

No. 863,436.

PATENTED AUG. 13, 1907.

J. O. PETERSON.
DRAFT EQUALIZER.
APPLICATION FILED MAY 19, 1906.

2 SHEETS—SHEET 1.

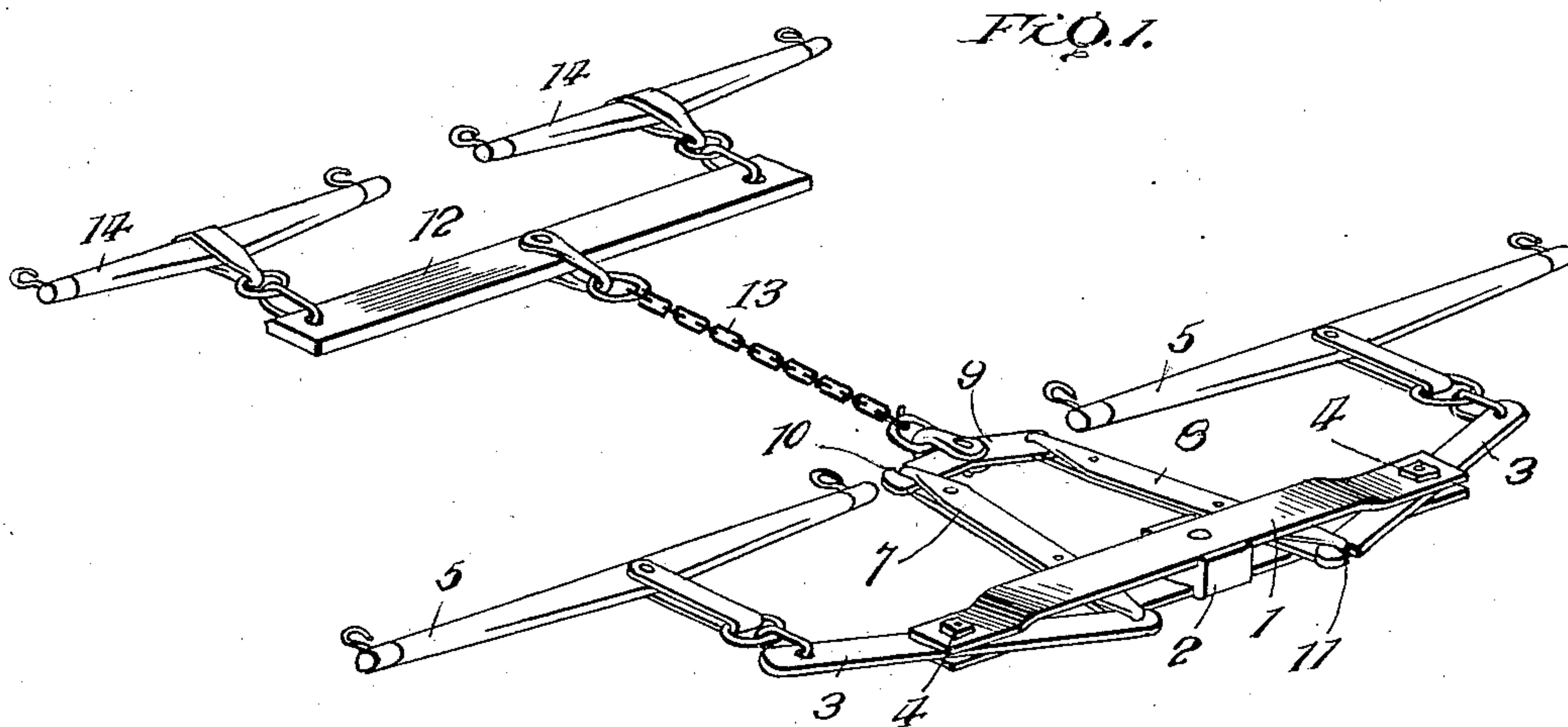
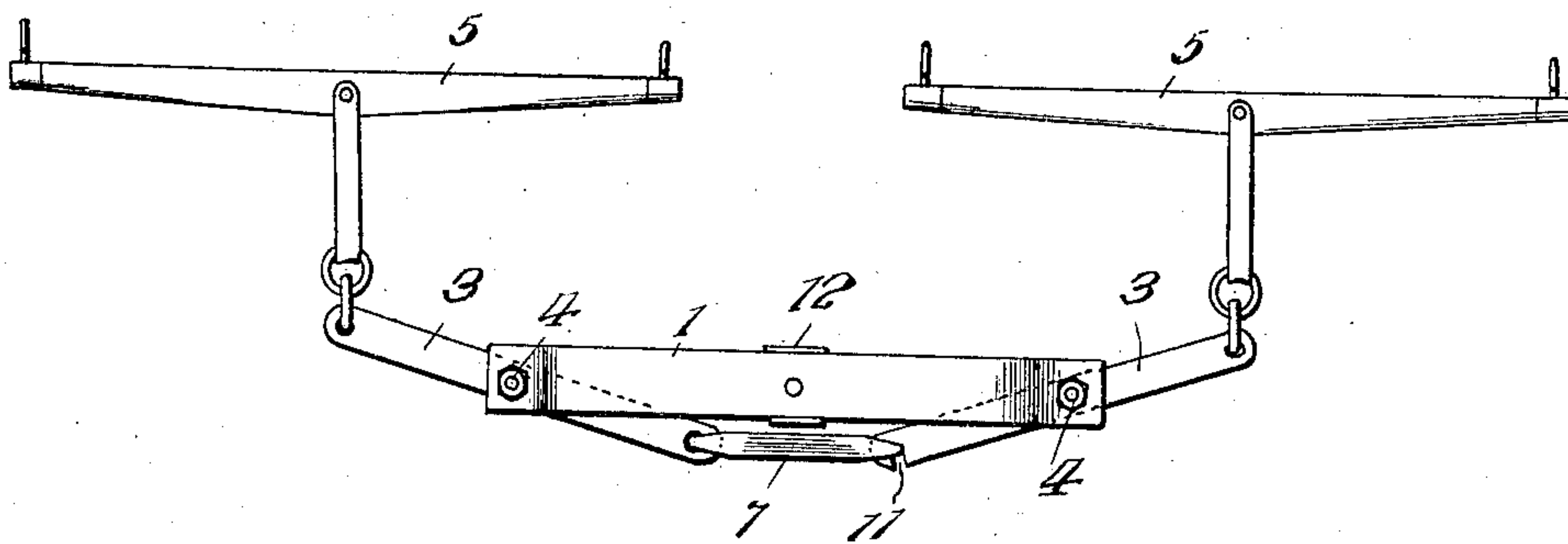


