

# A.D. 1915

Date of Application, No. 2959, 24th Feb., 1915 No. 5409, 10th Apr., 1915 Complete Specification Left, 24th Aug., 1915 (Section 16 of the Patents and Designs Act, 1907.) Complete Specification Accepted, 21st Oct., 1915

#### PROVISIONAL SPECIFICATION.

No. 2959, A.D. 1915,

# Improvements in or relating to Fountain or Reservoir Pens.

I, ERNEST MACAULEY WADE, of 65, Cavendish Drive, Rock Ferry, in the County of Chester, Reservoir Pen Manufacturer, do hereby declare the nature of this invention to be as follows:-

This invention relates to fountain or reservoir pens, but more particularly those of cheaply constructed self-filling type; and has for its object to provide simple means whereby an external actuating ring or band may be quickly and securely connected with a piston or plunger rod, (or the nib-carrying rod of a reservoir pen of the "safety" type).

According to my invention, and in its application to a pen of the kind in

which ink is induced into the body or barrel through the movement of a piston or plunger within it, I provide in a pen body or barrel (which may be constructed of celluloid) two longitudinal through slots arranged diametrically opposite. In said piston or plunger rod is formed an annular or circumferential groove or recess, and leading into same is a longitudinal slot or groove. A ring or band constructed of vulcanite, sheet metal, or other suitable material, is passed over said pen body or barrel, and as means for securing same to said piston or plunger rod there are provided two-preferably metal-locking or anchor pieces of suitable shape or configuration on the upper part of each of which is formed an end projecting or hooked portion, and on the lower part is formed a keel-like projection or extension adapted to tit and lie in said annular or

circumferential groove of said plunger rod.

In fitting the ring or band, said plunger rod is positioned in the pen body or barrel so that the longitudinal slot therein is in register or alignment with said body slots. A locking or anchor piece is now positioned through the remote body slot so that its keel lies in the annular groove or recess of said plunger rod; the actuating band or ring is then slided into engagement with the projection or hook of said anchor, the adjacent side being slotted to take said projection. The second anchor is now passed through the other body slot, its keel being slided into the annular rod groove or recess through said longitudinal groove, when its end projection or hook takes into a recess provided in the other side

of said ring or band.

The plunger rod is now turned by means of a screwdriver or other suitable tool applied to a transverse slot provided for the purpose in the outer end-ofsame, whereby the longitudinal groove therein is moved out of register or





### Wade's Improvements in or relating to Fountain or Reservoir Pens.

alignment with the adjacent body slot, thus both locking or anchoring devices are secured in said annular rod groove or recess, and consequently said ring or band is securely engaged with the plunger rod which is reciprocated by means of said ring or band.

Dated this 18th day of February, 1915.

JOHN HINDLEY WALKER, 139, Dale Street, Liverpool, Agent for the Applicant.

### PROVISIONAL SPECIFICATION.

No. 5409, A.D. 1915.

## Improvements in or relating to Fountain or Reservoir Pens.

This invention relates to fountain or reservoir pens, but more particularly those of cheaply constructed self-filling type, and has for its object to provide simple means whereby an external actuating ring or band may be quickly and securely connected with a piston or plunger rod (or the nib-carrying rod of a

reservoir pen of the "safety" type).

According to my invention, and in its application to a pen of the kind in which ink is induced into the body or barrel through the movement of a piston or plunger within it, I provide in a pen body or barrel (which may be constructed of celluloid) a longitudinal slot; in the piston or plunger rod is formed an annular or circumferential groove or recess, and leading into same is a longitudinal slot or groove; a ring or band constructed of vulcanite, sheet metal or both or other suitable material, is passed onto said pen body or barrel, and as means for securing same to said piston or plunger rod there is provided a locking or anchor piece of suitable shape or configuration, on the upper part of each end whereof is formed a projecting or hooked portion and on the underside is formed a keel like projection or extension adapted to fit and lie in said annular or circumferential groove in said plunger-rod.

