

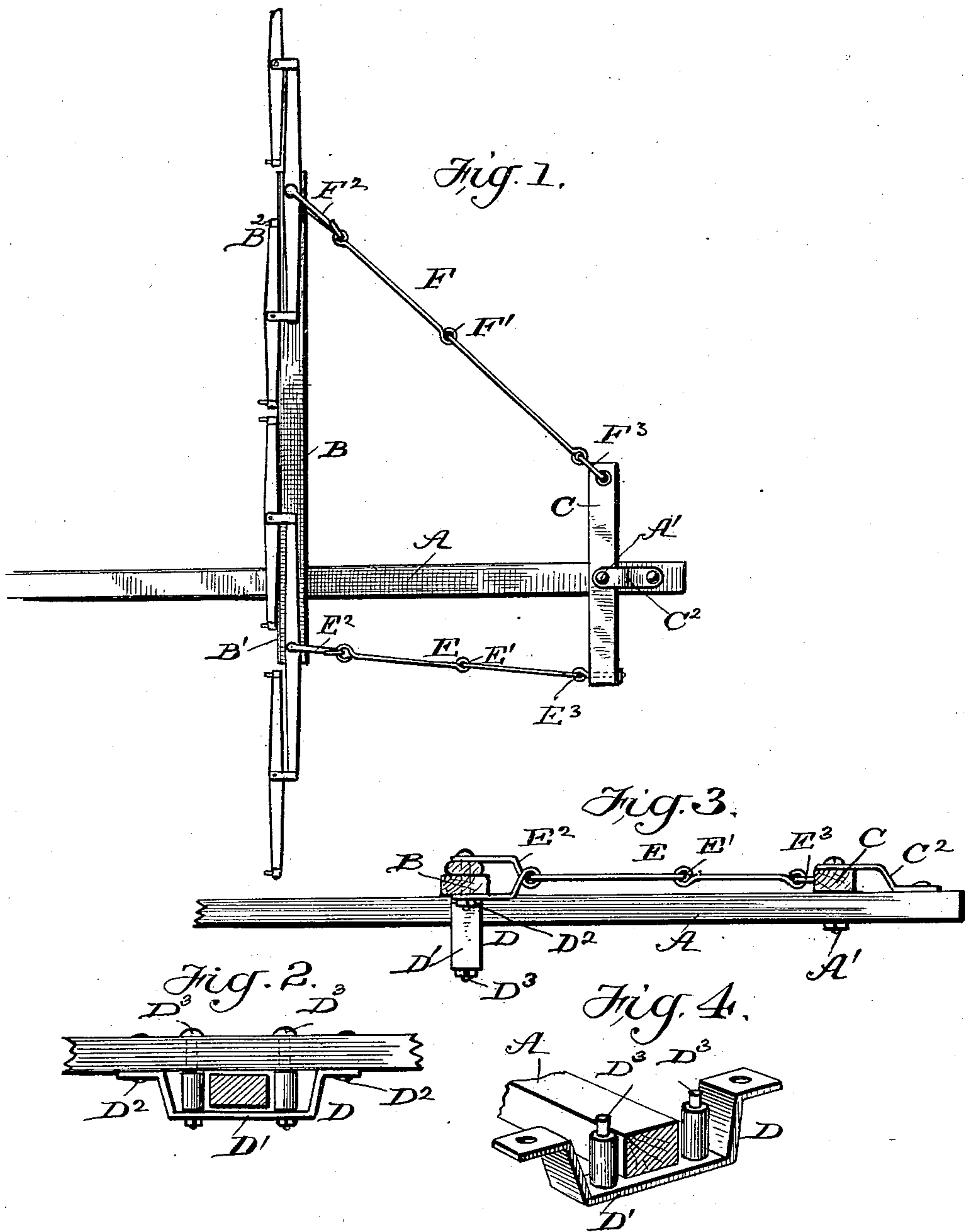
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Patented Apr. 29, 1902.

T. F. & J. J. FOLK.
DRAFT EQUALIZER.

(Application filed Aug. 21, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

THEODORE F. FOLK AND JOSEPH J. FOLK, OF BURTON, OKLAHOMA TERRITORY.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 698,920, dated April 29, 1902.

Application filed August 21, 1901. Serial No. 72,778. (No model.)

To all whom it may concern:

Be it known that we, THEODORE F. FOLK and JOSEPH J. FOLK, citizens of the United States, residing at Burton, in the county of Noble and Territory of Oklahoma, have made certain new and useful Improvements in Draft-Equalizers, of which the following is a specification.

This invention is an improvement in draft-equalizers, seeking to provide a novel construction of four-horse equalizer which is especially adapted for use on binders and aims to avoid as far as possible the side draft incident to the use of grain-binders, as is well understood by those skilled in the art; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of the improved equalizer. Fig. 2 is a cross-sectional view drawn in front of the main equalizing-beam and showing the box thereon which slides along the binder-tongue. Fig. 3 is a side elevation of the equalizer; and Fig. 4 is a detail perspective view, partly broken away, of the sliding box.

