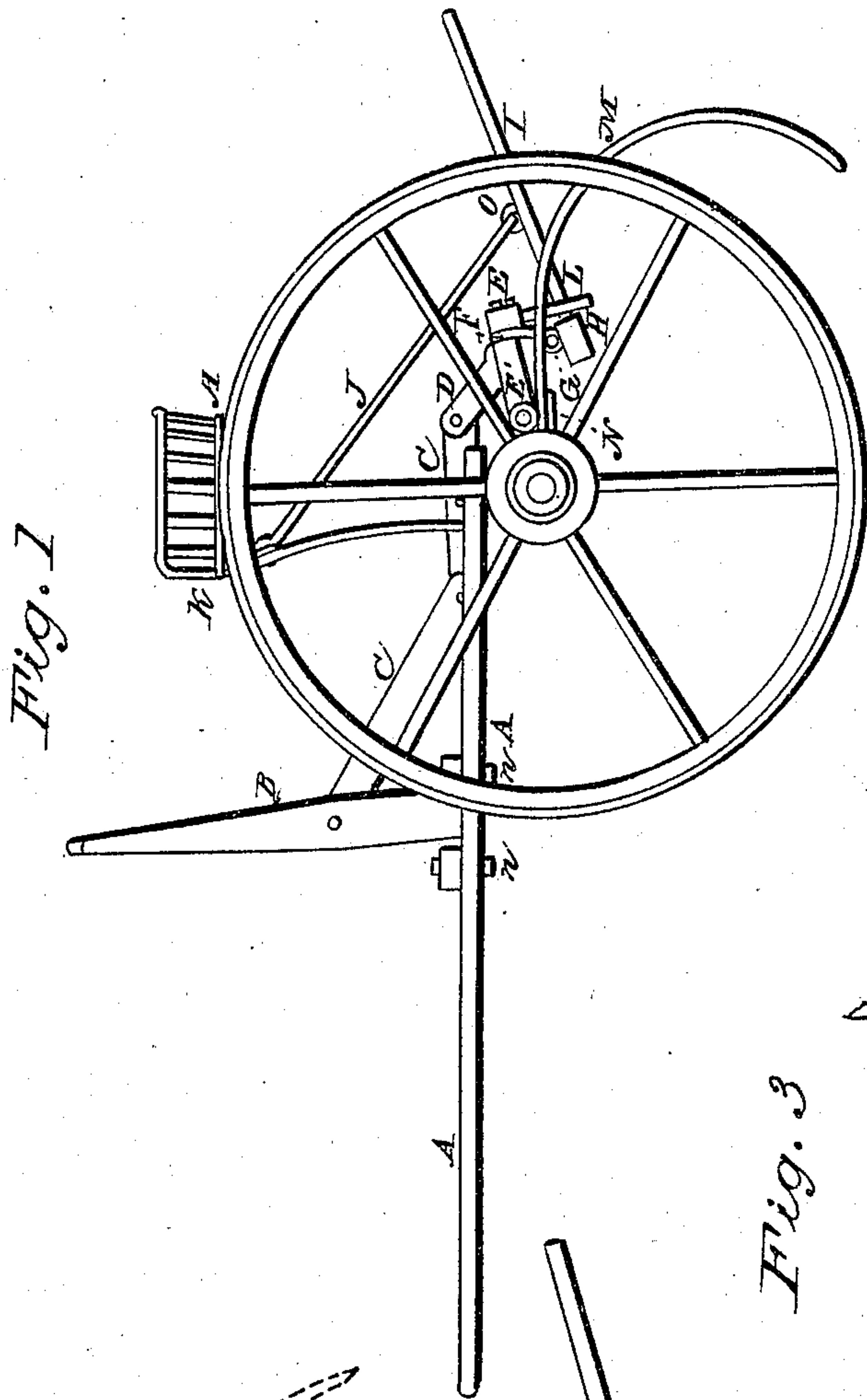


B. F. HORTON.

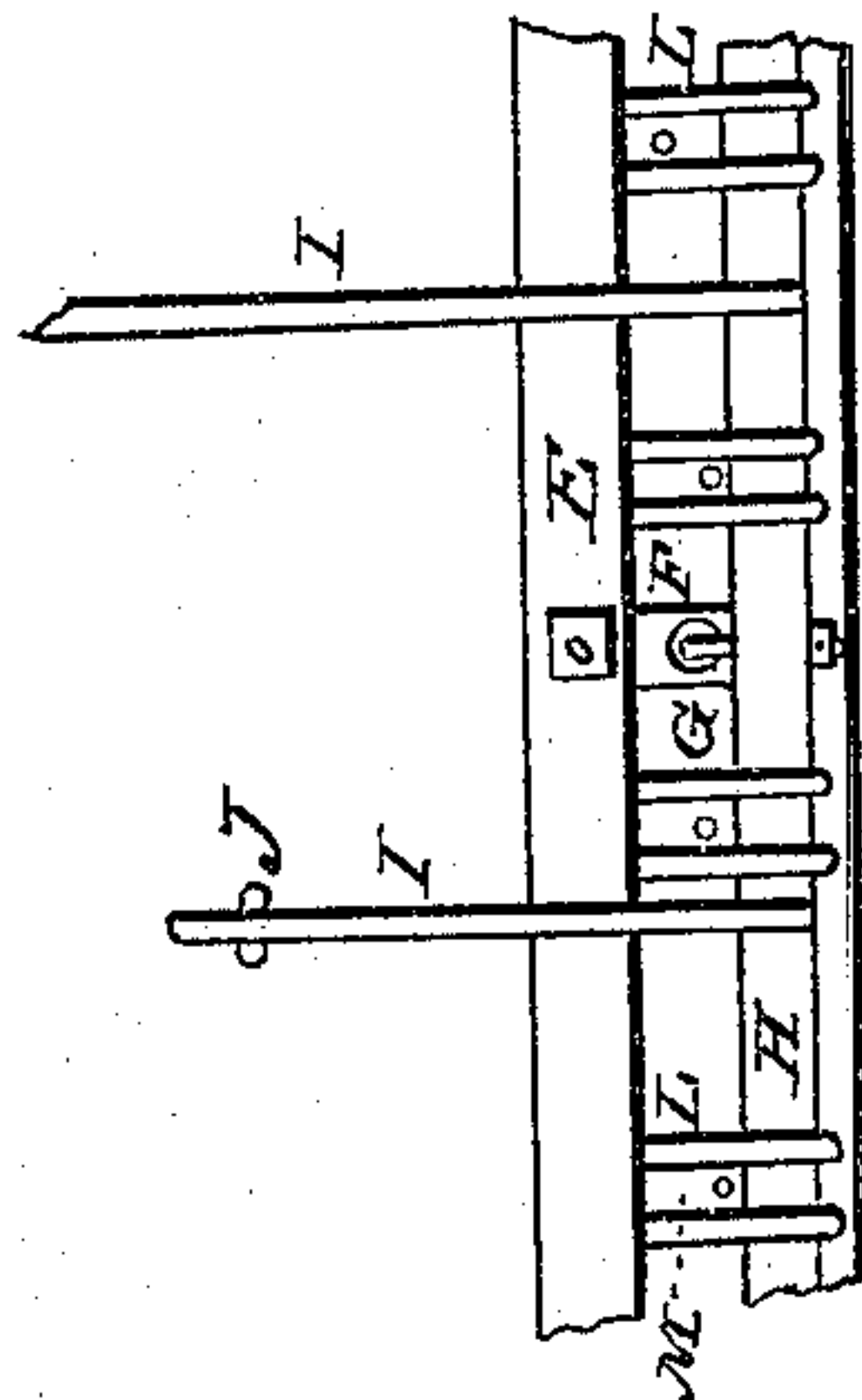