In fitting the ring or band to the plunger rod, the latter is positioned in the pen body or barrel, so that the longitudinal slot therein is in register or alignment with said body slot; the ring or band is placed on said pen body or barrel and the locking or anchor piece is passed under same through the longitudinal rod slot or groove—so that its keel lies in the annular groove or recess of said plunger rod, said end projections or hooks entering recesses provided in the sides of said ring or band. The plunger rod is now turned by means of a screw-driver or other suitable tool applied to a transverse slot provided for the purpose in the outer end of the rod whereby the longitudinal groove therein is moved out of register or alignment with the body or barrel slot; thus the locking or anchoring device is secured in said annular rod groove or recess and consequently said ring or band is securely engaged with the

reciprocable plunger rod thereby.

Dated this 8th day of April, 1915.

JOHN HINDLEY WALKER, 139, Dale Street, Liverpool, Agent for the Applicant,

#### COMPLETE SPECIFICATION.

## Improvements in or relating to Fountain or Reservoir Pens.

I, ERNEST MACAULEY WADE, of 65, Cavendish Drive, Rock Ferry, in the County of Chester, Reservoir Pen Manufacturer, 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 or reservoir pens, but more particularly those of cheaply constructed self-filling type; and has for its object to provide simple means whereby an external actuating ring or band may be quickly and securely connected with a piston or plunger rod (or with the nib-carrying rod in a reservoir pen of the "safety" type, wherein the nib is retracted and lies within the barrel when the pen is not required for use).

I will describe my invention with the aid of the accompanying sheet of explanatory drawings in which are illustrated two modes of applying same to a self-filling fountain or reservoir pen of the kind in which a charge of ink is induced into the body or barrel through the movement or retraction of a piston or plunger within it; one arrangement being shown in Figures 1 and 2,

and the other in Figures 3 and 4.

In the several views like characters of reference denote like or equivalent

parts wherever they occur.

Referring first, more particularly, to Figs. 1 and 2, (Fig. 1 being a part sectional elevation of a pen and Fig. 2 an elevation viewed at right angles to Fig. 1), a represents the pen body or barrel—which may, if desired, be constructed of celluloid—wherein are formed two longitudinal through slots b b arranged diametrically opposite, and c is the piston or plunger carrying rod in which is provided an annular or circumferential groove or recess d and a longitudinal slot or groove e leading into said recess d.

Passed onto said barrel or reservoir a is a reciprocable ring or band f constructed of celluloid and/or sheet metal, or other suitable material (the band illustrated is composed of an inner brass and an outer celluloid ring), and for securing same to said piston or plunger rod c there are provided two preferably metal-locking or anchor pieces g on the outer part of each of which is formed an end projecting—and in some cases hooked—portion  $g^1$  and on the inner part of each of which is formed a kecl-like projection or extension  $g^2$  adapted to fit and lie within said annular or circumferential groove or recess d of plunger rod c.

In fitting said ring or band f to the pen, said piston or plunger rod c is so placed in the body or barrel a that the longitudinal groove or slot e therein is in coincidence or register with one (the right Fig. 1) of said body slots b b; a locking or anchor piece g is now positioned through the remote (the left Fig. 1) body slot b so that its keel  $g^2$  lies in the annular neck or groove d of plunger rod c; said band or ring f is then slided over said anchor g until it contacts with the projection or shoulder  $g^1$  thereof, the adjacent side of the band being provided with a slot h to take said shoulder.

The second anchor is now passed through the other (the right Fig. 1) body slot b its keel  $g^2$  being slided into the annular plunger rod groove or recess d 45 by way of said longitudinal groove c, when its end projection or shoulder  $g^1$  takes into the slot or recess h provided in the adjacent side of said ring or

band f.

The plunger rod c which in the pen construction illustrated closes the upper or outer end of the body or barrel a when retracted, as shown in the drawings is now turned by any convenient means as by pliers or by a screw driver applied to a transverse slot i (Fig. 1) provided for the purpose in the (subsequently removed) outer end of the rod, whereby the longitudinal groove c therein is

## Wade's Improvements in or relating to Fountain or Reservoir Pens.

moved out of register or alignment with the adjacent body slot b; thus the keels  $g^3$  of both said locking or anchoring devices g g are maintained in said annular plunger rod groove or recess d, and consequently said ring or hand f is securely engaged with said rod which may be reciprocated within the limits

of body slots b, b, by means of said band.

