

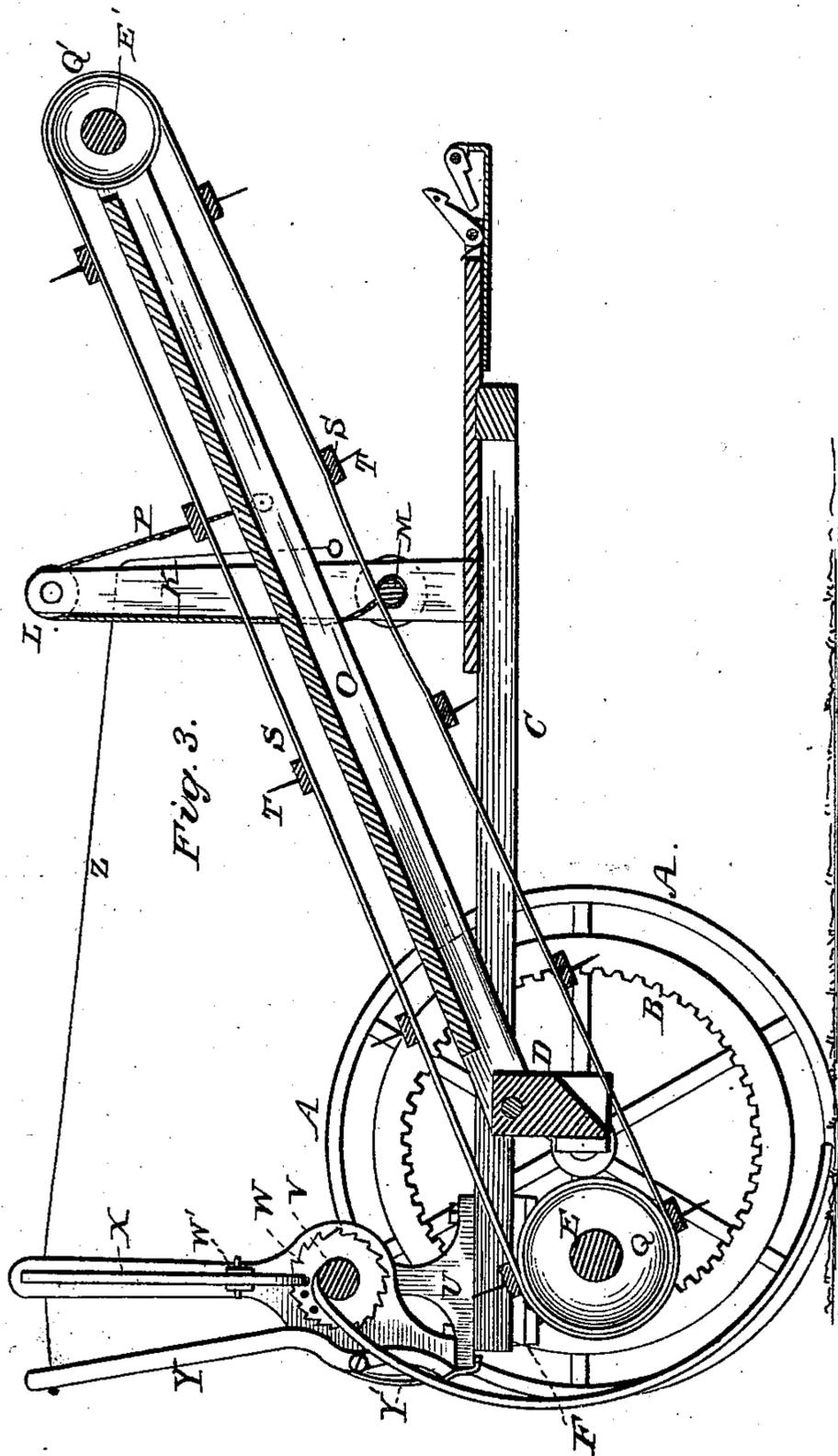
(Model.)

2 Sheets—Sheet 2.

S. L. McKAY.
Hay Rake and Loader.

No. 237,690.

Patented Feb. 15, 1881.



Witnesses:
Fred G. Dietrich
J. R. Sittell,

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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 use-
ful Improvements in Hay Rakes and Loaders;
and I do hereby declare that the following is a
full, clear, and exact description of the inven-
tion, which will enable others skilled in the
art to which it appertains to make and use the
same, reference being had to the accompany-
ing drawings, which form a part of this speci-
fication.

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 lon-
gitudinal 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 here-
inafter 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 ro-
tate 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 en-
circling the shaft E, and bearing against col-
lars 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 turn-
ing 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-pro-
jecting 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 piv-
oted 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 pro-
vided, 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, 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, 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 my own I have hereto affixed my signature in presence of two witnesses.

SAMUEL L. MCKAY.

Witnesses:

JOHN PIERIGO,

L. J. HACKNEY.