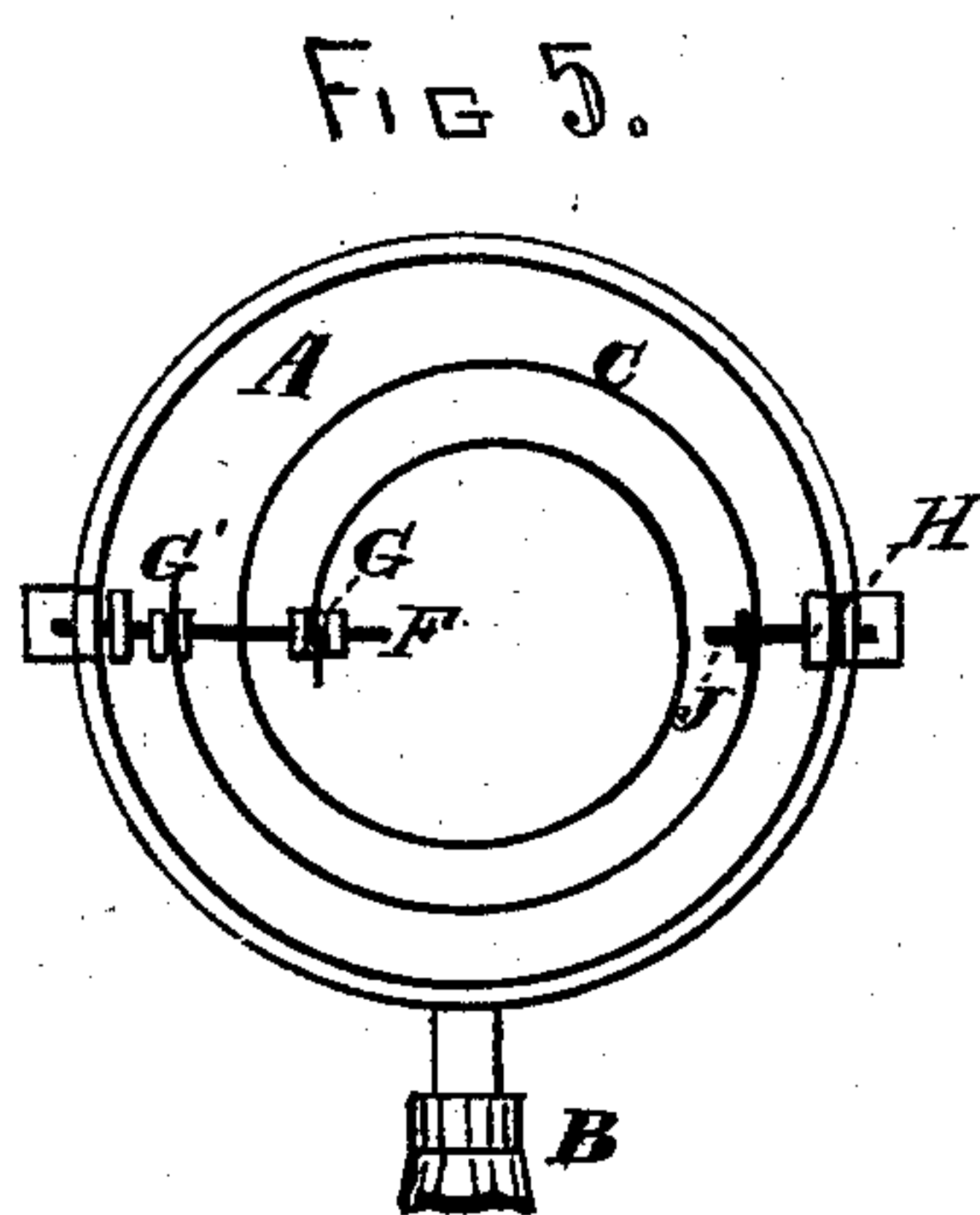
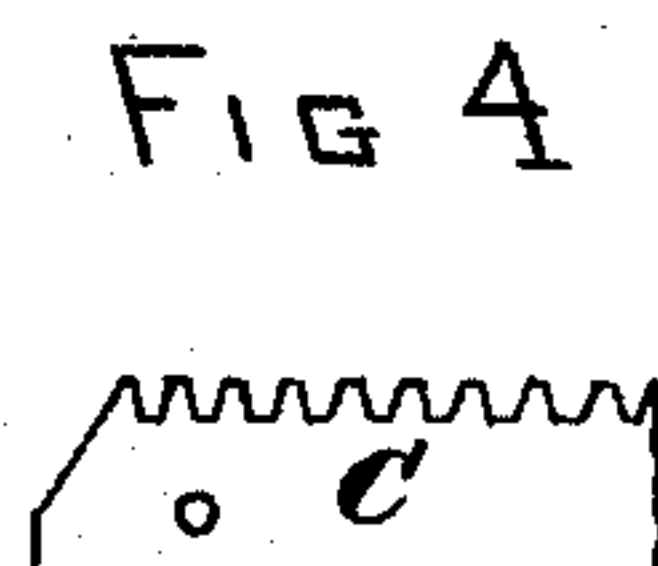
