No. 687,023. Patented Nov. 19, 1901.

H. P. HAVENS.

FOUNTAIN RULING PEN.

(Application filed June 12, 1901.)

(No Model.)

fig. 1.

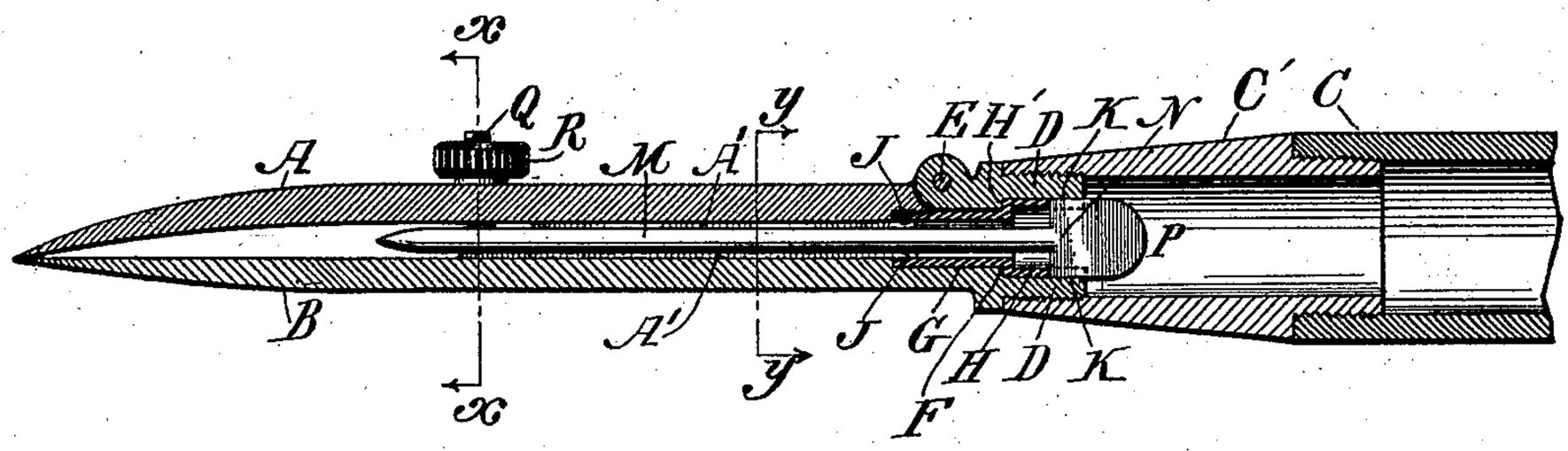


fig. 2.

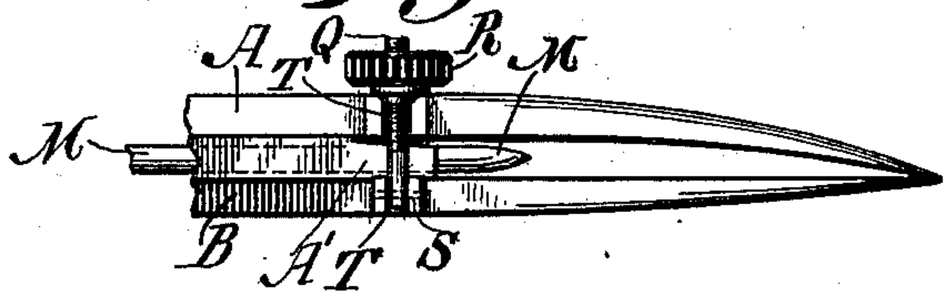


fig. 3.

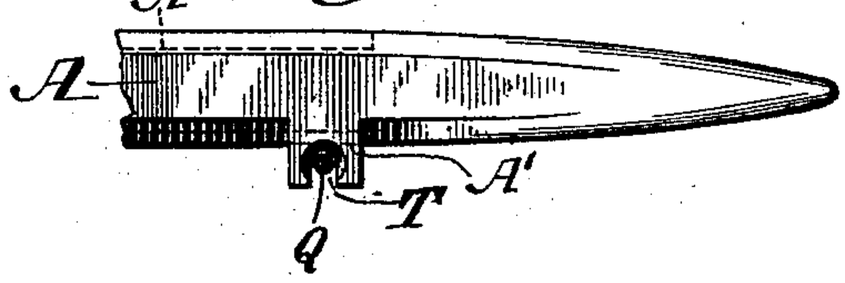


fig. 7.