Referring to the modification illustrated in Figs. 3 and 4, a single longitudinal slot b is formed in said pen body or barrel a and a single anchoring device g provided at each outer end with a projection or shoulder  $g^1$  is employed, said shoulders being adapted to engage in aligned slots formed in the sides of the ring or band f; in this construction a longitudinal plunger rod slot e is, of 10 course, sufficiently deep to permit of the anchor g being passed completely below the previously positioned band f before rising into engagement therewith. Said anchor g is locked to rod e and actuating band f when said rod is turned in manner as before described with reference to Figs. 1 and 2.

Having now particularly described and ascertained the nature of my said 15 invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. In a fountain or reservoir pen, means whereby an external actuating ring or band is connected with a reciprocable piston or plunger carrying rod (or with the nib-carrying rod in a reservoir pen of the "safety" type wherein the 20 nib is retracted and lies within the barrel when the pen is not required for use) comprising, in the pen body or barrel two longitudinal slots, and in the piston or plunger rod an annular or circumferential groove or recess, and a longitudinal groove leading into said annular groove or recess; and two locking or anchor pieces on the outer part of each of which is formed an end projecting portion 25 adapted to engage a ring or band reciprocably positioned on the pen body or barrel, and on the inner part of each of which is formed a keel-like projection or extension adapted to fit and lie within said annular or circumferential groove or recess in said rod; said locking or anchor pieces being adapted to connect said ring or band with said rod when the latter is turned substantially as 30 described.

2. In a fountain or reservoir pen, means whereby an external actuating ring or band is connected with a reciprocable piston or plunger carrying rod (or with the nib carrying rod in a reservoir pen of the "safety" type wherein the nib is retracted and lies within the barrel when the pen is not required for use), comprising, in the pen body or barrel a longitudinal slot, and in the piston or plunger rod an annular or circumferential groove or recess and a longitudinal groove leading into said annular groove or recess; a locking or anchor piece on the outer part of which is formed at each end a projecting portion which projections are adapted to engage a ring or band reciprocably positioned on the pen body or barrel, and on the inner part of which is formed a keel-like projection or extension adapted to fit and lie within said annular or circumferential groove or recess of the plunger rod, said locking piece being adapted to connect said ring or band with the said rod when the latter is turned; substantially as described.

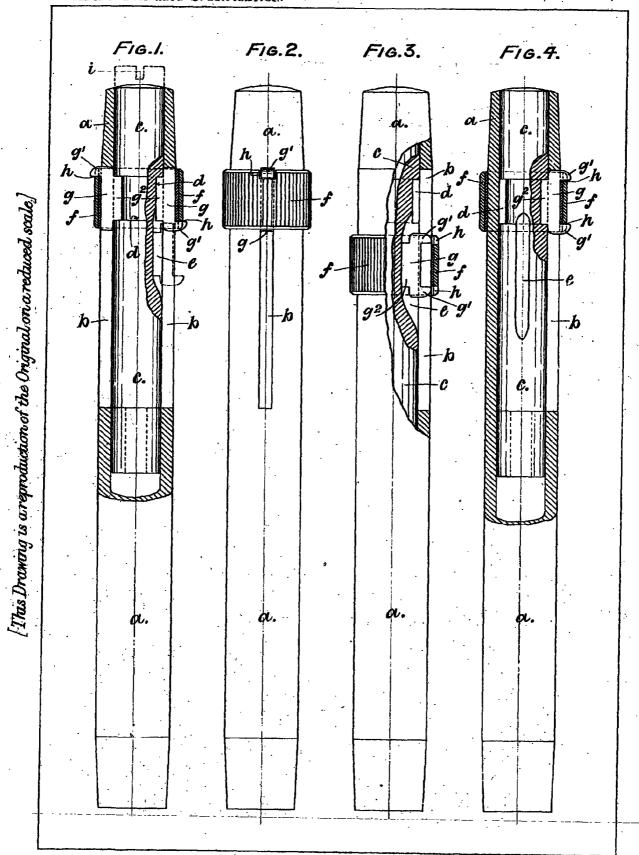
3. In a self-filling fountain or reservoir pen of the piston or plunger type, a ring or band reciprocably positioned on the pen body or barrel, and means whereby said ring or band is connected with the plunger rod; substantially as described with reference to Figs. 1 and 2 or Figs. 3 and 4 of the drawings

annexed hereto.

Dated this 30th day of July, 1915.

JOHN HINDLEY WALKER, 139, Dale Street, Liverpool, Agent for the Applicant. 50

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