FIG. 2.



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Witnesses

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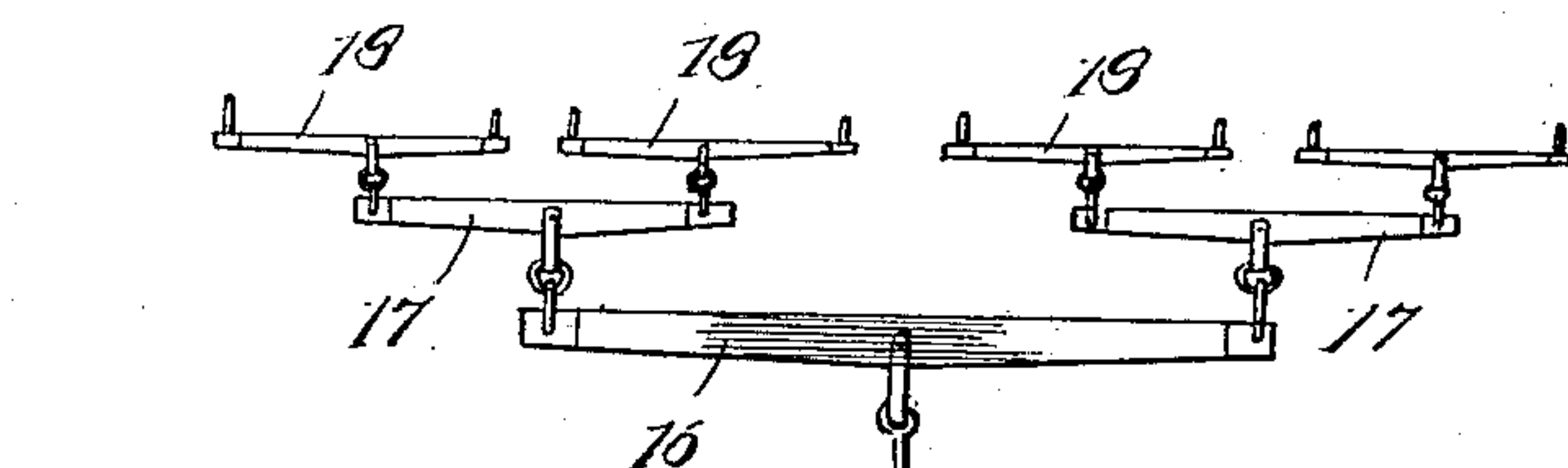


FIG. 3.

