

(No Model.)

G. SWEET.
HARROW TOOTH.

No. 386,094.

Patented July 10, 1888.

Fig. 1.

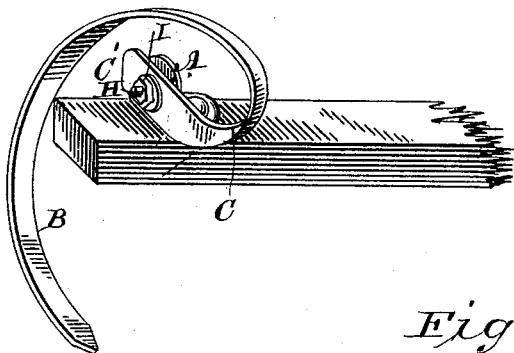


Fig. 4.

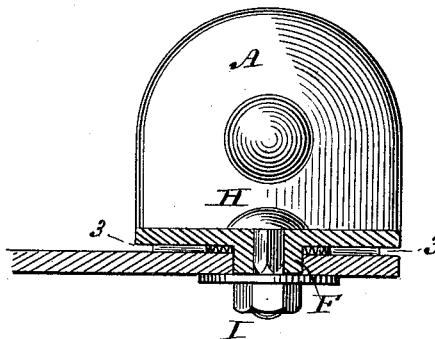


Fig. 2.

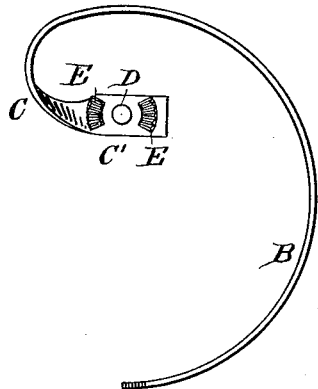
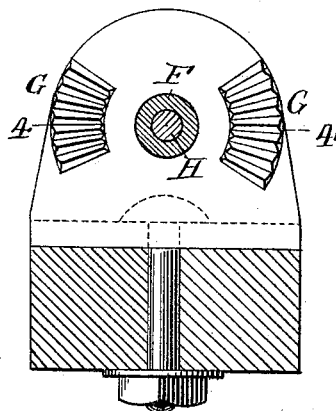


Fig. 3.



WITNESSES

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HARROW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 386,094, dated July 10, 1888.

Application filed January 9, 1888. Serial No. 260,198. (No model.)

To all whom it may concern:

Be it known that I, GEORGE SWEET, a citizen of the United States, residing at Dansville, Livingston county, New York, have invented certain new and useful Improvements in Harrow-Teeth, of which the following is a specification.

The object of my invention is to provide improved means for fastening or attaching harrow-teeth to their supports or standards. Various devices have heretofore been employed for this purpose, but many of them are complicated and expensive, and their adjustment is not in all cases easy or reliable.

My improved device is inexpensive to manufacture, simple, and reliable in operation.

In the accompanying drawings, Figure 1 is a perspective view of the tooth mounted on its standard; Fig. 2, a side view of the tooth; Fig. 3, a side view of the bracket or standard to which the tooth is secured. Fig. 4 is a longitudinal section through the standard and the upper part of the tooth.

A indicates a support or standard of any suitable kind, to which the harrow-tooth is secured.

B indicates the harrow-tooth, which is in this instance shown as a spring-tooth, as I prefer this kind of tooth. The body of the tooth and the working end may be of any suitable construction, preferably that shown in the drawings; but I bend or twist the tooth at C, so as to bring the upper end of the tooth transverse, or at right angles to the main body of the tooth—that is, so as to form a flat vertical portion, C', for ready attachment to the vertical face of the standard. In this flat portion C', I form a pivot-hole, D, and on opposite sides of the pivot-hole, and on one side of the end C' of the tooth, I form a series of teeth or serrations, E, arranged in the arc of a circle from the bolt-hole as a center.

The standard is provided with a boss, F, which enters the hole D, and which forms the bearing or fulcrum for the tooth, and about which it is adjusted. The standard or casting A is provided on opposite sides of the boss F with serrations or teeth G, corresponding with the serrations E on the tooth, and engaging therewith when the tooth is held tightly in position against the standard.

A bolt, H, having an adjusting-nut, I, extends through the standard and through the boss and tooth and secures the tooth and standard firmly together. By loosening the nut the tooth and standard may be separated, so as to disengage the teeth or serrations and permit of the adjustment of the harrow tooth about the boss or fulcrum F. When the bolt is again tightened, the tooth will be firmly held in its adjusted position.

It will be observed that I form the securing devices on the standard and on the teeth directly, and there are no separate or intermediate parts for accomplishing the connection between the tooth and the standard. The serrations on the upper end of the harrow tooth may be made very readily with a die when the tooth is hot. The standard may be provided or formed with teeth in any suitable way. For instance, they may be cast thereon.

I claim as of my own invention—

1. The combination of the standard having a vertical face on one side, the curved spring-metal twisted harrow-tooth having a vertical face at its upper end, adapted to rest against the vertical face of the standard, the serrations on the upper end of the harrow-tooth, the serrations on the standard, with which the serrations on the harrow-tooth engage, and the securing-bolt extending through holes in the standard and tooth for locking the tooth to the standard.

2. The combination of the standard, the boss formed thereon, the serrations on the standard on opposite sides of the boss, the twisted tooth having a bolt-hole in its upper end, and serrations formed in the arc of a circle on opposite sides of the bolt-hole, adapted to engage with the serrations on the standard, and a securing-bolt extending through the boss and through the harrow-tooth, substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

GEORGE SWEET.

Witnesses:

J. M. EDWARDS,
T. B. GRANT.