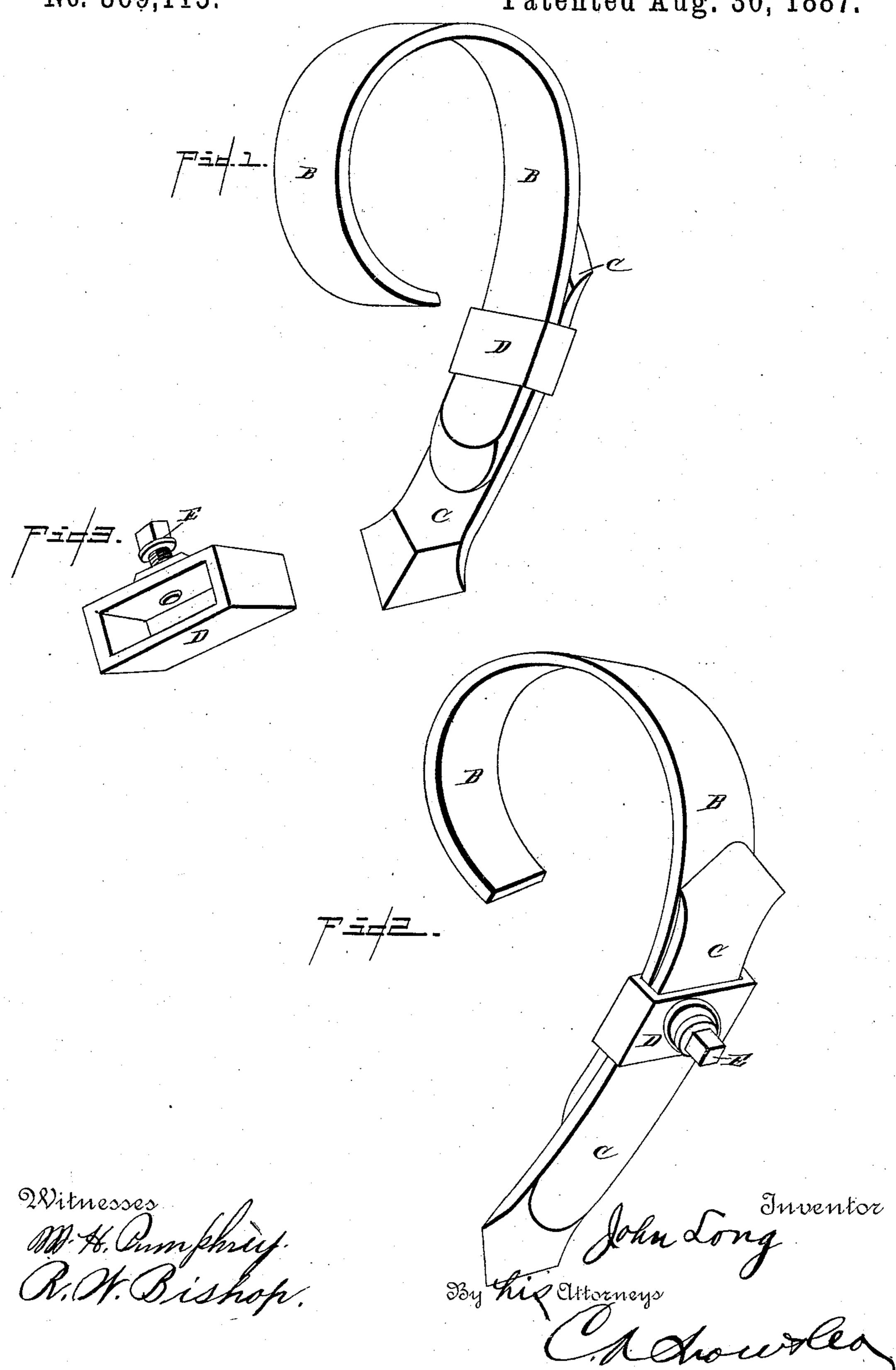
J. LONG.

SPRING TOOTH HARROW.

No. 369,115.

Patented Aug. 30, 1887.



## United States Patent Office.

JOHN LONG, OF PARISH, NEW YORK.

## SPRING-TOOTH HARROW.

SPECIFICATION forming part of Letters Patent No. 369,115, dated August 30, 1887.

Application filed July 5, 1887. Serial No. 243,432. (No model.)

To all whom it may concern:

Be it known that I, John Long, a citizen of the United States, residing at Parish, in the county of Oswego and State of New York, have invented new and useful Improvements in Spring-Tooth Harrows, of which the following is a specification.

My invention relates to improvements in harrow-teeth; and it consists in certain novel 10 features, hereinafter described and claimed.

The primary object of my invention is to provide means whereby a new point can be readily applied to an old worn out spring-tooth; and a further object is to provide a device which will permit of the tooth being adjusted to cut to any desired depth. These objects I accomplish by the use of the device illustrated in the accompanying drawings, in which—

Figures 1 and 2 are perspective views of a harrow-tooth embodying my invention, looking, respectively, at the front and rear; and Fig. 3 is a detail perspective view of the holder detached.

Referring to the drawings by letter, B designates the spring portion of the ordinary springtooth, secured to the beam in the usual manner, and from which the point has been worn by use. The lower end of the said spring B, after the tooth-point has been worn away, is ground to give it a smooth even edge, and the short tooth C is then applied thereto. This tooth C is passed through the rectangular band or holder D, and the said holder is then passed up over the lower end of the spring B, as shown, the tooth C passing up behind the spring. The rear side of the holder D is provided with a central screw-threaded perforation or opening, in which a set-screw, E, works.

The inner end of this set-screw bears against 40 the rear side of the tooth C and serves to clamp the same and the lower end of the spring against the front cross-bar of the holder, thereby rigidly securing the several parts.

It will be seen from the foregoing description, taken in connection with the annexed drawings, that I have provided a device of very simple construction, which can be readily applied to the harrow-teeth by an unskilled person. The tooth can be readily adjusted to 5c cut to any desired depth by simply releasing the set-screw and setting the tooth higher or lower and then retightening the set-screw, as will be readily understood. The construction of my device also permits of the tooth being 55 readily withdrawn for sharpening, and as the holder is rectangular it will fit squarely and snugly around the several parts, and thereby prevent the tooth turning.

Having thus described my invention, what I 60 claim, and desire to secure by Letters Patent, is—

1. A holder for harrow-teeth, consisting of a rectangular band having a set-screw working through its rear side, as and for the pur- 65 pose set forth.

2. The combination of the spring B, tooth C, holder D, encircling the tooth and spring, and the set-screw E, working through the rear side of the holder and bearing against the tooth, 70 substantially as set forth.

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

JOHN LONG.

Witnesses:

T. W. SKINNER, NICHOLAS RHODES,