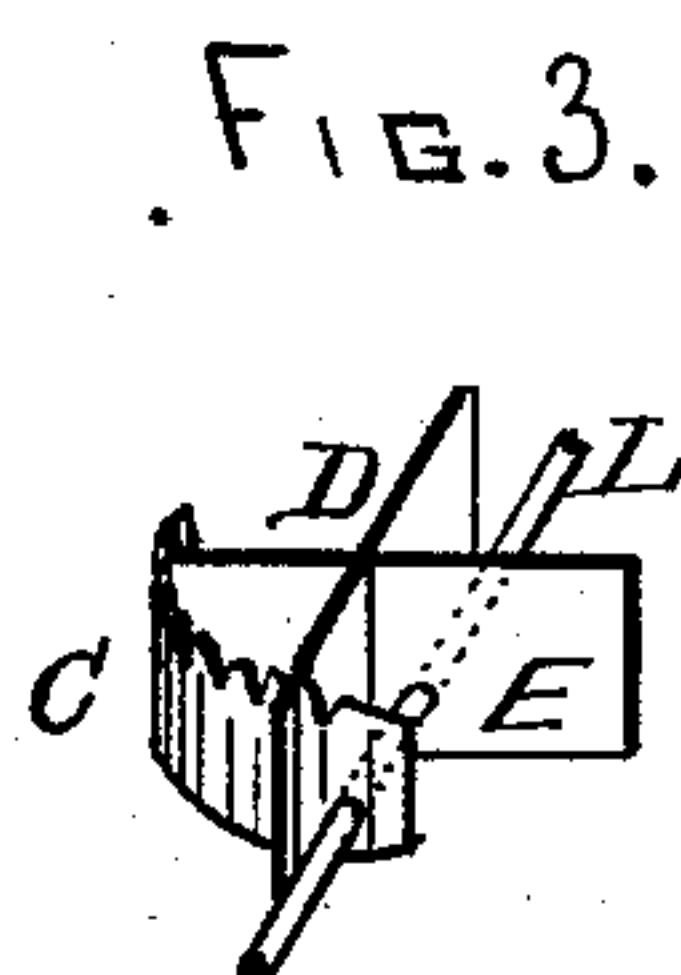
