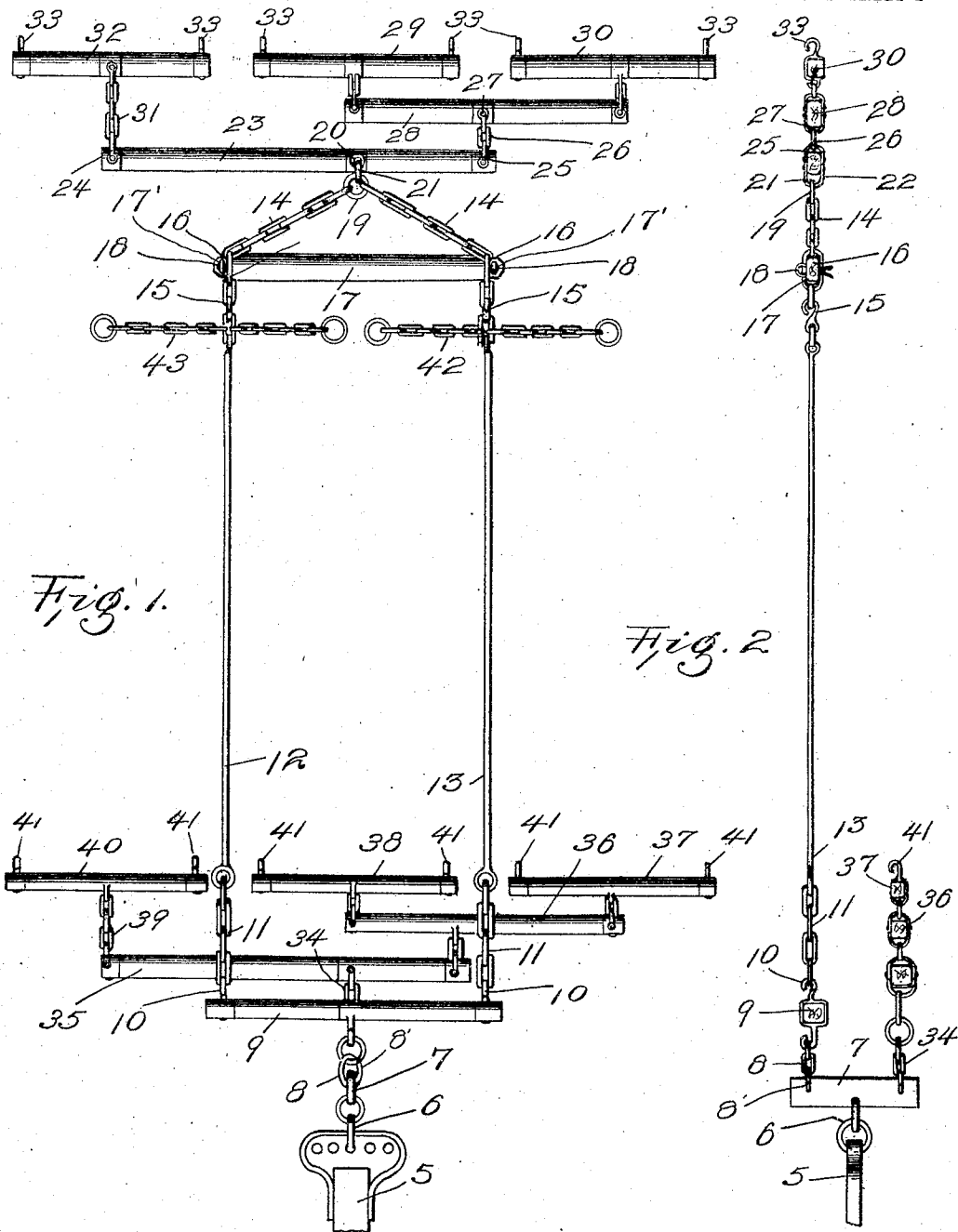


No. 780,838.

PATENTED JAN. 24, 1905.

