No. 749,373. PATENTED JAN. 12, 1904.

J. W. GAMBLE.

FIVE HORSE GANG PLOW EVENER.

APPLICATION FILED JULY 9, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

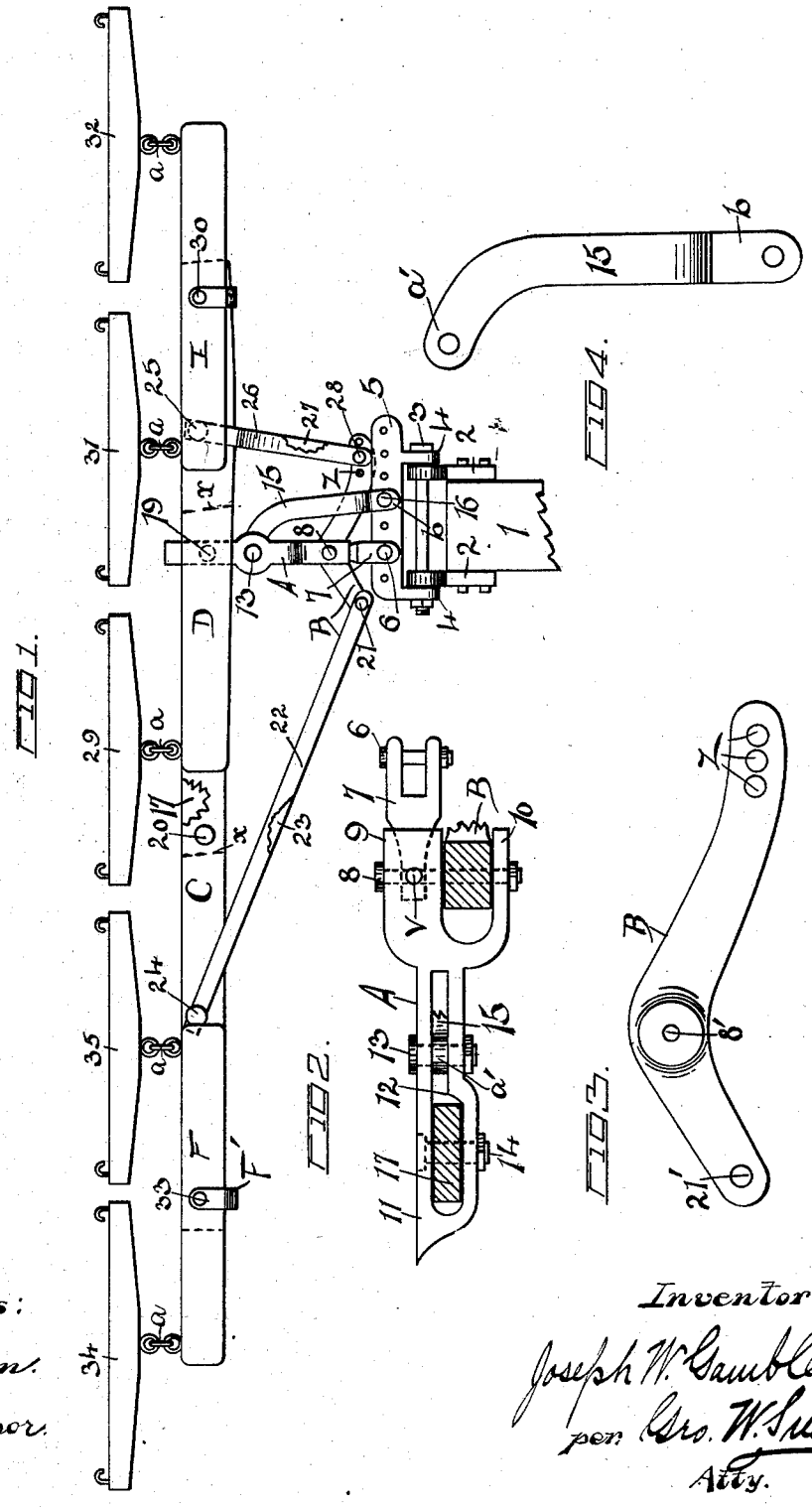


FIG 1.

