

PATENT SPECIFICATION

348.036



Application Date: Feb. 5, 1930. No. 3929/30.

Complete Left: Sept. 24, 1930.

Complete Accepted: May 5, 1931.

PROVISIONAL SPECIFICATION.

Improvements in or relating to Fountain Pens.

We, MABLE, TODD AND COMPANY LIMITED, a Company organised under the Laws of Great Britain and Northern Ireland, and FREDERICK GEORGE HEARD, British Subject, both of Swan Works, Barrets Green Rd., London, N.W.10, do hereby declare the nature of this invention to be as follows:—

This invention relates to fountain pens. 10 The object of this invention is to provide an improved fountain pen.

A fountain pen made in accordance with this invention comprises a casing, a pen nib holder adapted to be attached to the casing, a collapsible rubber bag 15 secured to the nib holder and adapted to lie within the casing, a pressure bar adapted to lie between the rubber bag and the casing, an operating lever 20 pivoted to the casing or to a part attachable to the casing, a rotatable head adapted to engage the free end of the operating lever, means for limiting the angular movement of the rotatable head.

25 Referring to the drawings filed herewith:—

Fig. 1 is a longitudinal section of one form of fountain pen made in accordance with this invention;

30 Fig. 2 is an end view of the head.

a is the casing threaded at *b* adapted to receive a collar *c*. The collar *c* is threaded at *d* to receive the rotatable head *e*. *f* is a nib holder provided with an extension *g*, on which is mounted the rubber bag *h*. Between the bag *h* and the casing *b* is a pressure bar *j*. Pivoted to the pressure bar *j* is an operating lever *k*, which is pivoted to the collar *c* at *m*.

In the rotatable head *e* is an eccentric recess *o* adapted to engage the free end *p* of the lever *k*. *q* is a stop in the head *e* adapted to engage a pin *r* in the collar *c* to limit the angular movement of the head *e*.

In operation, when it is desired to fill the fountain pen with ink, the head *e* is rotated, that is, unscrewed, whereby the free end *p* of the lever *k* is pressed down by the eccentric recess *o* and as *k* is pivoted at *m* the opposite end moves in the opposite direction, thus pressing *j* on to and collapsing the rubber bag. The rotation or unscrewing of the head *e* is limited to about half a turn by the pin *r* and stop *q*.

On turning or screwing up the head *e*, the nib being immersed in ink, the eccentric recess *o* allows the end of the lever *p* to assume its free position and pressure is taken off the collapsed rubber bag, thus drawing in the ink.

In this position it must be noticed that the head *e* is screwed up, the shoulder of the screw coming in contact with the face of *p*. This forms a friction lock and prevents the accidental operation of the pen when in use.

In use the end *e* can only make about half a revolution the limits being—shoulder of screw in contact with face—in one direction, and stop coming in contact with pin in the other.

Dated this 28th day of January, 1930.
MEWBURN, ELLIS & Co.,
70—72, Chancery Lane, London, W.C. 2,
Chartered Patent Agents.

COMPLETE SPECIFICATION.

Improvements in or relating to Fountain Pens.

We, MABLE, TODD AND COMPANY LIMITED, a Company organised under the Laws of Great Britain and Northern Ireland, and FREDERICK GEORGE HEARD, British Subject, both of Swan Works, Barrets Green Rd., London, N.W.10, do hereby declare the nature of this in-

vention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to fountain pens. 85 The object of this invention is to provide an improved fountain pen.

Price 1/-

A fountain pen made in accordance with this invention comprises a casing, a pen nib holder adapted to be attached to the casing, a collapsible rubber bag, secured to the nib holder and adapted to lie within the casing, a pressure bar adapted to lie between the rubber bag and casing, an operating lever pivoted to the casing or to a part attachable to the barrel and casing, a rotatable head adapted to engage the free end of the operating lever and actuate it by rotary motion of said head, and means for limiting the angular movement of the rotatable head.

The operating lever may be moved by the rotatable head by causing the free end to penetrate into an eccentric recess in the head, if necessary the free end of the operating lever can be shaped so as to be widest at the part furthest away from the pivot or the eccentric recess can be so shaped that the part nearest the pivot of the operating lever does not impede the motion of the head. The angular movement of the head may be limited by means of a stop and pin in one direction or in the other direction by making the head rotate on a screw thread and causing a shoulder on the head to engage with one on the casing or part attachable to the casing.

Referring to the drawings filed herewith:—

Fig. 1 is a longitudinal section of one form of fountain pen made in accordance with this invention;

Fig. 2 is an end view of the head.

a is the casing threaded at *b* adapted to receive a collar *c*. The collar *c* is threaded at *d* to receive the rotatable head *e*. *f* is a nib holder provided with an extension *g*, on which is mounted the rubber bag *h*. Between the bag *h* and the casing *a* is a pressure bar *j*. Pivoted to the pressure bar *j* is an operating lever *k* which is pivoted to the collar *c* at *m*. In the rotatable head is an eccentric recess *o* adapted to engage the free end *p* of the lever *k*. *q* is a stop in the head *e* adapted to engage a pin *r* in the collar *c* to limit the angular movement of the head *e*.

