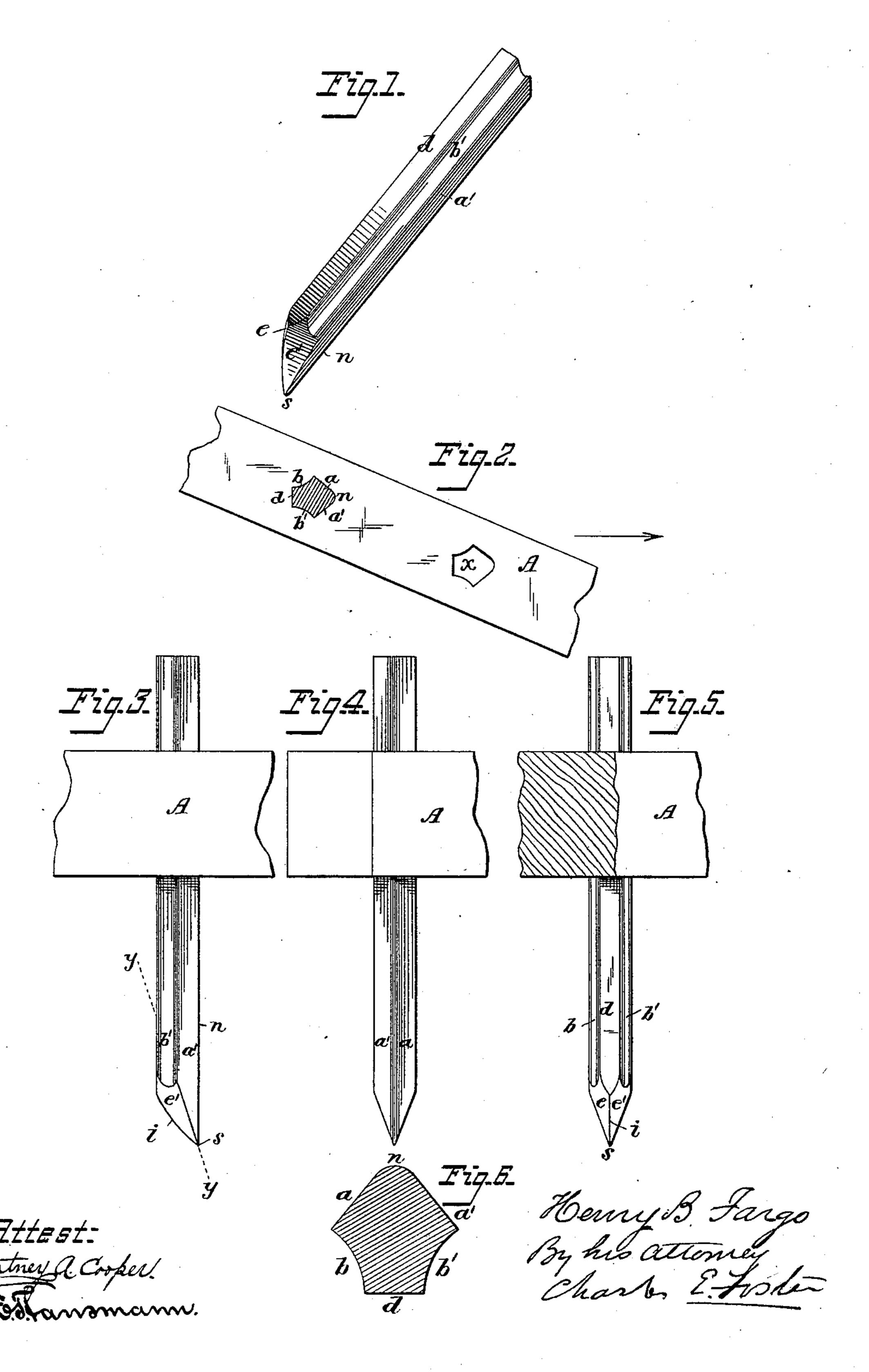
H. B. FARGO.

HARROW TOOTH.

No. 251,103.

Patented Dec. 20, 1881.



## United States Patent Office.

HENRY B. FARGO, OF REDWOOD FALLS, MINNESOTA.

## HARROW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 251,103, dated December 20, 1881.

Application filed September 28, 1881. (No model.)

To all whom it may concern:

Be it known that I, Henry B. Fargo, a citizen of the United States, and a resident of Redwood Falls, Redwood county, State of Minnesota, have invented certain Improvements in Harrow-Teeth, of which the following is a specification.

My invention is an improved harrow-tooth constructed, as fully described hereinafter, so as to secure stiffness, light weight, and a durable point, and specially adapted for use as a smoothing-harrow, with less liability to clog from the accumulation of straw and grass than teeth made in the ordinary manner.

In the drawings, Figure 1 is a perspective view, showing one of my improved teeth. Fig. 2 is a plan view of part of a harrow-bar, showing a tooth in section and an open socket. Fig. 3 is a side view, showing part of a bar and a tooth. Fig. 4 is a front view of Fig. 3. Fig. 5 is a rear view of Fig. 3; Fig. 6, a cross-section, showing the form of bar from which the tooth is made.

The tooth is made from a bar having five 25 faces, a a' b b' d, the faces a a' being front faces, the faces b b' side faces, and the face d a back face, as shown in Figs. 2 and 6. The point is made by cutting from the side faces centrally and downward to the front to form two curved 30 faces, e e', which meet centrally, forming an edge, i, and by their intersection with the front meeting edge, n, of the faces a a' making the point s. The faces b b' may be flat, but are best made curved, as shown, reducing the weight without impairing the stiffness of the bar. The tooth thus made is inserted in a socket, x, in the beam A, which socket corresponds in shape with the cross-section of the tooth, and is so formed that the forward edge, n, shall 40 be toward the line of draft, and not connected with the central line of the harrow-bar.

Heretofore harrow-teeth have usually been made with sharp rear edges, which construction has proved objectionable from the tendency of the sharp edge to split the harrow-bar

when the tooth was forced backward. By forming the tooth with a flat rear face, d, this is prevented.

It has also been common to sharpen harrow-teeth by cutting from the back downward and 50 forward on the line yy, Fig. 3; but this forms a very thin, weak terminal point, that soon wears away, leaving a blunt, unserviceable stump. By beveling from both side faces, as described, the sharpening is effected without 55 so much reducing the width of the tooth at the point from front to rear, thereby securing a wide strong support for the cutting-edge n, and at the same time forming two wide beveled back faces, ee', which, when the harrow is drawn 60 back, serve effectually to level the ground, forming a smoothing-harrow adapted specially for cultivating corn and covering grass-seed.

Heretofore it has been common to form the teeth with the front edges, n, as sharp as prac- 65 ticable, the result being that stalks of grass, straw, &c., met by the tooth are bent sharply across the front edge and retained unless cut. I round the edge n, so that the straw will not bend at a sharp angle, but will be curved and 70 slip readily over the edge. The clogging is thus prevented.

I claim—

1. A harrow-tooth having two front faces, a a', side faces, b b', and a flat back face, d, sub- 75 stantially as and for the purpose set forth.

2. A harrow-tooth having the front faces, a a', back face, d, and side faces, b b', curved inward, for the purpose specified.

3. A harrow-tooth formed as described and 80 having the front edge rounded, as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

H. B. FARGO.

Witnesses:

CHARLES E. FOSTER, A. E. T. HANSMANN.