FIG 2.

FIG 3.

FIG 4.

Witnesses:

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Inventor:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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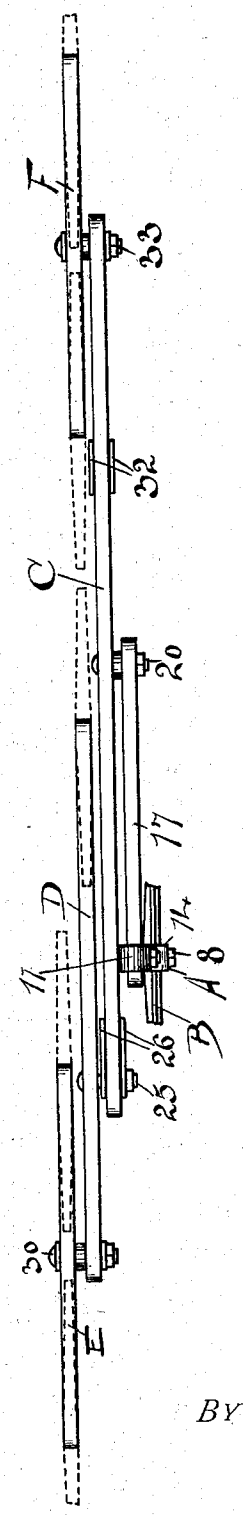


FIG. 5.

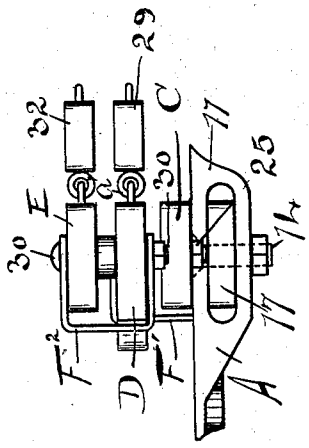


FIG. 6.

WITNESSES:

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No. 749,373. Patented January 12, 1904.

UNITED STATES PATENT OFFICE.

JOSEPH W. GAMBLE, OF OMAHA, NEBRASKA.

FIVE-HORSE GANG-PLOW EVENER.

SPECIFICATION forming part of Letters Patent No. 749,373, dated January 12, 1904.

Application filed July 9, 1902. Serial No. 114,910. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. GAMBLE, residing at 1528 North Sixteenth street, Omaha, in the county of Douglas and State of Nebraska, have invented certain useful Improvements in Five-Horse Gang-Plow Eveners; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a new and novel improvement in five-horse gang-plow eveners.

The object of my invention is to provide an evener of simple construction adapted to be used in connection with a five-horse evener on a gang-plow and so arranged that each horse will draw an equitable and evenly-divided portion of the load.

The aim of my invention is to provide an evener for a gang-plow in which the instrumentalities will be so arranged that one horse travels in the furrow and the remaining four upon the land side or upon the unbroken soil.

In the accompanying drawings I have shown in Figure 1 a top view of a five-horse gang-plow evener with portions broken away embodying my invention. Fig. 2 shows a side elevation of the tongue and fork as used in my invention. Fig. 3 shows a top view of the evener. Fig. 4 shows a detached detail of the auxiliary tongue. Fig. 5 shows a front elevation of an equalizer embodying my invention, while Fig. 6 discloses an end view with portions removed.

In carrying out the aim of my invention I secure to the jaws 2 2, secured to the forward end of the plow-beam 1, a bolt 3. Secured to this bolt 3 by means of the perforated ears 4 4 is the perforated plow-clevis 5, as indicated in Fig. 1. This clevis, it will be noticed, is provided with a series of perforations, within one of which is held the pin 6, which pin removably secures the reversible fork 7, a side view of which is shown in Fig. 2. This reversible fork is pivotally secured at its forward end by means of a bolt 8, as is shown in Fig. 2. This fork 7 is provided with two openings crossing one another at right angles. In Fig. 2 one of these openings is shown at *v*, the same registering with a like opening in the head 9.

