

No. 754,902.

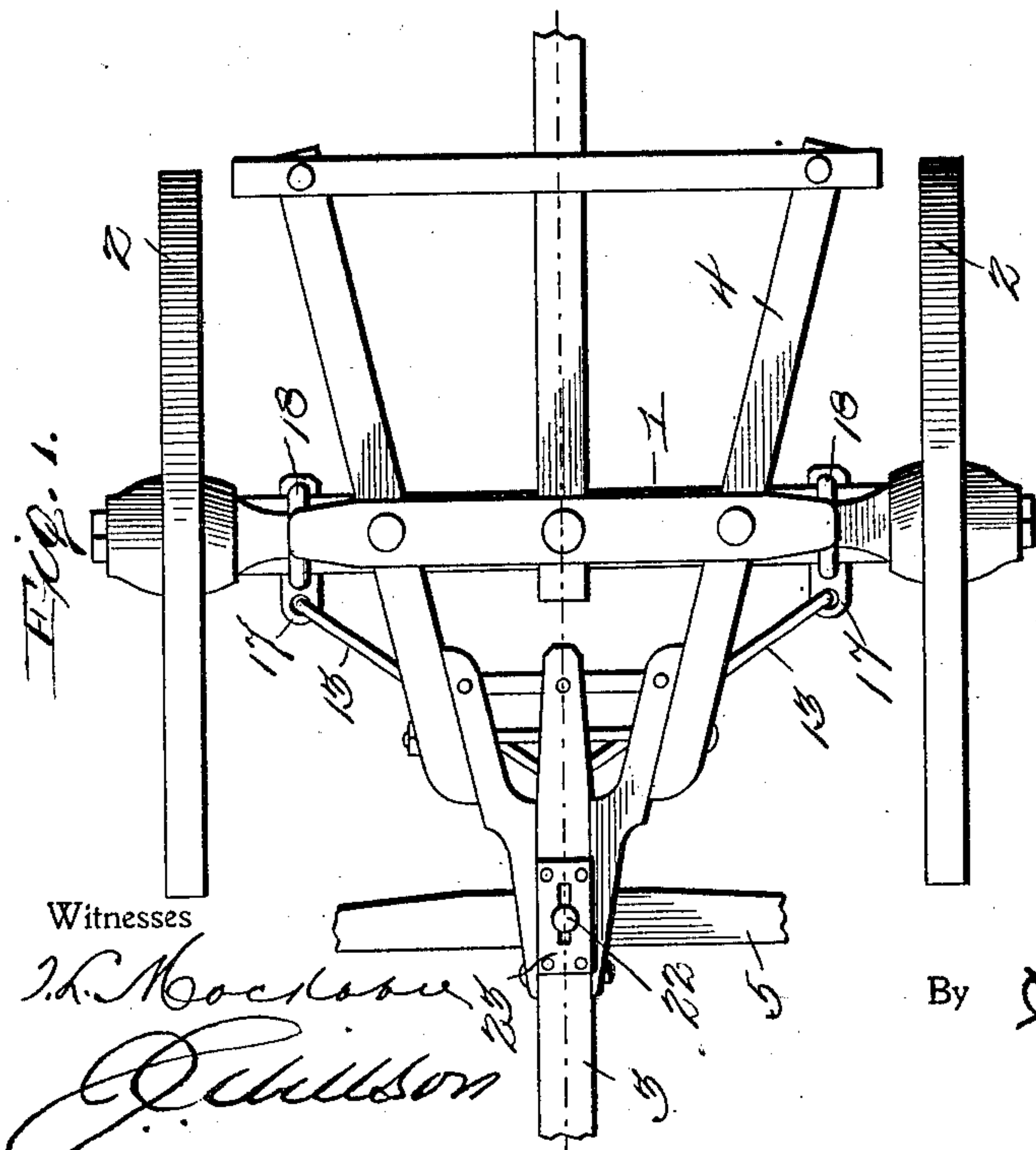
