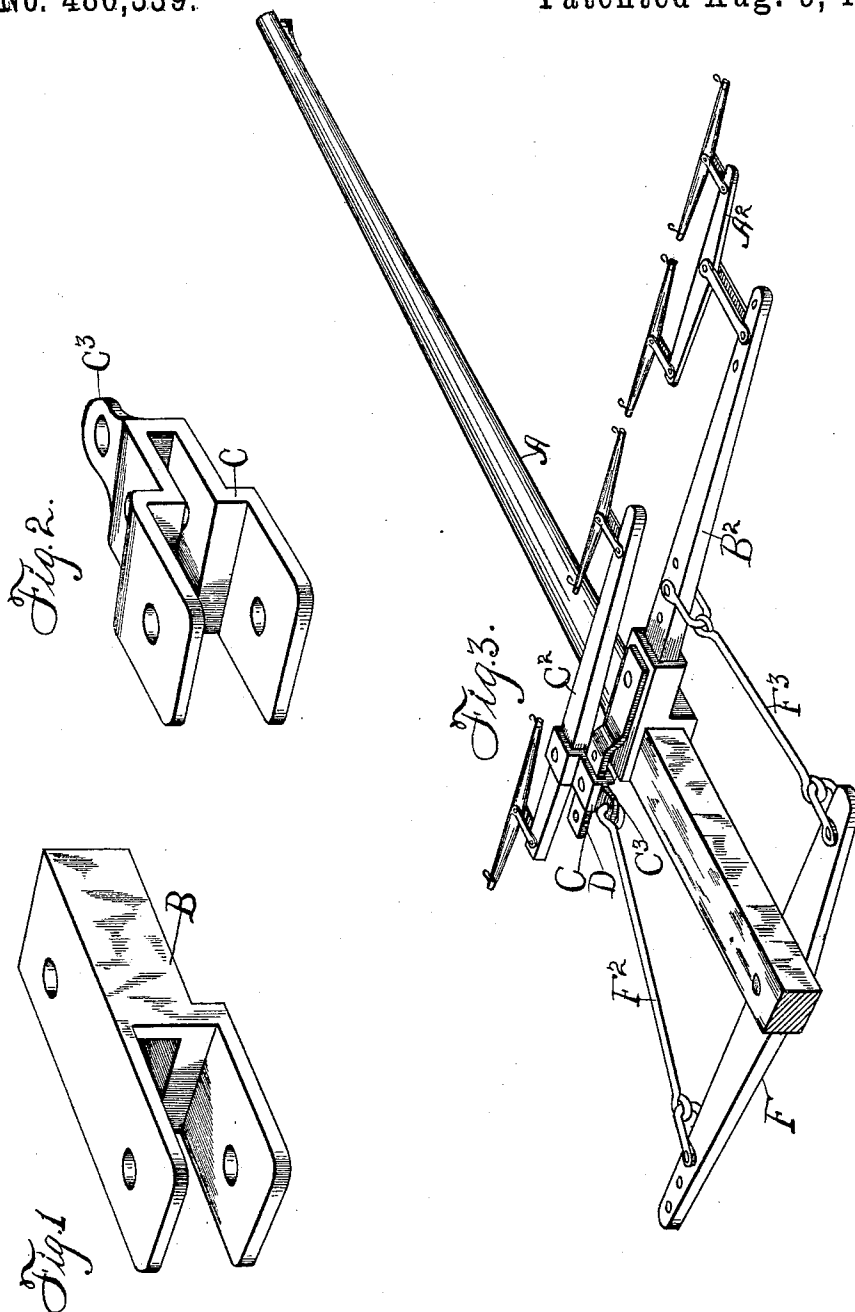


(No Model.)

A. McKEE.
DRAFT EQUALIZER.

No. 480,339.

Patented Aug. 9, 1892.



Witnesses:

W. B. Smith.
J. Ralph Onwig.

Inventor:

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UNITED STATES PATENT OFFICE.

