

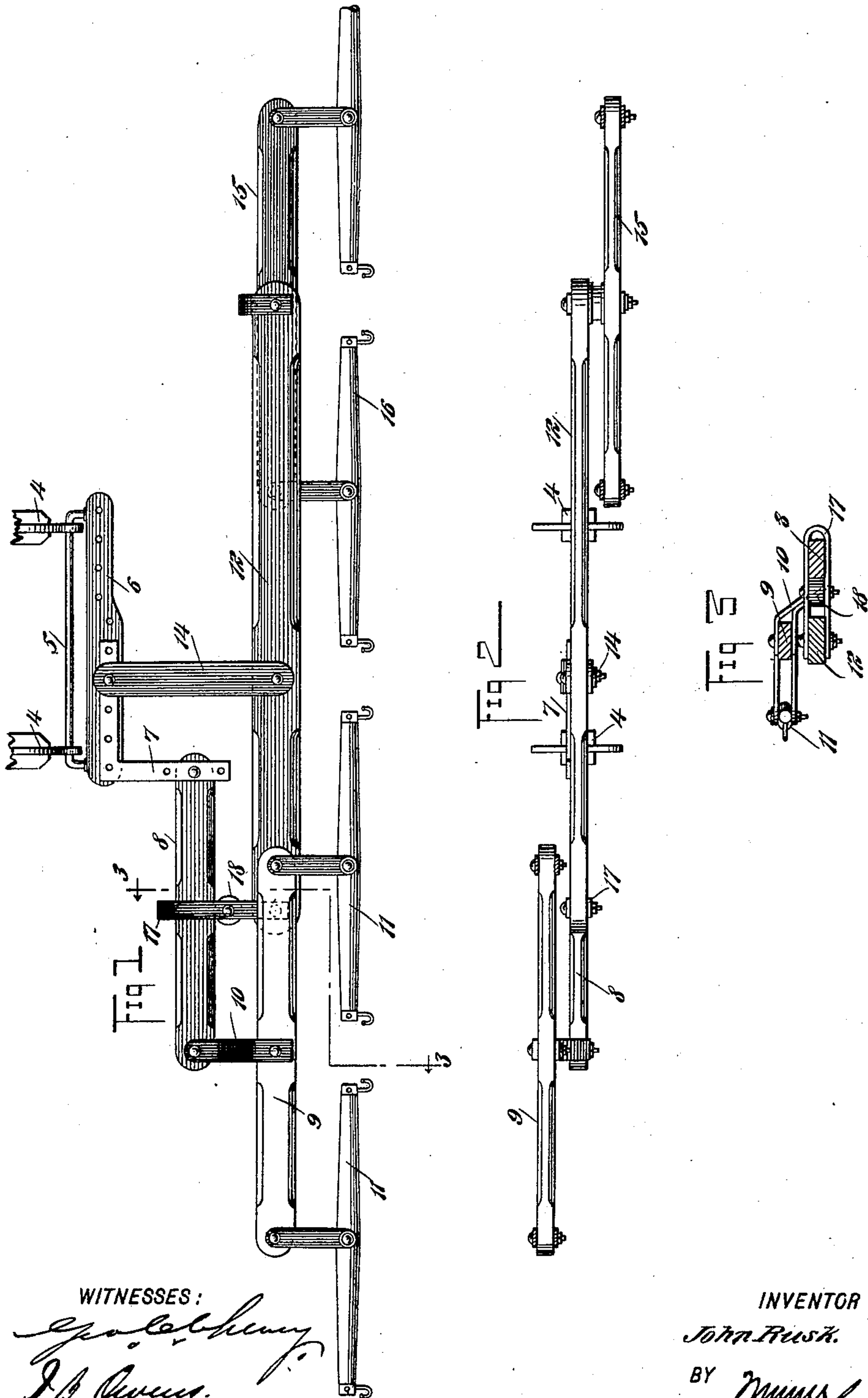
No. 669,312.

Patented Mar. 5, 1901.

J. RUSK.
DRAFT EQUALIZER.

(Application filed June 18, 1900.)

(No Model.)



