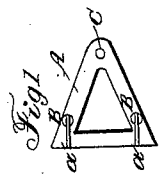
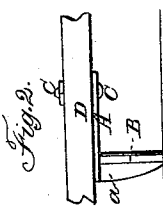
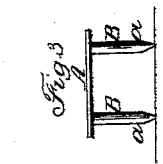
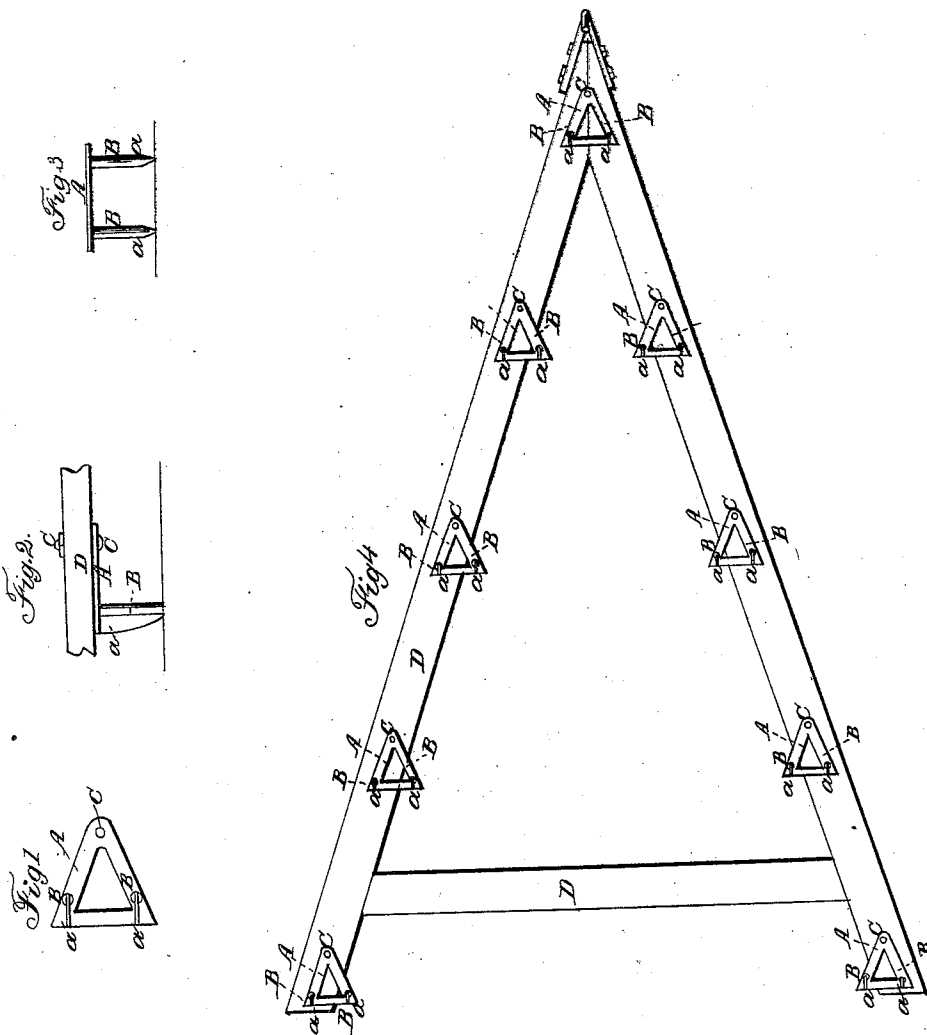


E. N. HIGLEY.

Harrow-Teeth.

No 43,500.

Patented July 12 1864



Witnesses

Edward P Hudson  
J B. Woodruff

Inventor

Eben N Higley  
By his atty  
J. S. Brown

# UNITED STATES PATENT OFFICE.

EBEN N. HIGLEY, OF LAKE VILLAGE, NEW HAMPSHIRE.

## HARROW-TEETH.

Specification forming part of Letters Patent No. 43,500, dated July 12, 1864.

*To all whom it may concern:*

Be it known that I, EBEN N. HIGLEY, of Lake Village, in the county of Belknap and State of New Hampshire, have invented a new and Improved Construction of Harrow-Teeth; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a bottom view of a double tooth or pair of teeth constructed in my improved manner; Fig. 2, a side view of the same, shown as attached to the harrow-frame; Fig. 3, a rear view thereof; Fig. 4, a bottom view of a harrow provided with the improved teeth.

Like letters designate corresponding parts in all of the figures.

I make my improved harrow-teeth in pairs B B, attached to a common stock, A, substantially as represented in the drawings. I generally make the stock and teeth of cast-iron and in one piece, and yet they may be made of wrought-iron and riveted together; but the cast-iron is so much cheaper and wears so much better that the teeth thus formed are preferable, if sufficient strength can be secured. I accomplish this by casting a thin web, *a*, behind each tooth, joining both with the tooth and stock. This web greatly increases the strength of the tooth without adding much to its weight, and without offering any obstruction to the passage of the tooth through the ground. The teeth B B are as far apart as it is desired to have any two teeth of the harrow.

There may be more than two teeth on each stock A; but it is most convenient and suitable to have only two. These teeth are near the rear edge of the stock A, as shown, and in the front end of the stock is a hole, C, through which a bolt passes, and through the harrow-frame D, to secure the teeth to said frame. This bolt also serves as a pivot on which the stock A turns or vibrates, so that each pair of teeth has a self-adjusting motion—very useful to free them from obstructions, and thereby avoid breaking them, as well as to make the harrow run more freely.

Fig. 4 indicates the arrangement of the teeth on the harrow-frame. The space between the adjacent teeth of successive pairs or sets is equal to the distance between the teeth of one set or stock, or thereabout.

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

1. Making harrow-teeth in sets of two or more teeth attached to the same stock, and pivoting the said stock to the harrow-frame, substantially as and for the purposes herein specified.

2. The webs *a a* on the harrow-teeth for strengthening them, arranged substantially as set forth.

The above specification of my improved harrow-teeth signed by me this 18th day of March, 1864.

EBEN N. HIGLEY.

Witnesses:

C. H. SLEEPER,  
THOMAS HAM.