

J. BRANNING.
Draft-Equalizer.

No. 204,289.

Patented May 28, 1878.

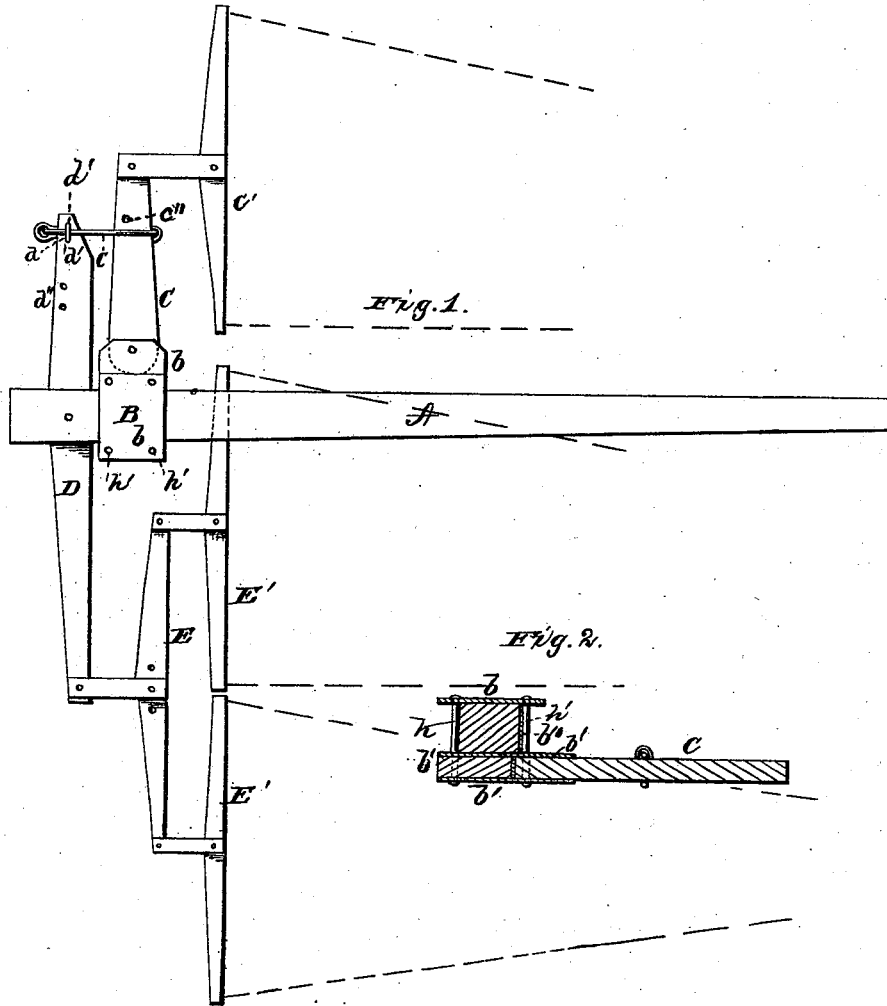


Fig. 1.

A

D

E

E'

E'

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Fig. 2.

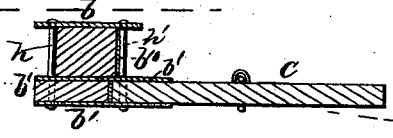
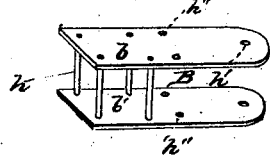


Fig. 3.



WITNESSES
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JOSEPH BRANNING, OF BLOOMING PRAIRIE, MINNESOTA.

IMPROVEMENT IN DRAFT-EQUALIZERS.

Specification forming part of Letters Patent No. **204,289**, dated May 28, 1878; application filed April 27, 1878.

To all whom it may concern:

Be it known that I, JOSEPH BRANNING, of Blooming Prairie, in the county of Steele and State of Minnesota, have invented certain new and useful Improvements in Draft-Equalizers, of which the following is a specification:

Figure 1 is a top-plan view of the device. Fig. 2 is a sectional view, to show the construction of the strap or clasp by which the short lever is attached to the tongue. Fig. 3 is a modification of the clasp.

