

PATENT SPECIFICATION

239,274

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PROVISIONAL SPECIFICATION.

Improvements in Reservoir Pens.

We, THOMAS DE LA RUE AND COMPANY, LIMITED, a company organised under the laws of Great Britain, and HENRY JOHN DIXON, British subject, both of 110, Bunhill Row, London, E.C. 1, do hereby declare the nature of this invention to be as follows:—

This invention relates to improvements in reservoir pens, of the type in which the ink reservoir is formed of a bag of rubber or like material, located in a barrel of vulcanite or the like, and in which there is pivotally mounted on the barrel an actuating lever connected to a depression bar by means of which air can be expelled from the reservoir when it is desired to fill the pen.

The main objects of our invention are to avoid unduly weakening the barrel, and to increase the strength of the actuating parts without increasing the cost of manufacture.

According to our invention the fulcrum for the actuating lever is on a single bar of metal which is secured to the barrel, preferably at each end of a slot therein, the actuating lever being formed of a

double lever pivotally mounted on, and astride, the bar.

Obviously the double lever may be formed in one piece which is slotted to receive the bar.

Preferably the inner end of the lever has pivoted to it a plate which slidably engages the depression bar.

The bar may conveniently be secured to the barrel by slitting or forking each end thereof, opening the two prongs formed thereby, inserting the bar in position in the slot in the barrel, and closing the prongs so that they embrace the inner and outer surface of the barrel.

It will be seen that with such a construction there is no necessity for a metal box to receive the actuating lever, nor is the barrel weakened by recessing it to receive metal fixing rings, while at the same time a metal bearing is provided for the pivot on which the lever is mounted.

Dated this 2nd day of June, 1924.

CARPMAELS & RANSFORD,

Agents for Applicants,

24, Southampton Buildings, London, W.C. 2.

COMPLETE SPECIFICATION.

Improvements in Reservoir Pens.

We, THOMAS DE LA RUE AND COMPANY, LIMITED, a company organised under the laws of Great Britain, and HENRY JOHN DIXON, British subject, both of 110, Bunhill Row, London, E.C. 1, 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 improvements in reservoir pens, of the type in which the ink reservoir is formed of a bag of

rubber or like material, located in a barrel of vulcanite or the like, and in which there is pivotally mounted on the barrel an actuating lever connected to a depression bar by means of which air can be expelled from the reservoir when it is desired to fill the pen.

The main objects of our invention are to avoid unduly weakening the barrel, and to increase the strength of the actuating parts without increasing the cost of manufacture.

According to our invention the fulcrum

[Price 1/-]

for the actuating lever is on a single bar of metal which is secured to the barrel, preferably at each end of a slot therein, the actuating lever being formed of a
5 double lever pivotally mounted on, and astride, the bar.

Obviously the double lever may be formed in one piece which is slotted to receive the bar.

10 Preferably the inner end of the lever has pivoted to it a plate which slidably engages the depression bar.

The bar may conveniently be secured to the barrel by slitting or forking each
15 end thereof, opening the two prongs formed thereby, inserting the bar in position in the slot in the barrel, and closing the prongs so that they embrace the inner and outer surface of the barrel.

20 It will be seen that with such a construction there is no necessity for a metal box to receive the actuating lever, nor is the barrel weakened by recessing it to receive metal fixing rings, while at the
25 same time a metal bearing is provided for the pivot on which the lever is mounted.

The invention is illustrated in the accompanying drawings in which Figure
30 1 is a longitudinal section, Figure 2 is a detail plan of the bag actuating parts in the positions shewn in Figure 1, Figure 3 is a similar detail plan with parts in different positions. Figure 4 is a vertical section on the line 4—4 of
35 Figure 1, Figure 5 is a detail elevation, Figure 6 is a plan of Figure 5, Figure 7 is a detail end elevation, Figure 8 is a side elevation of Figure 7 and Figure 9 is a plan of Figure 8. Figure 10 is a
40 detail elevation, Figure 11 is a plan of Figure 10 and Figure 12 is an end elevation of Figure 10.

1 is a barrel or casing of a reservoir pen, 2 is a bar of metal, the ends of
45 which are forked as is shown in Figure 5. The bar 2 is secured to the casing 1 by closing the forked ends on to the said casing as shown in Figure 1. 3 is an

actuating lever which is forked or double as is shown in Figure 7. The actuating
50 lever 3 is pivoted to the bar 2 at 4, the two forks of the lever 3 being astride the bar 2 as shown in Figure 4. 5 is a plate having upturned flanges 6 provided with
55 holes 7 which form bearings for the out-turned ends of the forked actuating lever 3. 8 is a depression bar, the longitudinal edges of which are intumed so as slidably
to engage the plate 5, see Figure 4. 9 is a bag of rubber or like material which
60 forms the ink reservoir for the pen.

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
65 claim is:—

1. In a reservoir pen of the type described, the combination of a single bar of metal secured to the barrel or casing
70 and an actuating lever pivoted on and astride the bar substantially as described.

2. The combination with the arrangement claimed in Claim 1 of a plate pivoted to the actuating lever, and a
75 depression bar slidably engaged by the plate substantially as described.

3. An arrangement as claimed in Claim 1 or 2 in which the actuating lever is forked substantially as described.

4. An arrangement as claimed in Claim
80 3 in which the forked ends are out-turned to engage bearings on the plate substantially as described.

5. An arrangement as claimed in Claim 1 in which the ends of the bar of
85 metal are slitted or forked to engage the barrel substantially as described.

6. A reservoir pen substantially as described with reference to the accom-
panying drawings. 90

Dated this 7th day of November, 1924.

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

