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G. J. SENGBUSCH

1,767,189

WRITING PEN.

Filed Jan. 7, 1927

Fig. 1

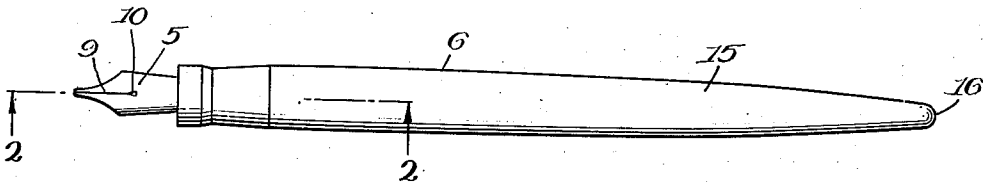


Fig. 2

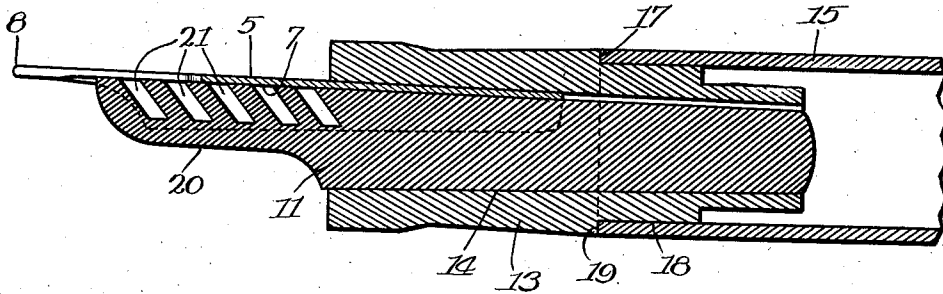


Fig. 4

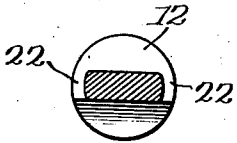
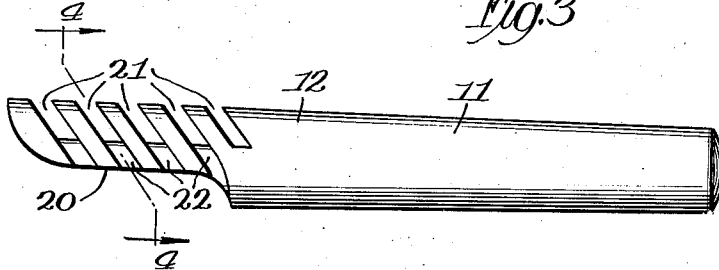


Fig. 3



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WRITING PEN

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This invention relates to writing pens and more particularly to pens which are adapted to write with ink or similar writing fluid for a considerable length of time, with one dipping of the pen in an ink-well containing ink.

The objects of the invention are to provide a pen of the above described class which will be simple in construction, comprise relatively few parts, capable of being easily cleaned, and which will be durable and not readily rendered inoperative.

It is also an object of the present invention to provide a pen having the advantages of a fountain pen but which will be light in weight and comfortable to the penman when in use.

Other objects and advantages will be understood by reference to the following specification and attached drawing illustrating a selected embodiment of my invention, in which drawing:

Fig. 1 is an elevation.

Fig. 2 is a section on the line 2-2 of Fig. 1 on an enlarged scale.

Fig. 3 is an elevation of an element of the pen, and

Fig. 4 is a section on the line 4-4 of Fig. 3.

Referring now to the drawings, I have indicated in Fig. 1 a pen comprising a pen-point 5 and a pen-holder 6, which in appearance constitute a common and well known type of pen. The pen-point 5 comprises a conventional pen-point having a concave underside 7, and a nib or writing end 8 to which ink is fed, partly through a slit 9 in the outer end portion of the pen-point which slit terminates in an aperture 10 at its upper end.

Underneath the pen-point 5, I provide a feed bar 11 having a convex upper portion 12 which more or less snugly fits within the concave underside of the pen-point. The feed bar 11 and pen-point 5 are mounted in cooperative position preferably by means of a mounting tip 13 having an aperture 14 extending therethrough for receiving the said bar and pen-point as clearly indicated in Fig. 2. I prefer to taper the bar 11

somewhat towards its inner end and the aperture 14 in the mounting tip is similarly tapered whereby the bar 11 is positioned within the tip and the pen-point is tightly clamped between the wall of the aperture and the wall of the feed bar. In practice I find it convenient to make the feed bar 11 substantially circular in cross section since the resulting convex surface 12 fits the convex under side of the pen 5 with sufficient snugness.

