(No Model.)

C. E. PERRY.

MARKING BRUSH.

No. 327,586. Patented Oct. 6, 1885.

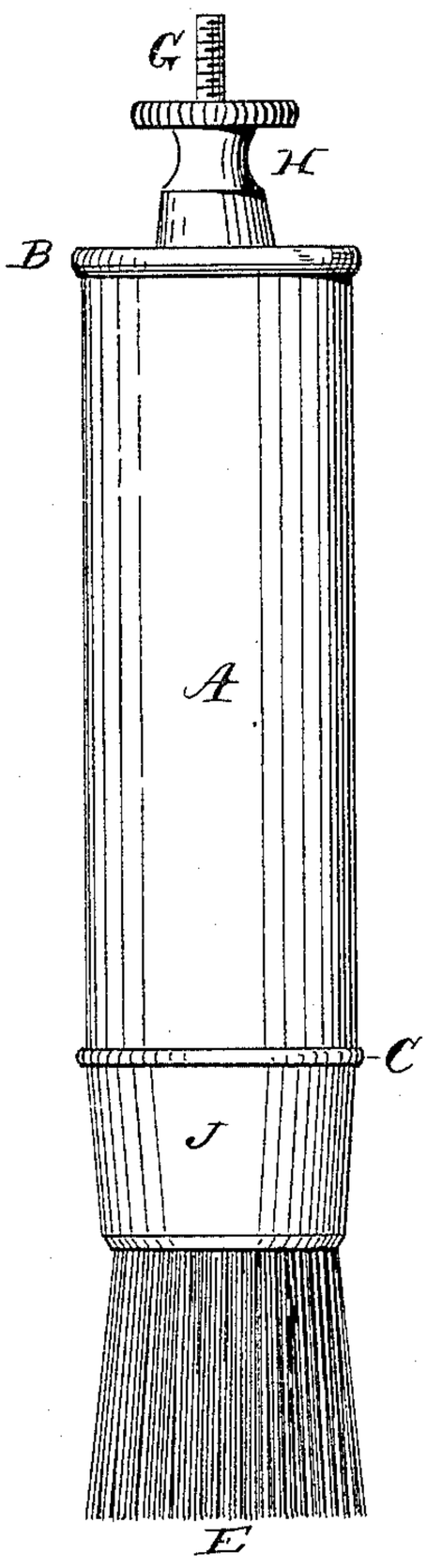

Fig. 1.

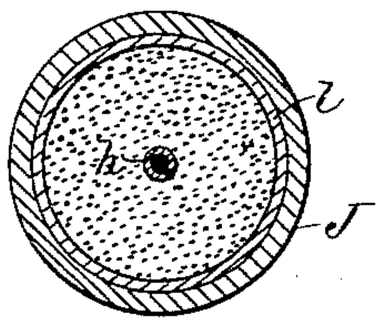

Fig. 3.

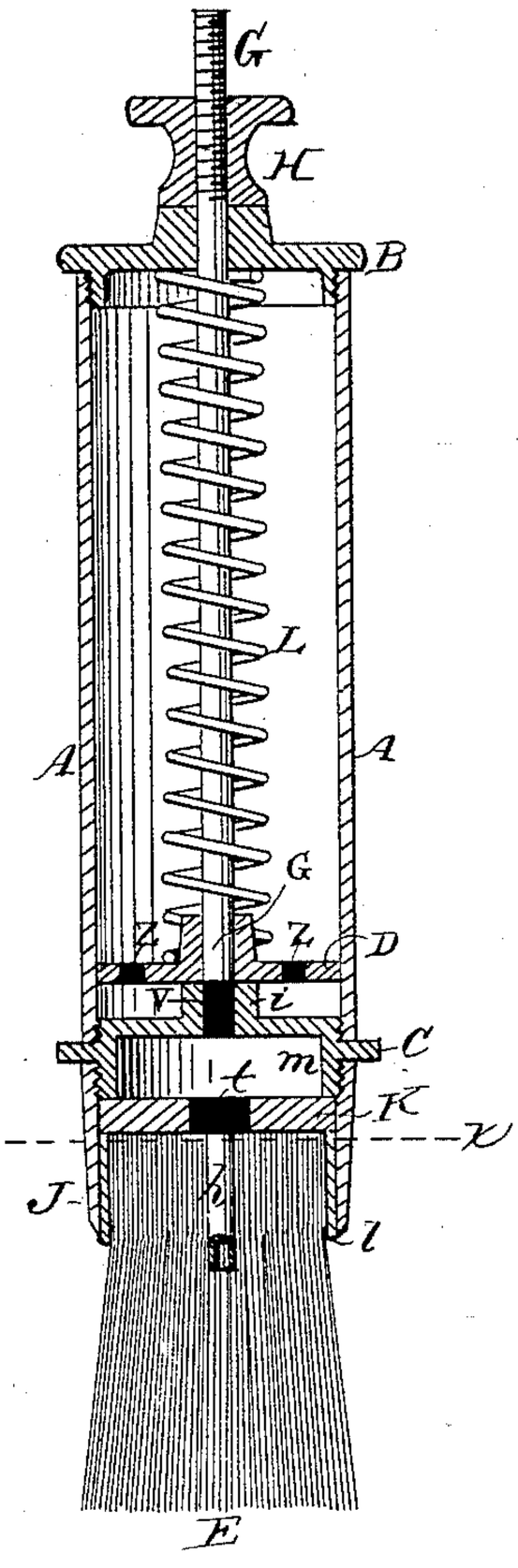

Fig. 2.