The equalizing-beams are applied, in the manner presently described, to the tongue A of the binder, and said beams B and C are usually made of two-by-four-inch timber, oak or other suitable material being employed for the purpose.

The rear beam C is pivoted at about its middle to the tongue A at A', and preferably is arranged upon said tongue and braced by the strap C², as shown in Figs. 1 and 3. In practice the beam C is made about twenty-four inches long.

The beam B, which we term the "main" beam, is in practice about fifty-six inches long and is provided on its underside at a point near one end with the box D, which slides upon the binder-tongue. This forms the beam B into a short arm B' and a long arm B², the short arm B' projecting laterally beyond the binder-tongue about the same distance as the corresponding arm of the rear beam C, with which the short arm is connected by a rod connection E, the opposite or longer arm of the main beam being connected with the other arm of the rear beam by the rod con-

nection F. The rod connection E is in practice about twenty-three inches long, while the connection F is about thirty-eight inches long, and such rod connections are preferably made in sections jointed together at E' and F', as shown.

The clevis E², which secures the rod connection E to the short arm of the beam B, is about three and one-half inches long, while the clevis F², which secures the rod connection F to the long arm of the beam B, is about six inches long—that is to say, between its cross-bolts and the eye through which it is connected with the rod F.

The clevis F³, which secures the rear end of the rod connection F to the beam C, is about three and one-half inches long, while the rear end of the rod connection E is secured to the short beam by an eyebolt E³, as shown in Fig. 1.

The box D, which is secured to the under side of the main beam, comprises the metal bar or strap D', whose ends are upturned and bolted at D² to the beam, and the bolts D³, extending on opposite sides of the binder-tongue and preferably supplied with rollers, as shown, to relieve the friction as the main beam is moved along the tongue. This box is made large enough within its rollers to slip back and forth on the binder-tongue in the operation of the device.

It will be noticed that in the use of our construction the horses may be hitched, as best shown in Fig. 1, the single and double trees being arranged as shown in said figure, and the main beam may slide back and forth on the tongue and will equalize in the application of the power to the tongue through the rear beam, with which it is connected, as before described.

The construction is simple, can be conveniently applied to any ordinary binder-tongue, and will be found quite efficient in avoiding the side draft and equalizing the draft generally in its application to the binder.

It will be noticed that rod connection E extends parallel with the line of draft, while the rod connection F extends obliquely to such line of draft; also, that the box D is arranged relatively near one end of the beam B, the pivot of the rear beam C to the binder-tongue

being in line with the center of the box D, as is best shown in Fig. 1 of the drawings.

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

1. The draft-equalizer herein described, consisting of the beam pivoted between its ends, the main beam made longer than the rear beam and arranged at one end in line with the corresponding end of the rear beam and projecting at its other end laterally beyond the corresponding end of the rear beam, the connecting-rods between the said main and rear beams at their ends, one of said connecting-rods extending parallel with the line of draft, and the other connecting-rod extending oblique to the line of draft, and the boxing secured to the main beam relatively near to the end thereof, which is in line with the corresponding end of the rear beam and constructed and adapted to slide along the tongue of the binder, substantially as and for the purposes set forth.

2. In a draft-equalizer, the combination substantially as described of the binder-tongue, the rear beam pivoted between its ends thereto, the main beam arranged at one end in line with the corresponding end of the rear beam and extending at its other end laterally beyond the other end of the rear beam, the box on the under side of the main beam near one end thereof and embracing the binder-tongue loosely whereby the main beam can slide along said tongue, and connections between the ends of the main and rear beams, substantially as set forth.

3. In a draft-equalizer, the combination of the binder-tongue, the rear beam pivoted mid-

way between its ends to the binder-tongue, the main beam held to and slidable along the binder-tongue at a point near one end of its ends, and devices connecting the ends of the main and rear beams, substantially as set forth.

4. The draft-equalizer herein described, comprising the main beam provided near one end with the box and arranged to embrace and slide along the binder-tongue, the rear beam made shorter than the main beam and pivoted between its ends to the binder-tongue at a point in line with the center of the box of the main beam, the rod connections composed of jointed sections and secured at their rear ends to the rear beam, and the clevises connecting the front ends of the rod connections with the main beam, substantially as set forth.

5. A draft-equalizer comprising the main beam provided at a point relatively near one end with a box arranged to embrace and slide along the tongue, the rear beam made shorter than the main beam and pivoted between its ends to the tongue at a point approximately in line with the center of the box of the main beam, the rod connection between the main and rear beams at one end thereof and approximately in line with the line of draft, and the opposite rod connection connecting the other ends of the main and rear beams, and arranged obliquely to the line of draft, substantially as set forth.

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