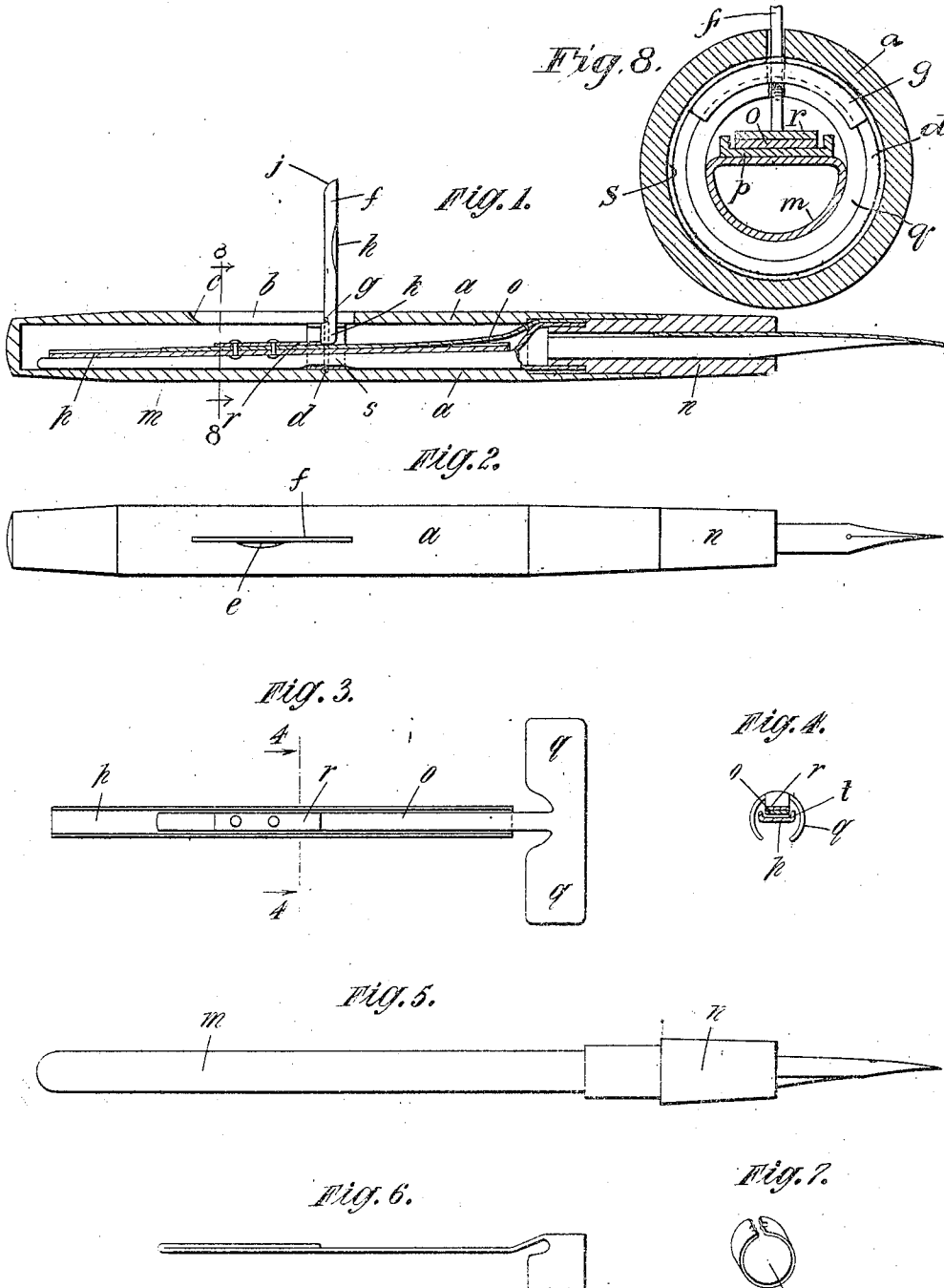


C. BRISTOW.
 FOUNTAIN PEN.
 APPLICATION FILED JULY 29, 1915.

1,243,383.

Patented Oct. 16, 1917.



Inventor:
 Cecil Bristow
 By Atty.
 Fraser, Tuck & Myers

UNITED STATES PATENT OFFICE.

CECIL BRISTOW, OF LONDON, ENGLAND.

FOUNTAIN-PEN.

1,243,383.

Specification of Letters Patent.

Patented Oct. 16, 1917.

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To all whom it may concern:

Be it known that I, CECIL BRISTOW, of 20 St. German's road, Forest Hill, London, England, have invented certain new and useful Improvements in or Relating to Fountain-Pens, of which the following is a specification.

This invention relates to fountain pens of the type in which an elastic bag disposed in the barrel of the pen is adapted to be compressed by a lever and plate, said bag being allowed to create a suction whereby ink is drawn into the bag, which forms an ink reservoir to the pen.