Witnesses:
H. E. Remick
L. J. White

Inventor:
Clarence E. Perry
Per C. C. Shaw.
Atty

UNITED STATES PATENT OFFICE.

CLARENCE E. PERRY, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF, ELIHU SMEAD, AND JOHN B. TURNER, ALL OF SAME PLACE.

MARKING-BRUSH.

SPECIFICATION forming part of Letters Patent No. 327,586, dated October 6, 1885.

Application filed May 10, 1884. Serial No. 131,047. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE E. PERRY, of Newton, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Marking-Brushes, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my improved brush; Fig. 2, a vertical longitudinal section of the same, and Fig. 3 a transverse section taken on the dotted line *x x* in Fig. 2.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates more especially to that class of marking-brushes which are provided with a fountain or tank for containing the marking-ink; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a simpler, cheaper, and more effective device of this character is produced than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body of the brush; B, the cap; C, the plug; D, the valve, and E the brush proper.

The body is cylindrical in form, and may be composed of sheet metal, rubber, or any other suitable material, the cap B and plug C being respectively screwed into its upper and lower ends, as shown in Fig. 2.

A rod or stem, G, passes centrally through the cap B, and is provided at its upper end with a nut, H, its lower end being connected to the valve D.

The plug C is chambered on its lower side, as shown at *m*, and provided on its upper side with a nipple, *i*, which forms a seat for the valve D.

A series of ducts or openings, *z*, are formed in the valve D beyond the periphery of the nipple *i*, and there is also a duct or opening, *v*, through the center of said nipple connecting the chamber *m* with the interior of the body A.

The brush proper, E, is composed of bristles or other materials, which are secured in a band, *l*, by cement, or in any other suitable manner.

A slightly-conical thimble, J, is screwed onto the lower end of the plug C, its larger end being connected with the plug.

The brush E is provided with a short centrally-arranged tube, *h*, open at either end, and extending, preferably, from its top to slightly below the band *l*.

A rubber packing-ring, K, having the central opening, *t*, is placed in the thimble J, above the brush E and band *l*, so that when the thimble is firmly screwed onto the plug C these parts will be properly packed, or a tight joint formed between the thimble, brush, and plug.

A coiled spring, L, is disposed in the body A around the stem G, its lower end resting on the upper side of the valve D, and its upper end abutting against the under side of the cap B, the spring acting expansively to force the valve down onto its seat *i*.

In the use of my improvement the brush E is inserted in the thimble J and the packing-ring K placed on top of the same, after which the thimble is screwed firmly onto the plug C, which has previously been placed in position in the body A. The valve D is inserted in the body A, which latter is then filled with ink and cap B screwed down to secure the valve, the nut H being turned back slightly to permit the spring L to close the valve and prevent the flow of ink into the chamber *m* and tube *t*. After the body or tank has been filled, as described, whenever the brush is required for marking, the nut G is turned down far enough to raise the valve from its seat and permit the ink to flow to the brush E, the nut being turned back again after the brush is used, thereby closing the valve.

It will be obvious that when the valve is opened the ink in the body A will flow through the ducts *z* and *v* into the chamber *m*, and will pass thence through the hole *t* and tube *h* to the brush E, where it will be properly distributed by the capillary action of the bristles; also, that the flow of the ink to the brush may be varied as desired by means of the nut.

If sufficient air does not pass upwardly through the tube *h* to supply the vacuum which tends to form in the tank as the ink runs out of the same, an additional vent may be arranged in the cap B and proper means supplied for closing the same.

The brush E being detachable may be readily changed and a coarser or finer one substituted, according to the work being done, its band *l* corresponding in flare or taper with that of the thimble J, and being of such a size as to prevent its escape from the thimble when the parts are screwed together.

Having thus explained my invention, what I claim is—

1. In a marking-brush, substantially such as described, the brush E, provided with the tube *h*, in combination with the thimble J, plug C, and packing-ring K, substantially as specified.

2. In a marking-brush, the tubular tank A, a brush connected thereto, the plug C, provided with the chamber *m* and duct *v*, and the nipple *i*, in combination with the valve D, having ducts *z*, substantially as described.

3. In a marking-brush, the combination of the tubular tank A, a brush, E, connected to the lower end of said tank, a plug, C, above said brush, provided with a chamber, *m*, with a duct, *v*, and with a nipple, *i*, a valve, D, provided with ducts *z*, a cap, B, at the upper end of said tank, a spring interposed between said cap and valve for holding the latter normally in contact with said nipple, and a rod extending through said cap, to the lower end of which said valve is fixed, whereby the latter may be withdrawn from the nipple to permit the flow of ink to the brush, substantially as described.

4. The improved marking-brush herein described, the same consisting of the body A, cap B, plug C, having chamber *m*, nipple *i* on said plug, provided with duct *v*, valve D, having ducts *z*, stem G, nut H, spring L, thimble J, packing K, and brush E, having the tube *h*, constructed, combined, and arranged substantially as specified.

CLARENCE E. PERRY.

Witnesses:
C. A. SHAW,
L. J. WHITE.