

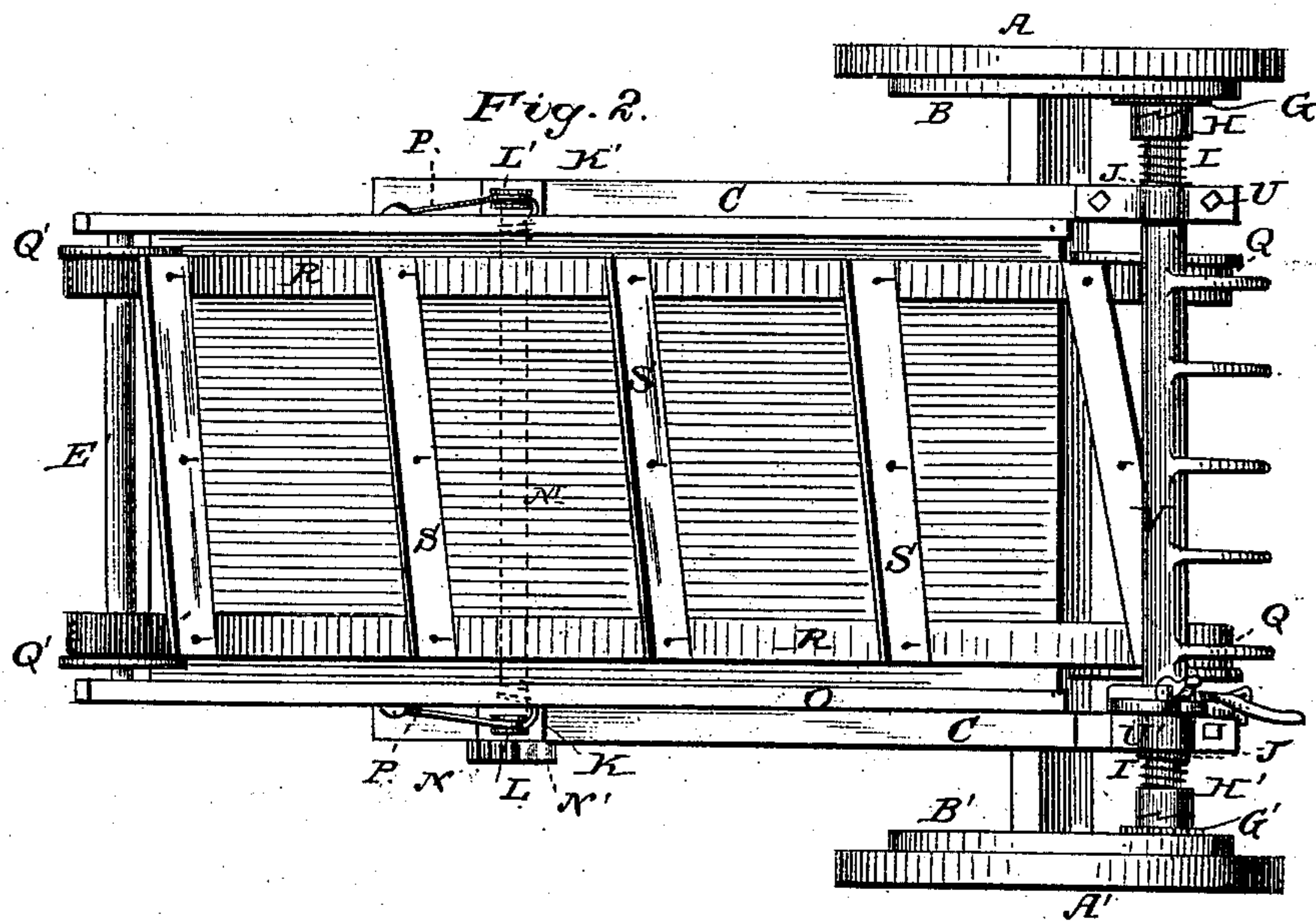
