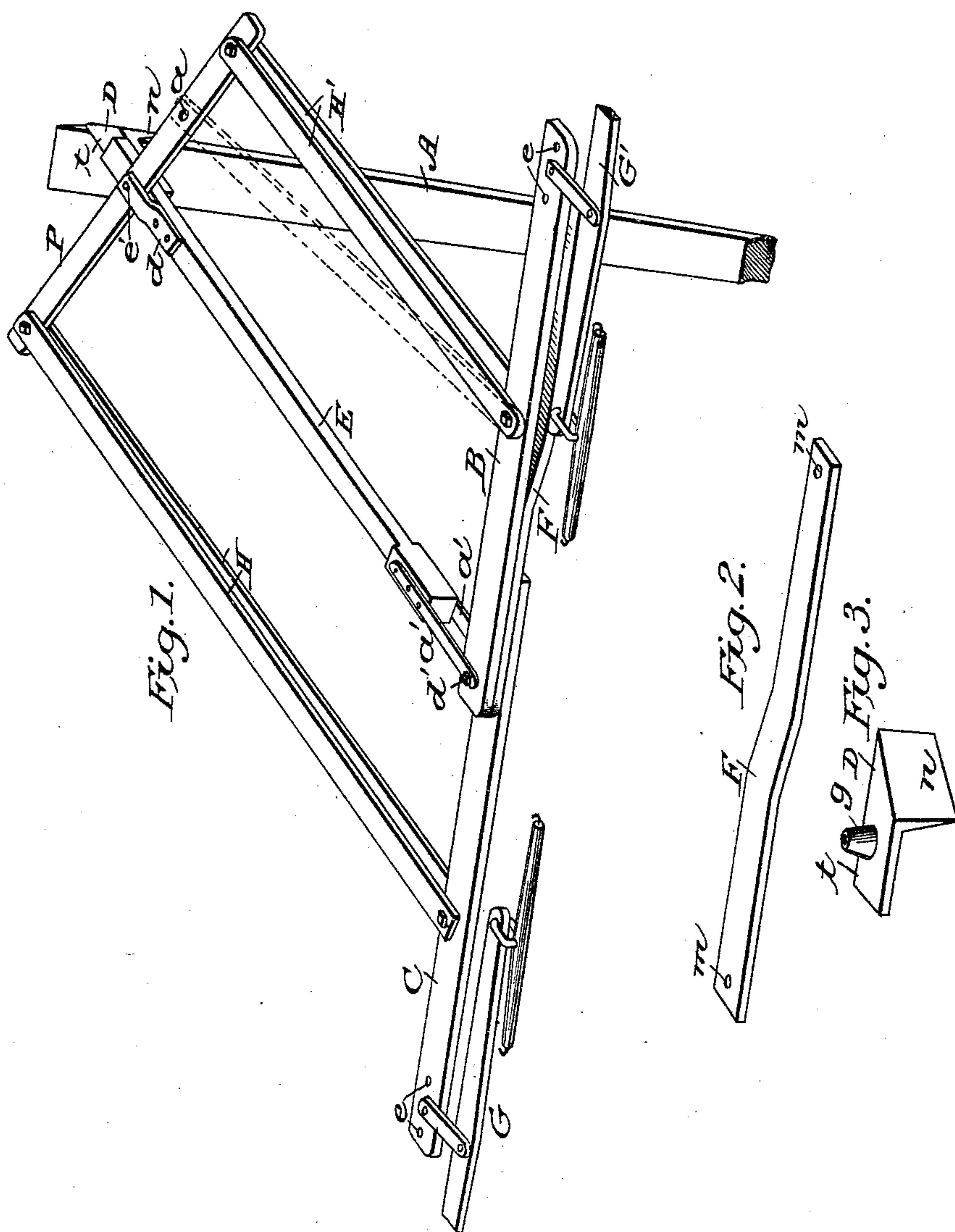


(No Model.)

A. HUNT.
DRAFT EQUALIZER.

No. 481,357.

Patented Aug. 23, 1892.



Witnesses.
Orington Swan.
E. A. Swan.

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UNITED STATES PATENT OFFICE.

ALMON HUNT, OF ATLANTIC, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 481,357, dated August 23, 1892.

Application filed September 25, 1891. Serial No. 406,849. (No model.)

To all whom it may concern:

Be it known that I, ALMON HUNT, a citizen of the United States, residing at the city of Atlantic, in the county of Cass and State of Iowa, have invented certain new and useful Improvements in Draft-Equalizers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in draft-equalizers; and it consists in the peculiar construction and combination of the parts that will be more fully set forth hereinafter, and particularly pointed out in the claim.

My invention is particularly adapted to be used on harvesting-machines and other agricultural machines in which there is a heavy side draft; and the objects of my invention are to provide a draft-equalizer which will overcome the side draft of self-binding harvesting-machines and which can be readily converted from a four-horse to a three-horse equalizer when desired. I attain these objects by the device illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the draft-equalizer; Fig. 2, a detail view of the spring-support, and Fig. 3 a detail view of strengthening-piece for tongue.

Similar letters refer to similar parts throughout the several views.

A represents a pole or tongue of a self-binding harvesting-machine of ordinary construction.

F is a spring-support made of steel, having its inner end firmly secured to the tongue and its outer end located between the inner ends of the levers B and C. The bar E is secured to the tongue and projects from the off side thereof.

D is a strengthening-piece composed of the plate *t*, having the perforated boss *g* and lip *n*. The lip *n* bears against the side of the tongue and the boss *g* projects upward into the bar E. The parallel iron straps *a'* are firmly secured at their inner ends to the outer end of the bar E, one to the top side and the other to the bottom side of the bar E.

B and C are two levers, which are pivoted at their inner ends by means of a common

bolt *d'* to the outer end of the spring-support F and outer ends of the iron straps *a'*, the upper strap *a'* resting upon the top side of the lever B and the lower strap *a'* under the lever C.

P is a lever pivoted to the inner end of the bar E by means of the bolt *e'*, which passes through the strap *d*, lever P, plate *t*, and tongue.

The parallel bars H are pivotally connected at their forward ends to the lever C and at their rear ends to the lever P. The parallel bars H' are pivotally connected at their forward ends to the lever B and at their rear ends to the lever P.

To the outer end of the lever C is secured the doubletree G and to the outer end of the lever B is secured the doubletree G'. Each doubletree has secured to it in the usual manner two singletrees.

The drawings show an equalizer adapted for four horses; but by moving the rear ends of the bars H' and securing them to the lever P by inserting the pivot through the aperture *a*, so that the bars H' will occupy the position as shown by the broken lines, and by substituting a singletree in the place of the doubletree G a three-horse draft-equalizer is provided.

The operation of my invention will be very readily understood from the foregoing description and the accompanying drawings.

Having described my invention, what I claim as new, and desired to secure by Letters Patent, is—

The herein-described draft-equalizer, composed of the tongue A, the bar E, secured to the tongue, the spring-support F, secured to the tongue, the levers B and C, pivoted at their inner ends to the outer ends of the bar E and support F by a common pivot, the lever P, pivoted to the bar E, the parallel bars H, pivoted at their forward ends to the lever C and at their rear ends to the lever P, and the parallel bars A', pivoted at their forward ends to the lever B and at their rear ends to the lever P, all combined substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALMON HUNT.

Witnesses:

J. C. E. BRUCE,
J. N. WINNE.