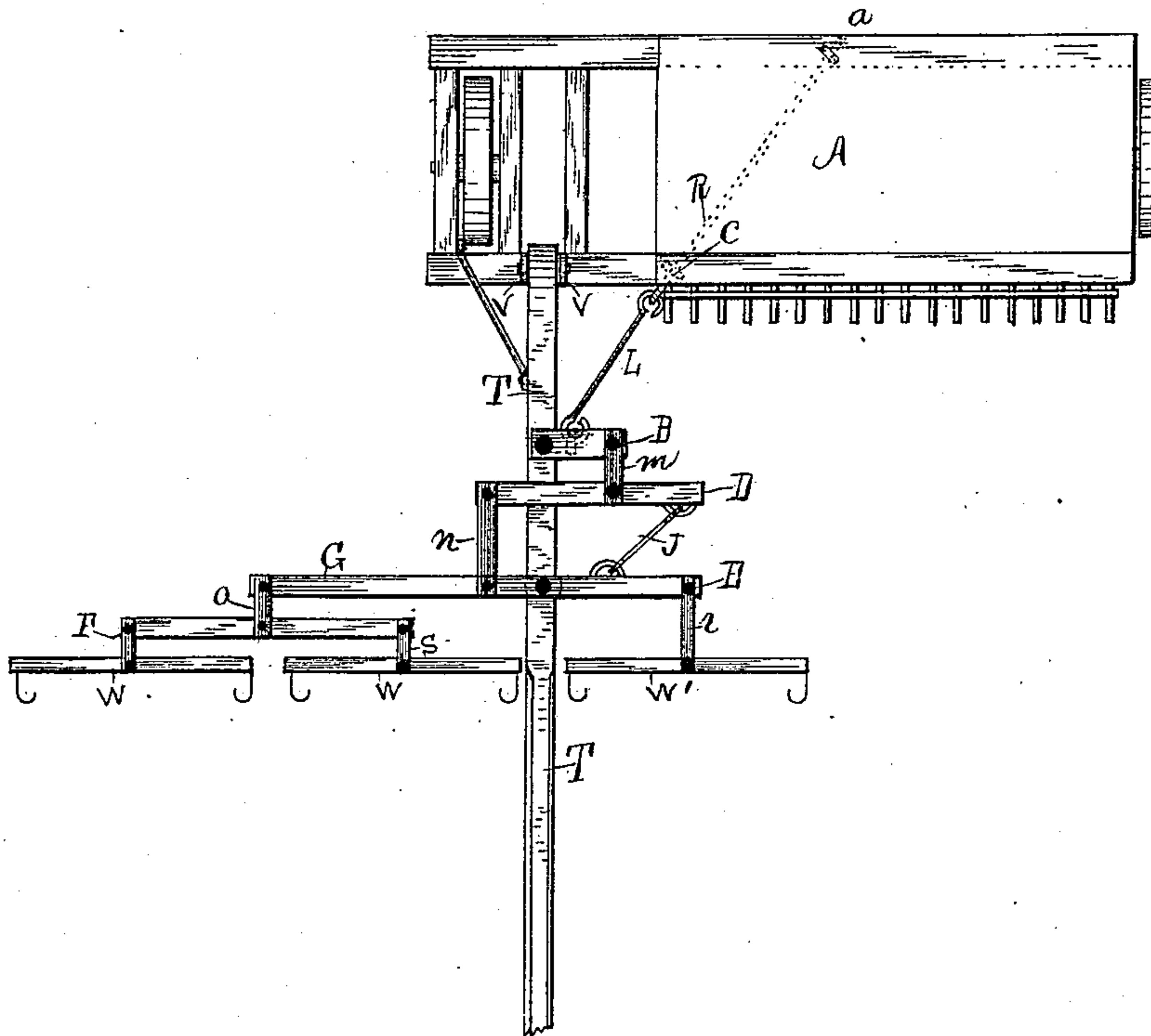


(No Model.)

P. J. RABB.  
DRAFT EQUALIZER.

No. 471,396.

Patented Mar. 22, 1892.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 471,396, dated March 22, 1892.

Application filed November 9, 1891. Serial No. 411,288. (No model.)

*To all whom it may concern:*

Be it known that I, PHILLIPP J. RABB, a citizen of the United States of America, residing at Frankfort Station, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Draft-Equalizers, of which the following is a specification, reference being had therein to the accompanying drawing, and the letters of reference thereon, forming a part of this specification, in which the figure is a plan view.

This invention relates to certain improvements in draft-equalizers and device for preventing side draft in harvesting-machines, mowing-machines, &c., which improvements are fully set forth and explained in the following specification and claim.

Referring to the drawing, the equalizer is shown as applied to a portion of a grain-harvester A.

T is the tongue of the draft-equalizer, having its rear end pivotally attached at V to a harvester-frame.

B is a short arm pivotally connected to the top of the tongue and extending to one side of the tongue. Said arm B is attached also to the rear side of the platform of the harvester A at *a* by means of the rod R on the under side of the harvester-frame and the link L. The inner end of rod R is held up to the harvester-frame at *c* by means of passing through an eye in said frame. The link L and rod R are hooked together at about the forward side of the harvester, so as to form a joint at that place to permit oscillation of the machine and tongue. The outer end of the arm B is connected to a doubletree D by means of the clevis *m*, a little at one side of the center of said doubletree, the long section of said doubletree projecting over the tongue to its side opposite the cutter-bar of the machine.

E and G are separate arms, each pivoted to the top of the tongue to the same pivot, the arm G extending from the side of the tongue opposite the cutter-bar and the arm E extending from the side of the tongue toward the cutter-bar and the arm E being longer than arm G. The arm E is connected to the outer

end of the short section of doubletree D by means of the link J, the point of connection of said link J with arm E being at about its center. The arm G is connected with the outer end of the long section of doubletree D by means of the clevis *n*, the point of connection of said clevis with arm G being but a short distance from its inner end, where it pivots to said tongue. The outer end of arm E is connected to whiffletree W' by means of clevis *r*. The outer end of arm G is connected to doubletree F by means of clevis *c*, and said doubletree F is connected with the whiffletrees W W by means of the clevises S S, so that the device, as shown, is adapted to be used with three horses, one at the side of the tongue toward the cutter-bar and the other two at the opposite side of the tongue.

It is intended that the equalizer, when arranged as shown and applied to a harvesting-machine or other similar machine in the manner substantially as set forth, will materially lessen the side draft of the machine, if not relieve it from side draft altogether.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows, to wit:

The combination, with the tongue T, of arm B, pivotally connected thereto at one end, link L, connected thereto, rod R for connecting link L with the rear side of the harvester-frame A, doubletree D, connected by clevis *m* and at one side of its center to the outer end of arm B, arms E and G, each pivoted at their inner ends to tongue T on the same pivot, link J for connecting the outer short end of doubletree D to arm E at about its center, clevis *n* for connecting the outer end of arm G to the outer long end of doubletree D, doubletree F, connected to the outer end of arm G, and having the whiffletrees W W and whiffletree W', connected to the outer end of arm E, all arranged to operate substantially as and for the purpose set forth.

PHILLIPP J. RABB.

Witnesses:

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