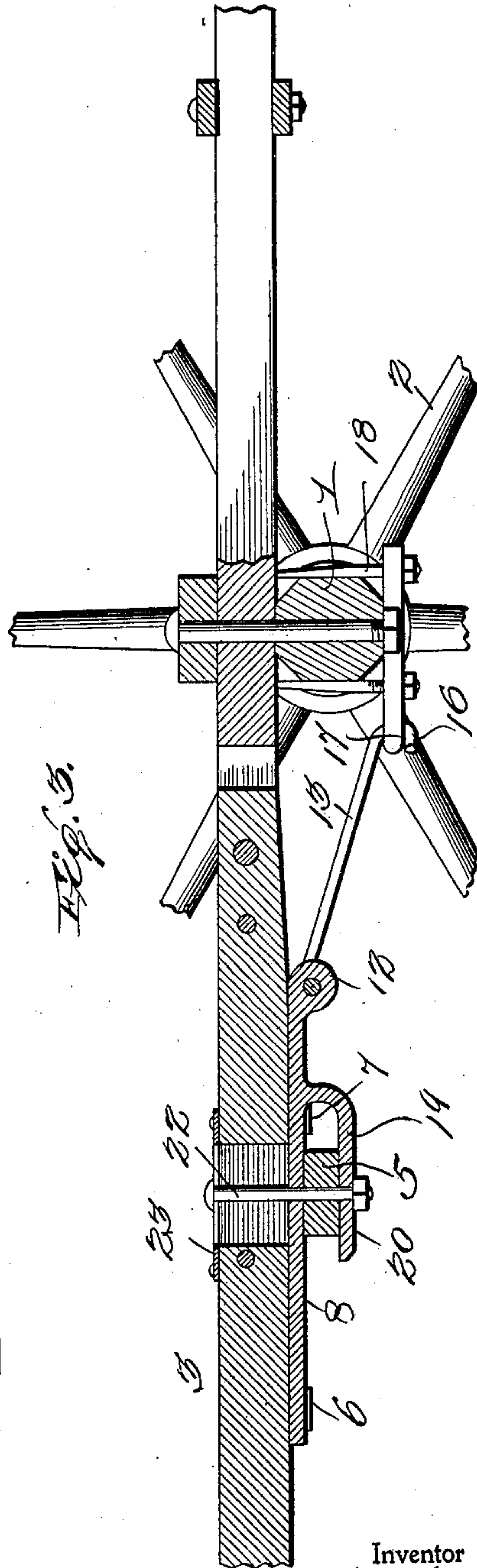
