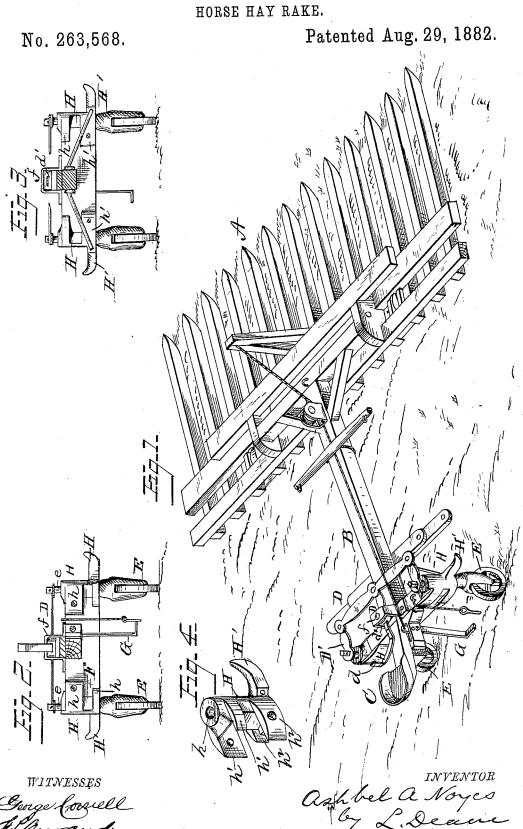
A. A. NOYES.



UNITED STATES PATENT OFFICE.

ASHBEL A. NOYES, OF STEAMBOAT ROCK, IOWA.

HORSE HAY-RAKE.

SPECIFICATION forming part of Letters Patent No. 263,568, dated August 29, 1882.

Application filed July 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, ASHBEL A. NOYES, a citizen of the United States, residing at Steamboat Rock, in the county of Hardin and State of Iowa, have invented certain new and useful Improvements in Horse Hay-Rakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specifica-

Figure 1 is a perspective view of a rake showing this invention applied; Fig. 2, rear elevation of the foot-rest; Fig. 3, front elevation of the foot-rest; Fig. 4, perspective view of casting.

This invention relates to that class of devices known as "horse hay-rakes," and the no elty consists in the general detail of the contraction and combination of the several parts, all as will now be more fully explained.

In general terms the several features which will be now described and claimed are improvements on the device shown in my Patent No. 255,658 of March 28, 1882.

In the accompanying drawings, A denotes 30 the rake, and B the shaft or pole to which it is attached, so as to operate as in my said patent.

C is the driver's seat and D D' the levers to operate the guide caster wheels E. The 35 said levers are worked by the arm d, which is attached at one end to the central joint of lever D, and is pivoted to the wheel-beam F by

means of the enlargement of bearing d' and arched socket f. Said bearing comes within this socket and a pin passes vertically through 40 both. The arm d thus has a very easy and free bearing, that is durable, can be readily lubricated, and also worked in the most ready manner by its handle, which extends backward and in convenient proximity to the 45 driver's seat. Each of the caster-wheels E has its shank e placed in the hole h in one of castings H. These castings are made right and left, so as to fit on each end of the beam F, and have the foot-rest H', which extends out- 50 wardly from the lower and outer end of H in proper position for both the feet of the driver. Each socket is secured or attached to the end of the beam by means of lugs or ears h' h^2 at top and bottom on each side. This construction of the lugs gives a good socket or seat for the end of the beam. The vertical foot-lever G and its connections are for operating the rake-head in the usual way.

Having thus described my invention, what 60 I consider new, and desire to secure by Letters Patent, is—

In a horse hay-rake, and in combination with the beam F, the casting H, having hole h for the caster-shank and lugs or sockets h' 65 h^2 , and foot-rest H', substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ASHBEL A. NOYES.

Witnesses:

D. WHERNER, ANDREW CLARK.