

No. 631,823.

Patented Aug. 29, 1899.

R. P. ROBINSON.
FOUNTAIN PEN.

(Application filed Feb. 21, 1899.)

(No Model.)

FIG. 1

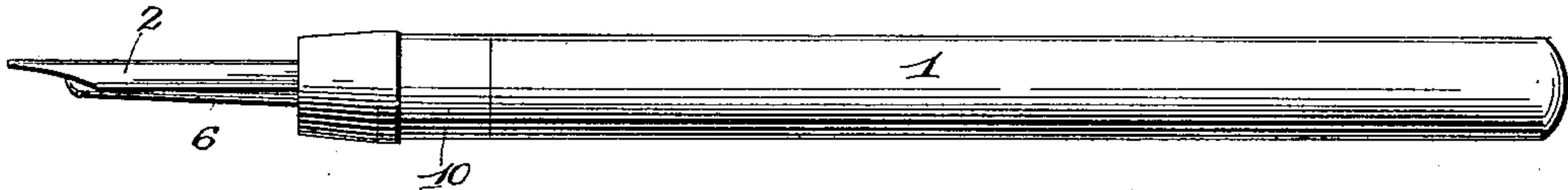


FIG. 2

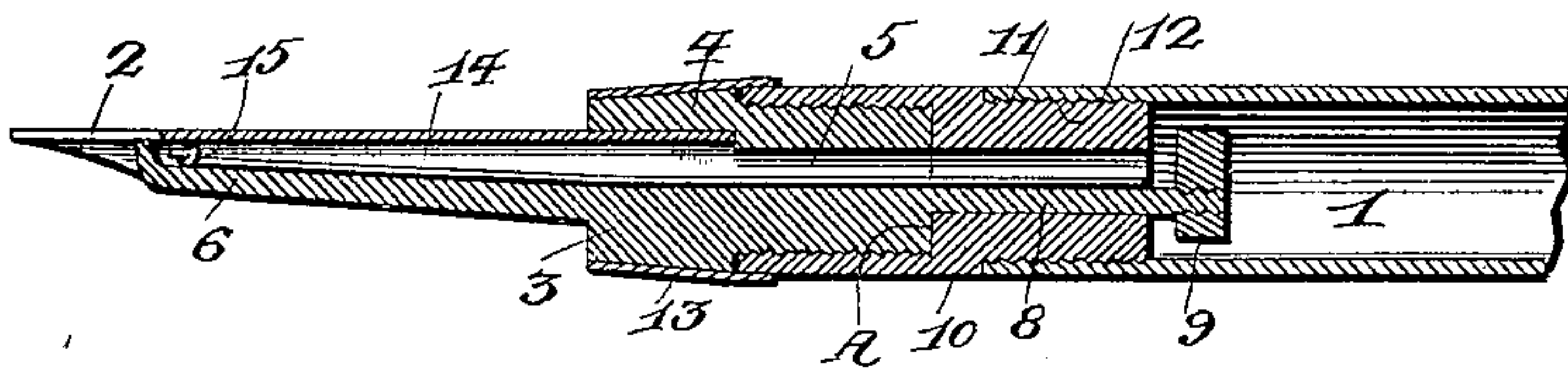


FIG. 3

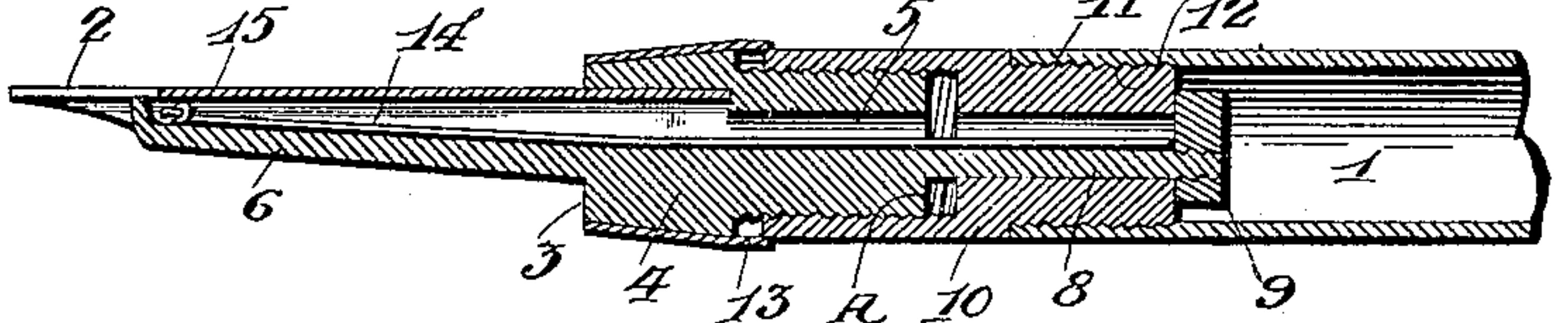


FIG. 4

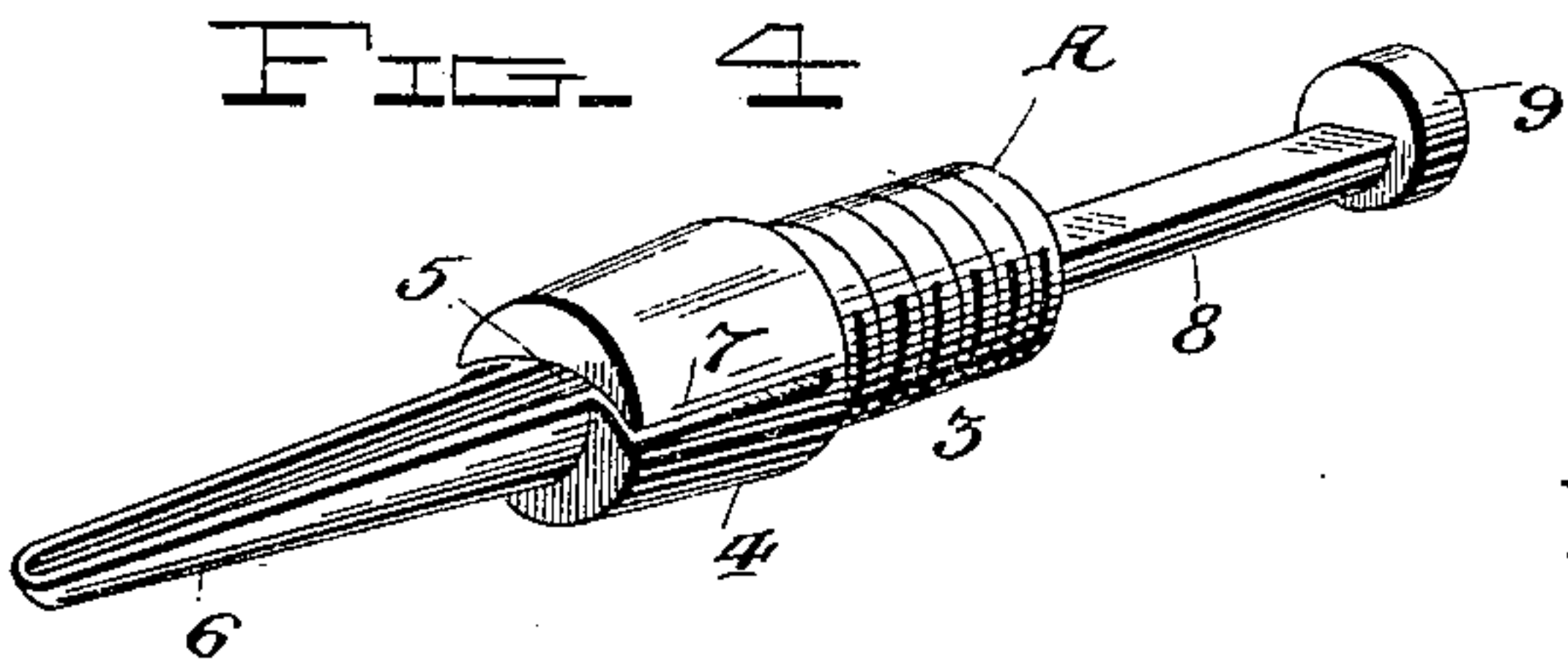
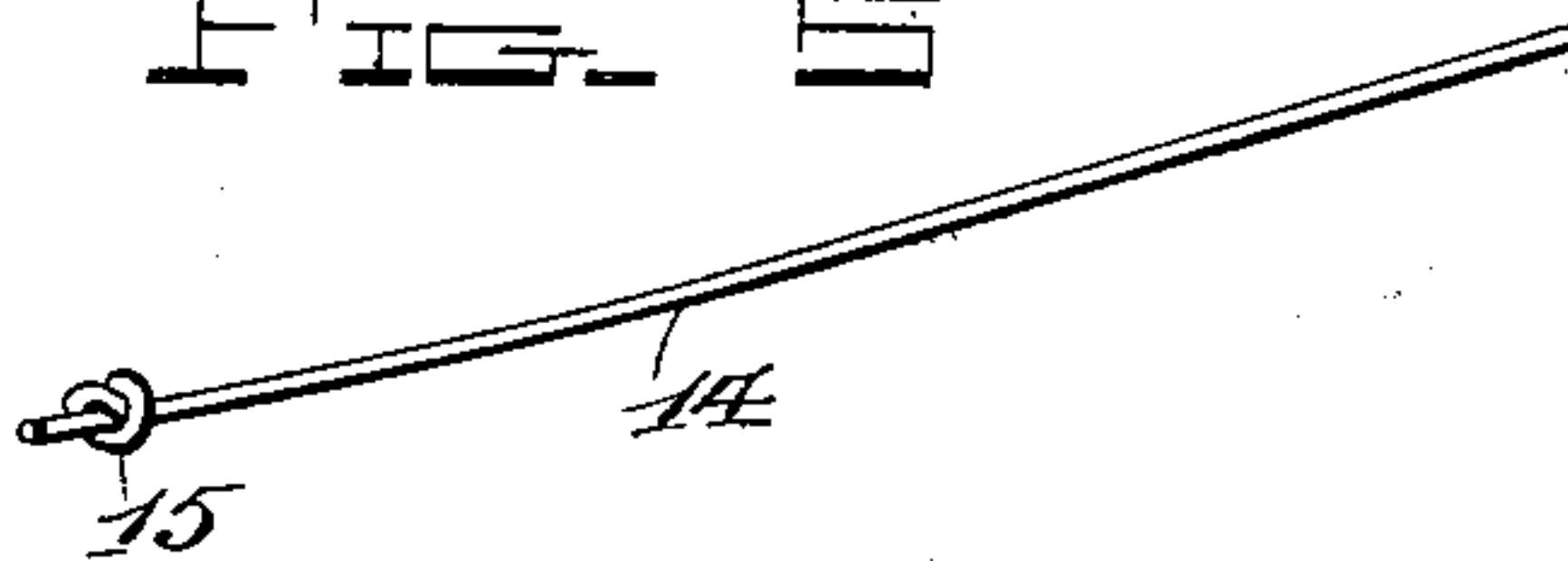


FIG. 5



Witnesses
D. L. Johnson
J. H. Johnson

Inventor
R. P. Robinson, by
A. B. Wilson & Co.
Attorneys

UNITED STATES PATENT OFFICE.

ROBERT P. ROBINSON, OF WILKES-BARRÉ, PENNSYLVANIA.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 631,823, dated August 29, 1899.

Application filed February 21, 1899. Serial No. 706,344. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. ROBINSON, a citizen of the United States, residing at Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Fountain-Pens; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention has relation to fountain-pens, and the object is to provide a pen of this character by means of which the ink may be entirely cut off from the pen-point, thereby preventing the leaking from the pen when the pen is not in use.

