United States Patent Office.

GEORGE F. HAWKES, OF NEW YORK, N. Y.

## FOUNTAIN-PEN.

Specification forming part of Letters Patent No. 50,470, dated October 17, 1865.

To all whom it may concern:

Be it known that I, GEORGE F. HAWKES, of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Fountain-Pens; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters of reference thereon.

In the drawings, Figure 1 is a perspective view of the whole instrument ready for the pocket. Fig. 2 is a perspective view of pen holder and fountain without the cap for protecting the pen, and showing a part of the feeder and a small portion of the stopper. Fig. 3 is a view of a longitudinal section through the slit of the pen and continued through the axis of the holder and fountain. Fig. 4 is the view of a longitudinal section of the feeder made through the slit of the pen. Fig. 5 is a top view of the feeder, and showing the spoon-like opening under the pen, and which communicates immediately with the under side of the pen when it is in place. The dotted line shows the direction of the section exhibited in Fig. 4. Fig. 6 is a view of the thimble-like stopper, which, in conjunction with the feeder, retains the ink in the fountain when the pen is not in use, as shown in Fig. 3, where the upper end is shoved up to its seat in the top of the stopper, and when the pen is in use it allows the ink to pass through it into the feeder, which, in that case, would be drawn out a short distance. Fig. 7 is a view of the outer end of the stopper and of a portion of the inner ring. Fig. 8 is a magnified sectional view, showing more clearly the course taken by the ink when the pen is in use, the feeding-tube being drawn out.

My invention consists in providing for pens of the shape most commonly in use an apparatus through which the ink from the fountain is permitted to flow to the pen upon drawing out a portion which serves, in part, the purpose of a stopper when the pen is not in use, and which, when it is in use, serves to convey the ink near to the point of the pen and to keep

up the supply from the fountain.

In Fig. 3 all the principal parts of my fountain-pen are shown. The part a is the feeder, a section of which is exhibited in Fig. 4, and

is made tubular for about half its length, terminating in a manner a little resembling a sharpened or narrowed spoon, as shown at b. The upper portion fits in tightly in the stopper, and the top of it is suitably shaped, as at s, to fit the top of hole which extends nearly through the length of the stopper, so that when shoved up against the top no ink can pass out. The portion of the surface at n and thence to the tip of the feeder is made to touch and fit the under side of the pen, or nearly so, leaving a thin space between the two surfaces, which greatly aids in securing the feeding of the ink. The stopper is made to fit in tight into the lower part of the handle or fountain, especially about the ring r. The portion c' above r is made of a diameter a little less than that of the inside of the fountain, and one or more holes, e, are made a little below the top of the stopper, so as to allow the ink to pass out when the feeder is drawn down, which it need be only a short distance for that purpose. Above  $\boldsymbol{r}$  a short slot is cut through the stopper, as at d, Fig. 6, in which a guide pin or pins, w, Fig. 5, projecting from the feeder, fits and slides, being fastened to the feeder so as to keep its sliding motion in one line. Two of these slots may be so made as to admit all the ink necessary to supply the pen, and then the communications e e may be dispensed with. The pin also serves to limit the extent of the drawing out of the feeder.

Fig. 7 shows a portion of the lower ring of the stopper cut away sufficiently to allow a pen of the form most commonly in use to be passed in between it and the handle, the portion remaining serving to keep the stopper central with the handle. This position of the stopper may also be preserved by putting in pieces of metal or other suitable material opposite the pen, which shall be allowed to project sufficiently for that purpose. The fountains, fitted up as this one is represented in the drawings to be, is filled by drawing with the mouth placed over the screw-cap, which has been unscrewed a turn or two, so as to give a passage for the air of the fountain through the hole m.

It is obvious that the fountain can be fitted up with a piston without affecting in any man-

ner my invention.

I am aware that a fountain-pen has been in-

vented by A. G. Day, in which a tube slides out to cut off the flow of the ink; but this movement to stop the flow of a fluid being contrary to universal usage in all instruments for common use, and carrying the feeder away from the point of the pen, when it ought rather to be brought nearer, I do not desire to claim, however arranged or applied.

What I claim, and desire to secure by Letters

Patent, is-

1. The arrangement of a ring or other equivalent support on a stopper of a fountain-pen to keep it central in its seat, thereby doing away

with one cause of leakage and increasing the

security of the hold on the pen.

2. The slot or slots employed for keeping the feeder in a line of motion, and used at the same time as the openings for the ink to pass out when the feeder is drawn out, substantially as described.

3. A stopper operating in conjunction with

a feeder, substantially as described.

GEO: F. HAWKES. [L. s.]

Witnesses:

F. RENAND, WM. H. ELTON.