(Model.)

A. B. GRISWOLD.

DRAFT EQUALIZER.

No. 345,631. Patented July 13, 1886.

Fig. 1.

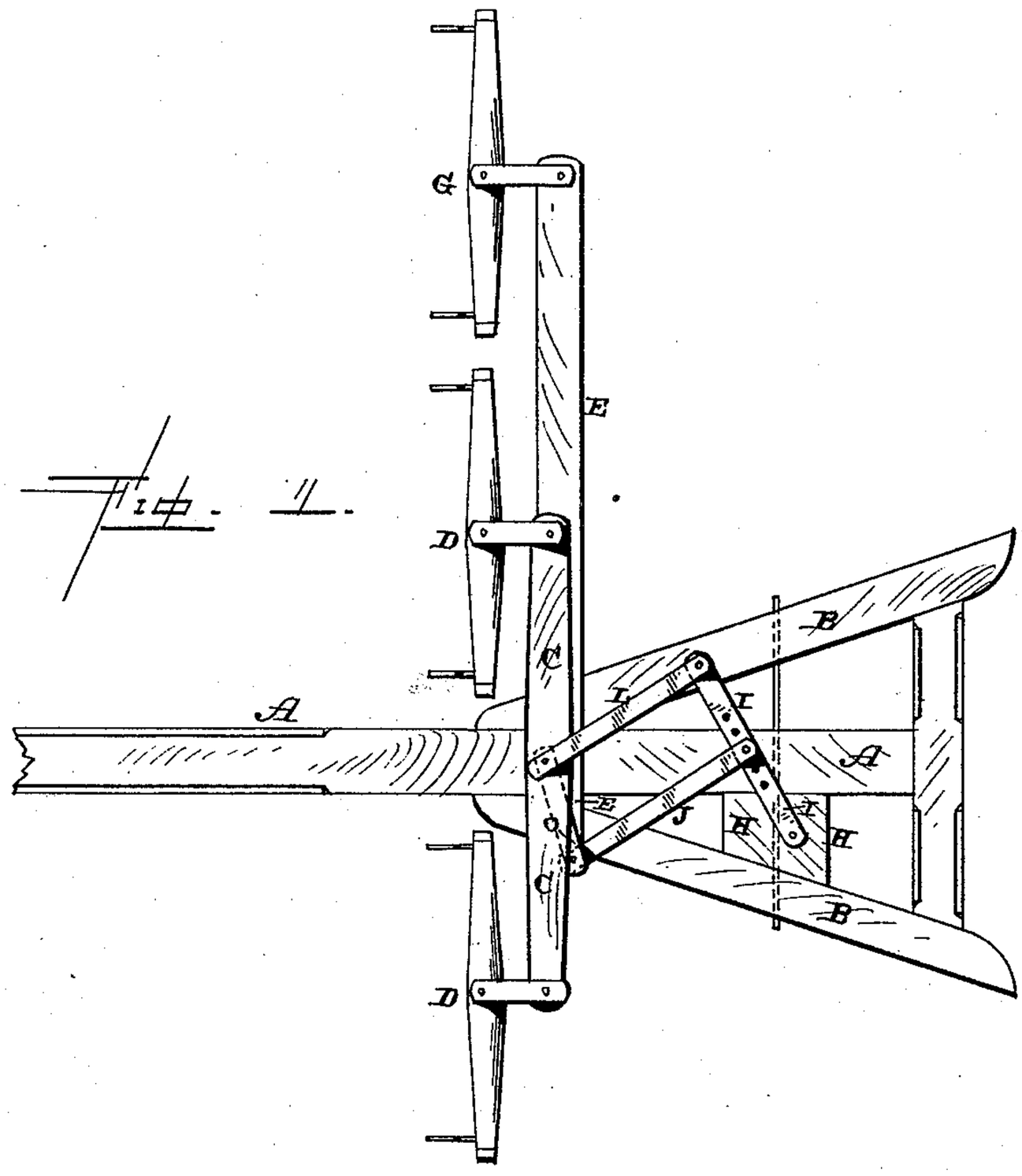
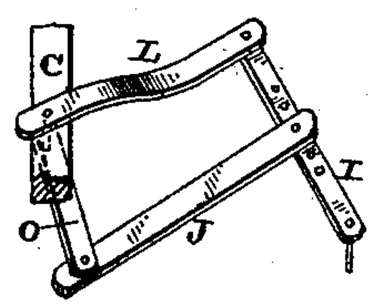


Fig. 2.



Witnesses.

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per

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UNITED STATES PATENT OFFICE.

ALANSON B. GRISWOLD, OF BUNKER HILL, KANSAS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 345,631, dated July 13, 1886.

Application filed May 11, 1886. Serial No. 201,895. (Model.)

To all whom it may concern:

Be it known that I, ALANSON B. GRISWOLD, of Bunker Hill, in the county of Russell and State of Kansas, have invented certain new and useful Improvements in Draft-Equalizers; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in draft-equalizers; and it consists in the combination of the double-tree, the lever carrying a single-tree, a connecting-rod which unites the short end of the lever with the double-tree, two connecting-rods, and a lever which is pivoted upon the tongue, as will be more fully described hereinafter.

The object of my invention is to produce a draft-equalizer for three horses, in which the long lever carrying one single-tree and the double-tree are connected together in such a manner that the slightest movement of one is immediately transferred to the other, so as to produce a movement in the opposite direction.

Figure 1 is a plan view of an equalizer embodying my invention. Fig. 2 is a perspective of the parts by means of which the lever and double-tree are connected together.

A represents the tongue; B, the hounds; C, the double-tree, carrying the two single-trees, D, and E the long lever, carrying the single-tree G. This lever E is pivoted upon the tongue at a suitable distance from its short end, in the usual manner. Pivoted on a block, H, secured to the tongue in any convenient manner, is the lever I, which is provided with a series of holes for the purpose of adjusting the end of the connecting-rod J back and forth thereon. To the free end of this perforated lever is loosely connected a connecting-rod, L, which has its other end pivoted upon the top of the double-tree. The connecting-rod J is longer than the one L, and the front end of the connecting-rod J is pivoted to the short end of the long lever E. Between the front ends of the rods J L is placed a connecting-rod, O, which is fastened by means of the same pivot to the end of the lever E, and which rod O extends from this pivotal connection to the center of the double-tree, to which it is connected by the same pivotal bolt that unites the front end of the connecting-rod L.

It will be seen from Fig. 2 that the rear ends of the rods J L are connected to the lever I, and that their front ends are connected together by means of the connecting-rod O, the four pieces forming almost a regular parallelogram. The double-tree is supported and has its movement entirely between the ends of the connecting-rods L O, as shown.

When either the double-tree or lever E are moved forward on account of a greater amount of power being applied to it, this movement is at once transferred to the other through the connecting-rods, so as to cause a corresponding movement of the other in the opposite direction, thus equalizing the draft either upon the single or both of the horses. The amount of movement which shall be transferred from the lever to the double-tree, to or from the double-tree to the lever, is regulated by adjusting the end of the connecting-rod J back and forth upon the lever I.

Having thus described my invention, I claim—

The combination of the tongue, the lever E, pivoted thereon, the double-tree with the lever I, and the three connecting-rods J L O, substantially as shown and described.

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

ALANSON B. GRISWOLD.

Witnesses:
C. SHAFFER,
IRA S. FELNE.