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## PATENT SPECIFICATION



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## COMPLETE SPECIFICATION.

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

I, WILLIAM LIVSEY, (British), of 13, Groveland Road, Wallasey, in the County of Chester, 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 sac self-filling fountain or reservoir pens, and consists in an improvement in or modification of the invention described in my prior Application for Patent No. 31,098 of 1923, which is characterised by a sacactuating structure adapted to hold by friction in a pen body or barrel, and comprising in combination, and as a unit, a strip of spring material suitably shaped or bent; a presser-bar connected with said strip; a second strip of spring material connected with said strip; and a lever fulcrummed to said second strip and adapted to operate said presser-bar.

According to the present invention, in order to cheapen the cost of manufacture of the sac-actuating unit and facilitate the assembly of the component parts thereof, it is arranged that the actuating lever in its sac-operating movement shall bear on the presser-bar carrying strip which in turn will bear on the presser bar.

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

In said drawings:—
Fig. 1 is a longitudinal section of a
40 fountain pen with sac-actuating mechanism, the parts being shown in the
normal position of use; and Fig. 2 is a
longitudinal section of the pen with the
sac collapsed preparatory to filling.

Fig. 3 is a detached view of the sacactuating mechanism, and Figs. 4 and 5

are enlarged views, taken at right angles to each other, of a part of said sac-actuating mechanism.

Figs. 6 and 7 are views of a modified 50 mode of connecting the presser-bar with its carrying strip.

In the several views like characters of reference denote like or equivalent parts wherever they occur.

Referring now to the drawings, but first more particularly to Figs. 1 to 3:—

a generally designates the body or barrel of a fountain or reservoir pen wherein is cut the customary longitudinal 60 slot  $a^1$  for the accommodation of a sac-

actuating lever. b is a strip of spring steel, or other suitable material, one end of which is so shaped or bent at  $b^1$  that when slid longitudinally into the barrel a, it holds in the rear portion thereof with a biting or fric-

tion fit.

Connected at e to the strip b is a presser-bar c for compressing the sac d. f is a second or fulcrum-forming strip

which is appropriately shaped or bent at  $f^1$ , and is secured to the rear end  $b^1$  of the strip b by means of clips  $f^2$  formed on strip f; a sac-actuating lever g is pivotally connected or fulcrumed by means of a transverse pin h to the free end of the said strip f. Said transverse pin h may project on each side of the lever g to prevent it from moving bodily so outward through the slot  $a^1$  of barrel a.

When said lever g is actuated its toe  $g^1$  bears upon strip b, which, in turn, bears upon and operates the pressure bar c, thus compressing the sac, as shown 85 in Fig. 2.

In the enlarged views, Figs. 4 and 5, it will be seen that the lower end of strip b is provided with lateral projections  $b^3$  which engage in holes  $c^2$  formed in the 90 side flanges  $c^1$  of presser-bar c.

In the modified mode of connecting

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strip b with presser-bar c illustrated in Figs. 6 and 7, the side flanges c¹ of presser-bar c are extended at c³, the ends of the extended portions being bent over 5 at c⁴. Lateral projections b⁴ formed on the lower end of strip b are inserted under said extended portions c³ of presser-bar c, the bent-over portions c⁴ preventing disengagement of strip b from said 10 presser-bar.

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

15 claim is:—

1. An improvement in or modification of the invention claimed in the prior Application for Patent No. 31,098 of 1923, in which improvement or modification it is arranged that the actuating

lever in its sac-operating movement shall bear on the presser-bar carrying strip which, in turn, will bear on the presserbar.

2. A sac self-filling fountain or reservoir pen, complete with sac-actuating structure substantially as hereinbefore described, and illustrated in the accompanying drawings.

3. In or for application to a sac self- 30 filling fountain or reservoir pen, a saccompressing unit, substantially as hereinbefore described and illustrated in Figs. 3 to 5 inclusive, or Figs. 6 and 7, of the accompanying drawings.

Dated this 1st day of December, 1924.

JOHN HINDLEY WALKER, 139, Dale Street, Liverpool, Registered Patent Agent.

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