

J. F. HENKLE.

Horse Rake.

No. 113,165.

Patented March 28, 1871.

Fig. 1

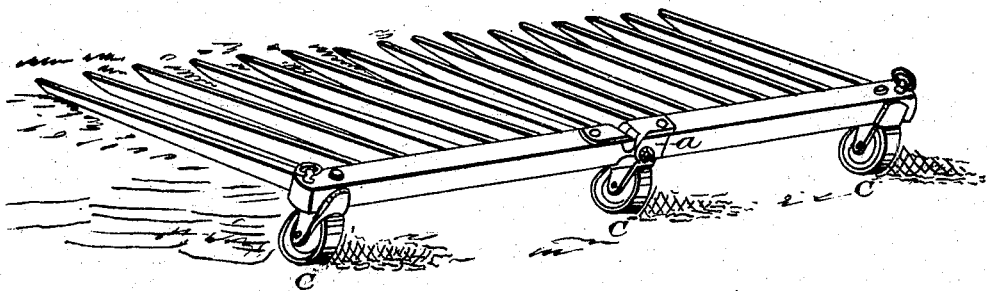
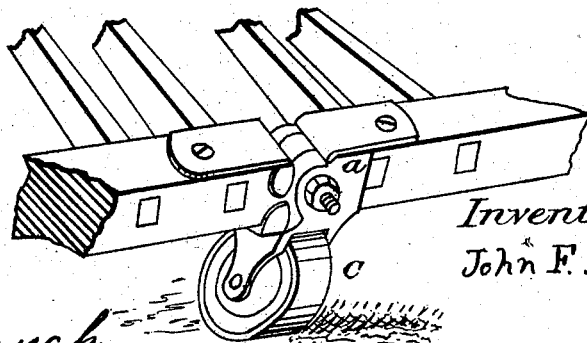


Fig. 2



Witnesses:
Macmillan
Chas. H. French

Inventor:
John F. Henkle.

UNITED STATES PATENT OFFICE.

JOHN F. HENKLE, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN HORSE HAY-RAKES.

Specification forming part of Letters Patent No. **113,165**, dated March 28, 1871.

To all whom it may concern:

Be it known that I, JOHN F. HENKLE, of the city of St. Louis, in the county of St. Louis and State of Missouri, have invented a new and useful Improvement in Horse Hay-Rakes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, (marked A and B,) making a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a broken sectional view.

My invention has for its object to furnish an improvement in that class of horse hay-rakes in which the rake-head is jointed to adapt it to the inequalities or undulations of ground-surface; and the invention consists in the peculiar arrangement of rollers with the jointed rake-head, as hereinafter set forth.

Referring to the drawings, A and B indicate the two parts of the rake-head, which are jointed together, as shown.

c c c are rollers, which have their bearings in metal brackets applied to the rake-head on the under side, so as to support the same a short distance above the ground. Thus the rollers not only follow in the track cleared by the teeth *d d*, but are not liable to become

choked or clogged, as would be the case if arranged in the rear of, or in the same horizontal plane with, the rake-head.

I construct the central bracket in such a manner, and so apply it to one of the contiguous ends of the rake-head, as to form, with the aid of a bolt and a socket-piece on the other, a joint which allows the two parts A B to assume different positions or angles with relation to each other. The wheel itself is placed directly under the joint.

I am aware it is not new to provide rollers for an unjointed or rigid rake-head; but such caster-wheels were arranged in such a way as to frustrate almost entirely the result aimed at in my invention.

What I claim as novel, and entitled to the protection of Letters Patent, is—

The improved arrangement, hereinbefore described, of the rollers *c c c*, mounted in brackets, applied to the under side of the rake-head A B, with the center bracket forming part of the joint of the same, as and for the purpose specified.

JOHN F. HENKLE.

Witnesses:

ISAAC N. GIBSON,
CHAS. L. FRENCH.