An extension 15, preferably a hollow cylindrical member tapered towards its outer end and there closed as indicated at 16, constitutes a handle whereby the pen may be easily and comfortably gripped. The extension 15 is open at one end as indicated at 17 and receives a portion 18 of the tip which is reduced in diameter so as to snugly fit within the open end of the extension. A shoulder 19 formed on the tip by the said reduced portion, engages the end of the extension and thereby limits inward movement of the tip in the extension.

The outer end of the feed bar 11 is cut away as indicated at 20 so as to avoid an otherwise large and cumbersome writing end. The remaining outer portion of the pen is provided with a plurality of independent or unconnected relatively deep but narrow notches or slots 21-21, which preferably extend transversely across the top of the bar and downwardly across the sides as indicated at 22-22. The width of the slots, that is, the dimension between their opposite faces is preferably considerably less than the depth of the slots. By thus slotting the bar, I provide a comparatively large amount of wall area which constitutes the faces of the slots 21, which faces, by means of capillary attraction are adapted to retain a comparatively large amount of ink or other writing fluid in the said slots which, in effect, constitute reservoirs for holding a supply of the said writing fluid. From an inspection of Fig. 2 it will be seen that the bar is arranged so that the slots open towards the concave face of the pen-point, and so that the pen-point constitutes a top closure for all of the slots. It will be apparent that ink held by the

slots 21 will readily be conveyed to the pen-point as fast as the ink is drawn therefrom. It will also be noted that by providing a plurality of unconnected slots, i. e., a plurality of slots without a connecting channel or the like, and also by providing a relatively large amount of wall area for the quantity of ink which is to be held in the slots, the tendency for the ink to flow too rapidly from the slots is overcome whereby blotting of the work does not readily occur.

In order to further increase the amount of wall area I prefer to arrange the slots 21 on an angle as clearly shown in Figs. 2 and 3. I prefer that the angle at which these slots are arranged should be such that when the pen is held in upright position, the slots will be downwardly inclined towards the writing end of the pen-point which inclination is effective to facilitate feeding all of the ink carried by the slots to the pen-point.

I am aware that changes in the form, construction and proportion of parts may be made without departing from the spirit of the invention as defined in the following claims.

I claim as my invention:

1. In a pen of the class described, the combination of a pen point, a solid feed bar formed with a plurality of unconnected slots extending across the top and down the sides of said feed bar and constituting independent reservoirs, each adapted, when said bar is dipped in writing fluid, to retain therein a quantity of said fluid, and means for mounting said pen point and feed bar in cooperative position so that the feed bar is capable of feeding the fluid in said reservoirs to the nib of said pen point.

2. In a pen of the class described, the combination of a convexo-concave pen point, a solid feed bar having a major portion of its cross section lying in the cavity of said pen point, and a pen holder having means for mounting said pen point and feed bar in cooperative position, said feed bar being formed with a plurality of unconnected inverted U-shaped slots constituting reservoirs for holding a quantity of writing fluid, said slots lying transversely of said feed bar and being inclined from their bottoms toward the nib of said pen point.

3. In a pen of the class described, the combination of a pen point, a feed bar associated with said pen point and having a plurality of transverse unconnected slots therein forming independent reservoirs for containing writing fluid, said slots being of such width that the capillarity of the opposite walls thereof is effective to hold in said slots, substantially their full capacity of writing fluid, and said slots being inclined from their bottoms outwardly and forwardly towards the nib of said pen point, whereby writing fluid contained by said slots tends

to flow to the pen point when the pen is in writing position, and a holder for maintaining said pen point and feed bar in cooperative position with the slots in the feed bar opening to the bottom side of the pen point so as to feed the fluid in said slots to said pen point.

4. A feeder bar for dip pens comprising a body portion having a shank portion to enter a pen holder, the bar portion in front of the shank having a plurality of independent and unconnected slots extending in substantial parallelism transversely across the top of the bar and downwardly at opposite sides thereof and constituting individual ink reservoirs, each reservoir having a closed bottom extending the full length of the reservoir from one side of the bar to the opposite side thereof, and said reservoirs being inclined upwardly and forwardly away from the shank portion whereby writing fluid in said reservoirs tends to flow away from the shank and towards the forward end of the feed bar.

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