July 31, 1923. 1,463,515

J. E. LONG

LEVELING DEVICE

Filed July 5, 1921 2 Sheets-Sheet 1

Fig. 1.

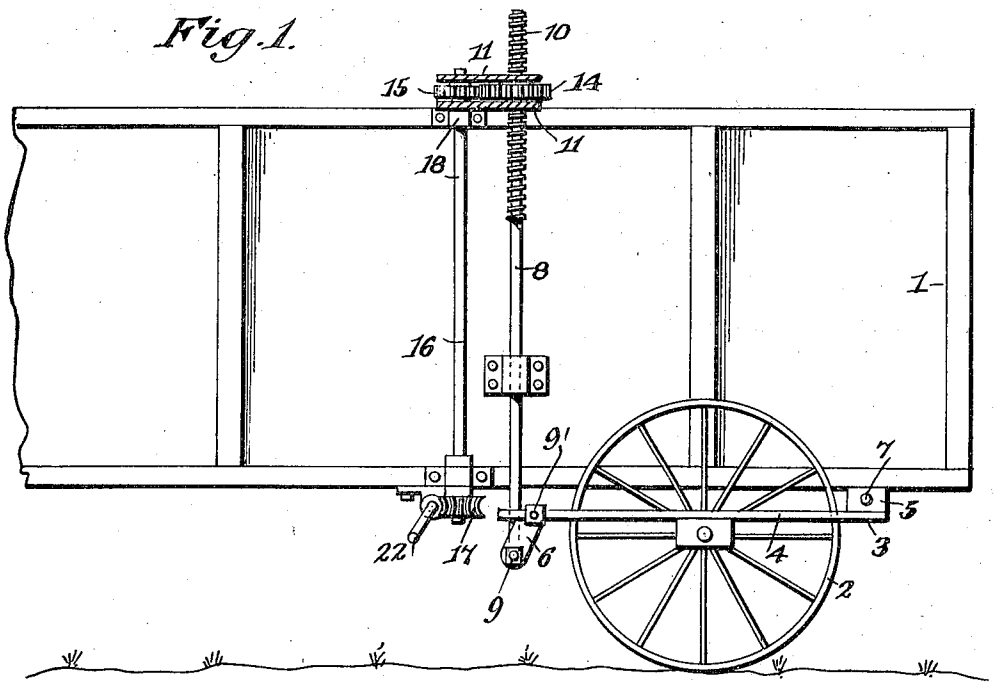
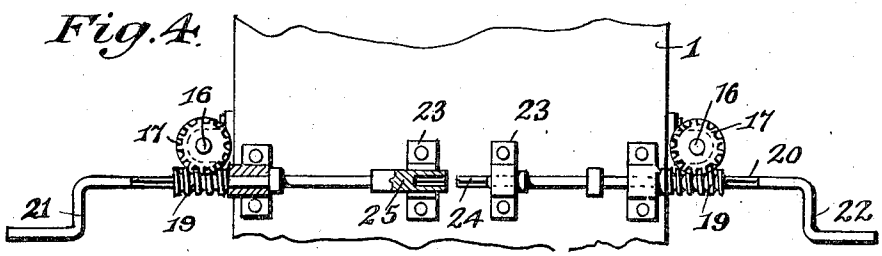


Fig. 4.



John E. Long, INVENTOR.

BY

Richard B. Clarke ATTORNEY.

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Fig. 2.

