(No Model.)

J. B. WILSON.

HARROW TOOTH.

No. 343,263. Patented June 8, 1886.

Fig. 1.

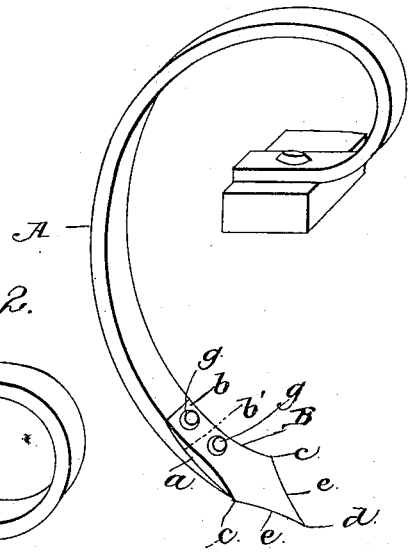


Fig. 2.

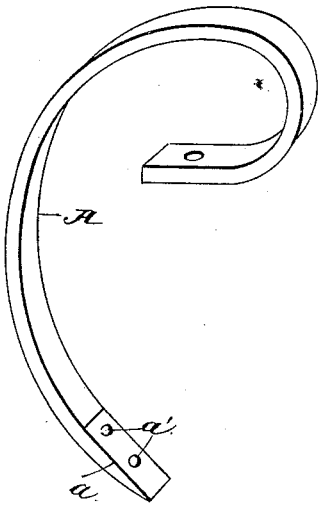


Fig. 3.

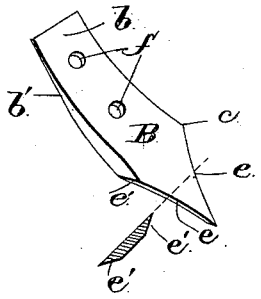
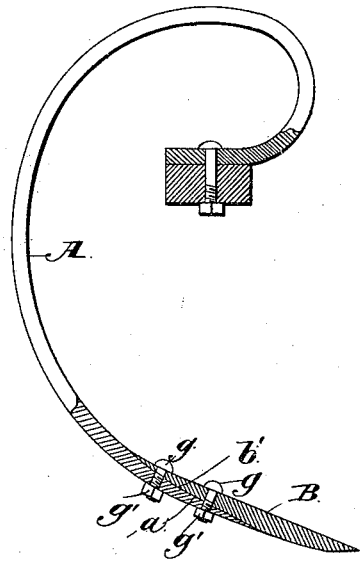


Fig. 4.



Witnesses
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W. F. Gerhard

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UNITED STATES PATENT OFFICE.

JEROME B. WILSON, OF EATON RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF TO JOHN T. HALL, OF SAME PLACE.

HARROW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 343,263, dated June 8, 1886.

Application filed February 11, 1886. Serial No. 191,616. (No model.)

To all whom it may concern:

Be it known that I, JEROME B. WILSON, a citizen of the United States, residing at Eaton Rapids, in the county of Eaton and State of Michigan, have invented a new and useful Improvement in Harrow-Teeth, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in harrow-teeth; and it consists of the peculiar and novel construction of parts, substantially as hereinafter fully set forth, and specifically pointed out in the claims.

It has been proposed to provide a harrow-tooth with a reversible and detachable point or blade, so that it can be adjusted end for end, and interchangeable with other teeth of like construction; but this construction is objectionable, from the fact that there is always a joint or ledge left wherein the dirt can clog or lodge, and which is also liable to soon become dulled and worn out as it is made of the same metal as the tooth proper.

It is the object of my invention to overcome the above-named objections, and to provide a harrow-tooth and a blade that are adjustably and detachably connected together in such manner that they leave no ledges between the joints wherein the dirt can lodge.

My improved harrow-tooth point or blade is made of cast-steel, which I have found by practical experience is much more durable than spring-steel and will retain its edges longer, while at the same time it can readily be reheated and sharpened without in the least detracting from its inherent qualities, and which at the same time is very cheap and inexpensive of manufacture.