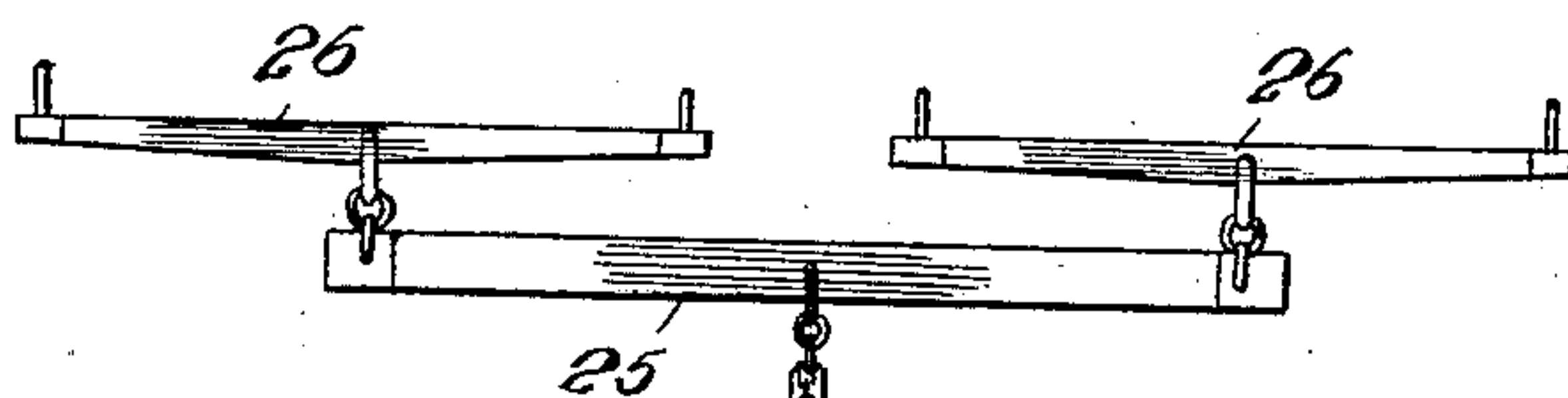
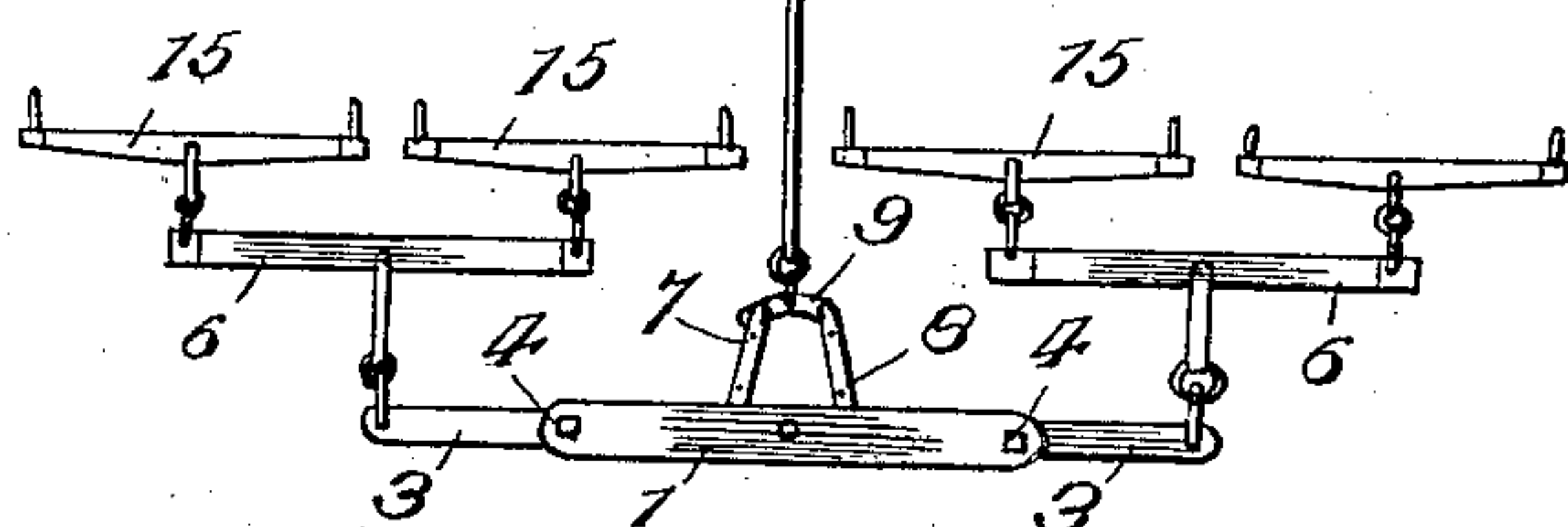