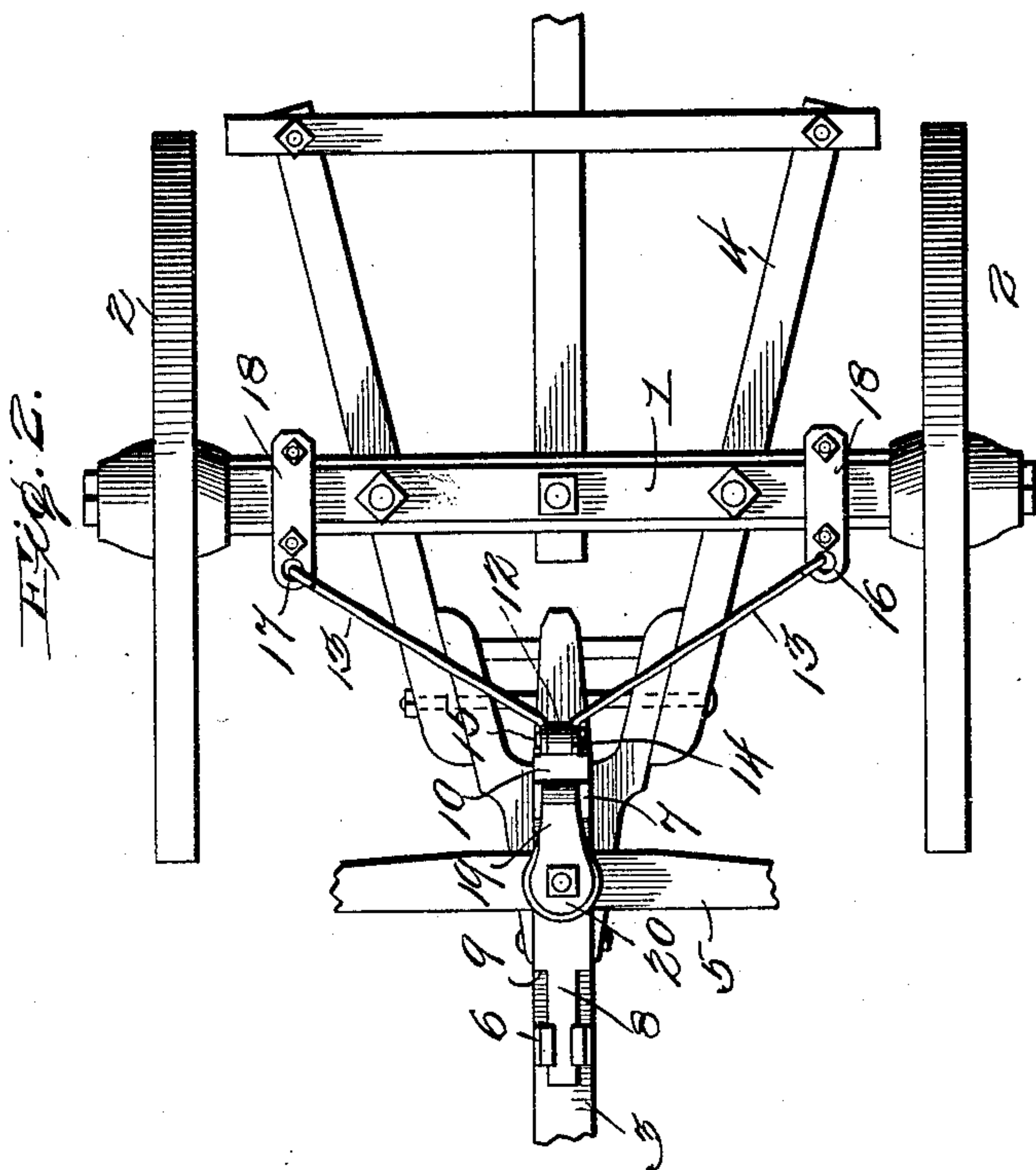
PATENTED MAR. 15, 1904.

