

(No Model.)

J. MORRIS.
FOUNTAIN PEN.

No. 407,412.

Patented July 23, 1889.

Fig. 1.

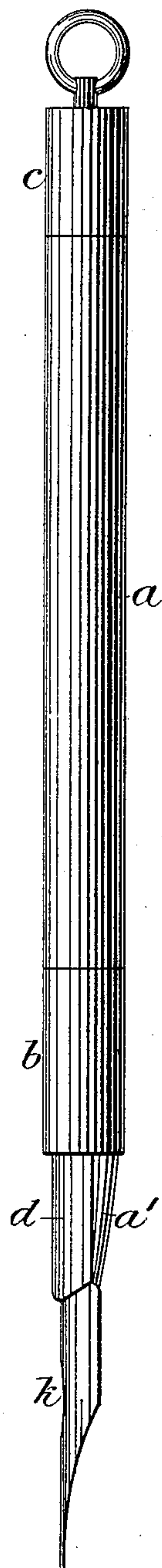


Fig. 2.

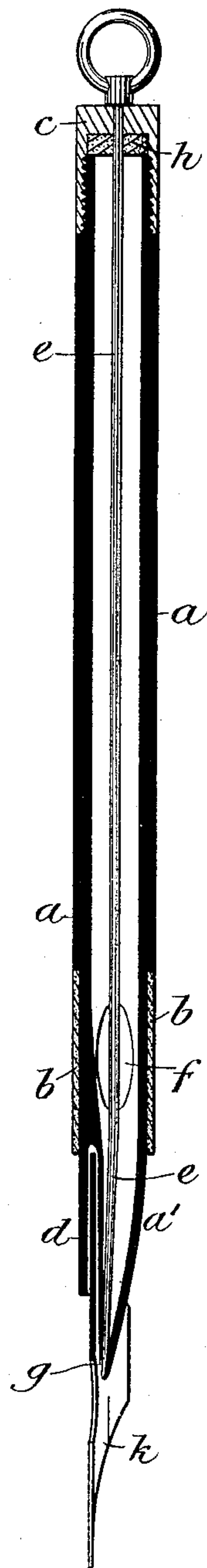
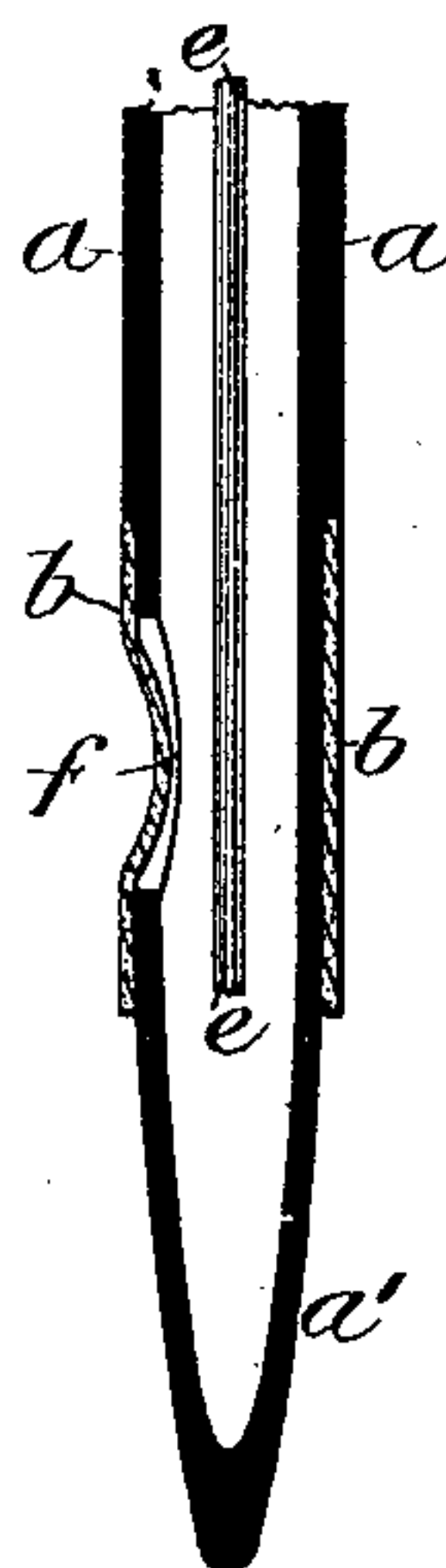


Fig. 3.



