

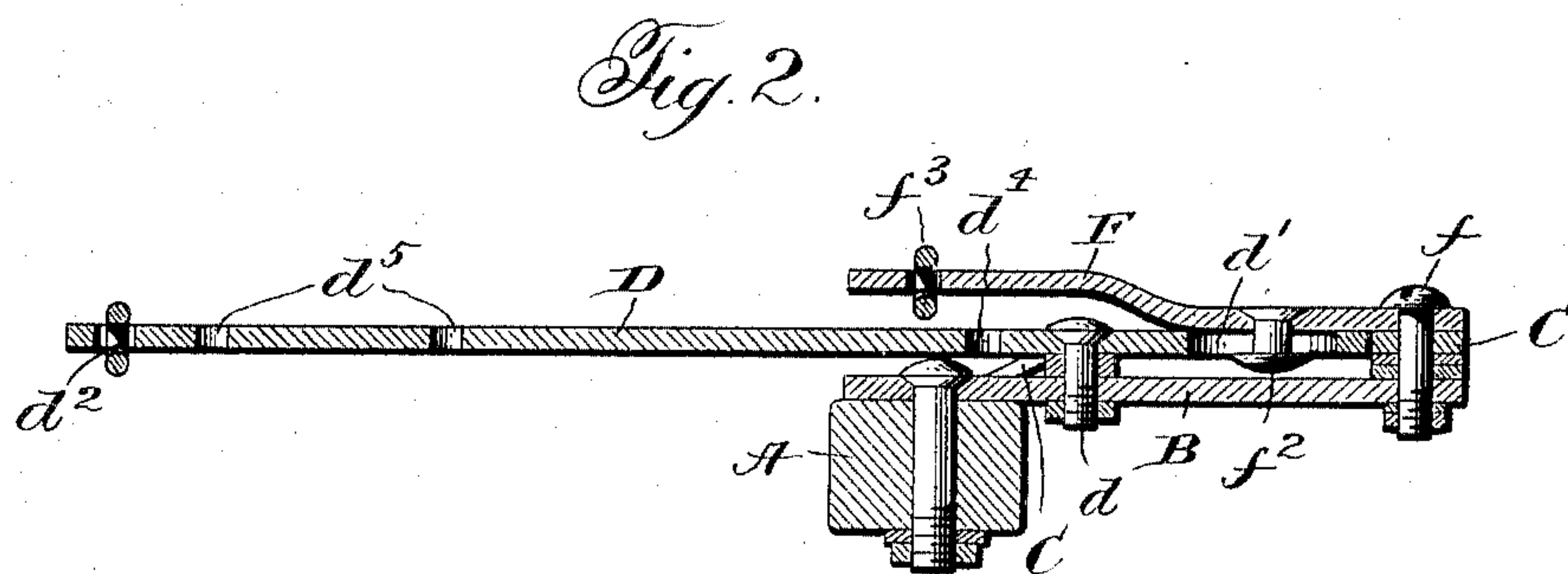
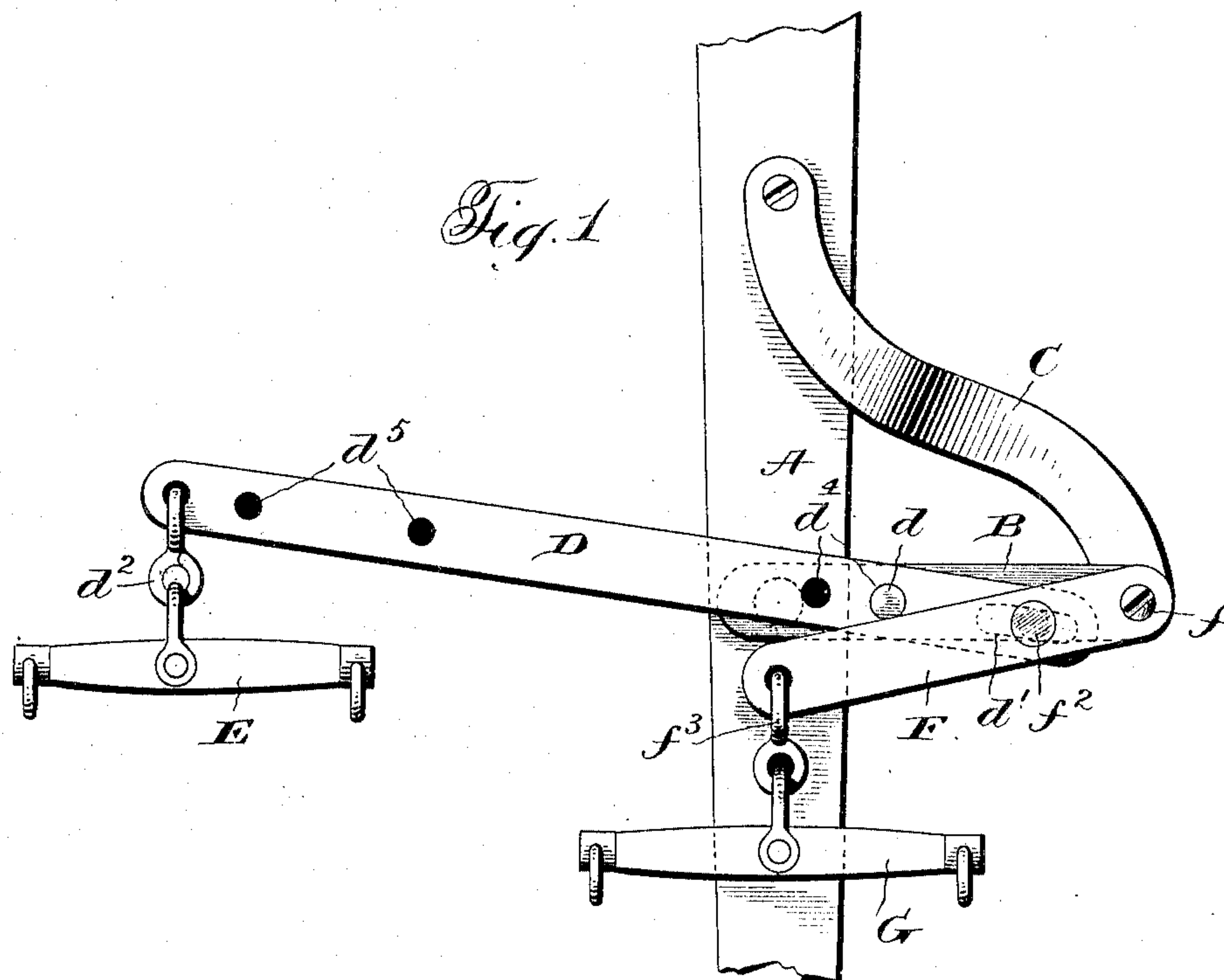
No. 789,313.