ALEXANDER MCKEE, OF STUART, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 480,339, dated August 9, 1892.

Application filed August 15, 1891. Serial No. 402,721. (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 a new and useful Transformable Draft-Equalizer, of which the following is a specification.

The object of my invention is to provide a convenient, strong, and durable draft-equalizer adapted for hitching two, three, or four draft-animals to a vehicle or agricultural implement, so that each may perform its share of the work.

My invention consists, primarily, in the formation of a cast-metal socket and a clevis for those parts of the device subjected to the greatest strain, and in the construction and combination of various other operative parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a cast-metal socket adapted to connect the stationary arm of the device with a wagon tongue or pole. Fig. 2 is a perspective view of the clevis, and Fig. 3 is a perspective view of the complete device.

Heretofore it has been found necessary to employ a plurality of braces or stays to support the stationary horizontal arm and other parts of draft-equalizers, and thereby produce a complicated device, or else to construct it from such heavy timber as required to attain the requisite amount of strength as to be also objectionable; but my invention obviates the difficulty as set forth by the employment of a metal socket B, fixed to the tongue A and adapted to admit an arm B² to be placed therein and extended approximately at right angles from the tongue.

A further description of my invention is as follows:

A² represents a doubletree adjustably and detachably connected with the arm B².

C is a clevis having its forward end adapted to admit a doubletree C² to be firmly connected with its forward portion. It is adjustably connected to the metal bar D, which is pivoted to the socket B, and its rear end is provided with a perforated extension C³.

F is an equalizer pivoted to the rear end of the tongue A in such a manner as to have

one long and one short arm, and having a rod F² adjustably connected with the long arm and with the perforated projection C³ of the clevis C, and a rod F³ is fixed to its short arm and adjustably connected with the arm B.

In the practical use of my invention it will be obvious to those familiar with this class of device that the doubletrees of the device may be replaced by singletrees, and thereby transform the equalizer, so that different numbers of draft-animals may be used. It is also obvious that the various parts of the device may be readily detached and compactly placed together, as required, to economize space in storing and shipping.

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

1. In a draft-equalizer, the combination of a metal frame having its one end bifurcated, a wagon-tongue placed in the said bifurcated end, a pin or bolt extended through the said metal frame and tongue to connect them, an angular hollow formation on the other end of the said metal frame, an arm inserted in the said opening and extended at right angles from the tongue, a whiffletree on the outer end of the said arm, and a whiffletree connected with an extension from the other side of the tongue, to operate substantially in the manner set forth, for the purposes stated.

2. In a draft-equalizer, the combination of a metal clevis formed complete in one piece, the central portion being adapted to admit and retain an angular bar, its forward ends bent outward at right angles thereto and vertically perforated and its rear end provided with a perforated extension, a bar fixed to the wagon-tongue and inserted in the central portion of the clevis, a doubletree pivoted in its forward end, and a rod fixed to the rear end and connected with an evener pivoted to the tongue, a bar connected with the other end of the said evener and extended forward therefrom, and a whiffletree connected with the forward end of the said bar, to operate substantially in the manner set forth, for the purposes stated.

3. A transformable draft-equalizer for two, three, or four draft-animals, comprising a wagon-tongue, a socket fixed to the said tongue, which socket has its one end bifurcated

and placed on the tongue and its other end
formed into a socket adapted to admit and
retain an angular arm, the said arm fixed in
the said socket, a whiffletree connected with
5 the outer end of the said arm, a bar pivotally
connected with the said socket, a clevis on
its outer end, which clevis is formed complete
from one piece of metal, its rear end formed
into a perforated extension and its forward
10 end bent outward at right angles thereto and
adapted to admit a doubletree, a doubletree
pivoted in the forward end thereof, an evener
pivoted to the tongue in the rear of the said
socket, connected by means of bars with said
perforated end of the clevis, and the said arm 15
fixed in the socket, constructed and combined
substantially in the manner set forth, for the
purposes stated.

ALEXANDER MCKEE.

Witnesses:

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F. O. HINKSON.