

(No Model.)

A. C. & J. T. JACOBSON.
Draft Equalizer.

No. 237,538.

Patented Feb. 8, 1881.

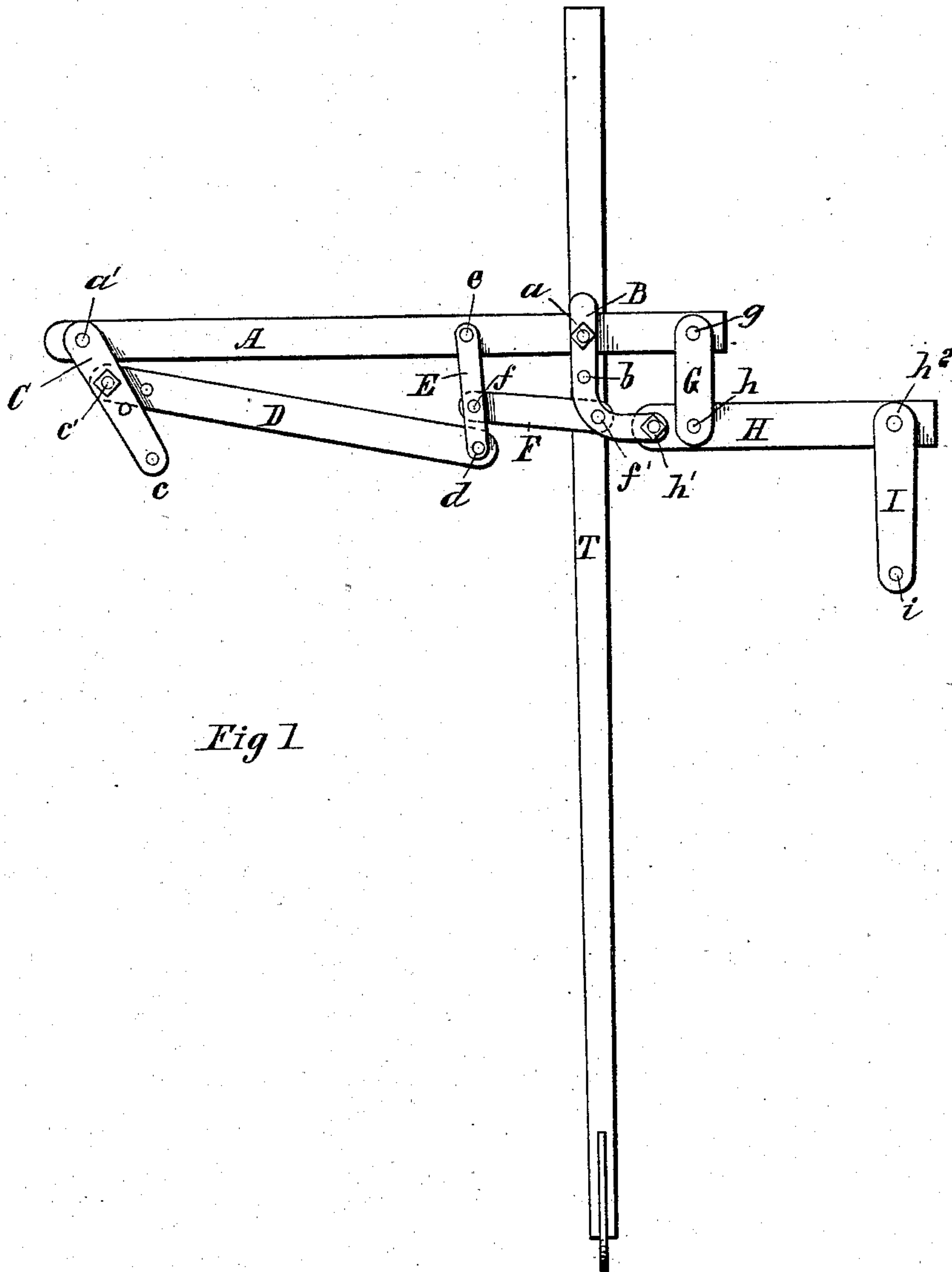


Fig 1

Witnesses

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DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 237,538, dated February 8, 1881.

Application filed June 22, 1880. (No model.)

To all whom it may concern:

Be it known that we, ADOLPH C. JACOBSON and JACOB T. JACOBSON, of Ridgeway, in the county of Winneshiek, in the State of Iowa, have invented a certain new and useful Improvement in Draft-Equalizers; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which represents a plan view of our invention.

Our invention relates to apparatus for equalizing the force exerted on the two sides of a vehicle or other weight drawn by an uneven number of horses; and the object of it is, by the devices hereinafter described, to produce a new and more economical method of effecting this result, and particularly to obviate the inconvenience caused by side draft, or crowding of one horse against the tongue, which is incident to the equalizers in ordinary use.

In the drawing, A denotes the main draft-bar, pivoted at a point, *a*, much nearer one of its ends than the other, to the tongue T. A draft iron or clevis, B, is pivoted to the tongue at the same point. It is bent nearly in the shape of an L, having its upper end pivoted to the tongue, and its lower member turned the same way as the shorter arm of A. This clevis is capable of being pinned or bolted to the tongue at an additional point, *b*, on its upright member, and thus made immovable with reference to the tongue, if desired.

Near the end of the longer arm of A is pivoted, at *a'*, the rigid strap C, having at its free and forward end, *c*, the point of attachment of the whiffletree for the greater number of horses. At *c'*, between *a'* and *c*, the strap C is also pivoted to one end of the side draft-bar D, which is about two-thirds as long as the longer arm of A. Both C and D are pierced with several holes, so that the point of their connection may be varied. On the other end of D, at *d*, and farther forward than *c'*, is pivoted the forward end of the rigid strap or bar E, which is pivoted at its other end, *e*, to the main draft-bar A about three times as far from *a'* as from *a*.

At a point, *f*, on the strap E, between *d* and

e, is pivoted one end of the connecting-bar F, which is nearly parallel with A, its other end being pivoted at *f'* to the clevis B, near its bend. At *g*, on the outer end of the shorter arm of A, is pivoted the rigid strap G, having pivoted to its other end, at *h*, the secondary draft-bar H. One end of this draft-bar is pivoted at *h'* to the projecting end of the clevis B. On the other, at *h²*, is pivoted the rigid strap I, on whose free end, at *i*, is the point of attachment of the whiffletree for the less number of horses.

The distance from *h* to *h²* is about five times as great as from *h* to *h'*, so that the bar H constitutes a lever having its fulcrum at *h*, and one of its arms about five times as long as the other.

As represented in the drawing, the distance between *g* and *f'*, when H and A are parallel, is to the distance in a straight line from *f* to *c* as 9 to 13. These proportions may, of course, be varied to suit the varying distribution of weight and force. Those we have given are found convenient for ordinary circumstances.

It is obvious that the points of attachment of the side draft-bar D and connecting-bar F, respectively, to the strap E may be varied, or even reversed, as the inequalities of force or weight between the two sides of the load may require; or by pinning or bolting B to T at an additional point, *b*, the position of B, and consequently of the points *f'* and *h'*, with reference to the tongues, become fixed.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a draft-equalizer, the combination of the bars A and H and connecting-strap G with the clevis B, pivoted to the tongue, substantially as and for the purpose described.

2. The draft-bars A and H, connecting-straps C, E, and G, side draft-bar D, connecting-bar F, and clevis B, pivoted or rigidly fixed to the tongue, all in combination, substantially as and for the purpose described.

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Witnesses:

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