The object of this invention is to provide an improved pen of this type.

In a pen made in accordance with this invention the lever is supported on a bearing which is disposed in an annular groove formed on the inside of the barrel. Within the barrel is disposed a spring which is held at the end nearest the nib against the side of the barrel and the other or free end is fastened to the said plate (hereinafter called the presser plate) which bears on the elastic tube. When the lever is raised the short end thereof presses down the spring and the presser plate attached thereto on to the bag, compressing it and driving the air out.

Figure 1 is a diagrammatic section of one form of fountain pen made in accordance with this invention.

Fig. 2 is a plan.

Fig. 3 is a plan of the presser plate and spring, the wings of the spring being flattened out.

Fig. 4 is a cross section of presser plate and spring.

Fig. 5 is an elevation of the bag.

Fig. 6 is a side view of the spring bent over to form a stop.

Fig. 7 is a perspective view of the collar.

Fig. 8 is a cross-section of the pen barrel on the line 8—8, Fig. 1.

The barrel *a* of the fountain pen has a longitudinal slot *b*, one end of which slopes as at *c*, and which has a recess *e* in its side (Fig. 2). A lever *f* is pivotally supported in the barrel. Such support may be accomplished in various ways. As illustrated, the lever is mounted on a bearing or hinge pin *g* which is disposed in an annular groove *d* in the barrel, and on which bearing the lever is free to turn. The lever *f*, when closed, fills the slot *b* as illustrated in Fig. 2. In this position its sloping end *j* fits the slop-

ing end *c* of the slot and the notch *h* corresponds with recess *e*.

The short end of the lever *f* is provided with a heel *k* to insure contact with spring when the lever is closed and thus keeping same down in the slot *b*.

An elastic bag *m* attached to the nib holder *n* is adapted to lie in the barrel *a*. Between the bag *m* and the barrel *a* is a spring *o*, one end of which is attached to a presser plate *p*. The other end is shaped with wings *q q* which can be bent to the curve of the barrel so as to hold the spring firmly within the barrel and against the inner surface thereof. *r* is a stop disposed on the spring against which the lever *f* bears when it is in its raised position. If the hinge pin *g* for the lever *f* is supported as illustrated in the groove *d*, means are preferably provided for holding the hinge pin in place such as a split collar *s* so disposed that the slit registers with the longitudinal slot in the barrel and supports the trunnions in the annular groove.

The presser plate is or may be flanged at *t* to give it sufficient rigidity.

The stop *r* may be of a separate piece as shown in Fig. 1 or it may be formed by bending over the end of the spring as shown in Fig. 6.

In operation when it is desired to fill the pen with ink the lever *f* is raised as shown in Fig. 1 forcing the presser plate *p* on to the bag so as to compress it and drive out the air. On lowering the lever *f* the bag expands and draws in ink from an external source, when the nib is inserted therein.

The support of the lever *f* and the disposition of the spring *o* and plate *p* are the characteristic features of the invention and avoid difficulties experienced in pens of this type.

Instead of the spring being fastened as shown in Fig. 1 it might be shorter and fastened nearer the center of the plate.

What I claim and desire to secure by Letters Patent is:—

1. In fountain pens a barrel provided with a longitudinal slot and an annular groove, a lever pivotally mounted in said slot, bearings for said lever lying in said annular groove, means for supporting said bearings in said groove, and means actuated by said lever for drawing ink into said barrel.

2. A fountain pen comprising a barrel, a longitudinal slot and an annular internal

groove in the barrel, a lever disposed in said slot and a bearing for said lever engaging with said annular groove; a split collar disposed within the barrel so that the slit is in register with the longitudinal slot and supports the bearing in the annular groove, a nib holder, an elastic bag, adapted to contain ink, attached to the nib holder, said bag being disposed within the said barrel, a plate within said barrel adapted to lie between the bag and the barrel, one end of the said lever pressing down the said plate when the lever is raised.

3. A fountain pen comprising a barrel, a longitudinal slot, and an annular internal groove in the barrel, a lever disposed in said slot and a bearing for said lever engaging with said annular groove, a collar, adapted to support said bearing in said groove, a nib holder, an elastic bag, adapted to con-

tain ink, attached to the nib holder, said bag being disposed within the said barrel, a plate within said barrel adapted to lie between the bag and the barrel, a spring within the barrel adapted to lie between the plate and the barrel, one end of said spring being formed with a ring adapted to lie against the inner surface of the barrel so as to hold one end of the spring against the barrel toward that end of the barrel nearest the nib, and other end being fastened to the said plate, one end of said lever pressing down the spring when the said lever is raised.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

CECIL BRISTOW.

Witnesses:

ROBERT MILTON SPEARPOINT,
HERBERT D. JAMESON.