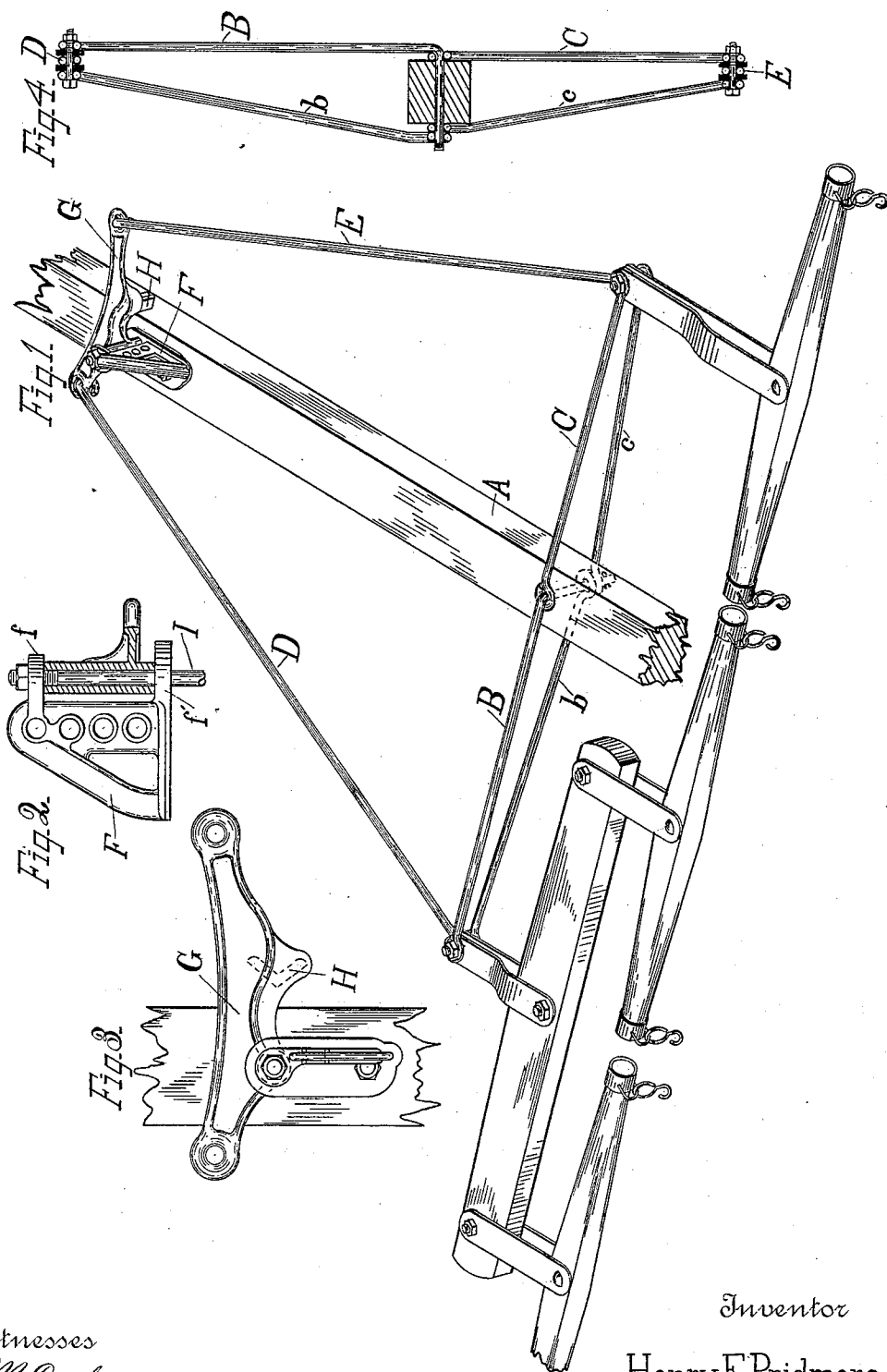


(No Model.)

H. E. PRIDMORE.
DRAFT EQUALIZER.

No. 463,776.

Patented Nov. 24, 1891.



Witnesses
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HENRY E. PRIDMORE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE MCCORMICK HARVESTING MACHINE COMPANY.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 463,776, dated November 24, 1891.

Application filed April 25, 1890. Serial No. 349,420. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. PRIDMORE, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Draft-Eveners, of which the following is the specification.

