No. 632,320.

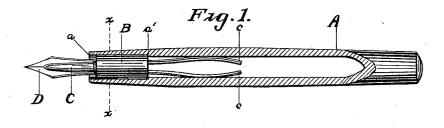
Patented Sept. 5, 1899.

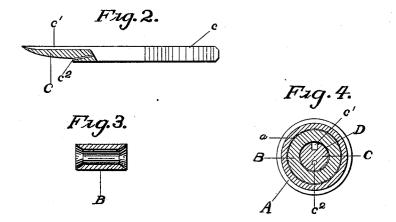
## E. E. NELTHORPE & G. H. WILLIAMSON.

FOUNTAIN PEN.

(No Model.)

(Application filed Mar. 10, 1899.)





WITNESSES

Spank S. Howelf. Nartwell ? Heath Edgar & Velthorpe, Story St. M. Sowick, Story.

## UNITED STATES PATENT OFFICE.

EDGAR E. NELTHORPE AND GEORGE H. WILLIAMSON, OF JANESVILLE, WISCONSIN.

## FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 632,320, dated September 5, 1899.

Application filed March 10, 1899. Serial No. 708,515. (No model.)

To all whom it may concern:

Be it known that we, EDGAR E. NELTHORPE and GEORGE H. WILLIAMSON, citizens of the United States, residing at Janesville, in the 5 county of Rock and State of Wisconsin, have invented a certain new and useful Improvement in Fountain-Pens, of which the following is a specification.

Our invention relates to fountain-pens, and 10 has for its object to provide a pen without a joint and of few parts and simple construction. This object we accomplish in the manner and by the means hereinafter more fully described in detail, and particularly pointed 15 out in the claims, reference being had to the accompanying drawings, in which like reference-letters indicate like parts in all the figures.

Figure 1 is a central longitudinal section of 20 our invention. Fig. 2 is a sectional view of the feed-bar. Fig. 3 is a detail view of nozzle. Fig. 4 is a sectional view on line x x, Fig. 1.

Our invention consists of a reservoir-holder A, of suitable shape and material, preferably 25 hard rubber, having one end closed and the opening in the other end bored out a little larger than the rest of the reservoir to form a seat a for the nozzle B, said seat a having a shoulder a' at its inner end.

The nozzle B is a small hollow cylinder of suitable material, preferably hard rubber, reamed out at each end to form an ink-receptacle and adapted to fit snugly in said seat a, its inner end resting against the shoulder a', which prevents said nozzle B slipping back

into the ink-reservoir.

The feed consists of a feed-bar C, of suitable material, preferably hard rubber, divided longitudinally from one end to the heel of the pen D into two parts c, which are bowed away from each other and form a spring pressing against the sides of the ink-reservoir and holding the nozzle B in place. The undivided end of the feed-bar C passes through 45 the nozzle B, leaving just room enough for the insertion of the pen D between the noz-zle B and the feed-bar C. Under the pen D

when in place and on top of the feed-bar C is cut a narrow channel c', extending from the 50 end of the split portion toward the point of

the pen D and growing shallow as it approaches such point. On the opposite side of feed-bar C a small hole  $c^2$  extends longitudinally through the undivided portion of the feed-bar C, connecting the interior of the ink- 55 reservoir with the air.

Having thus described our invention, what we claim as new, and desire to secure by Let-

ters Patent, is-

1. In a fountain-pen provided with an ink- 60 reservoir, and a nozzle fitting in the open end of said reservoir, a feed-bar divided longitudinally from its inner end nearly to its outer end into two parts, said parts being bowed apart forming a spring bearing against the 65 sides of the ink-reservoir, and said bar provided with a channel on top and an air-hole at the bottom and adapted to fit under the pen in said nozzle, substantially as shown and described.

2. In a fountain-pen, a nozzle adapted to fit in the open end of the ink-reservoir and a feed-bar divided longitudinally from its inner end nearly to its outer end into two parts, said parts being bowed apart forming a spring 75 bearing against the sides of said ink-reservoir, and said bar provided with a channel on top and an air-hole at the bottom and adapted to fit under the pen in the nozzle, substan-

tially as shown and described.

80 3. A fountain-pen consisting of an ink-reservoir, having its open end bored out to form a seat for the nozzle, a nozzle adapted to fit in said seat and a feed-bar adapted to fit under the pen in said nozzle, said feed-bar provided 85 with a narrow channel under said pen growing shallower as it approaches the point of said pen and an air-hole on the opposite side and said bar being partially divided longitudinally into two parts, said parts bowed away go from each other forming a spring bearing against the sides of said reservoir, substantially as shown and described.

In testimony whereof we hereto affix our signatures in the presence of two witnesses. EDGAR E. NELTHORPE.

GEORGE H. WILLIAMSON.

 ${
m Witnesses}$ :

WILLIAM BYRNE, EDWIN F. CARPENTER.