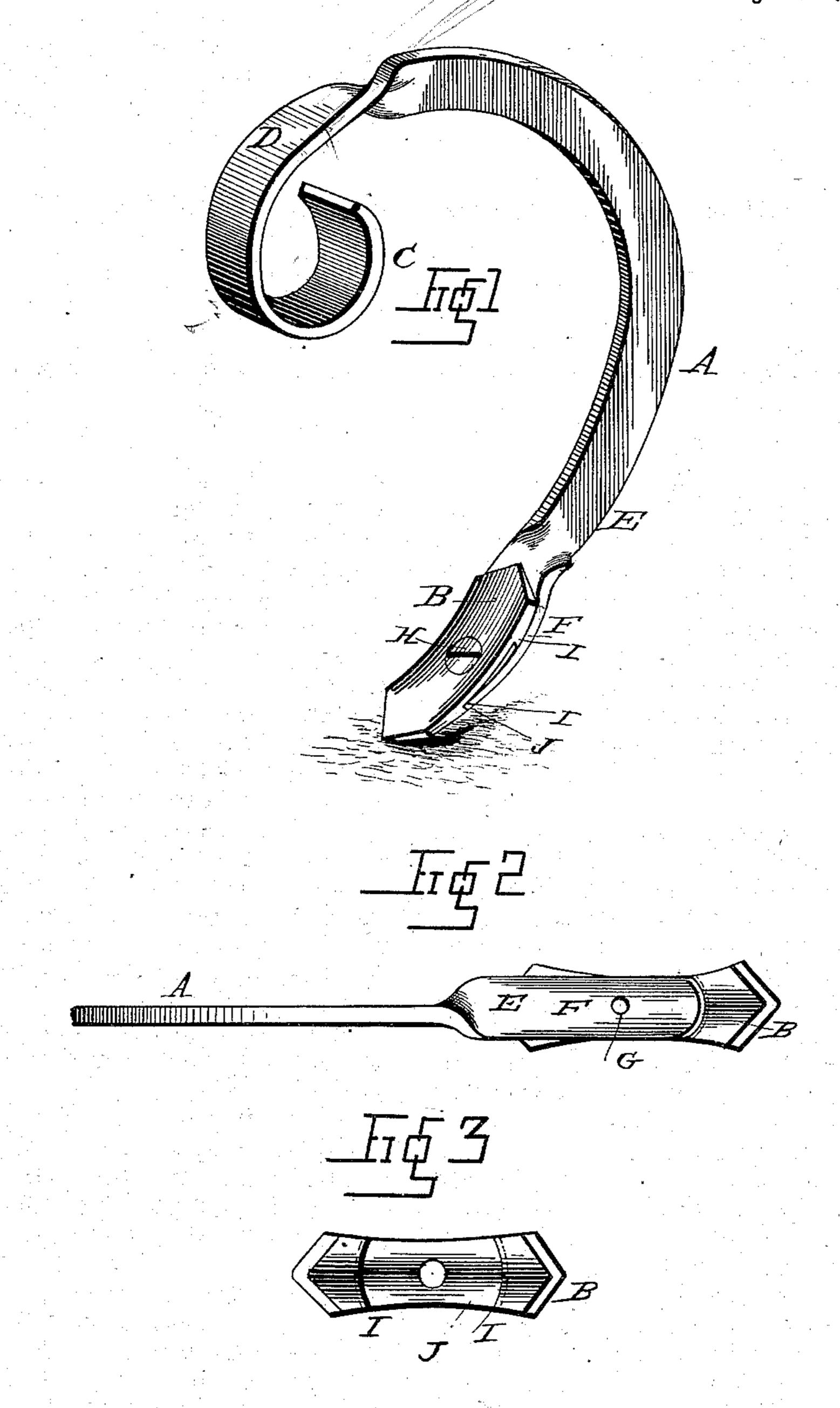
(No Model.)

## P. STANTON.

HARROW TOOTH.

No. 278,287.

Patented May 22, 1883.



WITNESSES

Med. J. Dieterich.

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## United States Patent Office.

## PHILENA STANTON, OF MILLBROOK, MICHIGAN.

## HARROW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 278,287, dated May 22, 1883.

Application filed January 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, Mrs. Philena Stanton, of Millbrook, in the county of Mecosta 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. Fig. 2 is a bottom view of the lower part of the same, and Fig. 3 is a bottom view of the reversible point.

Similar letters of reference indicate corre-

sponding parts in all the figures.

My invention has relation to spring harrowteeth; 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 represents the curved tooth, and B the rever-25 sible point. The tooth is fastened to the front of the tooth-bar by its upward-curved part C, whereupon it is curved forward and upward at D, coming around over the tooth-bar, when it is twisted at right angles, bringing the edges 30 to face forward and rearward, the upper curved part of the tooth C being fastened with its flat side against the tooth-bar. The twisted portion E is curved slightly forward, and twisted at right angles at its lower end, F, bringing 35 its flat sides facing forward and rearward. By twisting the tooth so that it will pass edgewise through the ground it will require less draft and the harrow will not be as liable to clog up by sod and clods as when the flat side of the 40 tooth faces forward. The lower end, F, of the tooth has a screw-threaded hole, G, adapted to receive a screw-bolt, H, which secures the reversible point B to the end of the tooth. This point is sharpened at both ends, the bolt pass-

ing through the middle of it, and may be wide 45 or narrow, as desired, so that several sets of points may be used upon the same harrow without removing the teeth. The under side of the point is recessed at its central portion, the ends forming shoulders I, corresponding in shape to 50 the shape of the end of the tooth, which bears against them, resting in the recess J, whereby the dirt is prevented from working up between the end of the tooth and the point, causing the point to work loose, and at the same time hold-55 ing the point firmer in place.

It will be seen that by having the points removable several different widths and shapes of points may be used upon the same teeth, and that by having the points reversible they 60 may be turned when one end is worn out, and that the points may be sharpened and repaired

without removing the teeth.

Having thus described my invention, I claim and desire to secure by Letters Patent of the 65 United States—

1. A spring harrow-tooth twisted at right angles at its upper and lower part, turning the middle part of the tooth edgewise in the direction of the draft, as shown and set forth.

2. The reversible point B, fastened by a screw-bolt to the end of the tooth, and recessed at J upon its under side, forming shoulders I, corresponding in shape to the end of the tooth, as shown and set forth.

3. The combination of the curved spring-tooth A with the reversible point B, bolted to the end of the tooth and having recess J, substantially 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.

PHILENA STANTON.

Witnesses:

CHAS. H. RODI, OMER C. TINEY.