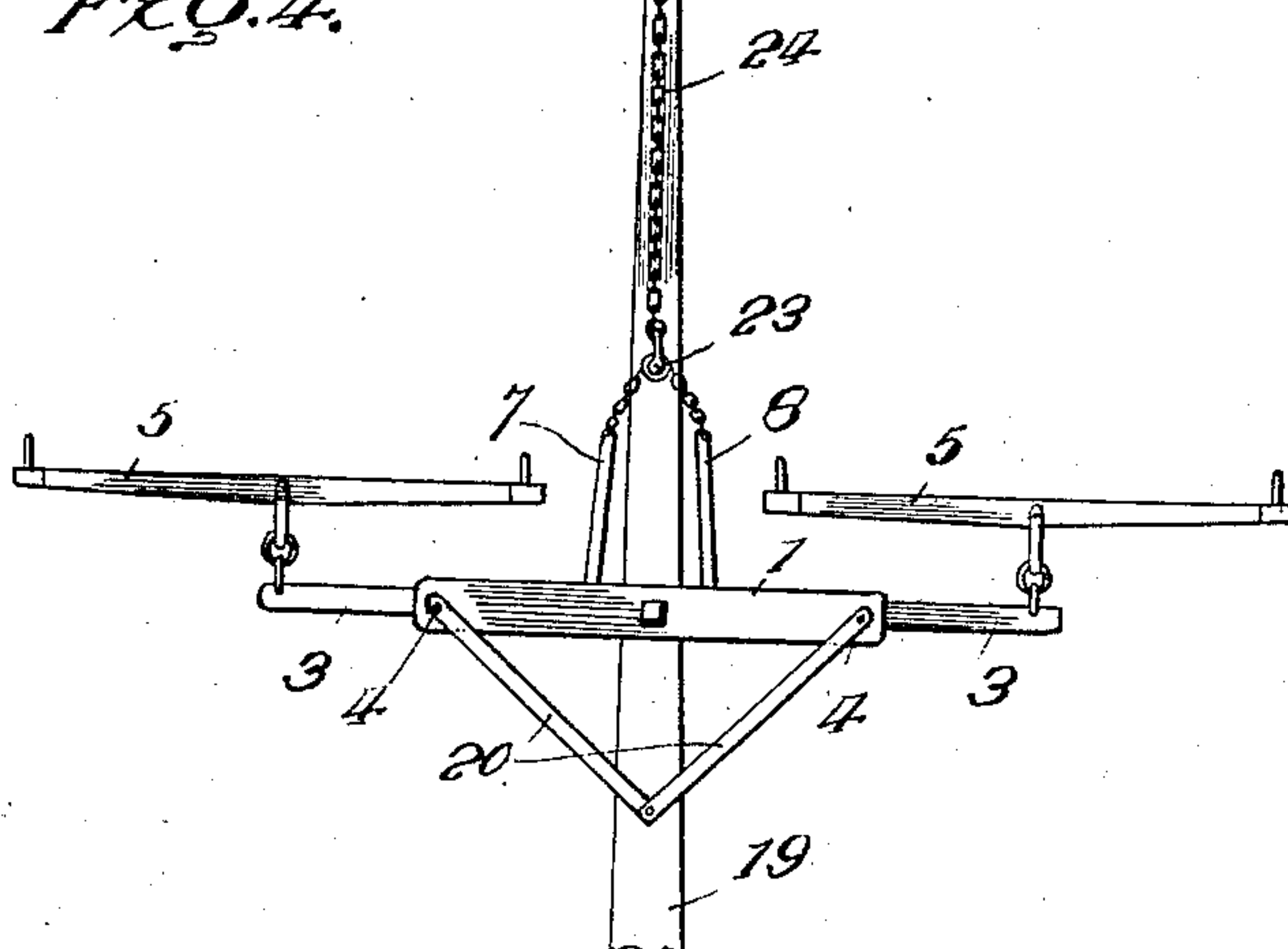