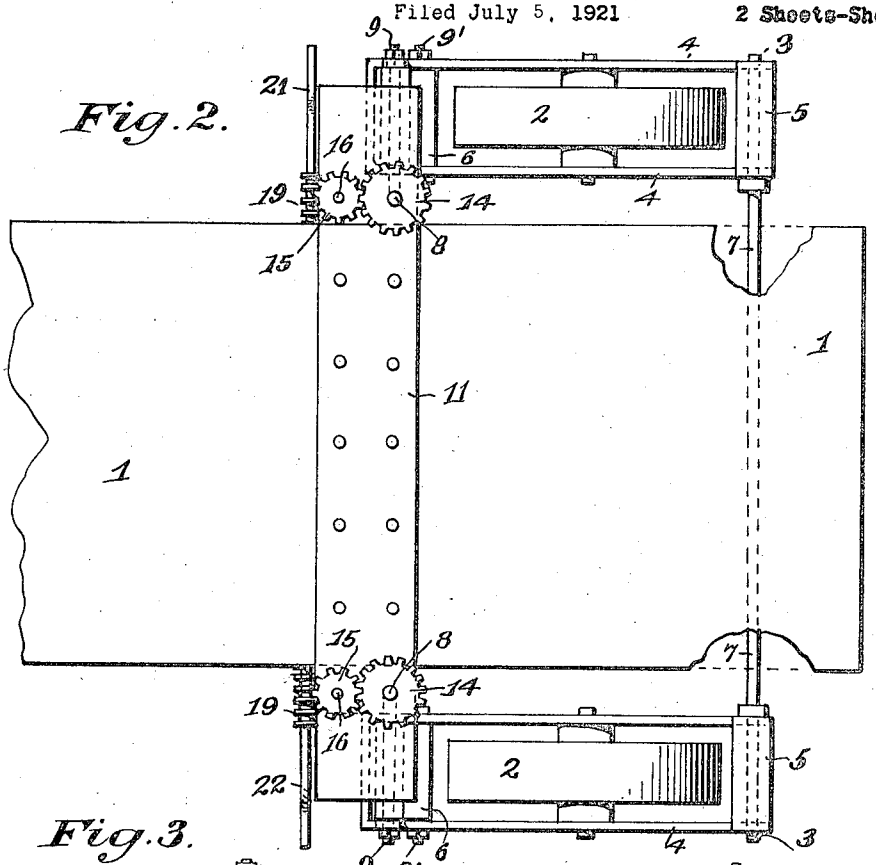
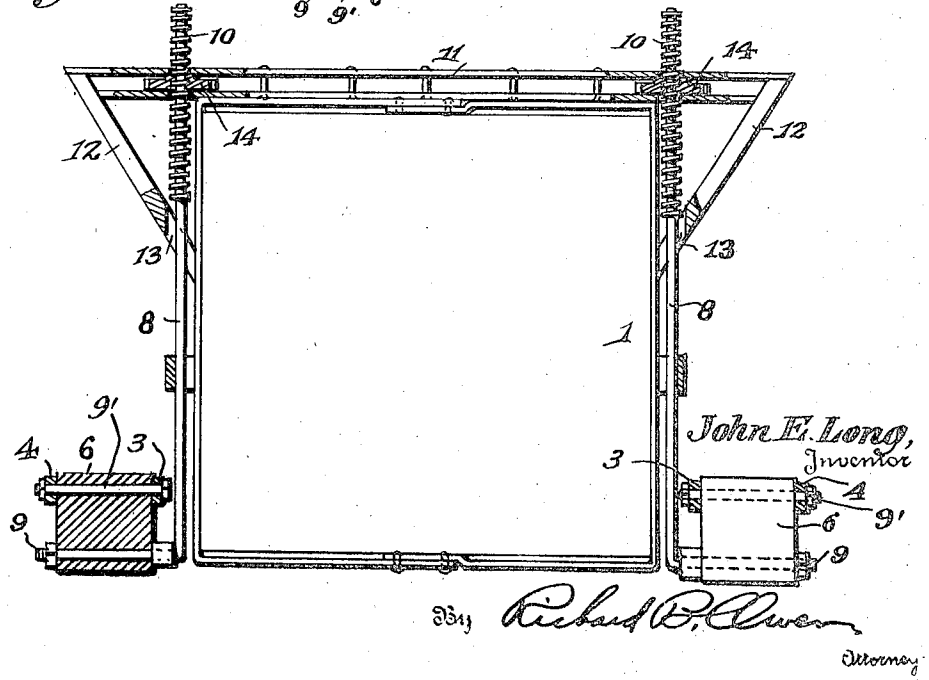


Fig. 3.



John E. Long,
Inventor

By Richard B. Owen
Attorney

Patented July 31, 1923. 1,463,515

UNITED STATES PATENT OFFICE.

JOHN E. LONG, OF EDGERTON, OHIO.

LEVELING DEVICE.

Application filed July 5, 1921. Serial No. 482,393.

To all whom it may concern:

Be it known that I, JOHN E. LONG, a citizen of the United States, residing at Edgerton, in the county of Williams and State of Ohio, have invented certain new and useful Improvements in a Leveling Device, of which the following is a specification.

This invention relates to a leveling device to be used with vehicles generally and particularly with grain thrashers and has for its principal object to provide means whereby a vehicle may be adjusted so that its body will be level regardless of the position of its wheels.