The object of this invention is to make a draft-evenner for three-horse teams that shall be light and stiff and equalize the draft on each horse. A common method of construction for such evenners has been to pivot two unequal draft-levers to the tongue normally in line with each other, extending on opposite sides of the tongue, attaching the singletree for one of the pole-horses to the shorter lever and the doubletree for the other two to the longer lever. These draft-levers were connected by chains or links to compensating devices situated on the tongue behind. In order to stand the strain and to support the whiffletrees without sagging, these draft-evenners have had to be of considerable weight, which is particularly objectionable, as the weight must be largely carried upon the horses' necks, as the evenners are so far out on the tongue. There have been various forms of compensating devices used; but whether pulley or lever, the friction attending their movement has made the equalization of draft impossible. In my invention I overcome these defects by attaching the draft-links at the point where the singletree and doubletree are attached to their respective draft-levers, now, however, more properly called "spreaders," in forming these spreaders in a peculiar manner, which will be hereinafter more fully described, and by pivoting the compensating lever upon a long fulcrum in a triangular bracket, so that the friction of its movement will be lessened.

Figure 1 is a perspective view showing a section of the tongue, to which is attached a three-horse evenner, constructed in accordance with my invention. Fig. 2 is a side view of the triangular compensating-lever pivot, with vertical section of the lever at the pivotal point. Fig. 3 is a top view of the pivot and compensating lever. Fig. 4 is a vertical cross-section of the tongue at the pivotal point of

the spreaders, showing the construction of the spreaders and the method of attaching the evenners and draft-links.

Similar letters refer to similar parts throughout the several views.

A is the tongue.

B is the upper arm of the longer spreader, formed with a hole in its outer end, and sufficient of its inner bent end at a right angle to pass through the tongue from above and serve as a pivot for its lower part *b* and also as a pivot for the shorter spreader upon the other side of the tongue. It is fitted with a cotter below to prevent the lower arm from dropping off.

b is the lower arm of this longer spreader, formed with holes in each end, the inner to be placed upon the downwardly-extending part of the arm *B* and the outer end for the reception of the bolt which unites the double-tree-straps, draft-link, and the outer end of the upper spreader-arm.

C is the upper arm of the shorter spreader, and *c* the lower. Both are formed with holes in each end. The inner end of the upper arm C is to be pivoted above the tongue upon the downwardly-extending part of the upper arm of the longer spreader B, while the inner end of the lower spreader *c* is to be pivoted below the tongue on the same extension, and the holes at the outer ends of both are for the reception of the bolt that connects the whiffletree-straps and draft-link.

D and E are the links connecting the extremities of the spreaders to the respective arms of the compensating lever, which is situated on the tongue at some distance in the rear of the spreaders.

F is the triangular bracket, which in this instance serves as the tilting bracket for the machine, and is a triangular casting formed with projections *f* and *f'* at the top and bottom of the rear side of the triangle, extending to the rearward, in which the compensating lever is pivoted on a pin I, that passes through the tongue, and which also serves to hold the triangular bracket rigidly in position upon the tongue.

G is the compensating lever with unequal arms extending upon each side of the tongue,

the longer arm being connected by the draft-link to the shorter spreader and the shorter arm to the longer spreader, so that the horses may do equal shares of the work. This compensating lever is provided with a downwardly-extending triangular projection H, so situated as to act as a stop against the tongue to prevent the compensating lever being thrown upon its dead-center by either the single horse or the double team.

It is possible to form either the upper or lower rod of either the shorter or longer spreader with the vertical extension to pass through the tongue for the pivot of the spreaders, or to leave off the vertical extension and form an eye in the end of the rod, thus using an independent pivot. Still I consider my invention to cover constructions so arranged.

What I claim is—

1. The combination, to form a draft-evenner, of the independent and unequal draft-spreaders pivoted to the tongue, each formed of two rods, one above and the other below the tongue, the singletrees connected mediately and immediately to the outer end of said

spreaders, the compensating lever, with the stop H pivoted to the tongue behind on a pivot, formed substantially as specified, said lever having unequal arms, and the links connecting the outer ends of the draft-spreaders and singletree to the compensating lever.

2. The combination, to form a draft-evenner, of the independent and unequal draft-spreaders, consisting of arms above and below the tongue, one of which is extended vertically through the tongue to form the pivot for itself and the other arms, the singletrees connected mediately and immediately to the outer ends of said spreaders, the compensating lever, formed with a projection H, pivoted to the tongue behind the draft-spreaders on a pivot with extending lips *f* and *f'*, said lever having unequal arms, and the links connecting the outer ends of the draft-spreaders and singletrees to the compensating lever, substantially as specified.

HENRY E. PRIDMORE.

Witnesses:

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