WITNESSES:

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JOHN RUSK, OF CHENEYVILLE, ILLINOIS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 669,312, dated March 5, 1901.

Application filed June 16, 1900. Serial No. 20,546. (No model.)

To all whom it may concern:

Be it known that I, JOHN RUSK, a citizen of the United States, and a resident of Cheneyville, in the county of Vermilion and State of Illinois, have invented a new and Improved Draft-Equalizer, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in the structure and arrangement of draft-equalizers, which will be fully described hereinafter.

This specification is the disclosure of one form of the invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the invention. Fig. 2 is a front view with parts in section, and Fig. 3 is a section on the line 3 3 of Fig. 1.

The draft-equalizer is adapted for use in connection with all vehicles and other appliances drawn by horses. It is particularly adapted, however, for use on gang-plows, it there serving to equalize the strain and avoid side draft, permitting the plow to be evenly drawn and causing it to operate effectively. The plow-beams 4 are connected by a rod 5 to the bar 6, which extends transversely in front of the plow and has two angle-plates 7 rigidly fastened thereto. The drawings illustrate but one of the angle-plates, which are duplicates in construction, the angle-plates being provided with a number of bolt-holes, facilitating their adjustable connection with the beam 6. The angle-plates 7 extend forwardly and have pivoted between them a whiffletree 8, one end of which is connected with the angle-plate 7 and the other end of which extends out laterally therefrom and carries a doubletree 9, the doubletree 9 being connected with the whiffletree 8 by means of a clevis 10, which is inclined upward, so as to place the doubletree 9 above the plane of the whiffletree 8. The doubletree 9 carries two singletrees 11, arranged in the usual manner.

A whiffletree 12 is connected with the beam 6 by a link 14, the link being attached to the beam 6 at such point as will evenly distribute the strain on the beam and the link 14 being

connected with the whiffletree 12 nearer the right-hand end than the left-hand end. The left-hand end of the whiffletree 12 carries a doubletree 15, to which singletrees 16 are connected in the usual manner, the doubletree 15 lying below the whiffletree 12. A strap 17 is fixedly connected with the right-hand end of the whiffletree 12 and embraces the whiffletree 8. This strap is provided with a roller 18, which rides on the front face of the whiffletree 8, so as to transmit movement between the parts 8 and 12.

The team of four horses being hitched to the singletrees 11 and 16, the draft of the horses will be equalized owing to the relative pivotal movements allowed the parts 12, 8, and 6. Should the horses at the singletrees 16 pull ahead, the right-hand end of the whiffletree 12 will be thrown rearward and the roller 18 will swing rearward the whiffletree 8, and should the horses at the whiffletrees 11 pull ahead the whiffletree 8 will be moved forward, and it will then through the medium of the strap 17 and roller 18 transmit the movement to the whiffletree 12, moving back the singletrees 16. By this arrangement the draft is effectively equalized and the vehicle or other implement drawn may be moved regularly and without uneven strains on the team.

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

1. A draft-equalizer, comprising a whiffletree, means on which the whiffletree is pivotally mounted, the pivot of the whiffletree being intermediate its ends, draft devices connected with one end of the whiffletree, a second whiffletree, means on which the second whiffletree is pivotally mounted at one of its ends, draft devices connected with the other end of the second whiffletree, and means forming a connection between an intermediate point on the second whiffletree and the end of the first whiffletree opposite the end bearing the draft devices thereof.

2. A draft-equalizer, comprising a transverse bar adapted to be connected with the object drawn, a whiffletree, a link extending between the transverse bar and an intermediate point of the whiffletree to pivotally mount the whiffletree, draft devices connected with one end of the whiffletree, an angle-

plate attached to the said transverse bar, a
second whiffletree, one end of which is piv-
otally mounted on the angle-plate, draft de-
vices connected with the opposite end of the
5 said second whiffletree, and means forming a
connection between the two whiffletrees, such
means extending from a point intermediate
the ends of the second-named whiffletree to
the end of the first-named whiffletree oppo-

site the end thereof which carries the draft ro
devices of the first-named whiffletree.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOHN RUSK.

Witnesses:

JOSIAH RUSK,
C. M. BRIGGS.