In operation, when it is desired to fill the fountain pen with ink, the head *e* is rotated, that is, unscrewed, whereby the free end *p* of the lever *k* is pressed down by the eccentric recess *o* and as *k* is pivoted at *m* the opposite end moves in the opposite direction, thus pressing *j* on to and collapsing the rubber bag. The rotation or unscrewing of the head *e* is limited to about half a turn by the pin *r* and stop *q*.

On turning or screwing up the head *e*, the nib being immersed in ink, the eccentric recess *o* allows the end of the lever *p* to assume its free position and pressure is taken off the collapsed rubber bag, thus drawing in the ink.

In this position it must be noticed that the head *e* is screwed up, the shoulder of the screw coming in contact with the face of *c*. This forms a friction lock and prevents the accidental operation of the head when the pen is in use.

In use the end *e* can only make about half a revolution the limits being—shoulder of screw in contact with face—in one direction, the stop coming into contact with pin in the other.

We are aware that in fountain pens it has previously been proposed to provide a fulcrum at right angles to the axis of the barrel, a pressure bar actuated by a longitudinal movement of the barrel end which is turned into a rotary movement by means of a screw, but having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A fountain pen comprising a casing, a pen nib holder adapted to be attached to the casing, a collapsible rubber bag, secured to the nib holder and adapted to lie within the casing, a pressure bar adapted to lie between the rubber bag and casing, an operative lever pivoted to the casing or to a part attachable to the casing at right angles to the axis of the barrel and casing, a rotatable head adapted to engage the free end of the operating lever and actuate it by rotary motion of said head, and means for limiting the angular movement of the rotatable head.

2. In a fountain pen according to claim 1 the rotating head is provided with an eccentric recess, to accommodate the end of the operating lever.

3. In a fountain pen according to either of the preceding claims, means for limiting the angular motion of the rotatable head by mounting it on a screw thread, and causing a shoulder on the head to engage with one on the adjacent part of the pen.

4. In a fountain pen according to any of the preceding claims, means for limiting the angular movement of the head by a stop and pin.

5. In a fountain pen according to any of the preceding claims an operating lever substantially as described with reference to the accompanying drawings.

