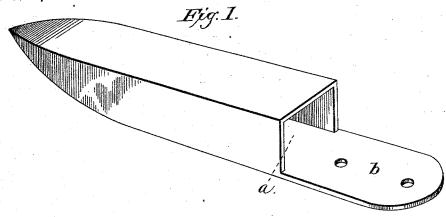
(No Model.)

## J. H. BEAN.

## TOOTH FOR HORSE HAY RAKES.

No. 301,660.

Patented July 8, 1884.



Fjg. 2.

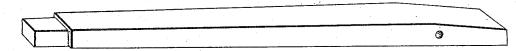
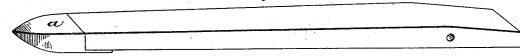
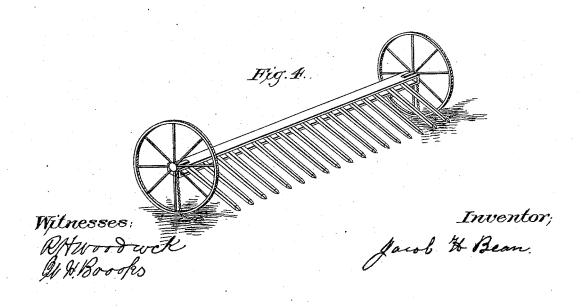


Fig.3.





N. PETERS, Photo-Lithographer, Washington, D. C.

## UNITED STATES PATENT OFFICE.

JACOB H. BEAN, OF MACON, ILLINOIS.

## TOOTH FOR HORSE HAY-RAKES.

SPECIFICATION forming part of Letters Patent No. 301,660, dated July 8, 1884.

Application filed March 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, Jacob H. Bean, of Macon, in the county of Macon and State of Illinois, have invented an Improvement in Teeth for Horse Hay-Rakes, of which the following is a specification.

My invention relates to horse hay-rakes; and it consists in the specific construction of metallic points for wooden rake-teeth, as hereto inafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the metallic point. Fig. 2 is a perspective view of the wooden tooth ready for the point; Fig. 3, a view of the same with the point attached; and Fig. 4, a view of the entire rake.

The point is made of cast-iron, having the principal bevel on the bottom, also a slight 20 bevel on top. The sides are beveled equally. The end of the tooth is fitted into the socket a, so that the wood on the top and sides of the tooth is on a level with the casting. The under side of the casting extends back to 25 form a tongue, b, which is perforated for the passage of the securing screws or rivets by which the casting is rigidly secured on the end of the tooth. By the provision of the tongue the securing-point of the casting is so disposed as to not be liable to be jarred or misplaced, while the necessity for piercing the working-surface of the casting and re-

duced portion of the tooth is obviated. The metallic point retains its shape, and, in connection with the rake, which has pivoted and 35 therefore flexible teeth, it is kept at a fixed distance from the surface. What is true in case of the pivoted-tooth rake is true to a certain extent of all wooden tooth rakes. The pivoted-tooth rake is given as an example, as 40 it more clearly shows the true worth of my invention.

I claim as my invention-

1. As a new article of manufacture, the improved metallic point for rake-teeth, consisting of a single casting beveled and pointed, as specified, and having the socket a and rearward-extending perforated tongue b, adapted, when the point is applied, to bear beneath the wooden tooth at a point in the rear of said 50 socket, substantially as set forth.

2. The combination, in a rake, of a series of teeth, each reduced or tenoned at its extremity, and a metallic point provided with a socket, a, adapted to receive said reduced 55 portion or tenon, and a perforated tongue-extension, b, bearing against the under side of the tooth at a point in the rear of said socket, and secured thereto by means of screws or rivets, substantially as set forth.

JACOB H. BEAN.

Witnesses:

R. H. WOODCOCK, W. H. BROOKS.