No. 853,781. PATENTED MAY 14, 1907.

G. I. HAISE.

VEHICLE TONGUE.

APPLICATION FILED MAR. 14, 1907.

Fig. 1.

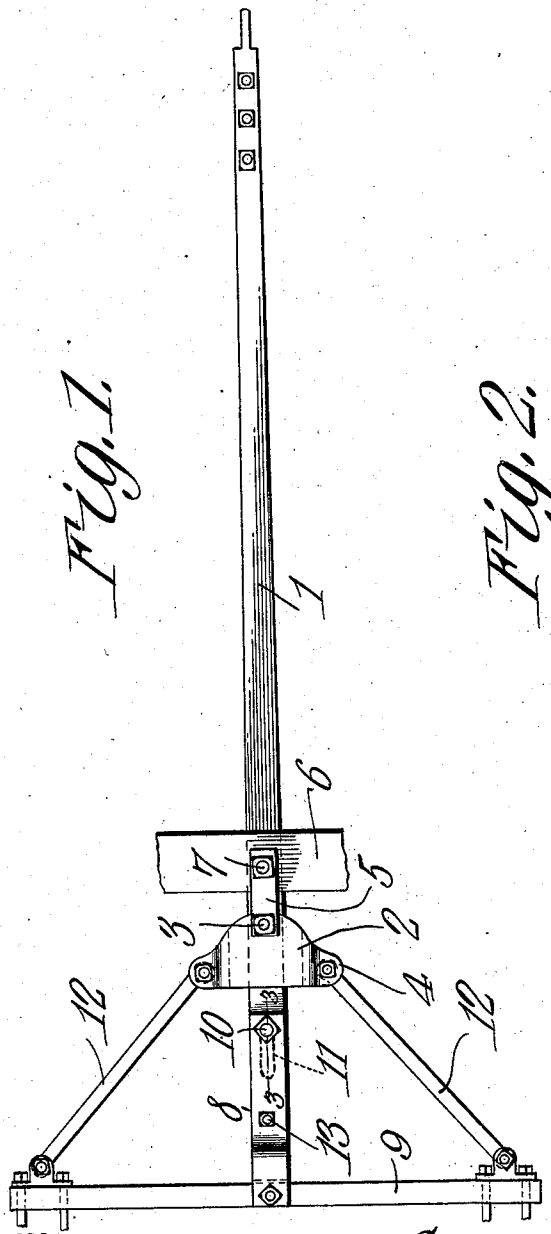


Fig. 2.

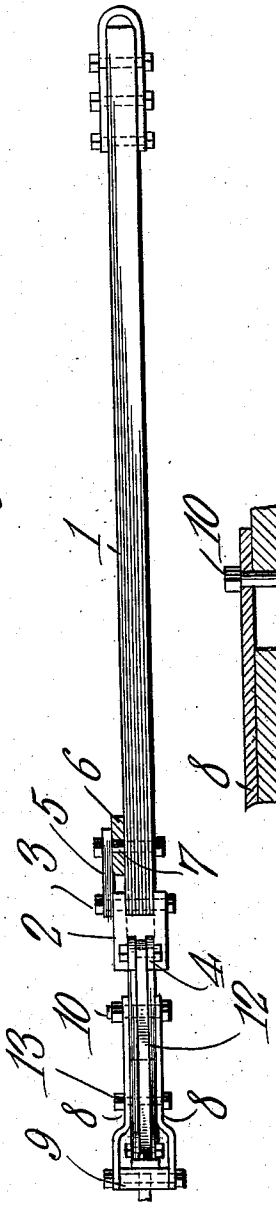
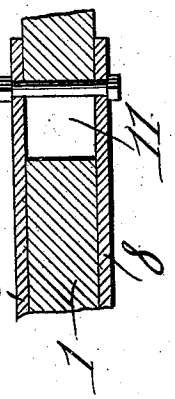


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE I. HAISE, OF BIRMINGHAM, OHIO.

VEHICLE-TONGUE.

No. 853,781. Specification of Letters Patent. Patented May 14, 1907.

Application filed March 14, 1907. Serial No. 362,379.

To all whom it may concern:

Be it known that I, GEORGE I. HAISE, a citizen of the United States, residing at Birmingham, in the county of Erie and State of Ohio, have invented a new and useful Tongue, of which the following is a specification.

