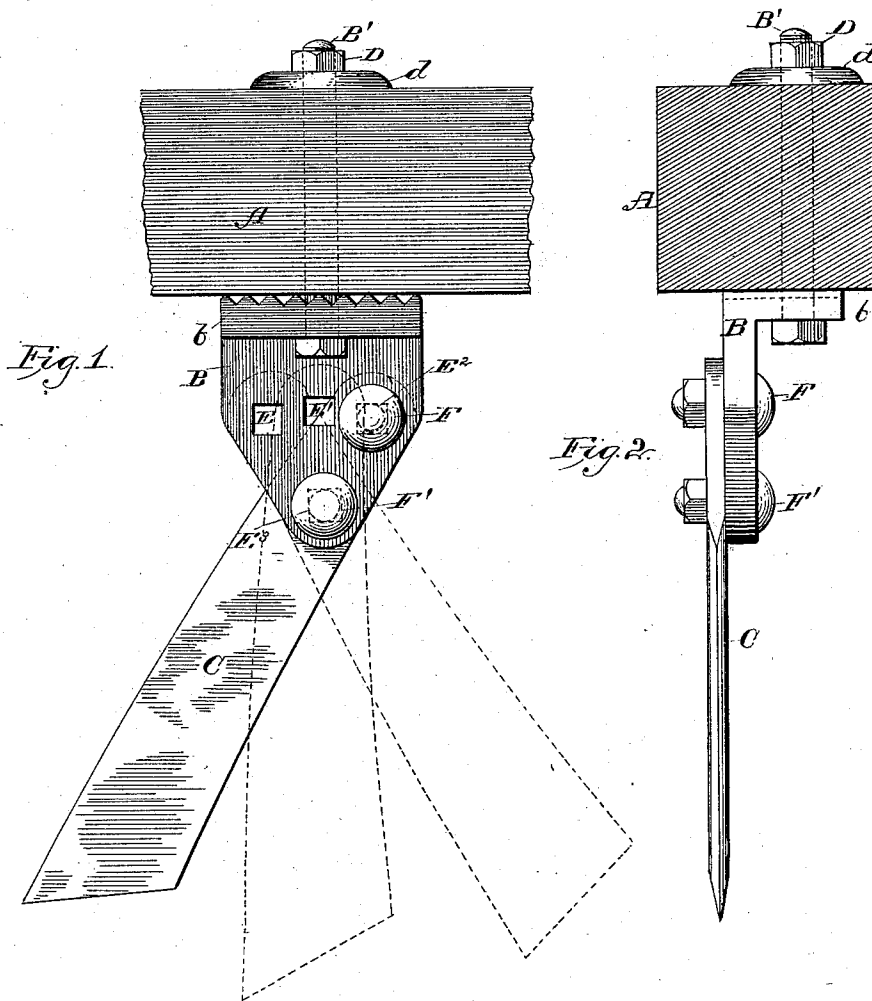


(No Model.)

A. M. FORRESTER.
HARROW TEETH.

No. 267,069.

Patented Nov. 7, 1882.



Witnesses:

E. L. Smith
Carl Pickhardt.

Inventor:

Abraham M. Forrester

By
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UNITED STATES PATENT OFFICE.

ABRAHAM M. FORRESTER, OF RACINE, WISCONSIN.

HARROW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 267,069, dated November 7, 1882.

Application filed April 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM M. FORRESTER, of Racine, in the county of Racine, and in the State of Wisconsin, 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 thereof.

My invention relates to harrow-teeth; and it consists in a novel method of attaching them to their supporting-beams and adjusting them with relation thereto.

In the drawings, Figure 1 is a side view of a section of a harrow-beam with my improved tooth attached, showing a side view of the latter; and Fig. 2 is a cross-section of a harrow-beam with my improved tooth attached, and showing an edge view of the latter.

A is the beam, and B is the head, to which the tooth C is hung. This head has an upper serrated flange, *b*, that rests against the under side of the beam, and is clamped to it by a bolt, B', that passes through the flanges *b* and the beam, a nut, D, and washer *d* serving to draw it tight. The head B is made tapering about its vertical center to its lower end, and is provided with four squared openings, E E' E² E³, (the latter near its extreme lower end,) to receive the bolts F F', that clamp the tooth to it. The tooth is provided with two round holes, one in its extreme upper end and the other just the distance below it that the opening E³ is from openings E, E', and E². The tooth C has a sharp edge and blunt back, and

a point that tapers from its rear to its front. In Fig. 1 the tooth is shown in position for tearing up land that is full of small roots, and when it is in this position the upper bolt, F, is passed through the opening E² in the head, and therefore holds the tooth in position to point toward the front of the harrow; but when it is desired merely to stir up light soil the tooth is carried to a vertical and the bolt F passed through the opening E'. If, however, the soil is to be merely dragged, the bolt F may be passed through the opening E, and the tooth will then merely drag through the soil; and to meet other contingencies I can, after loosening the nut on bolt B', turn the head B to the right or left, so as to correspondingly incline the knife or tooth; or I may turn the head entirely around, so as to bring the back of the knife in position to take the soil, and in every case I secure the head in its position by screwing up the nut D or bolt B'.

What I claim as my invention, and desire to secure by Letters Patent, is—

The angular bracket B, having serrated head *b*, pivotal perforation E³, and the series of apertures E E' E², in combination with the sword-tooth C and bolt B', as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, on this 8th day of April, 1882, in the presence of two witnesses.

ABRAHAM M. FORRESTER.

Witnesses:

S. S. STOUT,
HAROLD G. UNDERWOOD.