F. H. SHARP.  
DRAFT ATTACHMENT FOR VEHICLES.

APPLICATION FILED AUG. 6, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

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No. 754,902.

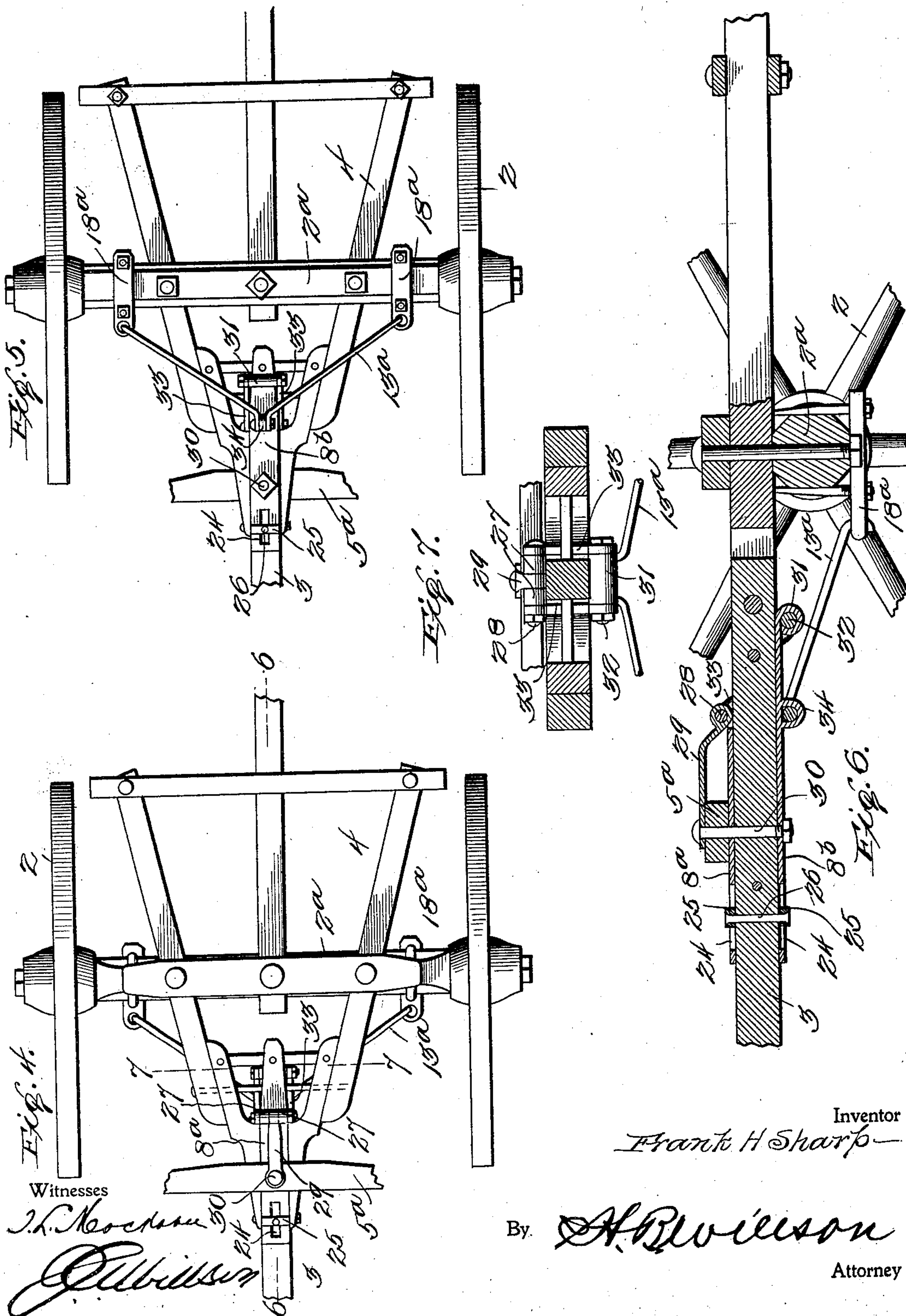
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# UNITED STATES PATENT OFFICE.

FRANK H. SHARP, OF HOWARD, NEW YORK.

## DRAFT ATTACHMENT FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 754,902, dated March 15, 1904.

Application filed August 6, 1903. Serial No. 168,529. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK H. SHARP, a citizen of the United States, residing at Howard, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Draft Attachments for Vehicles; and I do 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 attachments for vehicles.

The object of the invention is to provide an improved means for attaching the whiffletree to the tongue of a vehicle to lighten the draft and relieve the strain upon the necks of the draft-animals.

A further object is to provide a draft attachment of this character which will be simple, strong, and durable, inexpensive, and well adapted to the use for which it is designed.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a top plan view of the forward end of a vehicle running-gear and the inner end of the tongue, showing the application of the invention. Fig. 2 is a bottom plan view of the same. Fig. 3 is a central longitudinal vertical sectional view. Fig. 4 is a view similar to Fig. 1, showing a modified form of construction. Fig. 5 is a bottom plan view of the same, and Fig. 6 is a longitudinal vertical sectional view on the line 6 6 of Fig. 4. Fig. 7 is a vertical cross-sectional view on the line 7 7 of Fig. 4.

Referring more particularly to the drawings, 1 denotes the front axle; 2, the front wheels; 3, the tongue; 4, the front hounds, and 5 the doubletree. These parts may be of the ordinary or any well-known construction and arrangement except that the inner end of the tongue has a pivotal engagement with the ends of the hounds 4, as shown.