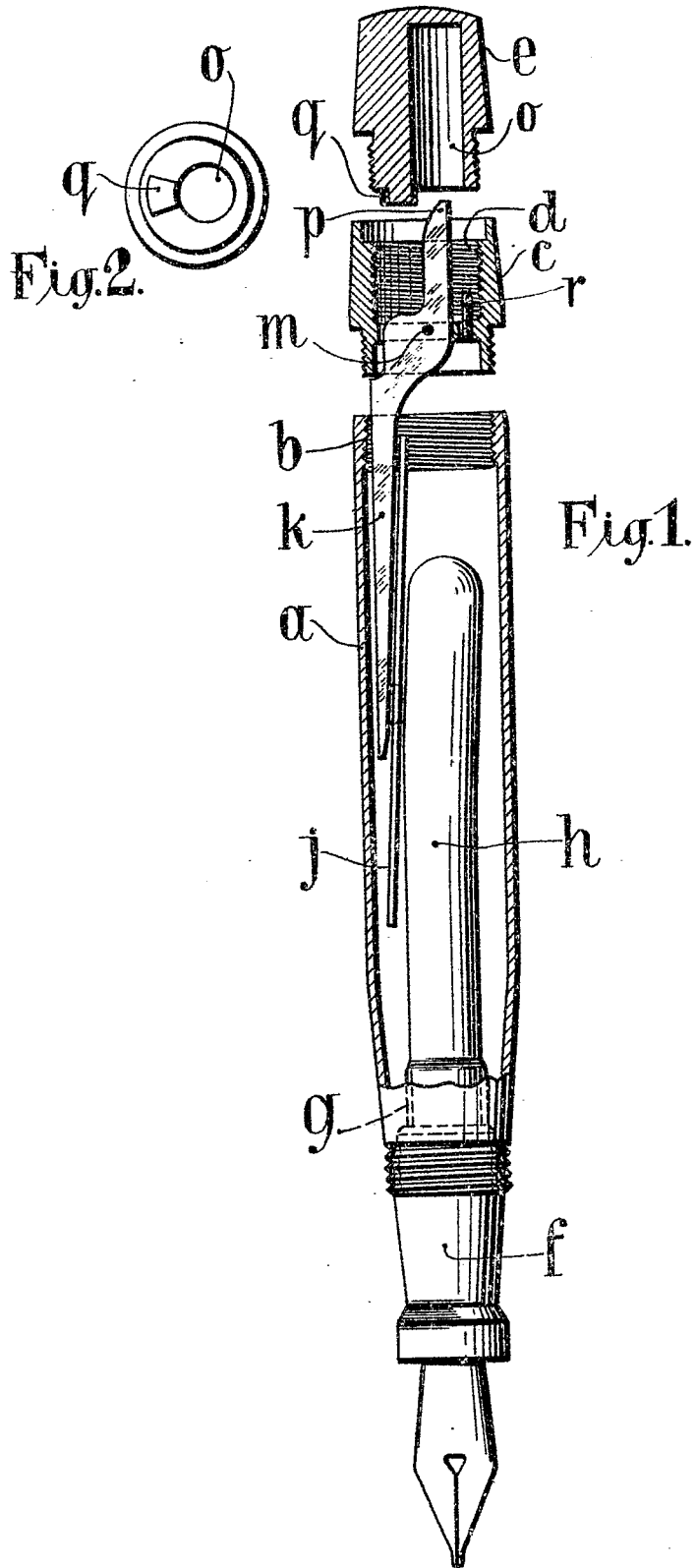
6. A fountain pen designed an doperat-

ing substantially as described and illustrated in the above specification and drawings.

Dated this 24th day of September, 1930.

MEWBURN, ELLIS & Co.,
70—72, Chancery Lane, London, W.C. 2,
Chartered Patent Agents.

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[This Drawing is a reproduction of the Original on a reduced scale.]

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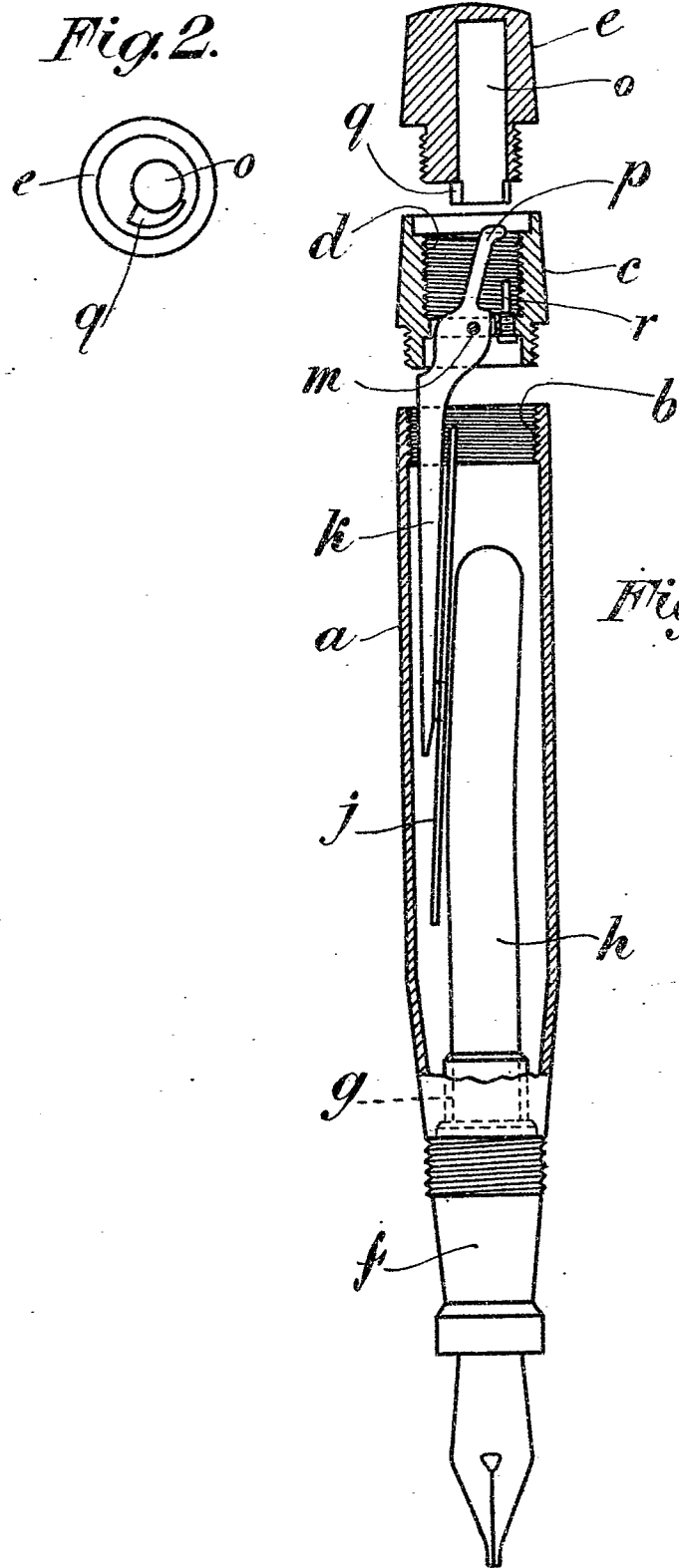


Fig. 1.

Fig. 2.