

## PATENT SPECIFICATION

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## PROVISIONAL SPECIFICATION

## Improvements in or relating to Fountain Pens

We, MABLE TODD AND COMPANY LIMITED, of 26, Donnington Square, Newbury, Berkshire, (a Company organized under the laws of Great Britain and Northern Ireland) and EDWARD STEPHEN SEARS (British Nationality), of 23, Oaklands Avenue, Watford, Hertfordshire, do hereby declare the nature of this invention to be as follows:—

10 This invention relates to fountain pens of sac self-filling type, in which deflation of the sac is effected through a presser bar actuated by a lever connected or associated with the pen body or barrel.

15 The primary aim of the present invention is, in a pen which it is moderately cheap to manufacture, to materially increase the ink-receiving capability of the sac; and which object we accomplish by a presser bar construction and arrangement whereby a substantially larger portion of the sac is compressed in an ink-charging operation than is practicable in fountain pens provided with the common hook type presser bar.

25 Broadly, our invention resides in forming a presser bar in two portions or components one of which functions to locate or position the bar in the pen body or barrel, whilst the other portion or component is adapted to engage and compress the sac by the action of the customary bar actuating lever which operates through a slot or opening formed in said first-mentioned portion of the presser bar; and the arrangement being preferably such that compression of the sac shall commence from its closed end and progress towards its open end.

40 We will further describe our invention with the aid of the accompanying sheet of explanatory drawings, which illustrate, by way of examples only, two modes of embodying same.

45 In said drawings:—

50 Figs. 1 and 2 are longitudinal sections of a sac self-filling fountain pen provided with our improvement, and respectively showing the parts prior to and on deflation of the sac.

Figs. 3 and 4 are views, drawn at right angles to each other, of the presser bar

prior to fitment in the pen barrel.

Referring to the drawings, *a* indicates a fountain pen barrel, *b* a collapsible ink sac, and *c* the presser bar actuating lever pivotably associated with barrel *a*, by the aid of internal ring *c*<sup>1</sup>; all of conventional construction and arrangement.

The presser bar comprises a continuous strip of suitable metal—such as spring steel—which has been doubled or turned back upon itself to provide a hook-ended outer portion *d*, whereby the bar is located in barrel *a*, and an inner portion *e* lying in proximity with sac *b*.

At or about the middle of said outer presser bar portion *d*, a slot *f* is formed therein, said slot being of such dimensions as to allow lever *c*, on actuation by hand, to move freely through and along it and into contact with bar portion *e* to compress sac *b* almost throughout its entire length, so that on re-expansion thereof a larger charge of ink is induced therein than has hitherto been practicable.

In actual manufacture, it is preferred that the position of presser bar actuating lever *c* shall be so predetermined that compression of the sac shall commence from the closed end thereof and progress naturally towards the open or nib end of the barrel, this arrangement lending itself very simply to adjustment of balance, a distinct advantage over the common type of presser bar referred to, with which natural deflation i.e. from the closed end to the open end of the sac is not feasible.

When said sac is completely deflated, the end nearest the hook of said bar slot *f* constitutes a definite stop for the bar actuating lever which is at right angles and extending through the bar slot.

A presser bar construction and arrangement under our invention, makes for greater efficiency, as—as the bar actuating lever does not bear on the slotted portion of the bar, but passes through its slot and projects the bar portion adjacent to the sac—said slotted component of the bar simply functions as a means of detachably affixing the bar in the pen barrel,

and as a carrier for the bar portion allocated to the imposition of deflating pressure on the sac, so that proper balance or adjustment can be effected.

- 5 Further, there is very little stress on the presser bar as a whole, thereby prolonging the fully efficient life of the parts constituting the "movement", and ensuring that a sac charging operation shall be smoothly accomplished.

10 Modifications may be adopted without

departing from the spirit and scope of our invention, as, for instance, other convenient methods of detachably locating the presser bar in the pen barrel may be employed. 15

Dated this 9th day of March, 1944.

JOHN HINDLEY WALKER,  
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139, Dale Street, Liverpool, 2,  
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## COMPLETE SPECIFICATION

### Improvements in or relating to Fountain Pens

We, MABIE TODD AND COMPANY LIMITED, of 26, Donnington Square, Newbury, Berkshire, (a Company organized under the laws of Great Britain and Northern Ireland) and EDWARD STEPHEN SEARS (British Nationality), of 23, Oaklands Avenue, Watford, Hertfordshire, do hereby declare the nature of this invention 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 of sac self-filling type, in which deflation of the sac is effected through a presser bar actuated by a lever connected or associated with the pen body or barrel.

