

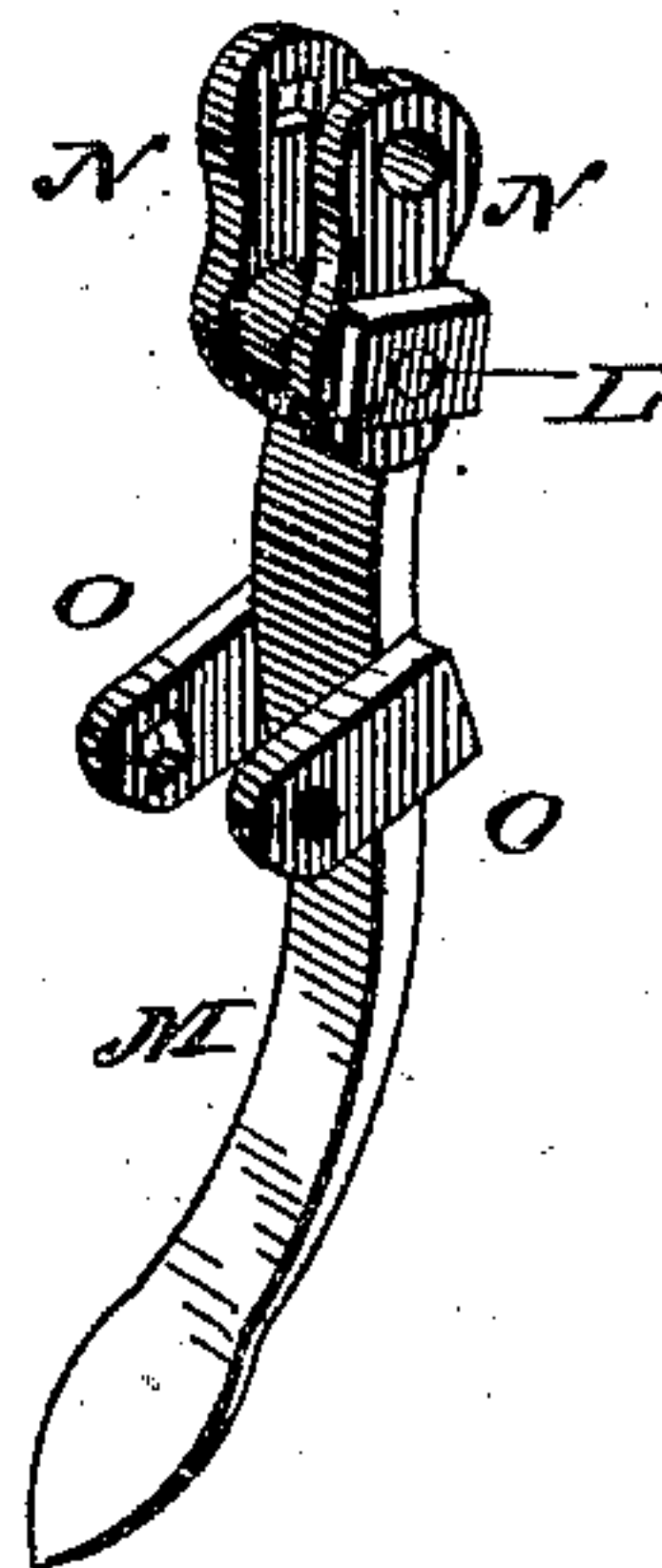
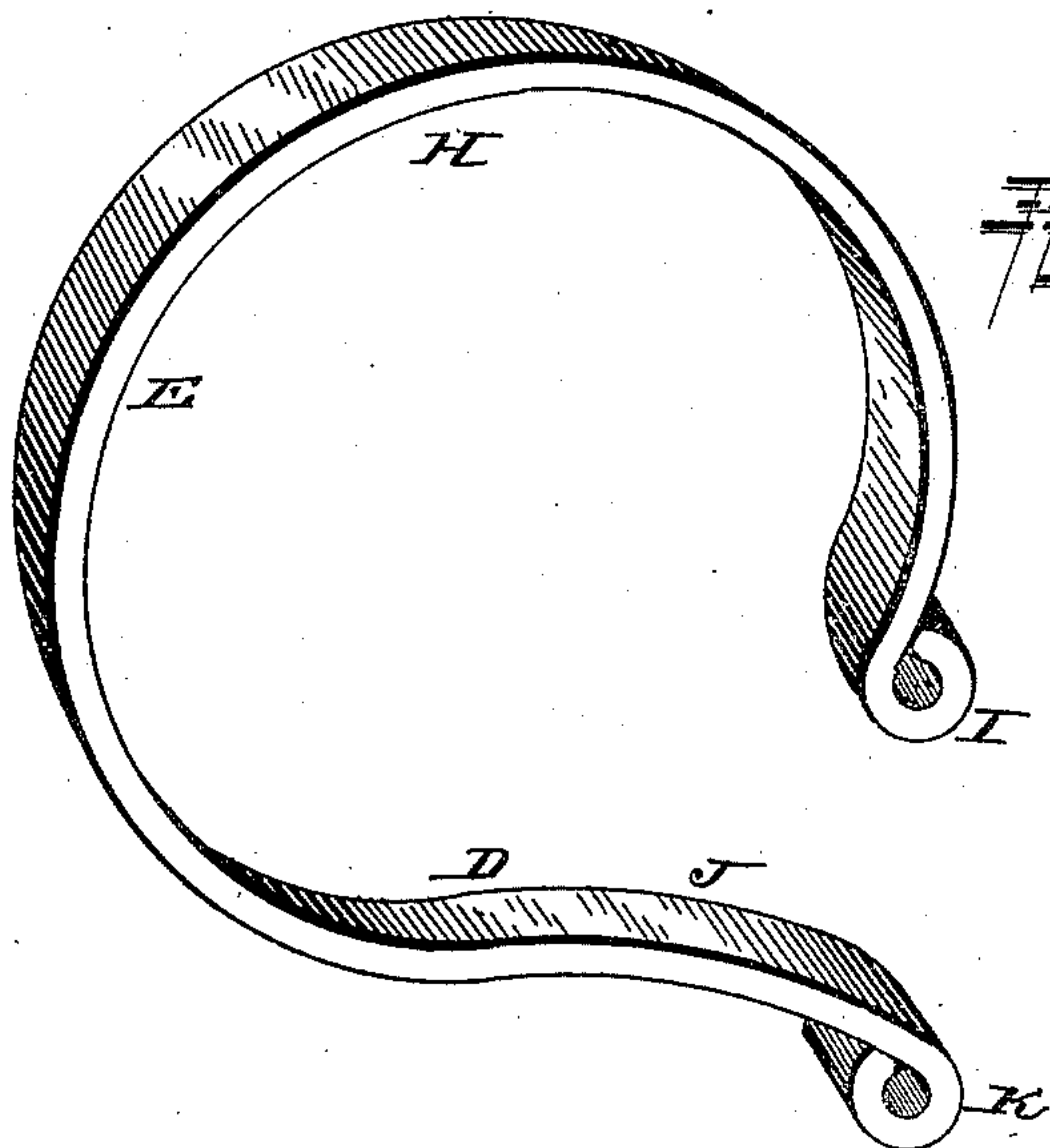
