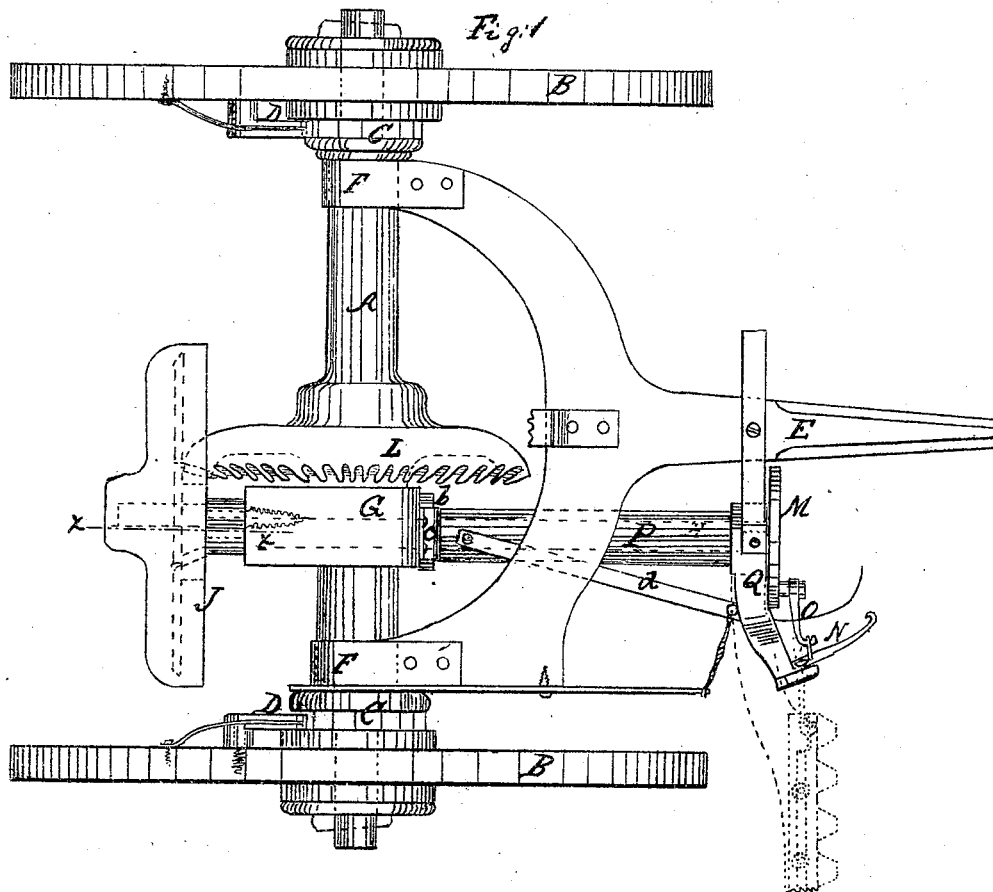


D. H. Thayer.

Mower.

N<sup>o</sup> 53198

Patented Mar. 13, 1866.



Witnesses.

Wm. L. Lyne  
Wm. Newn

Inventor.

D. H. Thayer  
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Attorneys



# UNITED STATES PATENT OFFICE.

D. H. THAYER, OF LUDLOWVILLE, NEW YORK.

## IMPROVEMENT IN REAPING AND MOWING MACHINES.

Specification forming part of Letters Patent No. 53,198, dated March 13, 1866.

*To all whom it may concern:*

Be it known that I, D. H. THAYER, of Ludlowville, Tompkins county, and State of New York, have invented a new and useful Improvement in Reaping and Mowing Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others 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 plan or top view of my invention; Fig. 2, a side sectional view of the same, taken in the line representing Fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a new and improved arrangement of the sickle-driving mechanism, as hereinafter fully shown and described, whereby the finger-bar and sickle may be raised and lowered without at all affecting the sickle-driving mechanism.

The invention also consists in a novel manner of attaching the finger-bar to the machine, whereby the former is secured firmly in position and rendered capable of being readily detached when necessary.

A represents the axle of the machine, having a wheel, B, fitted loosely on each end of it, and C C are two ratchets which are secured on the axle, one near each end and adjoining the hubs of the wheels B. Each wheel B has a pawl, D, attached to it, and these pawls engage with the ratchets when the machine is being drawn forward and cause the axle A to rotate with the wheels, the pawls slipping over the ratchets when the machine is backed, so as not to communicate motion to the axle.

E represents the draft-pole, the rear part of which is divaricated or forked, and is fitted to the axle A by metallic straps F F, which encompass the axle at the inner sides of the ratchets C C.

On the axle A there is fitted loosely a head or block, G, the latter extending below the axle a certain distance and serving as a bearing for a shaft, H, which has a pinion, I, on its rear end. This pinion I gears into a wheel, J, the teeth of which are at the inner side of a rim or projection, a, extending from the inner side of the wheel, as shown in Fig. 2. The axis of the wheel J projects from the rear side of the head or block G, and to the inner side of wheel J there is attached concentri-

cally a pinion, K, into which a wheel, L, on the axle A gears.

The shaft H extends through the head or block G, and projects some distance in front of it, and has a crank-pulley, M, on its front end, from which the sickle N is driven by a rod or piston, O.

On the shaft H there is placed loosely a sleeve or collar, P, the rear end of which is provided with a flange, b, which fits or works under a lip, c, attached to the front side of the head or block G. This flange and the lip retain the sleeve or collar P on the shaft K, and at the same time admit of the former turning freely on the latter.

To the front end of the sleeve or collar P the finger-bar Q is attached at right angles, and is braced by a rod, d.

From the above description it will be seen that the finger-bar may be raised and lowered to any point within the scope of its movement without at all affecting the sickle-driving mechanism, as the sickle always has the same relative position with the driving-shaft H. This arrangement also constitutes a very simple means for connecting the finger-bar to the machine, and one which admits of the sleeve or collar P being readily detached from the machine and applied thereto.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The head or block G, placed loosely on the axle A, with the shaft H passing through it, and the latter having the crank-pulley M on its front end, in combination with the gearing I J H, arranged as shown, to communicate motion from the axle A to shaft H, and the sleeve or collar P, to which the finger-bar Q is attached, placed loosely on the shaft H, all arranged to operate in the manner substantially as and for the purpose set forth.

2. The securing of the sleeve or collar P on the shaft H by means of the flange b on the rear end of the sleeve or collar, and the lip c at the front side of the head or block G, substantially as described.

The above specification of my invention signed by me this 6th day of December, 1865.

D. H. THAYER.

Witnesses:

M. M. LIVINGSTON.

C. L. TOPLIFF.