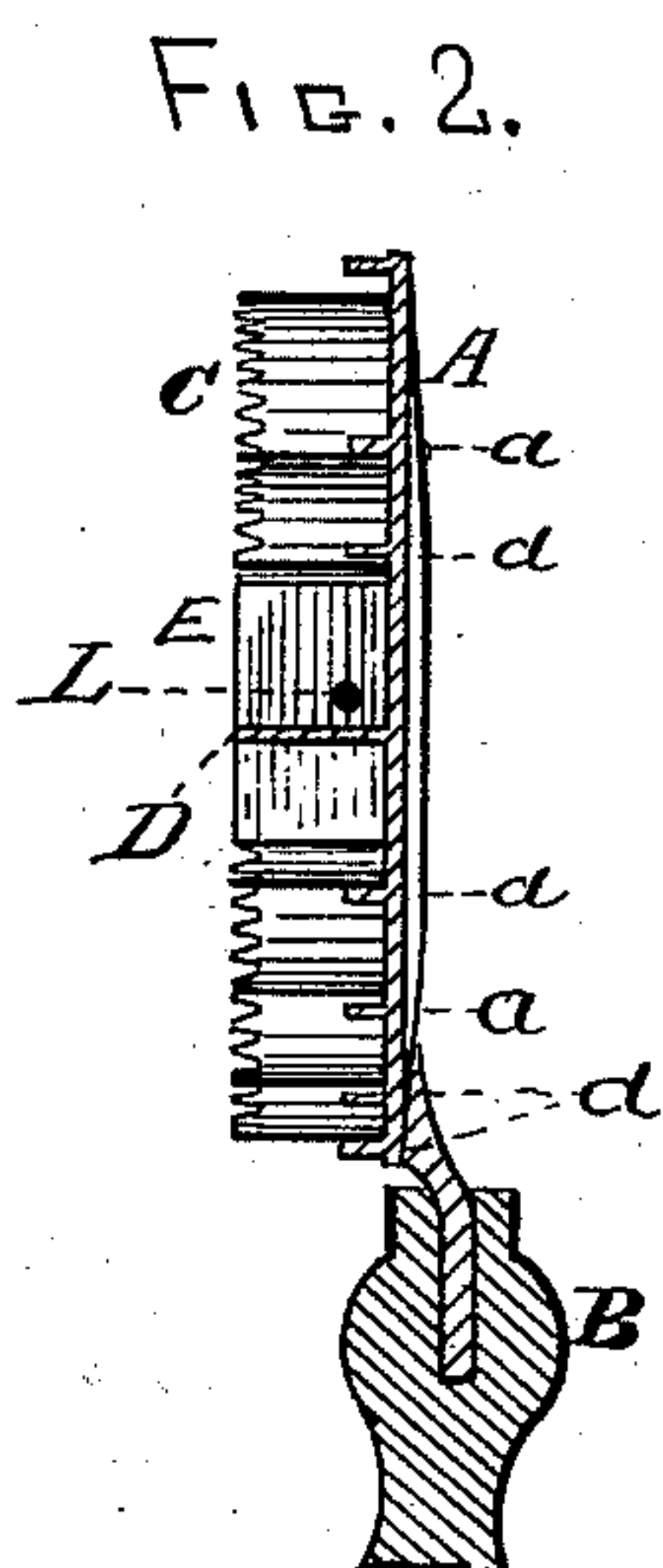
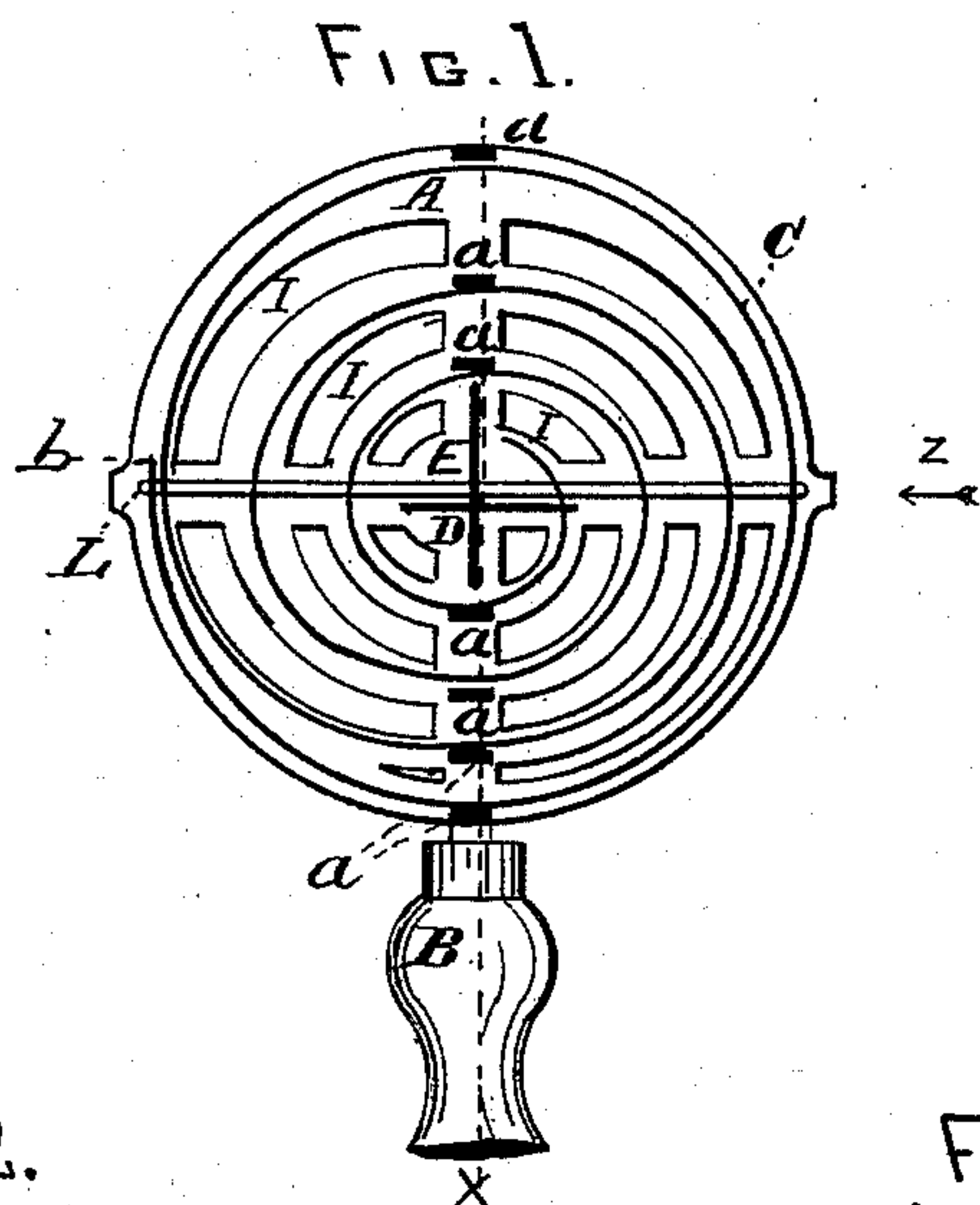