Horse Rake.

No. 99,897.

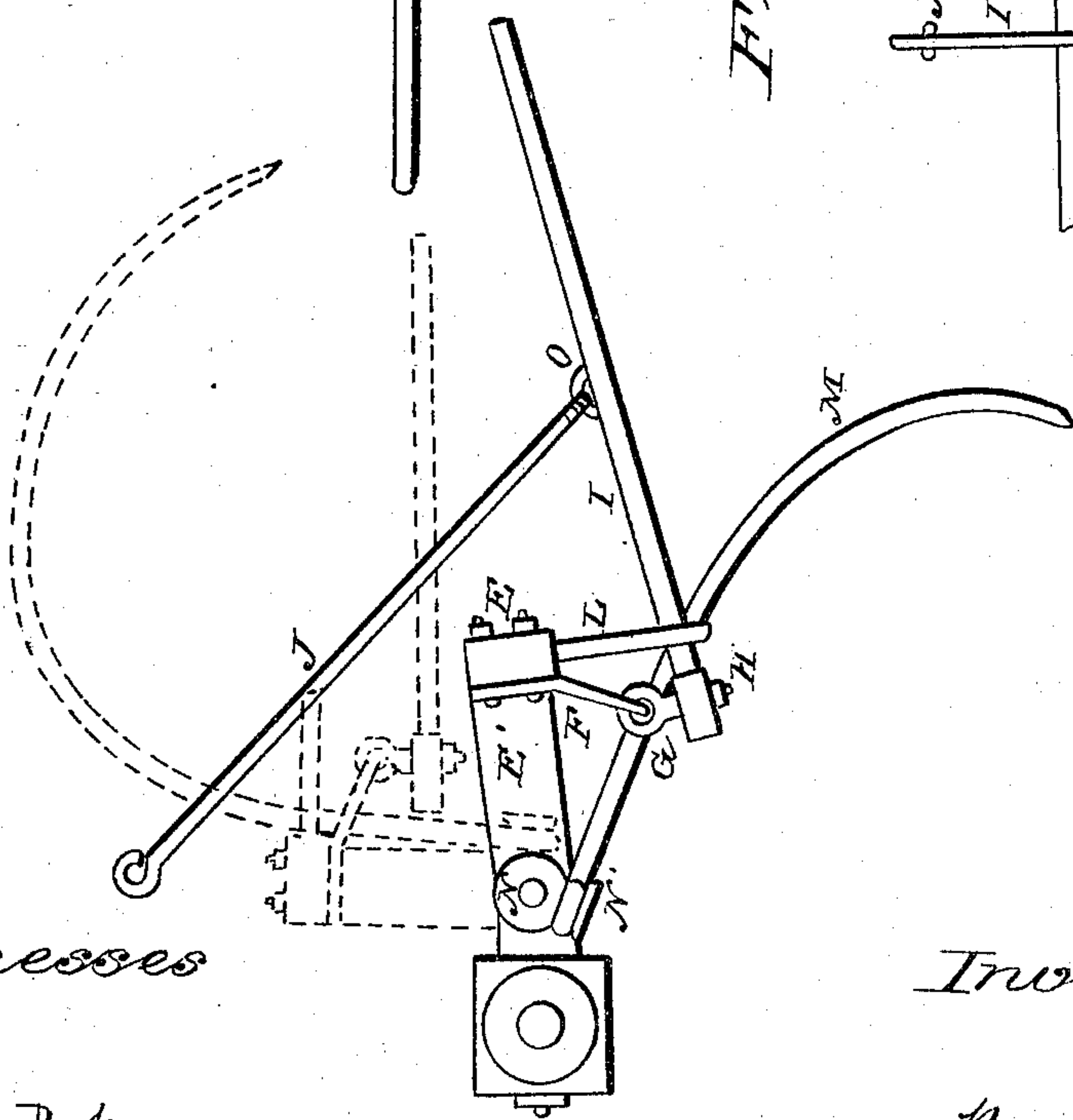
Patented Feb. 15, 1870.



