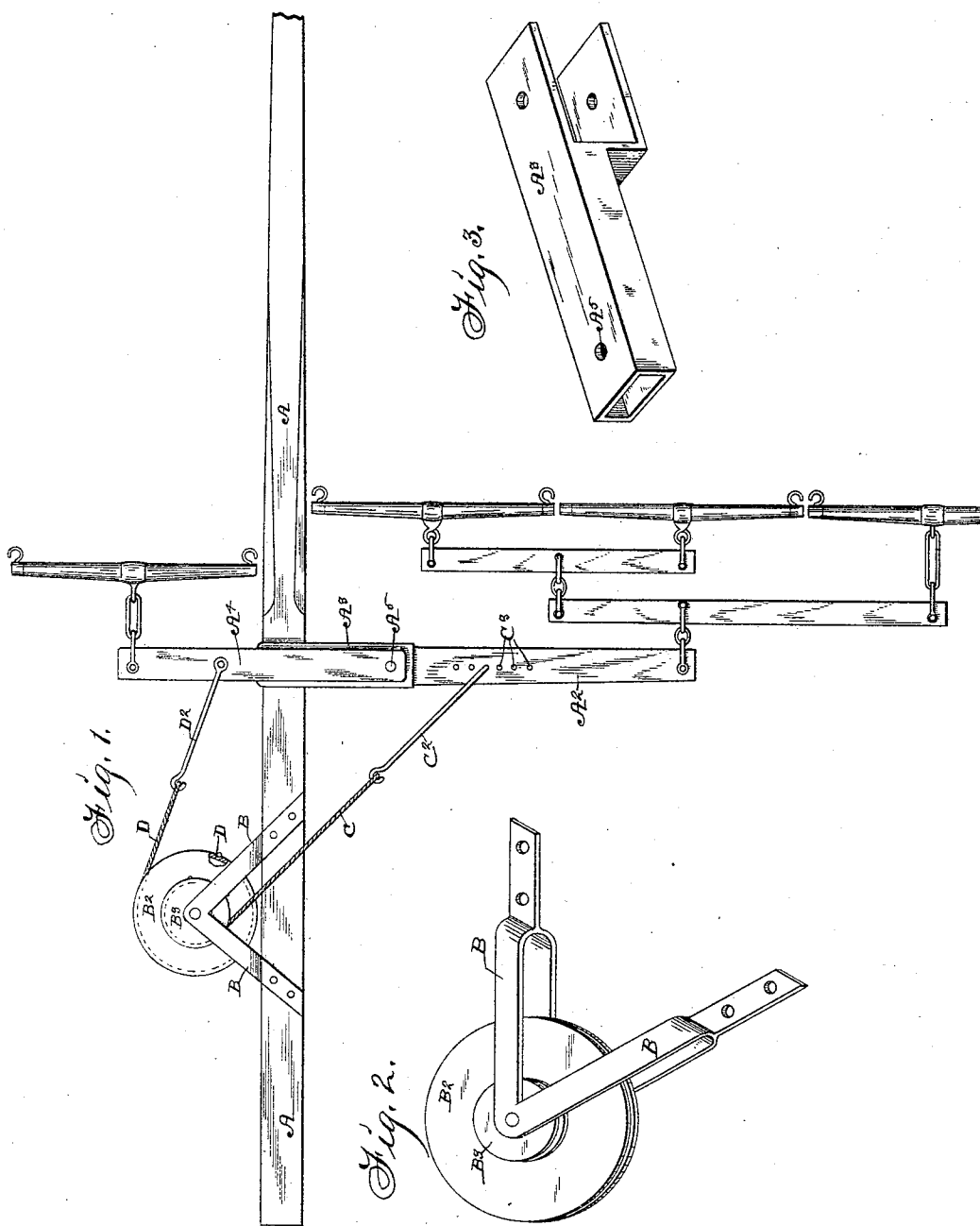


(No Model.)

A. McKEE.
DRAFT EQUALIZER.

No. 495,994.

Patented Apr. 25, 1893.



Witnesses: }
H. J. Sankley.
J. Ralph Orwig. } Inventor: Alexander McKee.
By Thomas G. Orwig, Attorney.

