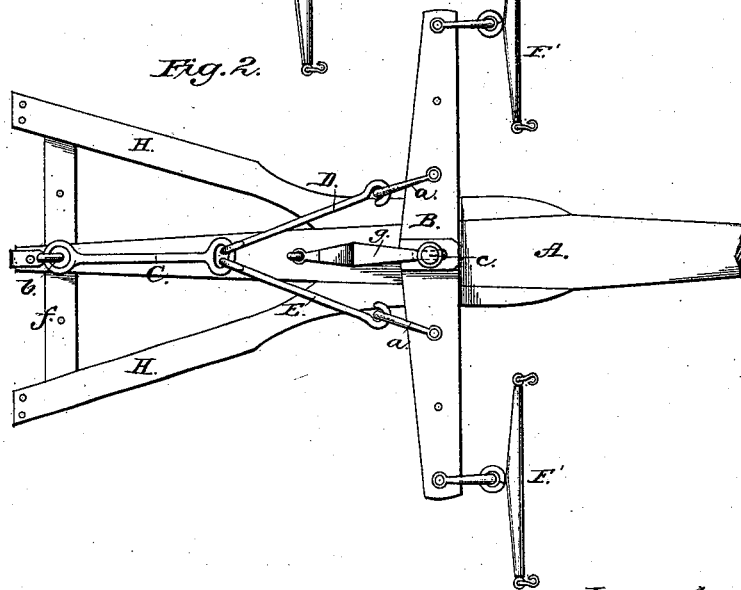
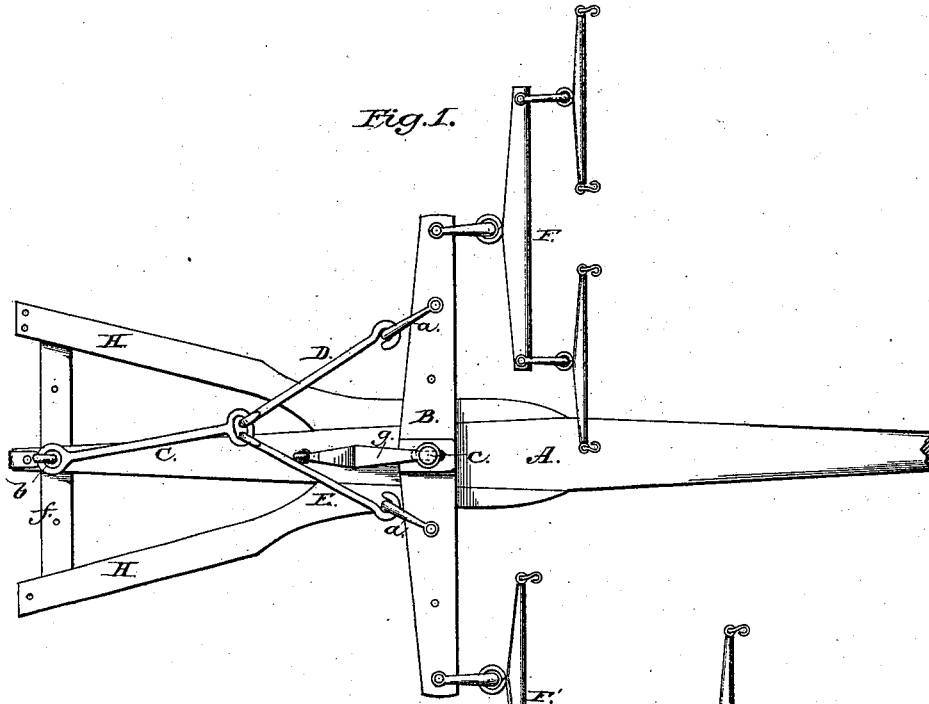


D. S. COLE.
Draft-Equalizer.

No. 209,657.

Patented Nov. 5, 1878.