This invention has relation to tongues and means for attaching them to axles so that the said tongue will not thrash laterally as the wheels upon which the axle is supported come in contact with uneven places upon the surface of the ground. Means is also provided for automatically shifting the entire draft to that wheel which comes in contact with an obstruction and thus side draft or a tendency at such draft is avoided.

The rear portion of the tongue is connected by means of links with the front axle, the said links are pivoted to the axle and are connected with the tongue by means of a bolt which passes through perforations in the link and an elongated opening in the tongue. Thus the said tongue may have a slight longitudinal movement with relation to the axle. A cuff is pivotally mounted upon the tongue and is connected at its opposite sides by means of links with opposite ends of the axle.

In the accompanying drawing:—Figure 1 is a top plan view of the tongue. Fig. 2 is a side elevation of the same, and Fig. 3 is a longitudinal sectional view of a portion of the tongue cut on the line 3—3 of Fig. 1.

The tongue 1 passes through the cuff 2 which is pivotally connected to the said tongue by means of the bolt 3. The said cuff is substantially semicircular in plan and is provided at its opposite sides with the ears 4. The link 5 is retained at its rear end by the bolt 3 and its forward end passes over the whiffle-tree 6 and is attached to the same by means of a bolt 7 which also passes through the tongue 1. The rear ends of the links 8 are pivoted to the middle of the axle 9 and upon the upper and lower sides thereof. The bolt 10 passes through perforations in the forward portion of the links 8 and through the elongated slot 11 provided in the tongue 1 behind the cuff 2. The links 12 are pivotally attached at their forward ends to the ears 4 of the cuff 2 and at their rear ends to the front side of the axle 9 in the vicinity of the ends thereof. Thus it will be seen that as one end or the other of the axle 9 is swung to the rear by reason of the supporting wheel coming in contact with an obstruction upon the ground the said axle will turn so that the links 8 will swing out of alinement with the longitudinal axis of the tongue 1 but that the direction or position of the tongue will not be changed. Thus the tongue is not violently swayed from one side to the other as the wheels pass over rough ground and the draft animals are relieved of much punishment and soreness incidental to the lateral thrashing of the tongue.

The length of the slot 11 is sufficient to allow the rear end of the tongue 1 to swing through the links without engaging the forward side of the axle 9. However, when the draft animals are backed the slot 11 will permit the rear end of the tongue 1 to come in direct contact with the side of the axle 9 when the strain is applied directly to the said axle. It will also be observed that as the axle 9 swings laterally when the supporting wheel meets an obstruction and permits the opposite wheel to move in advance of the obstructed wheel that the direct draft from the draft animals is applied along the link 12 connecting the cuff 2 with that end of the axle 9 to which the obstructed wheel is attached, thus the entire strain is applied directly to the obstructed wheel which is the more readily brought over the obstruction into a proper position and any side draft is avoided.

Should it be desired to limit the movement of the axle 9 with relation to the tongue 1 so that the said tongue will be comparatively fixed with relation to the axle but the axle may have sufficient swing to relieve the tongue of the objectionable thrashing movement above referred to the pin 13 is passed through registering perforations in the links 8 and the tongue 1 so that the said links are fixed with relation to the tongue but the axle 9 may swing upon the bolt 10 as a pivot. Thus means is provided for comparatively fixing the tongue with relation to the axle and at the same time relieving the tongue of objectionable movement described.

Having described my invention, what I claim as new and desire to secure by Letters-Patent is:—

1. In combination with a wheel supported axle a tongue, a cuff pivotally mounted thereon, links connecting opposite sides of the cuff with end portions of the axle, a link attached to the tongue behind the cuff and being pivotally connected with the middle of the axle.

2. In combination with a wheel supported axle a tongue, a cuff pivotally mounted thereon, links connecting the opposite sides of the cuff with the opposite end portions of the axle, a link pivoted to the middle of the axle and a bolt passing through said link and through an elongated opening provided in the tongue.

3. In combination with a wheel supported axle a tongue, a cuff pivotally mounted upon the tongue, links connecting the opposite sides of said cuff with the opposite end portions of the axle, links pivoted to the middle of the axle and bolts fixing the forward portions of said links with relation to the tongue.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses:

GEORGE I. HAISE.

Witnesses:
MARY E. HAISE,
J. F. HERTLEIN.