

UNITED STATES PATENT OFFICE.

SHERMAN A. BATES, OF COLLINS, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 725,819, dated April 21, 1903.

Application filed February 28, 1903. Serial No. 145,591. (No model.)

To all whom it may concern:

Be it known that I, SHERMAN A. BATES, a citizen of the United States, residing at Collins, in the county of Story and State of Iowa, have invented a new and useful Draft-Equalizer, of which the following is a specification.

My invention relates to draft-equalizers, and has for its objects to produce a device of this character which will be simple of construction, comparatively inexpensive, and one in which the draft will be properly equalized between the animals, and this without side draft.

To these ends the invention comprises the details of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a top plan view of the device. Fig. 2 is a section on the line 2 2 of Fig. 1.

Referring to the drawings, 1 indicates a vehicle-tongue, and 2 a primary draft-bar pivoted at its longitudinal center to the tongue. These parts may be of any suitable or desired construction and material, inasmuch as they form no part of the present invention.

3 indicates a secondary draft-bar composed of two sections 4 and 5, pivoted together, as at 6. The section 4 of the secondary draft-bar is pivoted at a point between its center and inner end, as at 7, to the tongue and is connected at its outer end by a link 8 with the primary draft-bar 2, while the section 5 of the secondary draft-bar is connected at its center by a link 9 with the other end of the main draft-bar.

10 indicates a draft-lever pivoted at its inner end to the tongue and connected at its center by a link 11 with the outer end of section 5 of the secondary draft-bar. This lever carries at its outer end a singletree 13, connected to the lever in any suitable manner.

15 indicates a doubletree connected by a

link 15' to the tongue, the link being pivoted at one end to the tongue and at its other end to the center of the doubletree. The doubletree is further connected by a link 16 with the outer end of section 4 of the primary lever.

During the operation of the device the draft will be equalized between the singletree and doubletree through the medium of the intermediate connections, as will be readily understood, and during this equalization of the draft there will at all times be a direct forward draft on the tongue, thus entirely obviating side draft and rendering the device thoroughly efficient in operation and relieving the animals of strains due to side draft. In attaining these ends I do not limit myself to the precise details herein shown, inasmuch as minor changes may be made therein without departing from the spirit of my invention.

Having thus described my invention, what I claim is—

In a draft-equalizer, the combination with a tongue, of a primary draft-bar pivoted thereto, a secondary draft-bar pivoted to the tongue and comprising two pivoted sections, one section connected at its outer end by a link to the primary bar, and the other section at its center by a link to the primary bar, a draft-lever pivoted to the tongue and carrying at its outer end a singletree and connected by a link to the secondary draft-bar, and a doubletree pivotally connected to the tongue by a link and having a link connection with the secondary draft-bar.

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

SHERMAN A. BATES.

Witnesses:

VINA ELLIOTT,
JAMES PRAWL.