C. H. TAYLOR.
DRAFT EQUALIZER.
APPLICATION FILED JUNE 2, 1904.

2 SHEETS—SHEET 1.



Witnesses:
Amstrong
Harry Ellis Chandler

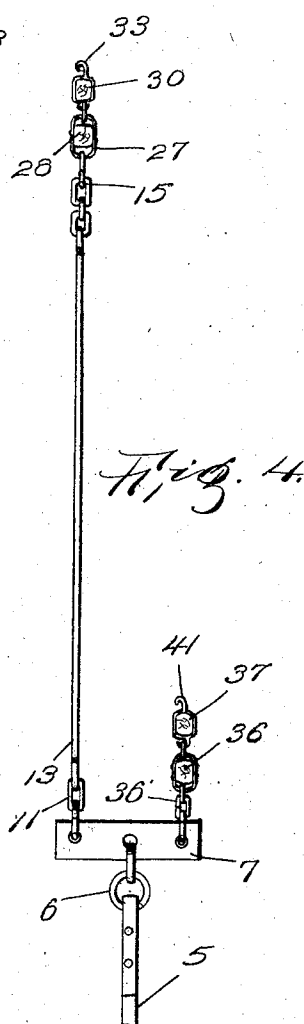
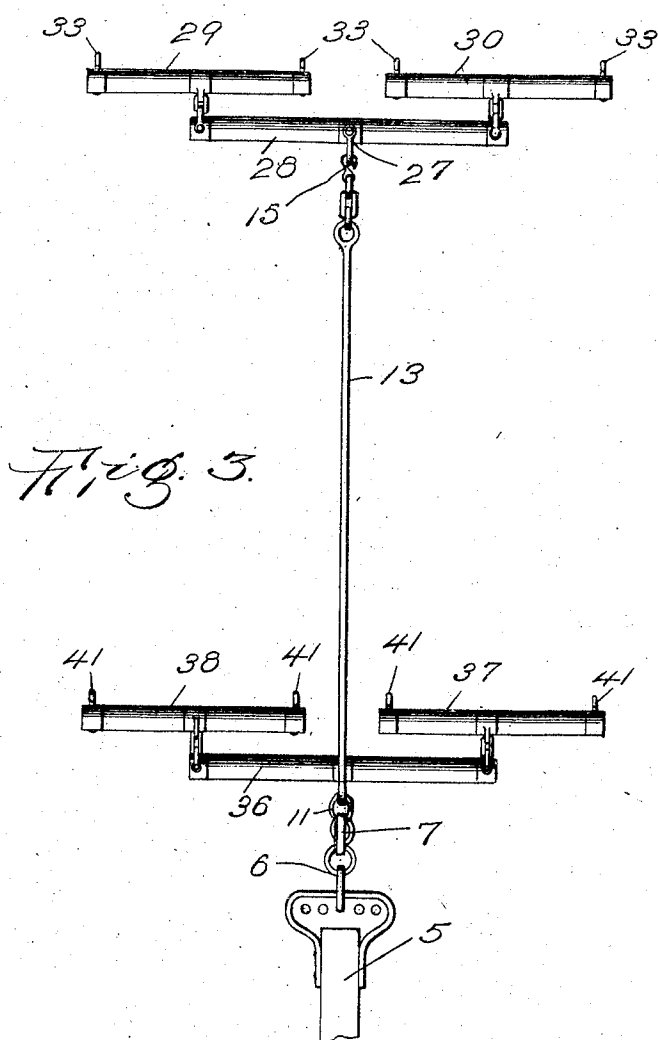
Inventor
C. H. Taylor
By [Signature]
Attorneys

No. 780,838.

PATENTED JAN. 24, 1905.

C. H. TAYLOR.
DRAFT EQUALIZER.
APPLICATION FILED JUNE 2, 1904.

2 SHEETS—SHEET 2.



Witnesses
 [Signature]
 Harry Ellis Chandler

Inventor
C. H. Taylor
Attorney*

UNITED STATES PATENT OFFICE.

CHARLES H. TAYLOR, OF WREN, OREGON.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 780,838, dated January 24, 1905.

Application filed June 2, 1904. Serial No. 210,833.

To all whom it may concern:

Be it known that I, CHARLES H. TAYLOR, a citizen of the United States, residing at Wren, in the county of Benton, State of Oregon, have invented certain new and useful Improvements in Draft-Equalizers; and I do hereby declare the following to be 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.

This invention relates to draft-equalizers, and has for its object to provide an equalizer for use with four or six horses, as desired, and which may be quickly changed to accommodate either number of horses.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top plan view of the equalizer arranged for six horses. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a view similar to Fig. 1, showing the equalizer arranged for four horses. Fig. 4 is a side elevation of Fig. 3.

Referring now to the drawings, there is shown the beam 5 of the plow, to which is connected a chain 6, having a vertical clevis 7, pivotally connected at its center to the free end thereof, and removably connected with the upper end of the clevis, by means of a chain 8, is a swingletree 9, having hooks 10 attached to its ends, and connected with these hooks, by means of chains 11, are rods 12 and 13, which are connected at their free ends by means of a chain 14, having split rings or hooks 15 adjacent to its ends, which permit removal of a portion of the chains from the rods, and engaged with two of the links of the chain are the reduced ends 16 of a spread-bar 17, which hold the free ends of the rods 12 and 13 separated. The spread-bar has perforations 17' in its ends, which lie beyond the links of the chains with which these ends are engaged, and engaged with perforations are pins 18, which prevent displacement of the bar.