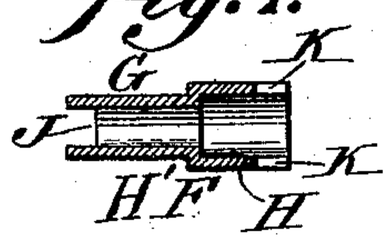


fig. 4.

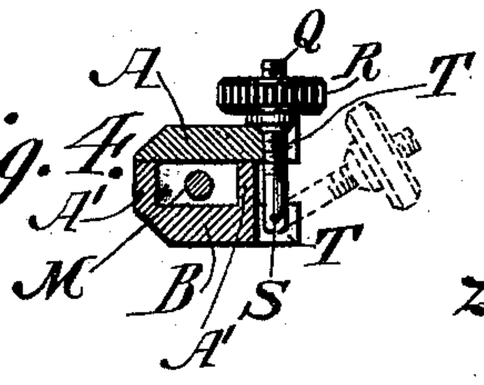


fig. 6.

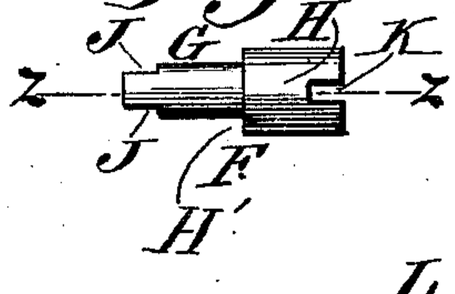


fig. 5.

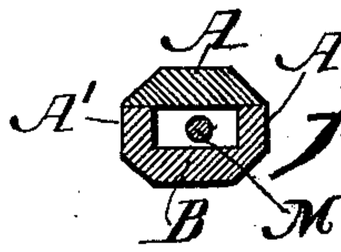
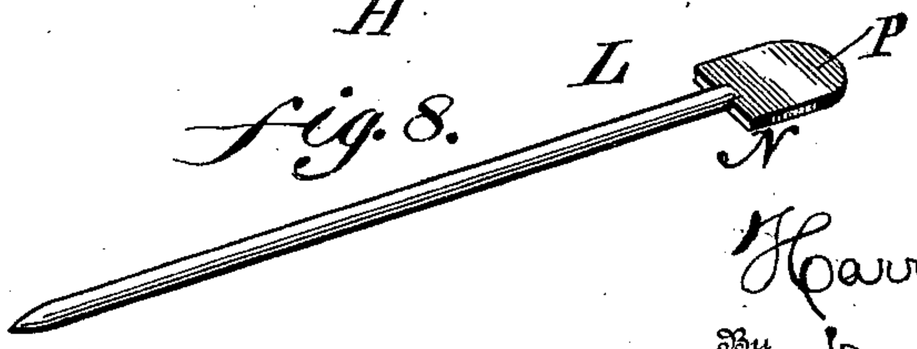


fig. 8.



Witnesses
L. Dorville,
C. S. McVay.

Inventor
Harry P. Havens.
By Duerstheimer & Fairbank
Attorneys

UNITED STATES PATENT OFFICE.

HARRY P. HAVENS, OF PHILADELPHIA, PENNSYLVANIA.

FOUNTAIN RULING-PEN.

SPECIFICATION forming part of Letters Patent No. 687,023, dated November 19, 1901.

Application filed June 12, 1901. Serial No. 64,243. (No model.)

To all whom it may concern:

Be it known that I, HARRY P. HAVENS, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Fountain Ruling-Pens, of which the following is a specification.

My invention consists of improvements in fountain ruling-pins, as will be hereinafter described, and pointed out in the claims.

Figure 1 represents a longitudinal section of a portion of a fountain ruling-pen embodying my invention. Figs. 2 and 3 represent side elevations of detached portions thereof. Fig. 4 represents a transverse section on line *x x*, Fig. 1. Fig. 5 represents a transverse section on line *y y*, Fig. 1. Fig. 6 represents a side elevation of a feeding device detached. Fig. 7 represents a section thereof on line *z z*, Fig. 6. Fig. 8 represents a perspective view of a conveying device.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A and B designate blades of a fountain ruling-pen. C designates the handle thereof, the latter being hollow, forming a barrel adapted to receive ink or other fluid suitable for drafting, writing, &c.