Witnesses:—
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UNITED STATES PATENT OFFICE.

JOSEPH MORRIS, OF LONDON, ENGLAND.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 407,412, dated July 23, 1889.

Application filed January 31, 1889. Serial No. 298,249. (No model.) Patented in England November 7, 1888, No. 16,114.

To all whom it may concern:

Be it known that I, JOSEPH MORRIS, a subject of the Queen of Great Britain, residing at London, England, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

The object of my invention is to manufacture improved fluid-tight fountain-pens.

My invention consists of a tubular holder, to the lower end of which any ordinary pen-nib may be fitted and used in the usual manner.

In order that my said invention may be particularly described and ascertained, reference is hereby made to the accompanying drawings, in which similar letters of reference indicate corresponding parts.

Figure 1 is an enlarged elevation of my invention. Fig. 2 is a sectional elevation, and Fig. 3 is a section of the lower end of the holder transversely to Figs. 1 and 2.

a is the tube forming the main body of the instrument.

b is a rubber sleeve covering a hole *f* made in the side of the tube *a*, against which the finger is held when writing. The lower end *a'* of the tube *a* is tapered to a point, as shown in Fig. 2. A small opening is made at *g*, and this part of the tube is turned upward toward the pen, the under side of which it just touches. The clip *d* may be soldered to the tube, or made movable, as preferred. *c* is a screw-cap bored through to receive the rod *e*, and inclosing a rubber disk *h* to render the upper end fluid-tight. The rod *e* passes down the tube *a*, and its lower end is sharpened or chamfered on one side, so that when pressed down it closes the valve *g* and prevents the ink flowing out. The rod *e* has the effect of keeping the valve clear from corrosion and solidified ink. When filling the pen-holder or reservoir, the pen is removed, the cap *c* is unscrewed, and the wire *e* withdrawn. The end *g* is then pressed against any elastic substance,

while ink is poured in at the upper end. The rod *e*, cap *c*, and pen *k* are then reinstated, the rod *e* being withdrawn from the port *g* about one-eighth of an inch. The pen is then ready for use. The ink percolates through the opening at *g* and travels down the pen, supplying it gradually and continuously while in use. The finger being held at *f*, Fig. 3, the natural throb of the finger imparts sufficient impelling-power to the ink to cause it to flow to the pen. The nib should be dampened before using the pen.

The tube, rod, holder, and other parts may be formed of metal, vulcanite, ebonite, or other suitable material.

I claim—

1. The combination, in a fountain-pen, of a tube *a*, rubber sleeve *b*, valve *g*, rod *e* controlling said valve, screw-cap *c*, to which the rod is secured, rubber disk *h*, and clip *d*, substantially as and for the purpose described.

2. In a fountain-pen, the combination, with a barrel *a*, of an india-rubber or equivalent sleeve *b*, cap *c*, clip *d*, rod *e*, hole *f*, valve *g*, and india-rubber or equivalent disk or washer *h*, substantially as herein described.

3. In a fountain-pen, the combination, with the reservoir or barrel *a*, having the opening *f* therein, and the projection *a'*, with the aperture in the end, and the clip *d*, formed integral therewith, of the rubber tightly surrounding the reservoir, covering the aperture *f* to prevent the escape of ink, substantially as described.

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

JOSEPH MORRIS.

Witnesses:

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