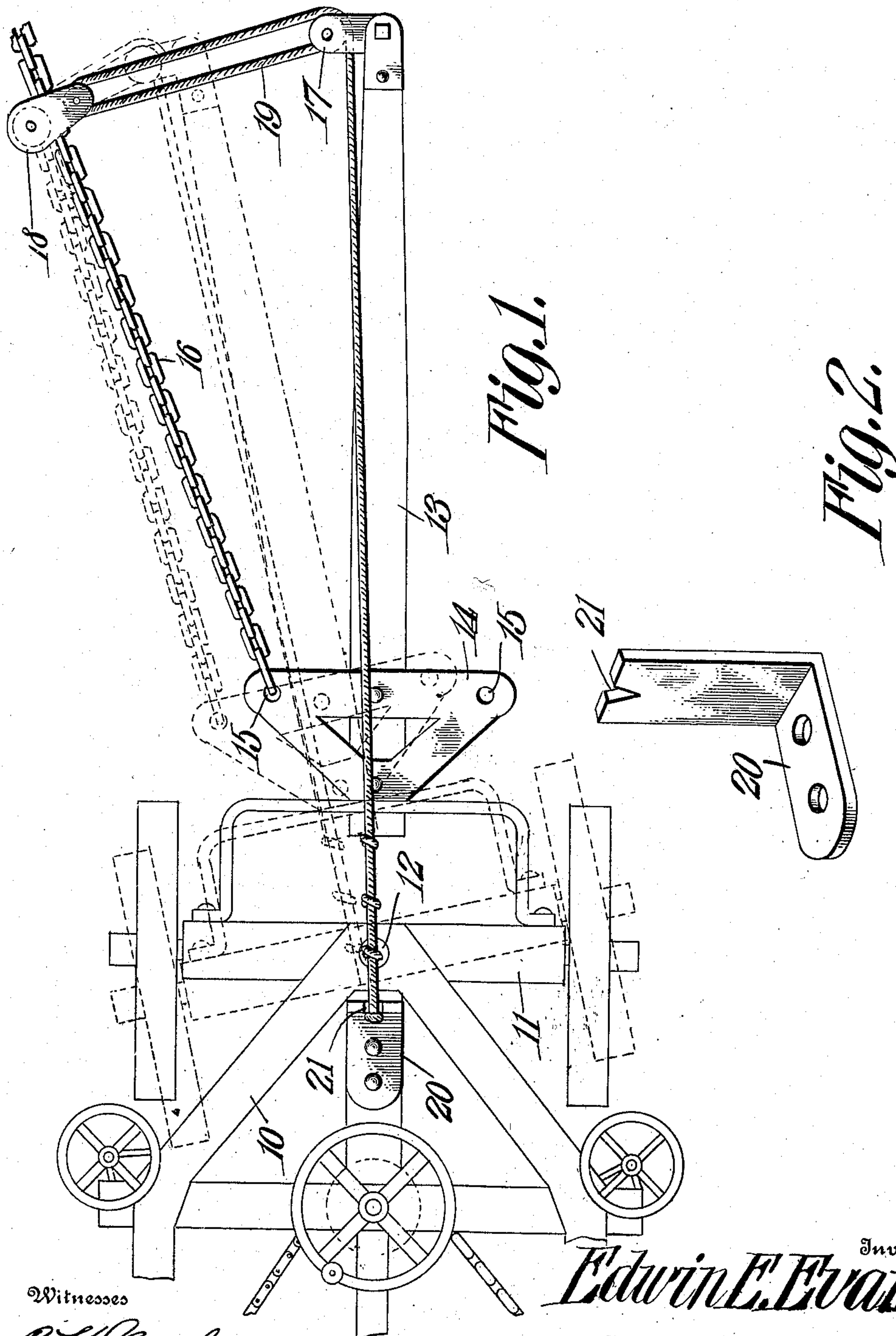


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STEERING DEVICE FOR VEHICLES.  
APPLICATION FILED MAR. 5, 1908.