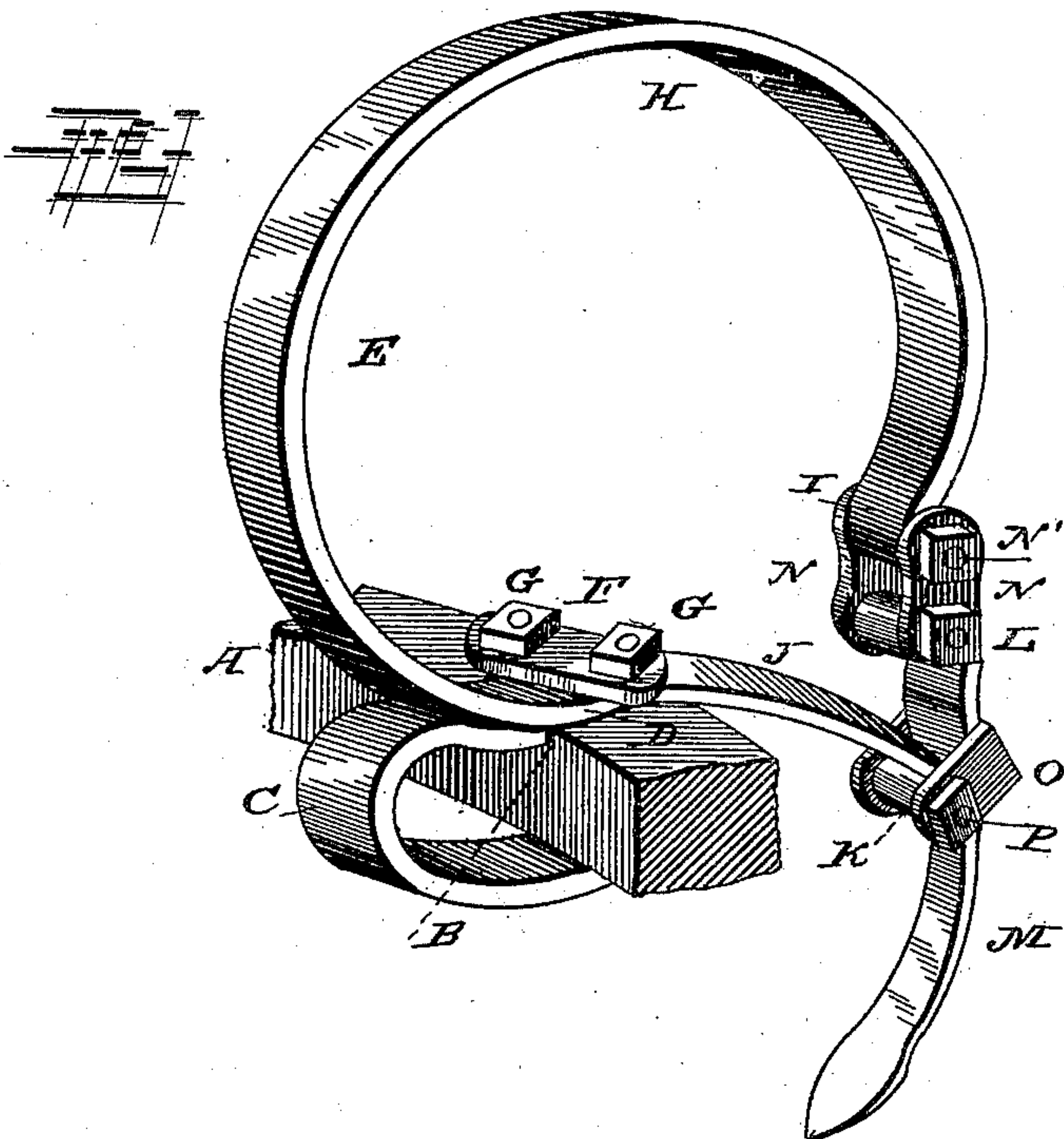
(No Model.)