D designates the neck which forms the connection of the handle and blades, it being noticed that one of the blades is connected with said neck by the pivot E, whereby said blade can be readily moved to and from the other blade B. The latter-named blade has a resilient connection with the neck D, whereby it may automatically separate from the blade A. Within the neck D and adjacent portion of the blades is the feeding device F, which consists of the tube G, having an enlarged head H, the forward end of the tube having outlet openings or recesses J therein and the outer end of the head H having slots K therein.

L designates the conveyer of the pen, the same consisting of the rod or shank M and the flat head N thereon, it being noticed that said conveyer passes through the feeding device F and between the blades A and B, the head N partly entering the head H of said feeding device and having the sides of the head N interlockingly seated in the slots K, leaving the portion P of said head, which is an extension of the same, outside of the head H and occupying the adjacent portion of the barrel C, said head N being also circumscribed and engaged by the inner wall of the neck D, whereby it is firmly held, and the conveyer L is retained steady in position, supported by both the feeding device F and the neck D, said device having a shoulder H′ on its other surface, the same contacting with a similar shoulder D′ on the interior of the neck D, thus preventing forward shifting of said feeding device, it being evident that the ink or fluid employed after leaving the barrel will enter the feeding device F, being directed thereinto by the head of the conveyer, the ink then passing through the recesses J and being directed by capillary attraction along the shank M of the conveyer to the points or working portion of the blades in an effective and reliable manner. It will be seen that when the barrel is unscrewed or removed access is had to the collar C′, which connects said barrel with the neck D, and consequently to the head of the conveyer, when the projecting portion P thereof may be grasped and the conveyer entirely removed for cleansing or other purposes. When the barrel is unscrewed or removed, ink may be passed out of the collar C′, and the handle P of the conveyer is then accessible for removal, as stated.

In order to adjust the blades for fine or coarse work, I employ the screw Q and nut R, one end of said screw being connected by the pivot S with the blade B and the other end having the nut R thereon, the same bearing against the blade A, the sides of the blades having slotted ears T projecting outwardly therefrom, leaving the relative upper and lower faces of the blades free for contact of the fingers in operating the pen, said ears receiving the relative portions of the screw Q and being open at their outer ends, whereby the screw may be turned laterally outwardly on its pivot and occupy the position shown in dotted lines, Fig. 4, by which provision the blade A may be turned on its pivot E and opened and separated from the blade B and access had to the space between the blades for cleansing or other purposes, it being also seen that when the screw is restored to its normal position by properly turning the nut the point or working ends of the blades

may be adjusted for the nature of the work to be performed.

One of the blades has side walls A′ thereon, the same extending a portion of the length of the blade and projecting toward the other blade, so as to abut against the same, and forming an interior channel forward of the feeding device to prevent lateral escape of the ink or fluid at the relative places, the conveyer L projecting into said channel and the latter being positively closed when the blades are brought together, as plainly shown in Figs. 4 and 5.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fountain-pen having blades and a neck carrying the same; a tubular feeding device fitted in said neck and provided with slots in the rear end thereof, and a conveying device which is passed through said feeding device into the space between said blades, said conveying device having a head which enters the slots of said feeding device, and said head having a handle extending rearward of said slots, said head being also encircled by the inner wall of said neck.

2. A fountain-pen, having blades, and slotted ears projecting outwardly from the sides thereof, one of said blades being resilient, in combination with a screw which is pivotally connected with one of said ears and adapted to freely enter the other ear and a nut on said screw having a bearing on the latter ear.

3. In a fountain-pen, a barrel, with a reservoir therein, a pair of blades, walls on the sides of one of said blades adapted to abut against the inner face of the opposite blade and form a closed channel which is in communication with said reservoir, a conveyer in said channel, and a screw connected with the two blades for adjusting the same and positively closing said channel.

HARRY P. HAVENS.

Witnesses:
JOHN A. WIEDERSHEIM,
HELEN LANE.