In the drawings, Figure 1 is a side elevation of my improved fountain-pen. Fig. 2 is a longitudinal fragmentary sectional view showing the valve open and the parts in position to supply ink to the pen-point. Fig. 3 is a similar view showing the valve closed. Fig. 4 is a perspective view of the combined feed and pen socket, and Fig. 5 is a perspective view of the feed rod or bristle hereinafter referred to.

In the drawings, 1 denotes the hollow pen staff or fountain. 2 denotes the pen-point, and 3 denotes the pen-socket. The pen-socket is formed with a cylindrical portion 4, having a longitudinal aperture 5, which communicates with the forwardly-projecting feed-channel 6 and supplies the ink to the nibs of the pen-point. The forward end of the cylindrical portion is provided with a slit 7, in which is inserted the upper end of the pen-point. Projecting from the rear end of the cylindrical portion is a valve-stem 8, which is provided with a valve 9.

10 denotes a sleeve provided at one end with external threads 11, which engage internal threads 12 of the pen staff or fountain, and provided with internal threads which engage external threads of the pen-socket. The bore of the sleeve at its rear end is of less diameter than the bore at its forward end. The valve-stem projects through the bore of the sleeve, and the valve hereinbefore referred to is then screwed or otherwise fastened upon the extreme rear end of the valve-stem.

13 denotes a band preferably formed of metal, which tapers to conform to the taper

of that portion of the pen-socket in which the pen-point is inserted, as well as the lower end of its sleeve. This band is slipped upon the pen-socket and serves to clamp the pen-point in position, as well as to conceal the joint formed between the sleeve and the pen-socket in the adjustment of one with respect to the other.

When the device is in the position shown in Fig. 2, with the valve open, the ink freely passes through the sleeve, the longitudinal aperture in the pen-socket, and into the feed-channel and supplies the pen. The offset or shoulder A, being forced against the flat portion or surface of the sleeve, prevents the ink from getting below that point, except through the ink-channel, thus preventing its running into the thread or screw 3. To close the valve, it is only necessary to rotate the pen-socket and work it outward, thus drawing the valve up against the rear end of the sleeve and cutting off the supply of ink.

In order to return the ink from the pen-point, the feed-groove, the longitudinal aperture, and the bore of the collar back to the fountain or pen-staff, I provide a fine stem 14, which is carried by the pen-socket and is located in the groove and the longitudinal aperture and rests upon the flat portion of the valve-stem, its forward end abutting against the end wall of the feed-channel and its rear end abutting against the valve. This stem may be made of catgut, split whalebone, split featherbone, bristle, or metal, or any other material capable of producing the desired effect, and the object is to overcome the capillary attraction between the ink and the parts through which it flows, to drain the pen-point and its socket of ink, and return the ink to the fountain, so that when the valve is closed there will be no ink to leak from those parts between the extreme end of the pen-point and the valve. Of course it is understood that to return the ink the pen is held with the point upward for a short space of time—a second or two. The stem also serves to quickly feed the ink to the pen-point when the valve is open, thereby relieving the penman of the objectionable habit of jerking or jarring the pen to bring the ink to the point.

In order to prevent the stem 14 slipping

from its place, I preferably form it with the head 15, which abuts with the end wall of the groove and is of such size as to prevent the stem working outward between the end wall of the groove and the body of the pen-point.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

15 In a fountain-pen, the combination with the hollow staff, a sleeve connected therewith and provided with a thread at its forward end, the pen-socket having a threaded en-

gagement with the forward end of the sleeve and having at its rear end a valve-stem that projects through the sleeve and into the staff, a valve secured to the free end of the stem, said socket being provided with a longitudinal aperture, a feed-channel, and a slit to receive the pen-point, and a band for clamping the pen-point in said slit and for closing the joint between the pen-socket and the sleeve, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT P. ROBINSON.

Witnesses:

J. F. O'NEILL,

W. A. O'NEILL.