Engaged with the central link 19 of the chain 14 is a yoke 20, between the spaced portions 21 and 22 of which there is pivoted adjacent to one of its ends a doubletree 23, having yokes 24 and 25 at its ends, and with the

latter there is connected, by means of a split link 26 and yoke 27, a second doubletree 28, to the ends of which there are connected for horizontal pivotal movement swingletrees 29 and 30, and to the yoke 24 there is connected, by means of a chain 31, a similar swingletree 32. Attached to the ends of the swingletrees are trace-hooks 33.

Removably connected to the lower end of the clevis 7, by means of a chain 34, is a doubletree 35, the chain being attached thereto adjacent to one of its ends, and pivotally and removably connected with this end of the doubletree is a doubletree 36, similar to the doubletree 28, and which has pivoted to its ends swingletrees 37 and 38, similar to the swingletrees 29 and 30, the swingletree 38 lying between the planes occupied by the rods 12 and 13, and connected to the remaining end of the doubletree 35, by means of a chain 39, is a swingletree 40, similar to the swingletree 32. The swingletrees 37, 38, and 40 are each provided with trace-hooks 41 at their ends, and it will be seen that the arrangement of the doubletrees 35 and 36 and the swingletrees 37, 38, and 40 is identical with that of the doubletrees 23 and 26 and the swingletrees 29, 30, and 32.

In hitching the horses to the equalizer one horse is hitched to each of the swingletrees, the horse which is hitched to the swingletree 38 being between the rods 12 and 13, and connected to the collar or breast-strap, as the case may be, of this horse are the ends of chains 42 and 43, which are passed through links of the chain 14 and are connected at their remaining ends to the collars or breast-straps of the horses which are hitched to the swingletrees 37 and 40. It will thus be apparent that the two pairs of doubletrees 35 and 36 and 23 and 28 will equalize the draft of the horses attached to the two sets of swingletrees and that the draft of these two groups of horses will be equalized by the clevis 7. When used as an equalizer for four horses, the swingletree 9 and the doubletree 35 are detached from the clevis 7, and by disengaging the chains 11 from the hooks 10 and the hooks 15 from the chains 14 the rods 12 and 13 may be disengaged from the remaining parts, and one of

these rods then has its chain 11 engaged with the upper end of the clevis 7, a hook being provided for this purpose. The split link 26 is then disengaged from the yoke 27, which
 5 disconnects the doubletree 28, and the yoke 27 is then engaged with the hook 15 at the forward end of the rod. The doubletree is then disconnected from the lower end of the clevis 7, and the doubletree 36, which has been previously disconnected from the doubletree 35,
 10 is connected to the lower end of the clevis 7 by means of a split link 36'. The swingle-trees 37, 38, 29, and 30 are thus disposed for the attachment of horses thereto and the four-
 15 horse equalizer is formed.

In practice modifications of the specific construction shown may be made and any suitable materials and proportions may be used for various parts without departing from the
 20 spirit of the invention.

What is claimed is—

1. In a draft-equalizer, the combination with a clevis arranged for pivotal attachment at its center with a vehicle, of a swingletree
 25 removably connected with one end of the clevis, rods removably connected with the ends of the swingletree and extending forwardly therefrom, a chain removably connected at its ends to the forward ends of the rods, a space-
 30 bar disposed with its ends engaged in the links of the chain adjacent to the ends of the rods to hold said rods in spaced relation, a double-tree connected to the chain, a second double-tree removably connected to one end of the
 35 doubletree, a swingletree connected to the remaining end of the first-named doubletree, a

doubletree removably connected with the remaining end of the clevis, a doubletree removably connected with one end of the third doubletree, and a swingletree connected to the
 40 remaining end of the third doubletree.

2. A draft-equalizer comprising a clevis arranged for connection at its center vertically to a vehicle for pivotal movement, a swingletree removably connected to the upper end of
 45 the clevis, rods removably connected to the ends of the swingletree and adapted to be disengaged therefrom and to be engaged with the upper end of the clevis, a doubletree removably connected with the lower end of the
 50 clevis, a doubletree removably connected with one end of the first doubletree and adapted for attachment at times to the lower end of the clevis, swingletrees connected to the ends of the second doubletree, a swingletree con-
 55 nected to the remaining end of the first doubletree, a third doubletree removably connected with the free ends of the rods, a fourth doubletree removably connected with one end of the third doubletree and adapted for connection
 60 at times with the free ends of the rods, swingletrees connected with the ends of the last-named doubletree, and a swingletree connected with the remaining end of the third double-
 65 tree.

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

CHARLES H. TAYLOR.

Witnesses:

VICTOR P. MOSES,
 J. F. IRWIN.