FIG. 4.



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UNITED STATES PATENT OFFICE.

JOHN OSCAR PETERSON, OF WALNUT GROVE, MINNESOTA.

DRAFT-EQUALIZER.

No. 863,436.

Specification of Letters Patent.

Patented Aug. 13, 1907.

Application filed May 19, 1906. Serial No. 317,657.

To all whom it may concern:

Be it known that I, JOHN OSCAR PETERSON, a citizen of the United States, residing at Walnut Grove, in the county of Redwood and State of Minnesota, have
5 invented certain new and useful Improvements in Draft-Equalizers, of which the following is a specification.

This invention embodies novel improvements in draft eveners or equalizers for vehicles.

10 For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

15 Figure 1 is a view showing one of the embodiments of the invention as a four-horse evener. Fig. 2 is a view showing some of the parts illustrated in Fig. 1, modified in arrangement and connections to admit of use of the invention as a two-horse evener. Fig. 3 is a
20 further modification of the invention, modified to admit of use thereof as an eight-horse evener. Fig. 4 is a plan view of a further modification of the invention which permits of a peculiar and independent equalization of the draft of the lead and rear horses.

25 Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In carrying out the invention, a special feature thereof is comprised in the peculiar form of the parts of the
30 evener whereby the same may be used for hitching either two, four, eight or a larger number of draft animals to the vehicle to be drawn.

Referring to Fig. 1 of the drawings, the numeral 1 designates a transverse draft beam which is designed to be
35 secured to the rear portion of the vehicle tongue and which preferably comprises upper and lower plates spaced apart in any suitable manner and reinforced at the central portions thereof by an intermediate block 2. A suitable coupling pin will pass through the
40 block 1 and block 2 to attach the same to the tongue. Pivoted between the outer ends of the beam 1 are the equalizing levers 3, the points of pivotal support or attachment 4, of said levers, being intermediate of their ends. The outer extremities of the levers 3 are
45 adapted for connection with swingletrees 5, as shown in Fig. 1, or doubletrees 6, as shown in Fig. 3, dependent upon the number of draft animals to be hitched to the vehicle. Peculiar means are provided for connecting the inner adjacent extremities of the levers 3, and such
50 means consist of the links 7 and 8, the outer or forward ends of which are connected by a draft plate 9, and the rear ends of which are attached to the levers 3. The link 7 is permanently and pivotally connected at its rear end with the inner end of the lever 3 adjacent, the
55 outer end of said lever 7 being formed with a loop to be received by a hook 10 at one end of the draft piece or