PATENTED MAY 9, 1905.

S. F. ARTHUR & E. J. MOODY.

DRAFT EQUALIZER.

APPLICATION FILED AUG. 11, 1904.



Witnesses:

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UNITED STATES PATENT OFFICE.

SAMUEL F. ARTHUR AND EVERETT J. MOODY, OF LANE STATION,
ILLINOIS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 789,313, dated May 9, 1905.

Application filed August 11, 1904. Serial No. 220,365.

To all whom it may concern:

Be it known that we, SAMUEL F. ARTHUR and EVERETT J. MOODY, citizens of the United States, residing at Lane Station, in the county of DeWitt and State of Illinois, have invented certain new and useful Improvements in Draft-Equalizers for Binders and other Agricultural Implements, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an improvement in draft-equalizers for binders and other agricultural implements, and more particularly to that type of equalizer with which four horses are employed, three of which are hitched to one side of the tongue and one of which is hitched upon the opposite side of the tongue.

The object of the invention is the provision of an equalizer of this type in which the two horses adjacent the sides of the tongue shall be hitched to one member of the equalizer and the other two horses shall be hitched to another member of the equalizer, the pull of both of said members being from the side of the tongue upon which the single horse is hitched.

In the drawings, wherein a preferable embodiment of our invention is shown and wherein like letters of reference refer to similar parts in both views, Figure 1 is a top plan view of a tongue having our improved equalizer secured thereto, and Fig. 2 is a transverse section through the tongue.

Referring now more particularly to the drawings, A denotes the tongue of a binder or other agricultural machine.

B is a bracket secured to the upper face of the rear portion of the tongue and projecting laterally therefrom, and C is a rearwardly-extending brace having its ends secured, respectively, to the free end of the bracket B and the upper surface of the tongue A.

D denotes the long arm of the equalizer, which is pivotally secured at a point adjacent one of its ends to the bracket B by means of the pivot-bolt d . The end of the arm D adjacent the bracket B terminates short of the brace C, secured to the end thereof, while the

opposite end of said arm projects for a considerable distance beyond the tongue. The end of the arm D overlying the bracket B is provided with a slot d' for a purpose to be hereinafter more particularly set forth. The arm D is provided at its opposite end with a clevis d^2 , to which is secured a doubletree E. Pivotaly secured at one end of the bracket B, by means of a pivot-bolt f , is the short arm F of the equalizer. The arm F is adapted to overlie the bracket B and the portion of the arm D adjacent thereto, and its free end lies directly over the center of the tongue A when the arms of the equalizer are in their normal position. In the drawings accompanying this specification we have shown the pivot-bolt f as also constituting the means for securing the end of the brace C to the bracket B; but it is to be understood that we do not limit ourselves to this construction, as it is obvious that the brace C and the arm F might be secured at different points on the bracket B. Secured to the under side of the arm F is a stud or pin f^2 , which engages the slot d' in the end of the arm D, thereby forming a pin-and-slot connection between the arms F and D. Secured to the free end of the arm F is a clevis f^3 , to which is attached the doubletree G. Inasmuch as the end of the arm F lies directly over the center of the tongue A, it will be apparent that the ends of the doubletree G will extend upon opposite sides of the tongue A.