Another object of the invention is to provide a mechanism of this nature which will be of extremely simple, durable and inexpensive construction, one which is efficient and reliable in operation, and well adapted to the purpose for which it is designed.

With these and numerous other objects in view the invention resides in certain novel features of construction, and the combination and arrangement of parts as will be hereinafter fully described and claimed.

In the drawing:—

Figure 1 is a fragmentary side elevation of a grain thrasher showing my attachment attached thereto,

Figure 2 is a top plan view of the vehicle showing my invention attached thereto,

Figure 3 is a rear elevational view of the vehicle body showing my attachment attached thereto, parts thereof being shown in section, and

Figure 4 is a fragmentary bottom plan view of the vehicle body showing invention attached thereto.

Referring to the drawing in detail it will be seen that 1 designates the body which will be mounted at one end upon a truck or any other suitable steering mechanism (not shown). The rear portion of the body is supported by the wheels 2 which are journaled in the frames 3 in any suitable manner.

These wheel frames 3 consist of the side bars 4 which are connected by end pieces 5 and link blocks 6 which are pivoted to the side bars of the bolts 9′. The end pieces 5 are supported on the bar 7 which is in engagement with the body 1 in any suitable manner and thus it will be seen that these frames 4 are in pivotal relation with the body 1. A rod 8 is provided with a right angled extension 9 which passes through the link block 6. The other end of each of the rods 8 is provided with a worm 10 or threaded portion which passes through the plates 11 extending over the top of the body 1. These plates 11 are suitably spaced from each other and are braced by means of brackets 12 which diverge from each other from the sides of the body and are attached to the ends of the plates 11. Suitable apertures 13 are provided in the brackets 12 through which pass the rods 8. A pair of cog wheels 14 are mounted between the plates 11 and are provided with a centrally located aperture which engages the worms 10 of the rods 8. These cog wheels 14 are in mesh with the pinions 15 keyed to the rods 16 which extend parallel to the rods 8. A work gear is situated on the lower end of each rod 16 as indicated at 17. These rods 16 are suitably journaled in brackets 18 and pass through the plates 11 so that the pinions 15 will be situated between the plates 11 and in mesh with the cog wheels 14. The worm wheel 17 is situated adjacent the worms 19 which are slidable on the arms 20 of the cranks 21 and 22. These arms 20 are square in cross section so as to be received in a square opening provided in the worms 19. The inner ends of the arms 20 are suitably journaled in brackets 23. The inner end of the arm 20 on crank 22 is provided with a square terminal 24 adapted to be received in the square socket 25 provided at the terminal of the arm 20 on the crank 21. Thus these cranks may be moved toward and away from each other so as to have the terminals thereof in engagement with or out of engagement with each other so as to rotate the rods 16 severally or simultaneously.

In using this leveling mechanism it will be understood that by rotating the cranks 21 and 22 the body 1 may be leveled properly transversely. After this has been done the two cranks may be keyed together by inserting the terminal 24 in the socket 25 and by proper rotation of either of the cranks the body may be leveled longitudinally.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the device will be readily understood without a more extended explanation. As numerous changes in form, proportion, and in the minor details of construction may be resorted

to without departing from the spirit of this invention, I do not wish to be limited to the construction herein shown and described other than as claimed.

Having thus described my invention what I claim as new is:

1. In combination, a vehicle body, a pair of wheel frames pivotally attached thereto, a wheel in each frame, a link attached to each frame, a rod attached to the link and provided with a worm, a cog wheel having a centrally located threaded aperture in engagement with the worm, a pinion in engagement with the cog wheel, means for rotating the pinion.

2. In combination, a vehicle body, a pair of wheel frames therefor, a wheel in each frame, a pair of cranks carried by the vehicle body, one of said cranks provided with a socket, the other crank provided with a square end, said crank being movable so that the terminal of one may be engaged by the terminal of the other and means controlled by the crank for adjusting the wheel frame.

3. In combination, a vehicle body, a pair of wheel frames pivotally attached thereto, a wheel for each frame, a link attached to each wheel frame, a rod attached to each link and provided with a worm portion, a cog wheel carried by the vehicle body and provided with a centrally located threaded aperture in engagement with the worm of the rod, a pinion in mesh with each cog wheel, a rod keyed to each pinion, a worm gear keyed to each rod, and a worm for actuating each worm gear.

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

JOHN E. LONG.

Witnesses:

BERNIECE JINNINGS,

J. A. JINNINGS.