911,709.

Patented Feb. 9, 1909.



Witnesses

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# UNITED STATES PATENT OFFICE.

EDWIN E. EVANS, OF BRANCHPORT, NEW YORK.

## STEERING DEVICE FOR VEHICLES.

No. 911,709.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed March 5, 1908. Serial No. 419,375.

*To all whom it may concern:*

Be it known that I, EDWIN E. EVANS, a citizen of the United States, residing at Branchport, in the county of Yates and State of New York, have invented a new and useful Steering Device for Vehicles, of which the following is a specification.

The invention relates to vehicles, more especially to that type that is designed to carry machinery for scraping a road or ditching the same.

The object of the invention is to provide a means whereby the machine may be drawn along one side of the road while the draft animals or road locomotive move along the middle or opposite side thereof.

A further object of the invention is to provide a means for steering the vehicle while being drawn.

The invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and specifically claimed.

In the accompanying drawings:—Figure 1 is a plan view, showing a portion of a road machine equipped in accordance with this invention. Fig. 2 is a detail perspective of one of the parts.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The numeral 10 indicates the frame of the machine, and an axle 11 is pivotally mounted thereon as at 12. A tongue 13 is secured to this axle in any desired manner, being held so that the movement of the tongue laterally will rotate the axle around the pivot point.

The cross bar 14 is mounted on the tongue and is provided with openings 15. In the present instance I have shown the cross bar of triangular form, but it is obvious that other forms might be used.

The openings 15 are for the purpose of permitting the attachment of a draft means, such as the chain 16 on either side of the tongue 13. At the front end of the tongue 13 is carried a block 17 equipped with the usual sheave and on the chain 16 is held a block 18 mounted to slide on said chain. It is preferred to equip the block 18 with a roller

or sheave so that the motion along the chain may be readily accomplished. Connecting the blocks 17, 18 and running back to the vehicle frame is a rope 19. Upon the vehicle frame is mounted an angled arm 20 having a V-shaped notch 21 in the upper end thereof adapted to receive a rope. Knots are provided in the rope toward the end thereof so that when the rope is inserted in the notch it will not be pulled therethrough.

It is obvious that any other desired means of securing the rope may be used and it is not desired to limit the invention in this respect.

In the full lines in Fig. 1 the device is shown with the draft means 16 at a considerable angle to the tongue 13. To the outer end of the draft means 16, (not being necessary here to be shown), is attached the road locomotive or draft animal. It is to be observed that the line of draft always tends to pass through the pivot point. In order to change this, it is simply necessary to pull up on the rope 19 when the angle between the tongue 13 and the draft means 16 will be varied, as shown by the dotted line position in Fig. 1. Now, if it is desired to return to the former position, the pull upon the draft means due to the line of draft having been displaced from the pivot point, will operate to cause the tongue 13 to move back when the rope 19 is slackened off until the line of draft again passes through said pivot point. There is thus provided a simple and effective means whereby the vehicle may be steered and moved at one side of the road while the draft means is in the middle or on the other side.

What is claimed is:—

1. A vehicle having a pivotally mounted axle, a tongue attached thereto, a cross bar on said tongue, flexible draft means adapted for attachment to said cross bar, and means operable from the vehicle body connecting said tongue and draft means to vary the angular relation thereof.

2. A vehicle having a pivotally mounted axle, a tongue attached thereto, a cross bar on said tongue, flexible draft means adapted for attachment to said cross bar, a block and tackle connection between said draft means and tongue to vary the angular relation thereof.



3. A vehicle having a pivotally mounted  
axle, a tongue attached thereto, a cross bar  
on said tongue, draft means adapted for  
attachment to said cross bar, and a block on  
5 said tongue, a second block slidably mounted  
on said draft means, and a rope passing  
through said blocks.

In testimony that I claim the foregoing  
as my own, I have hereto affixed my signa-  
ture in the presence of two witnesses.

EDWIN E. EVANS.

Witnesses:

A. J. PORTER,  
J. S. LYNN.