LAFAYETTE J. STANTON.

HARROW TOOTH.

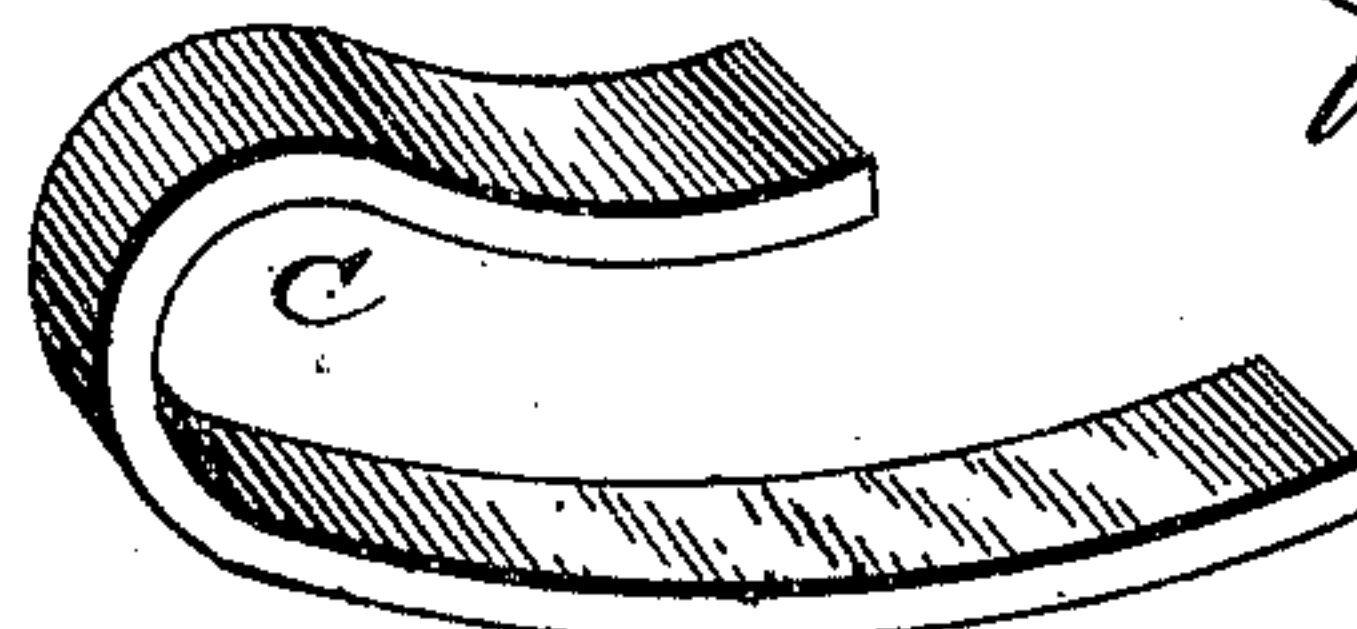
No. 309,416.

