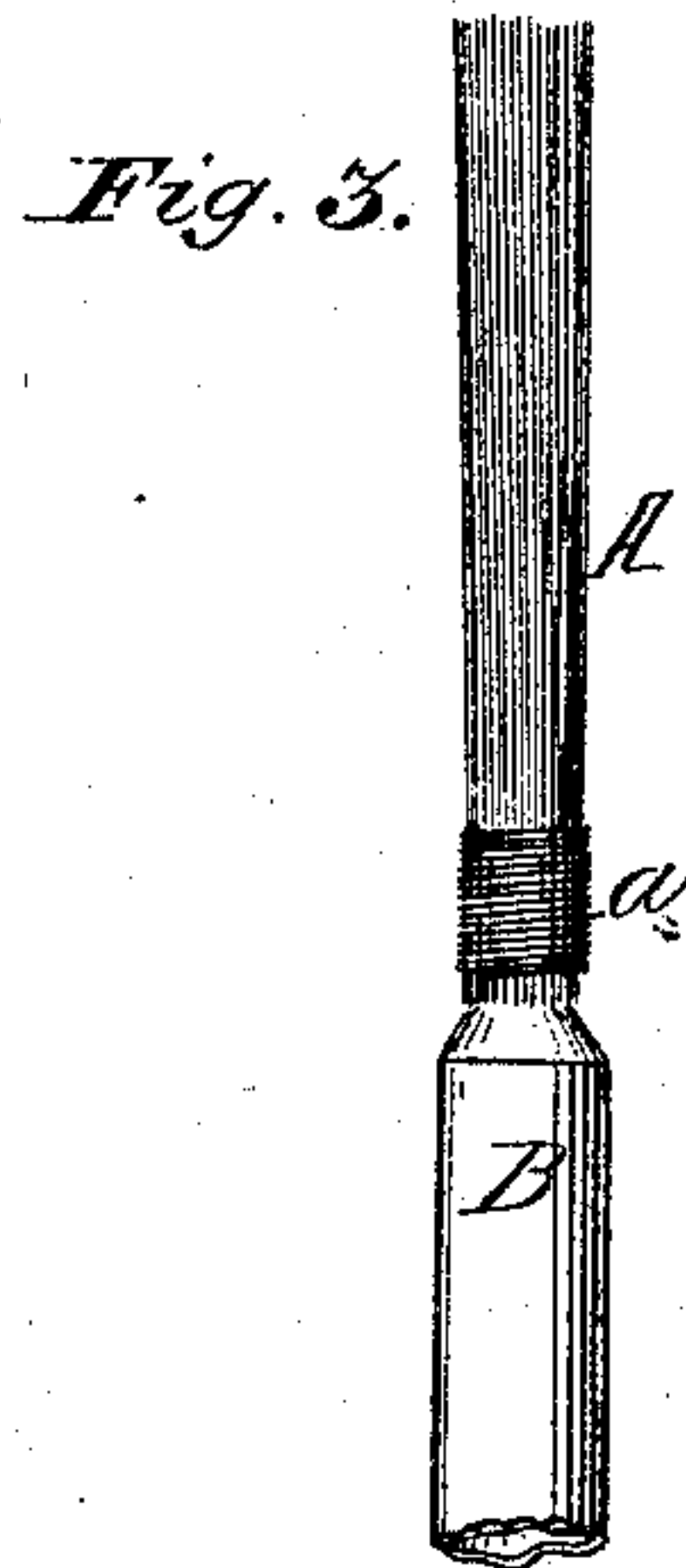
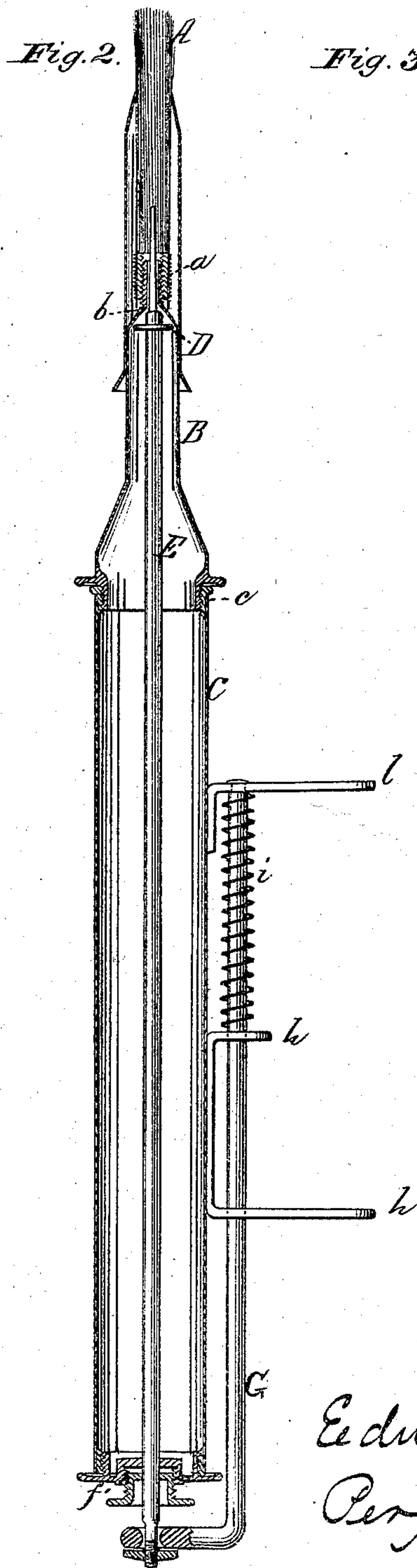
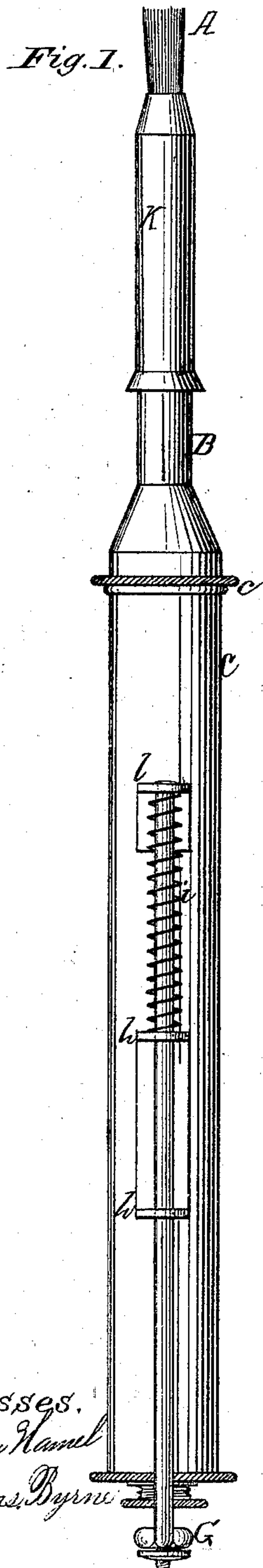


