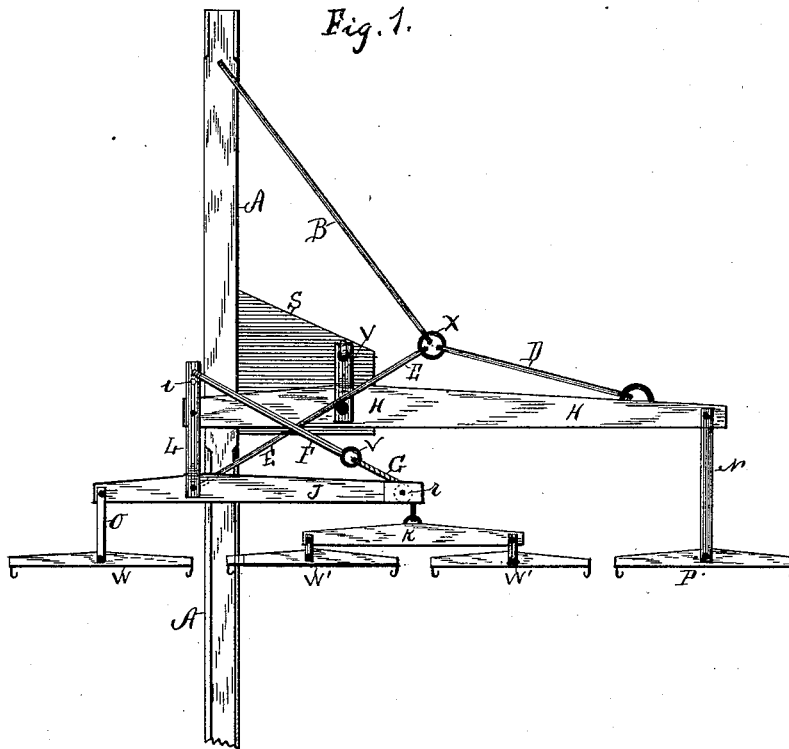


(No Model.)

S. H. TINSMAN.
DRAFT EQUALIZER.

No. 454,892.

Patented June 30, 1891.



Witnesses

S. A. Oliver
F. G. Harris

Inventor

Samuel H. Tenonan By
Thos H Hutchins his atty

UNITED STATES PATENT OFFICE.

SAMUEL H. TINSMAN, OF MORRIS, ILLINOIS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 454,892, dated June 30, 1891.

Application filed March 12, 1891. Serial No. 384,811. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL H. TINSMAN, a citizen of the United States of America, residing at Morris, in the county of Grundy 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 drawing represents a top plan view of the draft-equalizer as it would appear adapted to use with four horses.

Referring to the drawing, H represents the principal doubletree pivoted to the outer end of a bracket S, secured to the side of a pole A of either a vehicle or a reaping or mowing machine, and held on said bracket by means of a bolt and the strap *v* in the ordinary manner, but nearer one end than the other.

J is a doubletree connected to the short end of doubletree H by means of the lever L. The forward end of said lever is pivoted to the doubletree J, and is also pivoted near its center to the short end of doubletree H, and its rear extending end projects beyond said doubletree and is provided at that end with the row of holes *i* for receiving the hooked end of the rod F. The doubletree has attached to its short end by means of the strap *o* the whiffletree *w* and to its opposite end the doubletree K, to which is attached the whiffletrees *w' w'*. The long end of doubletree H has attached to it by means of the strap N the whiffletree P. The long end of doubletree H is connected with the rear end of the pole A at some little distance from the rear of said doubletree by means of the rods B and D, connected about opposite the center of said doubletree by means of a link or ring *x*, and said ring is connected with the doubletree J at its point of pivot with the lever L by means of the rod E, and the rear end of

said lever is connected with doubletree K by means of the rod F and cord or chain G, the said cord passing over a friction-wheel *r*, arranged in the extending long end of doubletree J. The rod F is hooked on its rear end, and may be inserted into any one of the holes *i* to adjust it along on said lever, which adjustment is for the purpose of furnishing means for varying the power applied to either end of the doubletree J. By connecting the doubletree J with the rods B and D at X, as shown, the doubletree J is connected with doubletree H at two different points or at each end and in such yielding manner as to permit the free working of said doubletree and a lateral movement of doubletree J to some little extent, permitted by said lever L, for the purpose of adjusting the device to the power that may be applied to the outer long end of doubletree H and to doubletree J without the necessity of changing the location or position of the parts. If desired, more or less horses may be used with the device simply by changing the number of whiffletrees.

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

The draft-equalizer shown and described, consisting of the combination, with the pole A, having the bracket S, of the doubletree H, rods B D, and link *x* for connecting the rear end of the pole and long end of said doubletree, doubletree J, having the friction-wheel *r*, lever L, having the holes *i* for connecting said doubletrees, rod E and cord G for connecting doubletree K with the rear end of lever L, and doubletree K, all arranged to operate substantially as and for the purpose set forth.

SAMUEL H. TINSMAN.

Witnesses:

N. E. COLES,
A. G. WOODBURY.