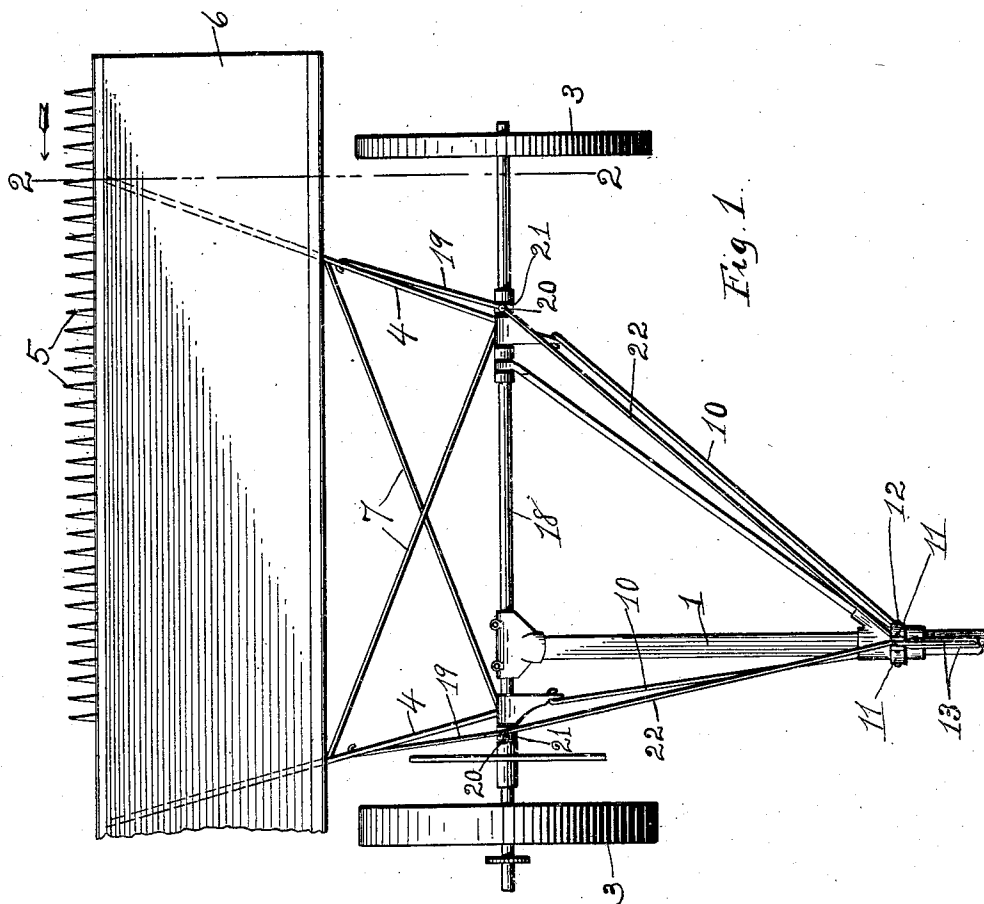


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APPLICATION FILED MAY 13, 1909.

938,100.

Patented Oct. 26, 1909.  
2 SHEETS—SHEET 1.



WITNESSES:  
*J. Donsbach.*

INVENTOR  
*George Walter Willis*  
BY *Prosser & Curtis*  
ATTORNEYS.

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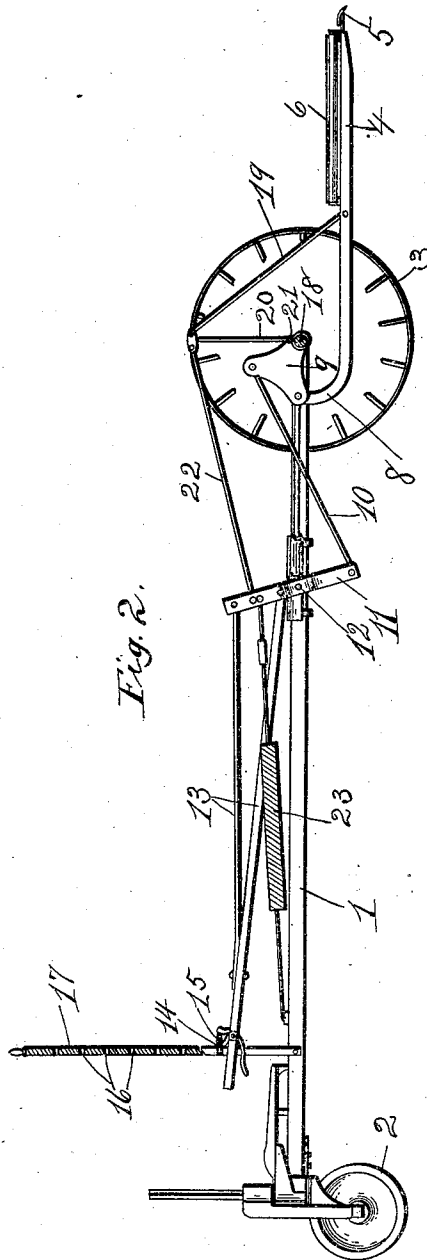


Fig. 2.

WITNESSES:

*J. Donsbach*

INVENTOR,

*George Walter Willis*  
BY *Mosher & Curtis*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

GEORGE WALTER WILLIS, OF HOOSICK FALLS, NEW YORK.

## MOWING-MACHINE.

938,100.

Specification of Letters Patent. Patented Oct. 26, 1909.

Application filed May 13, 1909. Serial No. 495,693.