plate 9. The link 8, however, is permanently connected at its front end with the opposite end of the draft plate 9, the rear end of link 8 being formed with the loop received by or engaged with a hook 11, which
60 is formed at the inner end of lever 3 adjacent said link 8. The draft plate 9 is provided with a centrally located clevis permitting ready connection of the doubletree 12 with the same, by means of a chain 13 or similar connecting member or members. As the doubletree has suitable swingletrees 14 connected thereto,
65 it will be observed that a four-horse evener may be readily constituted in the above arrangement of parts.

Should it be desired at any time to convert the construction shown in Fig. 1, into a two-horse evener, all
70 that is necessary is to disengage the hook 10 of draft plate 9 from link 8, and in a similar manner disengage the hook 11 of lever 3 from the link 8. This done, the draft plate 9 is detached from link 7 and lever 3 opposite said link, and link 7 may then be engaged at its
75 front end with the hook 11 so that the two levers 3 will be connected in the manner shown in Fig. 2, thereby forming a two-horse evener.

A further modification of the invention is illustrated in Fig. 3, wherein it will be observed that an eight-
80 horse evener is secured by connecting the double trees 6 with the levers 3, each of said doubletrees 6 having the swingletrees 15 attached thereto. A longitudinal rod connects the draft plate 9 with a common form of four-horse evener device arranged in advance of the
85 equalizing mechanism hereinbefore described. The four-horse evener in front of the equalizing mechanism connected with beam 1, consists of the usual equalizing lever 16, doubletrees 17, and swingletrees 18.

The principle of the invention may be readily carried out on the lines hereinbefore suggested to admit of
90 attachment of any suitable number of draft animals to the vehicle which is to be drawn. The different types of equalizing devices will be adapted for different kinds of vehicles, or will depend upon the load which is to
95 be drawn.

Fig. 4 illustrates a further adaptation of the invention, showing the draft beam connected with the tongue
100 19 and braced so as to be rigid therewith, by means of rearwardly extending braces 20 attached at the rear extremities to the tongue at 21. The inner ends of the levers 3 are connected with the links 7 and 8, the foremost ends of which are attached to a chain 22 or flexible connecting means of a similar nature, said chain passing about a pulley 23, which in turn is connected
105 with a longitudinal chain or draft element 24. An evener device comprising the lever 25 and swingletrees 26 (or doubletrees, if doubletrees are substituted for swingletrees 5) is connected with the front end of the chain 24. The connections above described are such
110 that the load is drawn steadily and smoothly, the rear equalizing mechanism being adapted to equalize with

reference to pulley 23, independently of the advance equalizing device and affording two points of draft instead of one.

Various other arrangements of the parts of the invention may be used within the contemplation thereof, but the constructions shown in the drawings fully comprehend and illustrate the scope of the invention and the different ways in which it may be applied.

Having thus described the invention, what is claimed as new is:

In a draft equalizer, the combination of a transverse beam, equalizing levers pivoted between their ends to opposite ends of said beam, means connecting the inner ends

of the levers and consisting of a pair of links, and a draft plate permanently connected with one of the links and having detachable connection with the other of said links, the link detachably connected with the draft plate being permanently connected with one of the equalizing levers and adapted for detachable connection with the other of said equalizing levers, the link which is permanently attached to the draft plate being detachably attached to the other of the equalizing levers. 15 20

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

JOHN OSCAR PETERSON. [L. S.]

Witnesses:

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