The primary aim of the present invention is, in a pen which it is moderately cheap to manufacture, to materially increase the ink-receiving capability of the sac; and which object we accomplish by a presser bar construction and arrangement whereby a substantially larger portion of the sac is compressed in an ink-charging operation than is practicable in fountain pens provided with the common hook type presser bar.

Essentially our invention resides in providing a one-piece presser bar which is doubled or bent back upon itself to form two portions or components an end of one of which is fixed in the pen body or barrel remote from the nib and functions to locate or position the bar the other end whereof is unsupported; whilst the other portion or component of the bar is adapted to engage and compress the sac by the action of the customary bar-actuating lever which operates freely through a slot formed in said first-mentioned portion of the bar and an end of which slot provides a stop for the bar actuating lever when the sac is completely deflated. The arrangement is preferably such that compression of the sac shall commence from its closed end and progress towards its open end.

We will further describe our invention with the aid of the drawings accompanying the provisional specification and which illustrate, by way of example only, one mode of carrying the invention into effect. 65

In said drawings:— 70

Figs. 1 and 2 are longitudinal sections of a sac self-filling fountain pen provided with our improvement, and respectively showing the parts prior to and on deflation of the sac. 75

Figs. 3 and 4 are views, drawn at right angles to each other, of the presser bar prior to fitment in the pen barrel.

Referring to the drawings, *a* indicates a fountain pen barrel, *b* a collapsible ink sac, and *c* the presser bar actuating lever pivotably associated with barrel *a*, by the aid of internal ring *c'*; all of conventional construction and arrangement. 80

The presser bar comprises a continuous strip of suitable material—such as spring steel—which has been doubled or turned back upon itself to provide a hook-ended outer portion *d*, whereby the bar is fixed in barrel *a* remote from the nib, and an inner portion *e* lying in proximity with sac *b*. The extremity of the bar remote from the hook-end is unsupported. 85

At or about the middle of said outer presser bar portion *d*, a slot *f* is formed therein, said slot being of such dimensions as to allow lever *c* on actuation by hand, to move freely through and along it and into contact with bar portion *e* to compress sac *b* almost throughout its entire length, so that on re-expansion thereof a larger charge of ink is induced therein than has hitherto been practicable. 90

In actual manufacture, it is preferred that the position of presser bar actuating lever *c* shall be so predetermined in relation to the presser bar that compression of the sac shall commence from the closed end thereof and progress naturally towards the open or nib end of 105

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the barrel, this arrangement lending itself very simply to adjustment of balance, a distinct advantage over the common type of presser bar referred to, with which natural deflation i.e. from the closed end to the open end of the sac is not feasible.

When said sac is completely deflated, the end nearest the hook of said bar slot constitutes a definite stop for the bar actuating lever which is at right angles and extending through the bar slot.

A presser bar construction and arrangement under our invention, makes for greater efficiency, as—as the bar actuating lever does not bear on the slotted portion of the bar, but passes through its slot and projects the bar portion adjacent to the sac—said slotted component of the bar simply functions as a means of detachably affixing the bar in the pen barrel, and as a carrier for the bar portion allocated to the imposition of deflating pressure on the sac, so that proper balance or adjustment can be effected.

Further, there is very little stress on the presser bar as a whole, thereby prolonging the fully efficient life of the parts constituting the "movement", and ensuring that a sac charging operation shall be smoothly accomplished.

Modifications may be made without departing from the spirit and scope of our invention, as, for instance, other convenient methods of detachably locating the presser bar in the pen barrel may be employed.

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 of sac self-filling type provided with a one-piece presser bar which is doubled or bent back upon itself to form two portions or components an end of one of which is fixed in the pen body or barrel remote from the nib and functions to locate or position the bar the other end whereof is unsupported; whilst the other portion or component of the bar is adapted to engage and compress the sac by the action of the customary bar-actuating lever which operates freely through a slot formed in said first-mentioned portion of the bar and an end of which slot provides a stop for the bar actuating lever when the sac is completely deflated.

2. A fountain pen as claimed in the preceding Claim, in which it is arranged that compression of the sac shall commence from its closed end and progress towards its open end.

3. A fountain pen of sac self-filling type including a presser bar substantially as hereinbefore described and illustrated in the drawings accompanying the provisional specification.

Dated this 28th day of December, 1944.  
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[This Drawing is a reproduction of the Original on a reduced scale.]

