

No. 656,243.

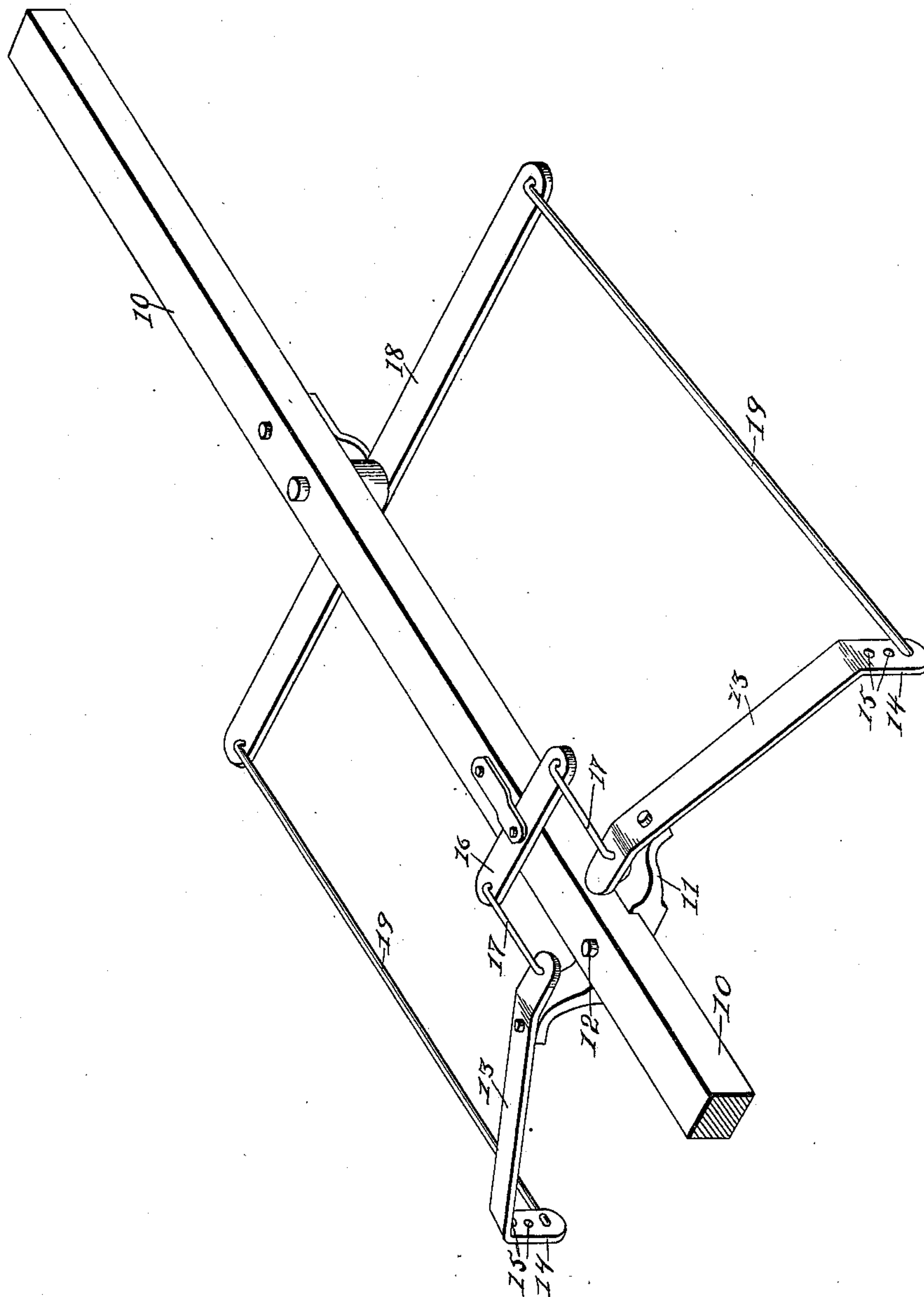
Patented Aug. 21, 1900.

T. I. BRINKLEY & D. A. WETRICH.

DRAFT EQUALIZER.

(Application filed Jan. 11, 1900.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

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DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 656,243, dated August 21, 1900.

Application filed January 11, 1900. Serial No. 1,073. (No model.)

To all whom it may concern:

Be it known that we, THOMAS I. BRINKLEY and DANIEL A. WETRICH, citizens of the United States, residing at Stuart, in the county of Guthrie and State of Iowa, have invented certain new and useful Improvements in Draft-Equalizers, of which the following is a specification.