Secured by means of the bolt 8 to the doubly-perforated stem of the reversible fork is a tongue A, which is provided with the socketed head 9, into which stem of the reversible fork fits, while below this head 9 is provided with a projection 10, through which the bolt 8 passes below, securing the evener B, a detail of the evener being shown in Fig. 3. This evener operates in the form of a rocking member, being pivotally supported by means of the bolt 8.

The extending portion 11 of the tongue is slotted, as is shown at 12, this slot being of two diameters and being provided with two transverse perforations or openings, within the first of which is held the bolt 13, the second accommodating the bolt 14, as is disclosed in Fig. 2.

The bolt 13, as disclosed in Fig. 1, holds the forward perforated end *a* of the auxiliary tongue 15. The end *b*, which is also perforated, is bent slightly upward, so that the same will work upon the clevis 5, where it is held by means of the bolt 16. This rear end *b* is forked, so as to stride this clevis 5 similar to the manner in which the reversible fork 7 strides the clevis, as will be understood in referring to Fig. 2.

The bolt 14, working within the larger end of the slot 12, supports a hinge-bar 17, which hinge-bar at one end is secured by means of the bolt 19, as shown in dotted line in Fig. 1, this hinge-bar extending laterally toward the land side of the plow and is provided with a pin 20, which pin extends upward and is secured to the long bar C as used in my invention, the dotted lines *x x* disclosing the length of this hinge-bar 17.

Secured to the evener B, which is bent slightly L shape at one end, is a bolt 21, which secures the counterpart draft-bars 22 and 23, which are also secured above and below to the long bar C by means of the bolt 24. This long bar is pivotally secured to the bolt 20 of the hinge-bar 17, and its remaining end is provided with a bolt 25, as shown in dotted lines in Fig. 1, which bolt is adapted to receive the

draft-bars 26 and 27, which draft-bars at the remaining ends are secured, by means of a bolt 28, within one of the openings *z* of the evener B. The pin 25 also pivotally supports the three-horse evener D, and the upper draft-bar 26 also works above this three-horse evener.

Secured at one end to the three-horse evener D is the swingletree 29, while to the bolt 30 is secured the two-horse evener E, provided with swingletrees 31 and 32, the swingletree 32 being adapted to receive the draft-animal walking within the furrow. To a bolt 33, secured to the remaining end of the long bar C, is the doubletree F, to which are secured the swingletrees 35 and 34.

It will be noticed that the swingletree 34 is longer than any of the remaining swingletrees, and this is done for the reason that the horse at this end is thereby given more room, so that the draft will come near the center of the five horses, permitting the use of a shorter long bar C than were possible if the outside swingletree were the same length as the remaining swingletree.

In Fig. 3, where a top view of the evener B is shown, the opening adapted to receive the bolt 21 is marked 21′, while the opening adapted to receive the bolt 8 is marked 8′.

My evener is so arranged that the main tongue A remains stationary from moving to the right or left by the use and the aid of the auxiliary tongue relative to the clevis 5. The hinge-bar 17, however, oscillates at the end where it is secured to the long bar C, while the evener B is continually rocking or oscillating while the evener is used, permitting the instrumentalities to adjust themselves so that the three-horse and two-horse evener will be permitted a backward or forward movement in equalizing the load in using the evener.

The reversible fork 7 is provided with two openings at the socket end, so that this fork may be turned ninety degrees in securing the same to a clevis vertically secured to the plow-beam in connection with which this evener is to be used.

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

In an evener of the character described, the combination with a clevis, of a reversible fork, a main tongue secured to said fork, an evener pivotally secured to said main tongue, an auxiliary tongue secured to said main tongue and to said clevis, a hinge-bar pivoted near one end to said main tongue and extending toward the land side of the plow, a bolt secured to the land-side end of said hinge-bar, a long bar secured approximately centrally to said bolt to pivotally secure said long bar, a two-horse evener secured to the land end of said long bar, a three-horse evener secured to said long bar near the furrow end, a draft-bar extending from the furrow end of said long bar and being adjustably secured to one end of aforesaid evener, and a draft-bar extending from the land end of aforesaid evener and being secured near the land end of said long bar, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH W. GAMBLE.

Witnesses:
GEORGE W. SUES,
EMILY B. MAYSTRICK.