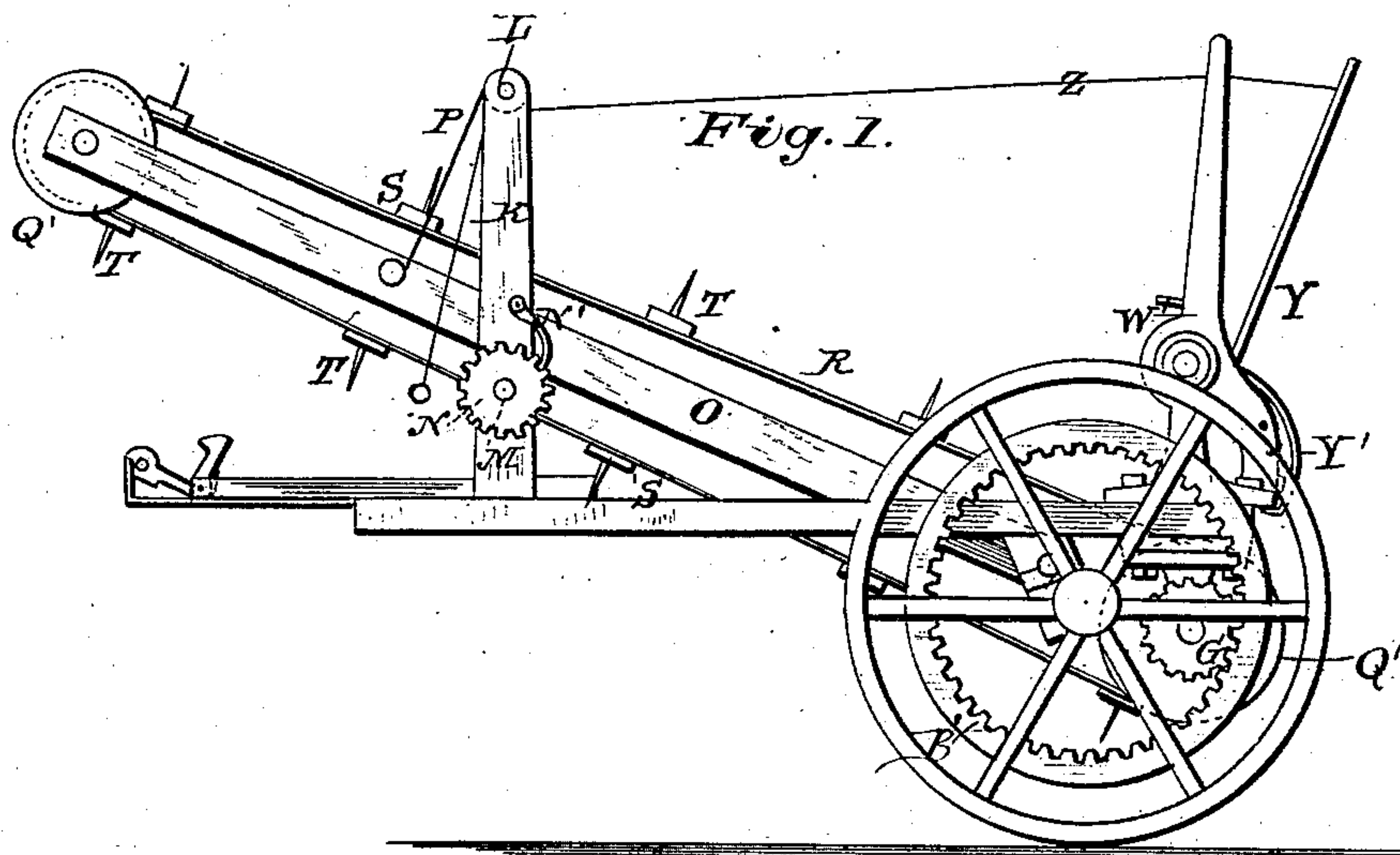
(Model.)