*To all whom it may concern:*

Be it known that I, GEORGE WALTER WILLIS, a citizen of the United States, residing at Hoosick Falls, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Mowing-Machines, of which the following is a specification.

The invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the reference characters marked thereon, which form a part of this specification. Similar characters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a top plan view of a mowing-machine of the header type embodying my invention, the rear end of the tongue of the truck being broken away. Fig. 2 is a vertical, longitudinal section of the same taken on the broken line 2—2 in Fig. 1, showing the tongue restored.

This invention is applicable to various kinds of mowing-machines and reapers, and is particularly adapted for such a machine of the particular type known as a header.

The principal object of the invention is to facilitate the adjustment of the grain-receiving platform.

Other objects will appear in connection with the following description.

Referring to the drawings wherein the invention is shown in preferred form, 1, represents the tongue, 2, the tiller-wheel, 3, the draft-wheels and, 18, the main shaft upon which the draft-wheels, 3, are mounted, together comprising the truck of the machine.

The harvester-platform, 6, may be mounted in any known manner upon the harvester-frame, 4, said frame comprising in part a pair of supporting-bars interconnected by diagonal brace-rods 7. The harvester-frame may be provided with cutting-mechanism of the usual type, comprising in part guard-fingers 5.

The details of the cutting-mechanism and of the movable grain-receiving apron commonly employed in this type of machine are not shown, as the same form part of the present invention.

Each of the supporting-bars, 4, of the harvester-platform has its rear end upturned at, 8, and pivotally connected with an angle-lever, 9, loosely mounted on the main shaft

or axle, 18, of the truck. Said angle-lever, 9, is connected by a link, 10, with the lower end of a lever, 11, pivoted at, 12, upon the tongue, 1, fixed to the upper portion of which lever is an angular rearward extension, 13, forming an operating handle therefor. The rear end of the handle-extension, 13, is provided with a hand-operated latch, 14, adapted to be yieldingly held by a spring, 15, in one of a series of apertures, 16, in a post, 17, erected from the tongue, 1, whereby the lever, 11, can be locked in selected positions of adjustment. By raising and lowering the handle-extension, 13, the lever, 11, can be operated to cause a rocking movement of the angle-lever, 9, whereby its point of pivotal connection with the harvester-frame, 4, can be raised and lowered, said point of pivotal connection being in rear of the main shaft or axle, 18, and the point of connection with the link, 10, of said angle-lever being in a plane above said shaft or axle.

An intermediate point of the harvester-frame in rear of its center of gravity is connected by a link, 19, with the outer end of a post, 20, erected from a sleeve, 21, loosely fitting the main shaft or axle, 18, the outer end of said post being also connected by a link, 22, with the upper end of the lever, 11, so that when the lever, 11, is operated by a lifting movement of the handle-extension, 13, the harvester-frame will be lowered at both points of its supporting-connection with the link, 19, and the angle-lever, 9; and when the lever, 11, is operated in the reverse direction by a descending movement of the handle-extension, 13, both of said points of support for the harvester-frame will be raised.

The harvester-frame being suspended by the link, 19, at a point in rear of its center of gravity, the rear end, 8, of said harvester-frame will at all times exert an upward thrust upon the angle-lever, 9, with resultant tension upon the link, 10. By properly locating the points of connection with the harvester-frame said frame can be thus raised and lowered without material departure from a horizontal position. A coil-spring, 23, connected at one end with the tongue, 1, and at the other end with the upper end of the lever, 11, serves as a counter-balance for the harvester-frame. The links, 10, 19 and 22, posts, 20, and angle-levers, 9, are duplicated at opposite sides of the machine, forming connections between the lever, 11, and the re-

spective supporting-bars of the harvester-frame.

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

- 5 1. In a machine of the class described, and in combination, a truck having a main shaft, tongue and draft-wheels; a harvester-frame; a lever fulcrumed upon said tongue; means for locking said lever in selected positions  
10 of adjustment; harvester-frame-supporting means connecting said lever with an intermediate part of said harvester-frame in rear of its center of gravity; a lever connected with the rear end of said harvester-frame;  
15 and a tension-member connecting together said levers resistant to the thrust of the rear end of said harvester-frame.
2. In a machine of the class described, and in combination, a truck having a main shaft,  
20 tongue and draft-wheels; a harvester-frame; a lever fulcrumed upon said tongue; means for locking said lever in selected positions of adjustment; harvester-frame-supporting  
25 means connecting said lever with an intermediate part of said harvester-frame in rear of its center of gravity; a lever connected with the rear end of said harvester-frame; a tension-member connecting together said levers  
30 resistant to the thrust of the rear end of said harvester-frame; and a counterbalancing

spring connecting said tongue with said first-mentioned lever to resist the pull of said tension-members.

3. In a machine of the class described, and in combination, a truck having a main shaft, 35 tongue and draft-wheels; a harvester-frame; a lever fulcrumed intermediately of its ends upon said tongue; means for locking said lever in selected positions of adjustment, a post rotatively mounted upon, and projecting upward from, said main shaft; a tension-connection between the upper end of  
40 said post and the upper end of said lever; a tension-connection between the upper end of said post and an intermediate part of said harvester-frame in rear of its center of gravity; an angle-lever fulcrumed on said main  
45 shaft and connected with the rear end of said harvester-frame in rear of said shaft; and a tension-connection between said angle-lever  
50 at a point above the plane of said shaft and the lower end of the lever mounted on said tongue.

In testimony whereof, I have hereunto set my hand this 15th day of April, 1909.

GEORGE WALTER WILLIS.

Witnesses:

WILLIAM W. MORRILL,  
J. DONSBACH.