Attest:

*Charles Hebrner
John Mather*

Inventor:

David S. Cole

UNITED STATES PATENT OFFICE.

DAVID S. COLE, OF WASHINGTON, ASSIGNOR OF ONE-HALF HIS RIGHT TO
SAMUEL A. HYERS, OF DAVENPORT, IOWA.

IMPROVEMENT IN DRAFT-EQUALIZERS.

Specification forming part of Letters Patent No. **209,657**, dated November 5, 1878; application filed
April 16, 1878.

To all whom it may concern:

Be it known that I, DAVID S. COLE, of Washington, in the county of Washington and State of Iowa, have invented a new and useful Improvement in Draft-Equalizers, of which the following is a specification:

The invention relates to an improvement in draft-equalizers; and consists in the peculiar construction and arrangement of levers and clevises with the evener and pole of a wagon or beam of a plow and single-trees, or a single-tree and a double-tree, to form an adjustable connection, as will hereinafter be fully described.

Referring to the drawings forming part of this specification, Figure 1 is a plan view of my improvement adapted for three horses, and Fig. 2 a similar view adapted for two horses.

Like letters indicate corresponding parts in both of the figures.

A is a section of the pole or tongue of a wagon. H H are the hounds, and *f* the rear cross-bar, connecting the hounds and pole.

The evener B is attached to the pole, in the usual manner, by means of a hammer or bolt, *c*, and the hammer-strap *g*. The evener is provided with an elongated slot, to allow of lateral adjustment and the equalization of the draft by means of the pivoted levers and clevises, hereinafter described.

When it is designed to use three horses, the double-tree F is attached, by means of a clevis, at one end of the evener, and the single-tree F' is attached in the same manner at the other end of the evener.

The clevises *a a* are secured to the evener at a suitable distance from the ends thereof, the one on the side at which the double-tree is attached being nearer to the end of the evener or farther from its center than the other.

Two rods, D E, made of metal, and provided with hooks or eyes at their ends, are attached to the clevises *a a* at one end, and to an eye in the link C at their opposite ends. The rod D is made longer than the rod E, to compensate for the increased distance the clevis *a* is located from the center of the evener on the outside, and also to provide for the equalization of the draft by means of the rods and link.

The link C is provided with eyes at both ends, and is pivoted at its rear end to a clip or strap having an eye formed thereon on the end of the pole, and at its front end to hooks or eyes on the rear ends of the rods D E, the

three arms thus forming a compound Y-shaped link.

When two horses only are used, the one clevis is moved closer to the pole, and secured through a hole in the evener provided for the purpose, so that when thus adjusted both clevises will be at an equal distance from the center. The two rods D E used are then of equal length, instead of having the one longer than the other.

The double-tree is removed and a single-tree substituted therefor, thus using two single-trees instead of one single and one double tree, as for three horses.

It will be understood that my improvement is as well adapted for use with the beam of a plow as with the pole of a wagon, the evener and rods being attached in a similar manner.

It will be seen that by the arrangement described a double leverage is provided for equalizing the draft, and by pivoting the rear end of the link C to the end of the pole or beam all side draft is overcome.

It is well known that the horse that lags behind has to pull the heaviest portion of the load—a difficulty that is obviated by my improvement.

It frequently occurs, too, that one of the horses in a team is stronger than the others, and it is desirable that they should be required to pull according to their strength. This device can be readily adjusted to accomplish this object, or each horse can be made to draw an equal portion of the load. It is also easily and conveniently adjusted to adapt it as an equalizer for two or three horses, as above explained.

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

1. The evener B, provided with pivotal slot C in its center, in combination with the rods D E and link C, pivoted to the tongue, substantially as described.

2. The evener B, pivoted in its center, and provided with apertures for interchanging from a two-horse to a three-horse evener, in combination with the rods D E and link C, pivoted to the tongue, substantially in the manner and for the purpose set forth.

DAVID S. COLE.

Attest:

CHARLES HEBENER,
JOHN MATHER.