The object of this invention is, first, to provide a draft-equalizer of simple, durable, inexpensive construction, especially designed for use in connection with corn-cultivators, whereby the downdraft upon the cultivator-beam occasioned by the use of a straight doubletree attached to the cultivator-tongue is prevented.

A further object is to provide a draft-equalizer so connected with the tongue that the draft is distributed and not all thrown upon one bolt or one point of connection with the tongue.

Our invention consists in the construction, arrangement, and combination, with the tongue of a corn-cultivator or the like, of a series of levers and evener-bars so arranged and combined with each other as to accomplish the objects stated, as hereinafter more fully set forth, pointed out in our claims, and illustrated in the accompanying drawing, in which the entire draft-equalizing device is shown in perspective attached to a vehicle-tongue.

Referring to the accompanying drawing, we have used the reference-numeral 10 to indicate the tongue of ordinary construction. Attached to the tongue is a bracket 11, which is secured by a bolt 12 to the under surface of the tongue and projects at right angles to the tongue, with its ends curved upwardly and outwardly from the tongue. On each end of this bracket is pivoted a lever 13. The inner ends of these levers are extended in a substantially-horizontal plane to a point near the tongue. The central portions of these levers incline outwardly and downwardly to a considerable degree, while the ends thereof at 14 project straight downwardly and are provided with a series of perforations 15.

On top of the tongue a short evener-bar 16 is pivoted, and links 17 are provided for pivotally connecting the ends of the lever-bar 16 with the inner ends of the levers 13. At

some distance in the rear of the evener-bar 16 we have pivoted a long evener-bar 18 to the under surface of the tongue. Links 19 are provided for connecting the outer ends of the evener-bar 18 with the lower end portions of the levers 13.

In practical use, and assuming that the evener were applied to the tongue of the cultivator or plow, it is obvious that on account of the downward bend of the levers 13 draft-animals may be attached to the levers 13 by means of singletrees connected with the openings 15, so that the draft will be substantially in a straight line and not downwardly, as would be the case if the draft-animals were attached by means of a straight doubletree pivoted to the tongue. Where the draft-animals are thus attached, the downward draft upon the tongue is highly objectionable in that it tends to draw the plow or cultivator shovels too deeply into the ground and the forward end of the tongue is forced downwardly, thereby throwing the draft to a great degree in a downward direction upon the draft-animals, whereas by means of the appliance shown in the drawing in this application the draft is applied in such a manner that the tongue remains in a substantially-horizontal plane and all of the pull of the draft-animals is applied directly to advancing the cultivator and the draft-animals are relieved of the objectionable downward pressure accompanying the use of a straight evener-bar on the tongue of the cultivator. Furthermore, by the use of two evener-bars—one above and one below the tongue—we have produced an equalizer of great strength and durability in that the strain upon the parts of the equalizer occasioned by the draft is not thrown entirely on the bracket which supports the levers; but by thus providing an evener-bar for the inner ends as well as for the outer ends of the levers the draft is divided between the bracket which supports the evener-bar 16 and the bracket which supports the evener-bar 18. Hence the bracket 11 need not be made cumbersome and heavy, as would be necessary if the two evener-bars were not provided. It is also obvious that by the use of two evener-bars arranged and combined as shown the draft-animal that falls behind to a slight degree is not handicapped by

shortage in levers, as is the case with the ordinary equalizer, because with the two eveners bars arranged as shown it is obvious that when one of the evener-bars on the side of the draft-animal that falls behind projects in a rearward direction the other evener-bar on the same side will project in a forward direction, thus counteracting the tendency to a shortage of leverage and equalizing the draft.

Having thus described our invention, what we claim, and desire to secure by Letters Patent of the United States therefor, is—

1. The combination, with a vehicle-tongue, of two levers pivotally connected with the tongue, and evener-bar pivoted to the tongue, means for connecting the ends of the evener-bar with the inner ends of the said levers, a second evener-bar pivoted to the tongue, and means for connecting the outer ends of said levers with the said second evener-bar, substantially as, and for the purposes stated.

2. An improved draft-equalizer, comprising in combination, a vehicle-tongue, a bracket 11 fixed to the tongue, levers 13 fulcrumed to the ends of said brackets, inclined outwardly and downwardly therefrom, with the ends thereof extending approximately straight downwardly, a short evener-bar pivoted to the top of the tongue in the rear of said levers, links for connecting the ends of said evener-bar with the inner ends of said levers, and a long evener-bar 18 pivoted to the under surface of the tongue, and links 19 for connecting its outer ends with the outer ends of the levers 13, arranged and combined substantially in the manner set forth, and for the purposes stated.

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Witnesses:

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