*Fig. 3*



*Fig. 2*



Witnesses

Samuel J. Parker  
J. M. E. Chubb

Inventor

Benjamin F. Horton

# United States Patent Office.

BENJAMIN F. HORTON, OF ITHACA, NEW YORK.

*Letters Patent No. 99,897, dated February 15, 1870.*

## IMPROVED HORSE HAY-RAKE.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, BENJAMIN F. HORTON, of Ithaca, Tompkins county, New York, have invented certain Improvements in Horse Rakes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters thereon.

Figure 1 is a side view of my rake;

Figure 2, of my stripper and pressure-bar arrangement; and

Figure 3, a rear view of a portion of the two bars and their attachments.

My object is mainly to facilitate the stripping and holding of the teeth. This I accomplish by the means I shall describe.

In fig. 1, A A are the the thills, wheels, and other parts of carriage, and B the hand-lever, that, by the rod C and pivoted connecting lever C', and connecting rod D, raises the upper bar E, which is hinged to the rake-head N by the middle hinge-pieces E'; and F is the hinge-plate attached to the bar F, and hinged by the loop G to the lower bar H, from which the strippers I project; and J is a stationary brace or rod, that, fast to the seat K or other convenient part, is hinged to the stripper-bar I, and produces a downward motion of the outward ends of the stripper, while the inward ends of the strippers and the bar G rise and lock the teeth fast during the flexion caused by the hand-lever in unloading the rake, in connection with the rod J.

In fig. 2, the same letters show the same parts on an enlarged scale, representing the action of the teeth, bars, strippers, and stationary hinged and connecting rods just named. It will be noticed that when the teeth are down, the bars E and H act as either pressure or lifting bars, and allow that play necessary to the right action of the teeth, while the teeth, when lifted, are bound between the two bars in a peculiar manner; and

that the stripping is facilitated by the downward thrust of the outward ends of the strippers.

In fig. 3, the relative proportions of the bars, hinges, and other parts, are seen at right angles to figs. 1 and 2. The side teeth-rods L L, &c., being also seen, between which the teeth play. The hand-lever and its connections, and the peculiar fastening of the teeth to the thimbles on the head-rod, are described in my patent of January 14, 1868.

The advantages and uses of my invention are apparent to those skilled in the art to which it appertains.

I am aware that bars above and beneath the teeth, and the teeth-rods L serving as staple from the pressure-bar, are in the expired patent of George Davis, July 22, 1839, and that strippers are found in English patents; therefore, I do not claim these.

### Claims.

1. The combination of the hinged bars E and H with the rake-head N, these parts being so arranged that the strippers are raised from the material raked, and the rake-teeth, at their highest elevation, are held between the two bars E and H, substantially as set forth.

2. The combination of the rod J with the described stripper-frame, by the eye or staple O, on one or more of the strippers I, when the said rod is also secured to the post K of the driver's seat or equivalent place, substantially in the manner figured and described.

3. The combination of the rake-head N, the arm E', the bar E, the hinges G F, the stripper-frame H I, and the rod J, operating together substantially as and for the purposes set forth.

B. F. HORTON.

Witnesses:

SAMUEL J. PARKER,  
T. J. McELHENY.