2 Sheets—Sheet 1.

S. L. McKAY.
Hay Rake and Loader.

No. 237,690.

Patented Feb. 15, 1881.



Witnesses:
Fred. G. Dietrich
J. R. Littel

Inventor:
S. L. McKay
By Chas. Snow & Co.
Attorneys.

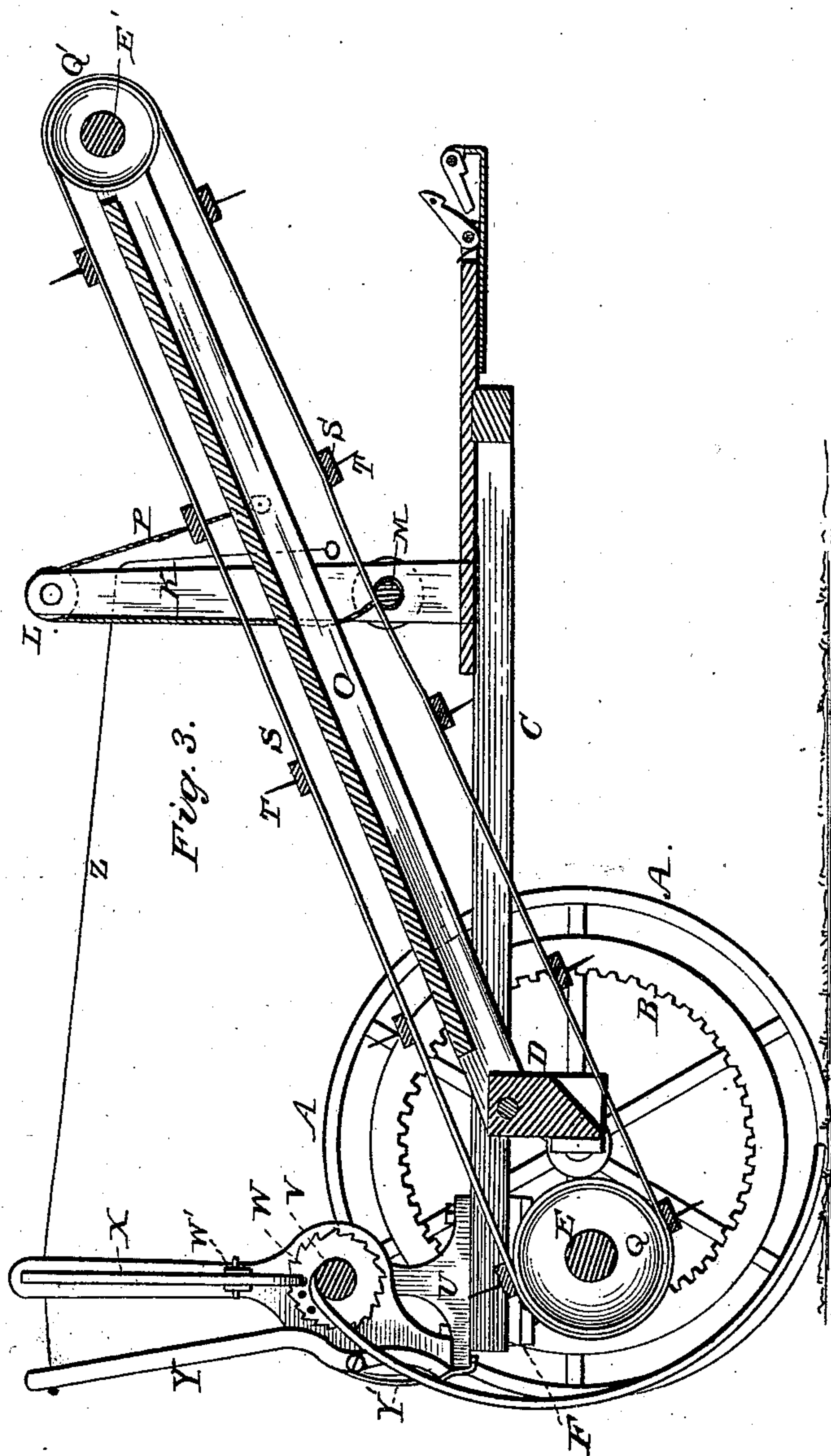
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UNITED STATES PATENT OFFICE.

SAMUEL L. MCKAY, OF MORRISTOWN, INDIANA, ASSIGNOR OF ONE-HALF
TO JOHN PHERIGO, OF SAME PLACE.

HAY RAKE AND LOADER.

SPECIFICATION forming part of Letters Patent No. 237,690, dated February 15, 1881.