The object of the present invention is to produce an efficient device for equalizing draft; and its peculiar novelties consist in the strap or clasp by which the short lever is secured or attached to the tongue or pole; and in such combination and arrangement of the two levers by which the draft is applied that the tongue or pole will come between two of the horses without interfering with either, and this though one horse is attached nearer to the tongue than the other; and in such arrangement of the several parts that the horses can be so attached that the inside tug of the middle horse will not interfere with the tongue; and in the provision for the use of two horses instead of three; and in such construction and adaptation of the parts that the evener can be applied or attached on the upper or under side of the tongue, as may be preferred, all as will now be more in detail set out and explained.

In the accompanying drawing, A denotes the pole or tongue of a harvester or other device. To and upon it, near its inner end, is secured the strap or clasp B. This clasp is so constructed that it can be applied at any desired point along the tongue, and to any tongue without making holes in the same, as will be hereinafter explained more at length.

Between the plates *b' b'*, on the upper or under side of strap B, is pivoted the short lever C. To the outer end of this is adapted the single-tree C'. To the tongue, inside of this clasp, and nearer to the harvester or other device to which the tongue is attached, is secured, in any usual way, the long lever D, so that it shall have suitable play back and forth. By suitable staple *d*, fixed in holes *d'* or *d''* in its short end, provision is made for the attachment of the link *e*, the other end of which is secured to lever C, and in this way the said

lever C is connected to the lever D. The said staple *d* can be put at the end of the short arm, as in holes *d'*, or set in toward the tongue in holes *d''*, as may be desired. To the end of the long arm of said lever D is secured the double-tree E, which, in turn, has on its ends the single-trees E' E'.

The strap or clasp B is made of upper plate *b* and under plates *b' b'*, these special terms of description now being applied in describing the evener as applied under the pole or tongue. The said plates are secured together and upon the pole by bolts and nuts *h h'*, and there may be side walls *b''*; but the purpose and object now aimed at is to have an upper and under plate that can be adapted to any thickness of tongue, and when placed on the tongue be secured thereon. Hence there may be several holes in the several plates, as now shown in the drawing at *h''*, to provide for a varying thickness of tongue.

I may use two plates, an upper and under one, and have an ear on the under one for the attachment of lever C; or there may be three plates, as shown, the said lever being pivoted between the two under ones.

This strap B, being thus constructed and adapted, forms a rigid arm on the tongue, and by such connection between the tongue and lever C very great help is given for carrying out the main purposes of the present invention.

By this construction of clasp or strap the evener can be secured in position at any point without piercing any extra holes in the tongue; also, by my present invention the tongue will be so brought between the two pole horses that it will not interfere with either.

It will also be observed that the tug on the left of the middle horse when the evener is attached, as shown in Fig. 1, passing over the tongue, can work without interfering with the tongue, since the said tongue enters the neck-yoke at a point lower than the connection of the tug and harness.

The several parts of this evener are so arranged that it can be used with two horses, when desired. This can be provided for by putting the staple *d* in holes *d''*, near the tongue, and changing the connection of the single-tree C' from the end of the lever into the hole *e''*, and by removing the double tree

E from the long end of the lever D, and putting in its place a single-tree.

The evener thus constructed will operate well in every respect. Three horses can be worked with three-foot whiffletrees as well as two horses on an ordinary evener, there being no side draft at all. The whiffletrees will not lap over each other, nor will the horses crowd each other.

My device is so constructed that it will not come in contact with the harvester, seeder, or wagon, since the parts cannot swing enough for that, nor are the levers long enough to admit of it. The pressure of the short lever against the tongue will prevent it from swaying back and forth.

Although the evener can be attached on either upper or under side of the tongue, I prefer to put it under, since in that position it greatly relieves the horses' necks from weight when used on a seeder or harvester, the draft being some six inches lower than when the evener is on the upper side of the tongue. In this way, also, a better purchase or draft will be afforded.

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

1. The clasp B, composed of plates *b b'*, and having adjusting-holes *h* and bolts *h'*, and constructed and adapted to operate substantially as described.

2. The clasp B, constructed as described, and combined with tongue A and lever C, substantially as and for the purposes set forth.

3. The combination of lever C, clasp B, and tongue A with lever D, link *c*, and staple *d*, substantially as and for the purposes set forth.

4. In a draft-equalizer, the combination of lever D, having double-trees E with single-trees E', with tongue A, clasp B, and lever C, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOSEPH BRANNING.

Witnesses:

G. S. BURNHAM,
ED. MORTON.