UNITED STATES PATENT OFFICE.

ALEXANDER MCKEE, OF STUART, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 495,994, dated April 25, 1893.

Application filed November 18, 1892. Serial No. 452,466. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER MCKEE, a citizen of the United States of America, residing at Stuart, in the county of Guthrie and State of Iowa, have invented an Improved Draft-Equalizer, of which the following is a specification.

My invention consists primarily in mounting a large and small pulley which are connected with each other, in a suitable bracket upon a wagon tongue on the side thereof in which the shorter arm of the evener is extended and in the rear of the same and in winding a cable partially around the smaller pulley and attaching it to the larger arm of the evener and winding a like cable partially around the larger pulley in an opposite direction and then attaching it to the shorter arm of the evener as and for the purposes herein-
after more fully set forth and pointed out in my claims.

In the accompanying drawings Figure 1 is a plan view of the complete equalizer with parts of one of the pulley wheels broken away to show the point of attachment of the cable. Fig. 2 is an enlarged detail perspective view of the bracket and pulley wheels. Fig. 3 is a perspective view of the socket whereby the larger evener arm is pivotally attached to the tongue.

Referring to the accompanying drawings the reference letter A is used to designate the tongue.

A³ is a longer evener arm which is pivotally attached to the tongue by means of the socket A³.

A⁴ designates the shorter evener arm which has a pivotal connection with the socket A³ at the point A⁵.

B designates a bracket secured to the tongue A in the rear of the evener arms, and extended laterally therefrom in the direction of the shorter evener arm.

B² and B³ are two pulleys of different sizes fixed together and mounted in the outer end of the bracket B. The cable C is passed around the smaller pulley and then attached to the rod C² which in turn is detachably and adjustably connected with the evener arm in the bores C³. The remaining cable D is passed

around the larger pulley and attached to the rod D² which has a like connection with the shorter evener arm. It will be obvious that the relative amounts of power desired to be applied to either side of the tongue may be regulated by changing the size of the pulley wheels. By this arrangement, namely a large and small pulley connected with the tongue in the rear of the evener arms, it will be seen that a comparatively small amount of power applied to the shorter evener arm will approximately counterbalance a greater amount of power applied to the longer evener arm, but if the pulleys were located directly above the tongue a strong side draft would be produced. To overcome this objection I have provided the bracket B to be extended laterally from the side of the tongue in the direction of the shorter evener arm and in view of the fact that a great portion of the power applied to the longer evener arm is transmitted diagonally to the opposite ends of the tongue to the pulleys B³ and all of the power applied to the shorter evener arm is applied to the same side of the tongue, this side draft is thereby eliminated.

Having thus clearly described the device, what I claim as my invention, and desire to secure by Letters Patent of the United States therefor, is—

1. An improved draft equalizer comprising the following elements in combination, to wit; a suitable tongue, a comparatively long evener arm pivotally connected therewith, a shorter evener arm pivotally connected with a suitable support and extended in an opposite direction from the tongue, a suitable bracket fixed to the tongue in the rear of the evener arms, and extended laterally therefrom in the direction of the shorter evener arm, two pulleys of unequal sizes fixed together and mounted in said bracket so as to be at the side of the tongue for the purposes stated, a cable attached to the longer evener arm and passed partially around the smaller pulley and fixed thereto, a second cable attached to the shorter evener arm passed partially around the larger pulley and fixed thereto, for the purposes stated.

2. An improved draft equalizer comprising

the following elements in combination, to wit; the tongue A, the socket A³ pivotally connected therewith, the evener arm A² fixed in said socket, a shorter evener arm pivotally attached to the socket A³ and extending to the opposite side of the tongue, the bracket B fixed to the tongue and extended laterally therefrom in the direction of the shorter evener arm for the purposes stated, the pulleys B² and B³ of unequal size fixed together and mounted in said bracket, a cable fixed to

the longer evener arm and passed around the smaller pulley and fixed thereto, a like cable fixed to the shorter evener arm passed around the larger pulley and fixed thereto substantially in the manner set forth for the purposes stated. 15

ALEXANDER McKEE.

Witnesses:

F. O. HINKSON,
F. M. SWAIN.