Referring particularly to Figs. 1, 2, and 3,

6 and 7 denote guides fixed to the under side of the tongue 4. These guides may be of any suitable construction, but are here shown as metal plates bolted to the tongue and having their ends bent downwardly and inwardly. In the guides 6 and 7 is slidably mounted a plate or bar 8, the forward or outer end of which is reduced and is adapted to engage the guide 6. On the inner end of the plate 8 is formed a lug 10, in which is formed an eye 12. 13 denotes diagonally-arranged draft-rods, on the outer ends of which are formed eyes 14, and 15 denotes a pin or bolt which is adapted to pass through the eyes 12 and 14 to pivotally connect the draft-rods 13 to the plate 8. On the inner ends of the rods 13 are formed hooks 16, which are adapted to engage eyes 17, formed on clips 18, attached to the axle 2. 19 denotes a bracket fixed to or formed integral with the under side of the sliding plate or bar 8 and having a forwardly-projecting arm 20, arranged parallel with said plates or bar. The doubletree 5 is arranged between the arm 20 and the plate or bar 8 and pivotally connected to the same by a draw-bolt 22, which projects downwardly through a slot in the tongue and through openings in the plate 8, the doubletree, and the arm 20. A slotted wear-plate 23 is secured to the upper side of the tongue, through which the bolt 22 also passes, the head of the bolt being adapted to slide on the plate.

In Figs. 4, 5, and 6 a slightly-modified form of sliding connection is shown. In this instance two sliding plates or bars 8<sup>a</sup> and 8<sup>b</sup> are arranged, one above and one below the tongue, and are provided near their outer ends with vertical slots 24. In the slots 24 are arranged flanged blocks 25, the same being held in place by means of a bolt or rivet 26, which passes through the tongue and through the blocks 25. The upper plate or plate 8<sup>a</sup> has formed on its inner end a pair of perforated plugs 27, through which passes a pin or bolt 28. Between the lugs 27 and pivoted to the pin 28 is a forwardly-projecting arm 29, between which and the upper plate 8<sup>a</sup> is arranged the doubletree 5<sup>a</sup>. A draw-bolt 30 is passed through open-



ings in the doubletree, the plates 8<sup>a</sup> and 8<sup>b</sup>, and through a longitudinally-disposed slot in the tongue, whereby the doubletree is pivotally connected to the plates. The lower plate 5 8<sup>b</sup> has formed on its inner end a perforated lug 31, through which passes a pin or bolt 32. To the ends of the bolt 32 are pivotally connected the lower ends of curved rods 33, arranged on each side of the tongue and having 10 their upper ends connected to the ends of the pin or bolt 28, thereby connecting the ends of the plates 8<sup>a</sup> and 8<sup>b</sup> together. 34 denotes a depending perforated lug formed on the lower side of the plate 8<sup>b</sup>, and to said lug is pivotally 15 connected the outer ends of draft-rods 13<sup>a</sup>, the inner ends of which have a hooked engagement with clips 18<sup>a</sup>, attached to the axle 2<sup>a</sup>, as shown.

In both forms of the invention as herein 20 shown and described it will be seen that the draft is applied to the lower side of the axle and that the vehicle is not drawn by the tongue, but through the medium of the draft-rods 13 or 13<sup>a</sup>, this arrangement aiding in the draw- 25 ing of the load and also lessening the tendency of the tongue to "whip" and removing considerable weight and strain from the horses' necks.

From the foregoing description, taken in 30 connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, 35 and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus fully described my invention,

what I claim, and desire to secure by Letters 40 Patent, is—

1. In a draft attachment for vehicles, the combination with an axle and a pivoted tongue, of a slide supported by said tongue, means for 45 connecting said slide to the lower side of said axle and a doubletree pivotally connected to said slide, substantially as described.

2. In a draft attachment for vehicles, the combination with an axle and a pivoted tongue, of a plate slidably supported by said tongue, 50 draft-rods pivotally connected at one end to said sliding plate and at their opposite ends to said axle, and a doubletree pivotally mounted on said plate, substantially as described.

3. In a draft attachment for vehicles, the 55 combination with an axle and a pivoted, slotted tongue, of guides carried by said tongue, a plate slidably mounted in said guides, means for limiting the forward movement of said plate, draft-rods pivotally connected at one 60 end to the inner end of said plate, and at their opposite ends to the lower side of said axle, a bracket-arm connected to said plate a doubletree arranged between said arm and said plate, and a draw-bolt passing through the slot in said 65 tongue and through openings in said plate, doubletree and bracket-arm, whereby said doubletree is pivotally connected to said plate and said plate slidably connected to said tongue, substantially as described. 70

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK H. SHARP.

Witnesses:

EUGENE L. MILLER,  
FRANK HOUSE.