E. HARRIS.
Curry-Comb.

No. 221,962.

Patented Nov. 25, 1879.



Witnesses.
Wm. R. Moore.
William R. Moore.

Inventor.
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Atty.

UNITED STATES PATENT OFFICE.

ELIJAH HARRIS, OF PRINCETON, ILLINOIS, ASSIGNOR TO B. F. BABCOCK,
L. D. CLEVELAND, AND J. H. REA.

IMPROVEMENT IN CURRY-COMBS.

Specification forming part of Letters Patent No. **221,962**, dated November 25, 1879; application filed
October 11, 1879.

To all whom it may concern:

Be it known that I, ELIJAH HARRIS, of Princeton, Bureau county, State of Illinois, have invented a new and useful Improvement in Curry-Combs, of which the following is a specification, reference being had to the accompanying drawings, illustrating the improvement, in which—

Figure 1 is a face view of the tooth side of a curry-comb embodying my improvement. Fig. 2 is a section thereof, taken on line *x*, Fig. 1; Fig. 3, a perspective view of the core-plates and a broken piece of the tooth-plate removed from the other parts; Fig. 4, a broken strip of the tooth-plate; Fig. 5, a modification of Fig. 1.

The nature of the present invention consists in the combination of a spiral toothed plate with a disk in such position that the plate in cross-section shall be at right angles with the disk which supports it.

The object sought is to make the tooth-plate flexible to a certain extent, that the convolutions thereof may be elongated or contracted (in drawing the curry-comb over an animal) to relieve the device from dust, hair, &c., and obviate the rigidity of the curry-combs as heretofore constructed.

A, Fig. 1, represents a metal disk of suitable size to support a tooth-plate for currying horses. To this plate is attached a spiral tooth-plate, C, as follows: An X-shaped core-plate, D E, is cast solid to or fastened to a plate, A, at its central part, as shown, and one end of the plate D is provided with a slot, in which is placed the inner end of a spiral tooth-plate, C, the convolutions extending out and terminating at *b*, Fig. 1. Holes having been previously made through the tooth-plate C, a metal rod, L, is placed through these holes in the convolutions of C, of such size as readily to permit the convolutions to slide on it. The

ends of the rod L pass through the plate A, and are riveted down in the usual manner of fastening iron rods.

In the present construction stops *a a a*, &c., project out from the plate A to control the expansion of the spring tooth-plate; but these stops are not required in the form shown, as will be seen at Fig. 5, a modification of Fig. 1, where the spring tooth-plate C is held in position on plate A by means of two rods, J and F, and clamping-nuts H G G', instead of the one rod L, as at Fig. 1. This construction in Fig. 5 admits substantially of the same spring movement of the plate C, although it is held by different means.

I make different forms of fastenings for holding the plate to the disk A, but in all cases permit the convolutions of the plate C to expand and contract when in use. The disk at Fig. 1 is in skeleton form—that is, it is cast with openings I I, &c.; but it may be solid, some persons preferring to have the dust pass through the back of the comb.

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

1. In a curry-comb, the disk A, combined with a toothed spiral plate, C, which is held to the disk A at intervals, substantially as described, whereby it is enabled to expand and contract, as and for the purpose specified.

2. The combination of the disk A, toothed spiral spring C, rod L, and center core, D E, as specified.

3. The combination of the disk A, toothed spiral plate C, rod L, and stops *a*, as set forth.

ELIJAH HARRIS.

Witnesses:

M. H. GUSTIN,
E. E. GUSTIN.