From the above construction it will be apparent that when swingletrees are secured to the ends of the doubletrees E and G there will be three swingletrees upon the side of the tongue opposite the bracket B and one swingletree upon the side of the tongue from which the bracket B projects and that the pull of all of the said swingletrees will be from the pivot-bolt d , secured in the bracket B.

The bar D is provided with a plurality of apertures d^4 adjacent its point of pivotal connection with the bracket B, so that said bar may be adjusted on the pivot-bolt d , the slot d' in the end of the arm D being long enough to permit such an adjustment. The outer end of the arm D is also provided with a plurality

of apertures d^5 to permit of the adjustment of the clevis d^2 .

When so desired, the arm D and the clevis d^2 can be so adjusted that three horses instead of four may be used with the equalizer. In this case a swingletree is secured to the clevis d^2 in place of the doubletree E.

We do not desire to limit ourselves to the precise form of construction shown in the drawings, as it is obvious that many minor changes might be made thereto without departing from the spirit of the invention.

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

1. In a draft-equalizer, the combination with a tongue, of a bracket secured thereto and extending to one side thereof, an arm pivotally connected intermediate its ends to said bracket at one side of the tongue, one end of said arm terminating short of the end of said bracket and the other end of said arm projecting beyond the opposite side of the tongue, a relatively short arm pivotally secured to the outer end of said bracket and extending inwardly to overlie a portion of said first-mentioned arm, a loose connection between the adjacent portions of said arms, and doubletrees secured to the free ends of said arms.

2. In a draft-equalizer, the combination with a tongue, of a bracket secured thereto and extending to one side thereof, an arm pivotally connected to said bracket at one side of the tongue and projecting beyond the opposite side of the tongue an inwardly-extending arm pivotally secured to the outer end of said bracket, the free end of said arm lying directly over the center of the tongue, a connection between the adjacent portions of said arms, and doubletrees secured to the free ends of said arms.

3. In a draft-equalizer, the combination with a tongue, of a bracket secured thereto and extending to one side thereof, an arm pivotally connected adjacent one of its ends to said bracket, the inner end of said arm terminating short of the end of the bracket and having an elongated slot formed therein, a relatively short arm pivotally connected to the outer end of said bracket and overlying the inner end of said first-mentioned arm, a pin secured to said short arm and projecting within the slot in the inner end of said first-men-

tioned arm, and doubletrees secured to the free ends of said arms.

4. In a draft-equalizer, the combination with a tongue, of a bracket secured thereto and extending to one side thereof, an arm pivotally and adjustably connected to said bracket at one side of said tongue, the inner end of said arm terminating short of the ends of the bracket and the outer end of said arm projecting beyond the opposite side of the tongue, a relatively short arm pivotally secured to the outer end of said bracket and overlying the inner end of said first-mentioned arm, a loose connection between the adjacent portions of said arms and doubletrees secured to the free ends of said arms.

5. In a draft-equalizer, the combination with a tongue, of a bracket secured thereto and extending to one side thereof, an arm pivotally and adjustably connected to said bracket at one side of said tongue, the inner end of said arm terminating short of the end of the bracket and the outer end of said arm projecting beyond the opposite side of the tongue, a relatively short arm pivotally secured to the outer end of said bracket and overlying the inner end of said first-mentioned arm, a pin-and-slot connection between the adjacent portions of said arms and doubletrees secured to the free ends of said arms.

6. In a draft-equalizer, the combination with a tongue, of a bracket secured thereto and extending to one side thereof, an arm pivotally connected intermediate its ends to said bracket at one side of the tongue, one end of said arm terminating short of the end of said bracket and the other end of said arm projecting beyond the opposite side of the tongue, a relatively short arm pivotally secured to the outer end of said bracket and extending inwardly to overlie a portion of said first-mentioned arm, a pin-and-slot connection between the adjacent portions of said arms and doubletrees secured to the free ends of said arms.

In testimony whereof we affix our signatures in presence of two witnesses.

SAMUEL F. ARTHUR.
EVERETT J. MOODY.

Witnesses:

F. R. GOODE,
E. S. PARKS.