Patented Dec. 16, 1884.



WITNESSES:

Wm. S. Dieterich
Geo. F. Fitch



Lafayette J. Stanton,
INVENTOR.

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UNITED STATES PATENT OFFICE.

LAFAYETTE J. STANTON, OF SAND LAKE, MICHIGAN, ASSIGNOR TO ABNER L. SHEETS, FRED H. OLIN, CORNELIUS O. CAIN, ALFRED GIDDINGS, WILLIS H. BROOKS, GEORGE W. CRABBE, VOLNEY POWELL, HOMER L. CARTER, MADISON V. WILSON, AND ARNOLD P. COMSTOCK.

HARROW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 309,416, dated December 16, 1884.

Application filed July 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, LAFAYETTE J. STANTON, a citizen of the United States, and a resident of Sand Lake, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Harrow-Teeth; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved harrow-tooth, showing a small portion of one of the beams of a harrow; and Fig. 2 is a similar view of the several parts of the tooth separated.

Similar letters of reference indicate corresponding parts in both the figures.

My invention has relation to that class of spring harrow-teeth in which the tooth is pivoted or hinged to a spring; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the beam, the upper side of which has a transverse recess, B, in which the upper and inner rearwardly-pointing end of a spring-fender, C, is placed, the said fender consisting of a flat spring-bar bent or curved double, and having its ends pointing rearward. The curved or bulged seat portion D of the curved spring E is secured above the upper end of the fender by means of a clip or yoke, F, and bolts G, passing through the beam, the yoke bearing transversely across the spring; and the said spring consists of an upper curved portion, H, curved rearward, and having a transverse eye, I, at its end, the curved or bulged lower portion, D, and a rearwardly-projecting portion, J, projecting from the rear end of the bulged portion, and formed with a transverse eye, K, at its end. The upper end of the tooth M forms an eye, through which passes a bolt, L, which passes through the lower perforated ends of two links, N N, the upper perforated ends of which are hinged upon a bolt, N', passing through the eye I at the end of the upper curved portion of the spring, and the middle of the

tooth is provided with two forwardly-projecting perforated lugs, O, which are hinged to the rearwardly-projecting portion of the spring by means of a bolt, P, passing through the perforated lugs and through the eye upon the end of the said straight portion. It will thus be seen that the tooth will have its fulcrum upon the end of the straight rearwardly-projecting portion of the spring, and will bear with its upper end against the end of the curved portion of the spring with the perforated flat links, which will enable the tooth to yield to all obstructions; and it will also be seen that the fender will prevent rubbish from collecting in the tooth, and that the tooth and fender may be placed and secured or removed in a moment of time by simply loosening the nutted bolts, when the yoke may be removed and the spring and fender taken off.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of the beam having a transverse recess in its upper side, the harrow-tooth, the spring secured in the said recess, the flat doubled fender secured with its upper end in the recess below the spring, and the yoke and bolts, as and for the purpose shown and set forth.

2. The combination of the recessed harrow-beam, the flat doubled fender secured in the recess, the spring formed, substantially as described, and secured in the recess above the fender, the yoke and bolts, the tooth having an eye at its upper end, and provided with two forwardly-projecting perforated lugs hinged to the rearwardly-projecting portion of the spring, and the flat perforated links hinged at their upper ends upon a bolt passing through the eye of the spring, and at their lower ends to a bolt passing through the eye of the tooth, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

LAFAYETTE J. STANTON.

Witnesses:

JAMES CURRY,

HENRY L. MITCHELL.