Application filed October 15, 1880. (Model.)

To all whom it may concern:

Be it known that I, SAMUEL L. MCKAY, of Morristown, in the county of Shelby and State of Indiana, have invented certain new and useful Improvements in Hay Rakes and Loaders; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a side elevation of a hay rake and loader embodying my improvements. Fig. 2 is a plan view; and Fig. 3 is a vertical longitudinal sectional view of the same.

This invention has relation to hay-rakes and loaders; and it consists in the improved features of construction and combination hereinafter fully described, and particularly pointed out in the claim.

Referring by letter to the accompanying drawings, A A' designate the supporting and driving wheels, having the annular cog-gears B B'. The frame C is secured to the axle D, and a shaft, E, traverses the frame in the rear of the axle, is supported in hangers F, and is provided with spur-gears G G', adapted to rotate loosely upon its ends, and automatic ratchets H H', which engage with ratchet-teeth on the inner faces of the spur-gears G G'. These ratchets H H' are held in engagement with the spur-gears by spiral springs I I encircling the shaft E, and bearing against collars J J upon the same.

Vertical arms K K' rise from the frame C, near its front end, and are provided in their upper ends with pulleys L.

A shaft, M, traverses the frame C, and has its bearings in the arms K K', a short distance above said frame. One end of this shaft M is provided with a ratchet-wheel, N, and a pawl, N', is pivoted to the arm K, to engage with the said ratchet-wheel N.

The carrier-frame O is hinged at its rear end to the axle D in any suitable manner, so that its forward end may be elevated or depressed to change the inclination of the carrier to build the load properly upon the wagon.

Chains or ropes P are connected to the sides

of the carrier-frame C and to the shaft M, and are run over the pulleys L L', so that by turning the shaft M the carrier-frame may be raised or lowered, as may be desired.

The shaft E is provided with two band-wheels, Q Q, and the front end of the carrier-frame O has a shaft, E', also provided with two band-wheels or pulleys, Q' Q'. Over these pulleys Q Q Q' Q' are run the belts or bands of an endless apron, R. The transverse slats S of this endless apron have outwardly-projecting teeth T.

The frame C has at its rear end two vertical standards, U U', in the upper ends of which the bearings of the rake-head V are formed.

The teeth of the rake are curved, and pass down over the rear end of the endless belt when the rake is in an operative position.

At one end of the shaft V, which forms the rake-head, is a perforated disk, W, adjacent to a vertical arm, W'. To the arm W' is pivoted a latching-lever, X. In the rear of this arm W', and pivoted to the inner face of the same, is an unlatching-lever, Y, the spring Y' of which is caused to automatically engage with the rear end of the base of the vertical standard U by the weight of the rake itself when not drawn up.

To the upper end of the unlatching-lever Y a cord or chain, Z, is attached, and is run through a perforation in the vertical arm W', and thence through a perforation in the arm K to the wagon, where a hand-piece is provided, by which a man upon the wagon which is being loaded may at any time lift the rake clear of any obstruction it may encounter.

By means of the perforated disk W and the latching-lever X the rake may be elevated and retained in an elevated position when not in use.

The slats carrying the teeth pass so near the rake in their travel as to take the hay from the rake and convey it, by means of the carrier, to the wagon.

The implement can be turned without trouble and still be kept in operation, for the reason that the ratchets H H' may permit either of the driving-wheels to rotate backward, but one wheel in turning will move forward, and thus keep the machine in operation.

From the foregoing, taken in connection with the drawings, the construction and operation of the device will be readily understood.

Having thus fully described my invention, 5 what I claim as new, and desire to secure by Letters Patent of the United States, is—

In a hay rake and loader, the arm W', having the unlatching-lever Y, provided with the latching-spring Y', pivoted to its inner face, 10 and the chain or cord Z, passing through the arms W' and K, and provided with a hand-

piece, in combination with the standard U of the rake-head, substantially as and for the purpose herein shown and described.

In testimony that I claim the foregoing as 15 my own I have hereto affixed my signature in presence of two witnesses.

SAMUEL L. McKAY.

Witnesses:

JOHN PHERIGO,

L. J. HACKNEY.