**E. W. HITCHINGS.**  
**Marking-Brushes.**

No. 147,394.

Patented Feb. 10, 1874.



*Witnesses.*  
*H. F. Du Hamel*  
*Thomas Byrne*

*Inventor.*  
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*attorney.*



# UNITED STATES PATENT OFFICE.

EDWARD W. HITCHINGS, OF POTSDAM, NEW YORK.

## IMPROVEMENT IN MARKING-BRUSHES.

Specification forming part of Letters Patent No. 147,394, dated February 10, 1874; application filed November 13, 1873.

*To all whom it may concern:*

Be it known that I, E. W. HITCHINGS, of Potsdam, county of St. Lawrence, and State of New York, have invented certain new and useful Improvements in Marking-Brushes, of which the following is a specification:

My invention relates to certain improvements in brushes designed more particularly for marking boxes, barrels, and packages. The invention consists in a brush formed with a thimble at its inner end, said thimble being provided with a female screw-thread for engagement with a male thread on the tapering end of the handle, which handle is hollow, constituting a fountain for the marking-fluid, and provided with a spring piston-valve for regulating the flow of the fluid, and a screw-cap for making the connection with the brush, and facilitating the supplying and replenishing of the fountain; and the brush being provided with a ferrule sliding over it, for the purpose of regulating its length and stiffness at the pleasure of the operator.

In the accompanying drawing, Figure 1 is a side view of my improvement. Fig. 2 is a longitudinal section of the same. Fig. 3 is a detached view of the brush.

A represents the brush, the inner end of which is formed on a hollow cylinder or thimble, *a*, for engagement with a male thread, *b*, on the end of the tapering portion B of the handle, which is hollow, so as to constitute a fountain for the marking-fluid, and consists of two parts, B and C, connected by a screw-thread at *c*, so that the part B fits the part C like a screw-cap, and is readily removed for the purpose of supplying the part C with marking-fluid. The screw-threaded shank *b* is hollow, so that the fluid readily passes from the fountain B C to the brush A when not prevented by the piston-valve D, which works in the tapering portion B of the handle, and is attached to a rod, E, the inner end of which works loosely in the hollow shank *b*, and the outer end works in a stuffing-box, *f*, at the outer end of the part C of the handle, where it is attached to the bent end of a rod, G, which slides in lugs *h h* on the outside of said handle, and is provided with a spring, *i*, for holding it down, and a finger-piece, *l*, for compressing the spring.

When the spring is extended, as shown in Fig. 2, the piston D closes the hollow shank *b*,

and prevents the flow of fluid to the brush; but when the spring is compressed by bearing upon the finger-piece *l*, the piston D rises into the larger portion of the part B, so as to allow the fluid to flow around it and pass to the brush, and, when released, it forces the fluid through said hollow shank.

K represents a ferrule, which slides over the brush and the tapering portion of the part B. The inner end is flaring, so as to correspond with the larger portion of the part B; and the outer end is tapering, so as to fit snugly over the brush A, and compress the bristles.

By sliding this ferrule upon the brush its length and stiffness are regulated at the pleasure of the person using it.

The advantages arising from the mode of attaching the brush by means of the thimble *a* and screw-shank *b* are obvious, as it will be seen that the brush may be easily removed, and replaced by a new one when worn, and brushes of different sizes and qualities may be used with the same handle.

I am aware that a series of rods, levers, springs, and valve have been in use in constructing a fountain-pen; but I find these devices inoperative for my use, for the reason that a downward pressure is required to feed the fluid. In my device I have introduced the lug or shoulder *h*, against which to brace the hand in operating the valve-rod.

What I claim as new, and desire to secure by Letters Patent, is—

1. The handle B C, made hollow and in two parts, connected by a screw at *c*, substantially as shown and described.

2. The combination and arrangement of the piston-valve D, rod E, rod G, lugs *h h*, spring *i*, and finger-piece *l*, as shown and described, for the purpose specified.

3. The combination in a marking-brush, substantially as shown, of the fountain C, provided with a tapering end piece, B, having shank *b*, with the rod E, terminating in the piston D and elongated point, and the brush A, all arranged and operating to carry the fluid to the center of the brush.

In testimony that I claim the foregoing as my invention I hereunto affix my signature.

EDWARD W. HITCHINGS.

Witnesses:

GEO. H. NORTON,  
E. HITCHINGS.