My improved cast-steel point or blade is adapted to be especially secured upon the teeth of old worn-out harrows, and to practically repoint the same at a very trifling expense to the farmer, and to thus render his almost worthless harrow as good and serviceable as a new one, and when the points have become worn and dulled through use they can be readily detached from the teeth, reheated, hammered, and resharpened, and thus render them serviceable for a longer period.

In the accompanying drawings, Figure 1 is a perspective view of a harrow-tooth and blade bolted together in proper position, embodying my invention. Figs. 2 and 3 are detached detail views of the tooth and blade or point, respectively; and Fig. 4 is a central vertical section of the device shown in Fig. 1.

Referring to the drawings, in which like letters of reference indicate corresponding parts in all the figures, A designates a tooth of a harrow, which is made of ordinary spring or elastic steel, and properly secured to one of the bars of the harrow-frame. The lower end of this spring-tooth is beveled off or tapered, as at *a*, and it is further provided with two bolt-holes, *a'*, that are disposed transversely through the tooth at a proper distance apart and one above the other.

B designates my improved point or blade, which is made of cast-steel, and comprises the straight portion *b*, which is beveled off on its rear face or tapered, as at *b'*, and gradually widened until it reaches the points *c*, from whence the side edges are inclined or curved inwardly toward each other until they meet and form a point, *d*. The inwardly inclined or curved side edges, *e*, of the blade are beveled off rearwardly, as at *e'*, to form the sharp cutting-edges that act upon the soil. The blade is curved longitudinally, as shown, to conform to the curvature of the tooth, and it is further provided with bolt-holes *f*, that are adapted to register or coincide with the holes *a'* of the tooth when the blade is properly adjusted on the latter; and through these aligned holes are passed headed bolts *g*, that receive nuts *g'*, and thus rigidly and firmly secure the tooth and blade together.

In order to adjust the blade vertically on the tooth, it is only necessary to remove the bolts, and adjust the lower bolt-hole, *f*, thereof in alignment with the upper bolt-hole, *a'*, in the blade, or vice versa, and pass one of the bolts through said aligned holes.

It will be seen that when the tooth and blade are properly connected together that the beveled end *b'* of the latter bears firmly and snugly against the tooth, and the lower beveled end, *a*, of the tooth bears against the rear face of the blade in a similar manner, whereby close joints between the tooth and blade are provided, and no ledges are left on which the dirt can lodge or clog, which is very objectionable.

To apply my improved blade or point to an old worn-out spring-tooth, it is only necessary to bevel the lower end thereof and provide the proper bolt-holes, after which the blade or point is adjusted upon the tooth and bolted thereto.

The blades or points can be very quickly and easily applied by an unskilled person, and at a very small expense to the farmer.

My improved cast-steel point or blade can be very readily detached from the tooth, reheated, and again sharpened at a very trifling cost, and thus they are made durable, and last for a longer period than the ordinary spring harrow-tooth.

The device is to be manufactured and put upon the market to be sold either singly or in lots, the same as other articles of commerce, and it is made in different forms and styles from that herein shown, in order to be applied to any form of harrow-tooth manufactured.

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

1. As a new article of manufacture, a blade or point for spring harrow-teeth, made of cast-steel, and having a beveled end, b', and cutting-edges e', and especially adapted to be detachably bolted upon the teeth of old harrows for repointing them, substantially as described.

2. A point or blade for harrow-teeth, made of cast-steel and provided with a beveled end, b', the bolt-holes, and the pointed end having the cutting-edges, in combination with a harrow-tooth having the lower beveled end, a, and the bolt-holes a', and bolts g, passing through the aligned holes of the point and tooth, to detachably secure them together, substantially as described.

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

JEROME B. WILSON.

Witnesses:
JOHN T. HALL,
FRED J. SLAYTON.