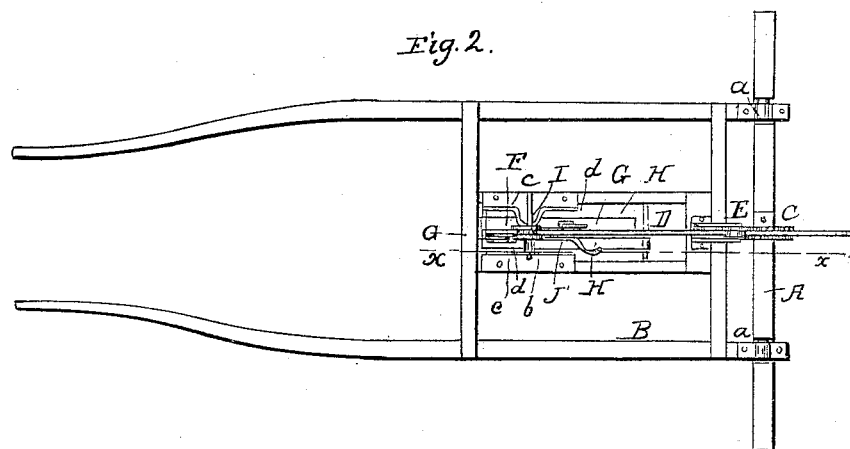
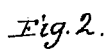


Horse Rake.

Patented Nov. 28, 1865.



Witnesses:
Am. Brown
Her. Tinsley

Inventor:
D E Hussey
Bryant & Co
attys.

UNITED STATES PATENT OFFICE.

DAVID G. HUSSEY, OF NANTUCKET, MASSACHUSETTS.

IMPROVEMENT IN HORSE-RAKES.

Specification forming part of Letters Patent No. 51,187, dated November 28, 1865.

To all whom it may concern:

Be it known that I, D. G. HUSSEY, of Nantucket, in the county of Nantucket and State of Massachusetts, have invented a new and Improved Horse Hay-Rake; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2. Fig. 2, plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved means for rolling or operating the rake-head so that the teeth of the same may rise to discharge their load, and be lowered to their work.

The object of the invention is to obtain a means for the purpose specified which will require a uniform application of power, and operate with greater freedom and with less care and attention on the part of the driver or operator.

A represents the head of the rake, which is fitted in bearings *a a* on the back part of the frame B of the device, the head being allowed to turn freely in its bearings, and provided with teeth of any desired form or construction. The device is mounted on wheels of any proper or desired diameter, and attached to the frame B at any suitable point between the rake and the horse which is attached to the device.

On the rake-head A there is firmly keyed or otherwise attached a toothed segment, C, into which a rack-bar, D, gears, said rack-bar passing underneath a roller, E, and, extending forward to the front part of the frame B, gears into a toothed segment, F, which is fitted on a shaft or axis, *b*, having its bearings in uprights *c c* on the frame B.

The segment F is provided with a curved flange, *d*, at each side, one at its front and the other at its rear end. These flanges are concentric with the segment F, and they have straps G attached to their rear ends, which straps extend over the flanges and downward, and have treadles H connected to their lower ends.

The rack-bar D is kept in gear with the segment F by means of a roller, I, which bears upon it over the segment, and the roller E keeps said rack-bar in gear with the segment C on the rake-head.

From the above description it will be seen that the rake-head A may be rolled or turned by actuating the treadles H, which are designed to be within convenient reach of the feet of the driver, and it will further be seen that in consequence of having the straps G pass over the concentric flanges *d d* the application of the power exerted upon the treadles will be uniform throughout—that is to say, no more power will be required to turn the segment F at the commencement of its movement than toward its close. The segment F actuates the rack-bar D, and the latter, through the medium of the segment C, turns the rake-head A. A lever or handle, J, is attached to the segment F, so that hand-power may be applied, if necessary or desired.

I claim as new and desire to secure by Letters Patent—

The toothed segment F, provided with the concentric flanges *d d*, and having the treadles H, attached by straps G G, in connection with the rack-bar D and the toothed segment C on the rake-head A, all arranged substantially as and for the purpose herein set forth.

DAVID G. HUSSEY.

Witnesses:

ALEXR. G. HUSSEY,
JOHN PADDOCK.