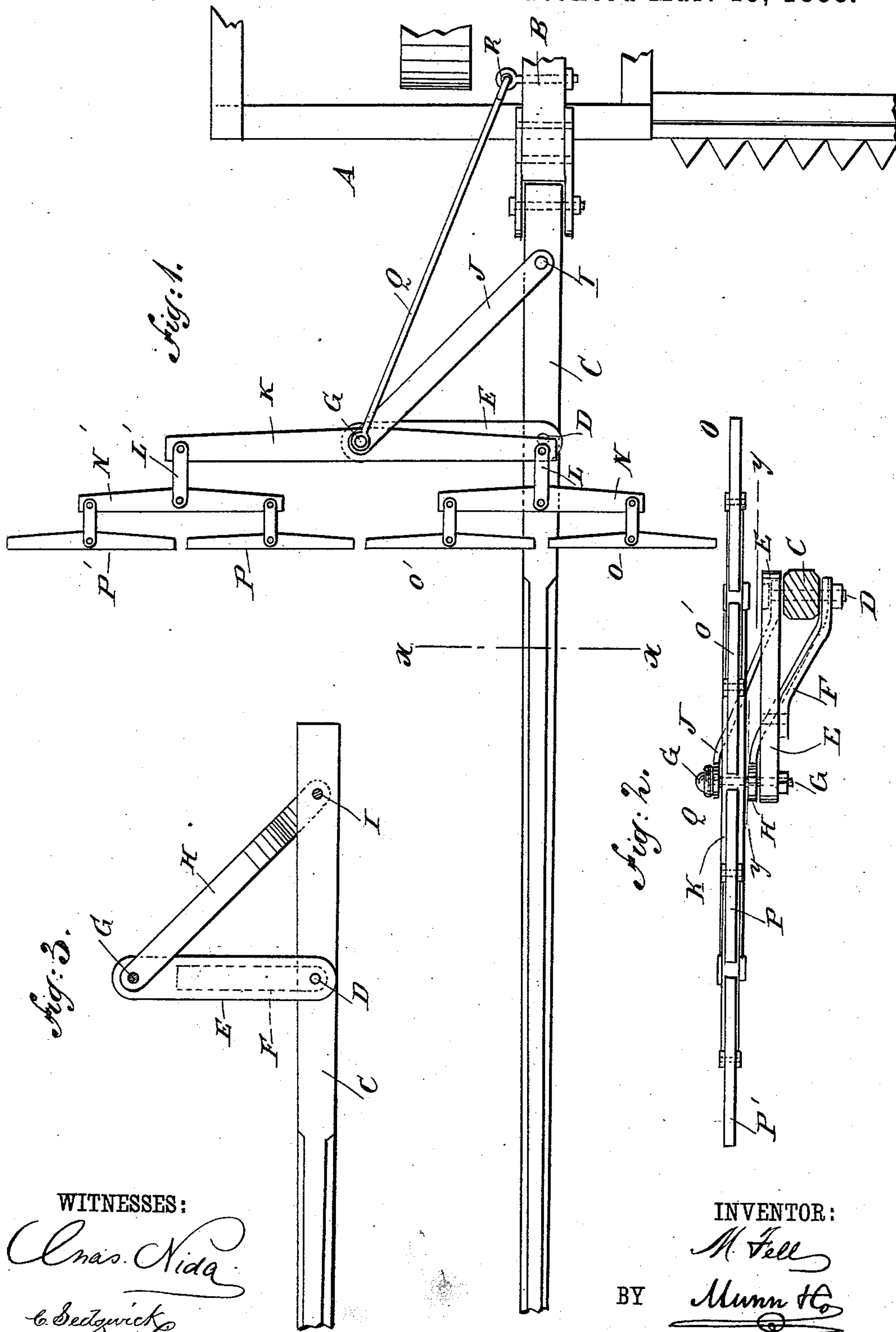


(No Model.)

M. FELL.
DRAFT EQUALIZER.

No. 379,383.

Patented Mar. 13, 1888.



WITNESSES:

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MICHAEL FELL, OF EVERLY, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 379,383, dated March 13, 1888.

Application filed October 28, 1887. Serial No. 253,620. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL FELL, of Everly, in the county of Clay and State of Iowa, have invented a new and Improved Draft-Equalizer, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved draft-equalizer especially adapted for mowers and reapers requiring four draft-animals, and so arranged that one animal is on the inside of the pole while the other three animals are on the outside of the pole.

The invention consists in the construction and arrangement of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improvement as applied. Fig. 2 is a sectional front elevation of the same on the line *x x* of Fig. 1, and Fig. 3 is a sectional plan view of the bracket for the doubletree on the line *y y* of Fig. 2.

The machine A on which my improvement is used is provided with the usual draft-beam, B, on which is pivoted the inner end of the tongue or pole C. A suitable distance in front of the pivot-point of the pole C is placed a bolt, D, on which is fastened the bracket E, extending at right angles to one side of the pole C. A brace, F, is secured by one end to the under side of the bracket E, and is held at its other end on said bolt D. On the outer end of the bracket E is placed a bolt, G, on which is held one end of a brace, H, which extends rearwardly and is secured to a bolt, I, held on the pole C, between its pivot-point and the bolt D aforesaid. A second brace, J, also extends from the bolt I to the bolt G, and between the said brace J and the brace H is held a long doubletree, K, on the bolt G, on which it is free to swing.

On each outer end of the long doubletree K is held a link, L or L', carrying, respectively, the doubletrees N and N', each supporting at

its ends a singletree, O O' or P P', respectively. The rod Q is held by one end on the bolt G, and is pivoted or swiveled at its other end on a bolt, R, secured to the draft-beam B, or to any other suitable part of the machine A. Instead of a bolt R, I may use a clevis.

It will be seen that the bracket E is securely held at right angles to the pole C by the brace J and the rod Q, which latter permits of an upward swinging motion of the pole C with the equalizing attachment, as said rod Q is swiveled on the bolt or clevis R. It will further be seen that one singletree, O, is on one side of the pole C, while the other three singletrees, O', P, and P', are on the other side of the pole C, so that one animal is on the inside of the pole while the other three animals are on the outside of the pole, and hence do not interfere with the cutting of the machine. It will further be seen that the four animals draw equally on the machine, thus avoiding all side draft.

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

1. In a draft-equalizer, the combination, with a long doubletree, of a bracket held on the pole and carrying said long doubletree, braces connected with the outer end of said bracket and with said pole, and a rod connected at one end with the free end of said bracket, and pivotally connected at its other end with the draft beam or frame of the machine, substantially as shown and described.

2. In a draft-equalizer, a long doubletree carrying at each end a doubletree supporting at each end a singletree, in combination with a bracket held on the pole or tongue and carrying said long doubletree, braces connected with the outer end of said bracket and with said pole, a rod connected at one end with the free end of said bracket, and a bolt or swivel secured to the draft beam or frame of the machine, and on which said rod is pivotally connected, substantially as shown and described.

MICHAEL FELL.

Witnesses:

W. A. KNIGHT,
H. H. PRATT.