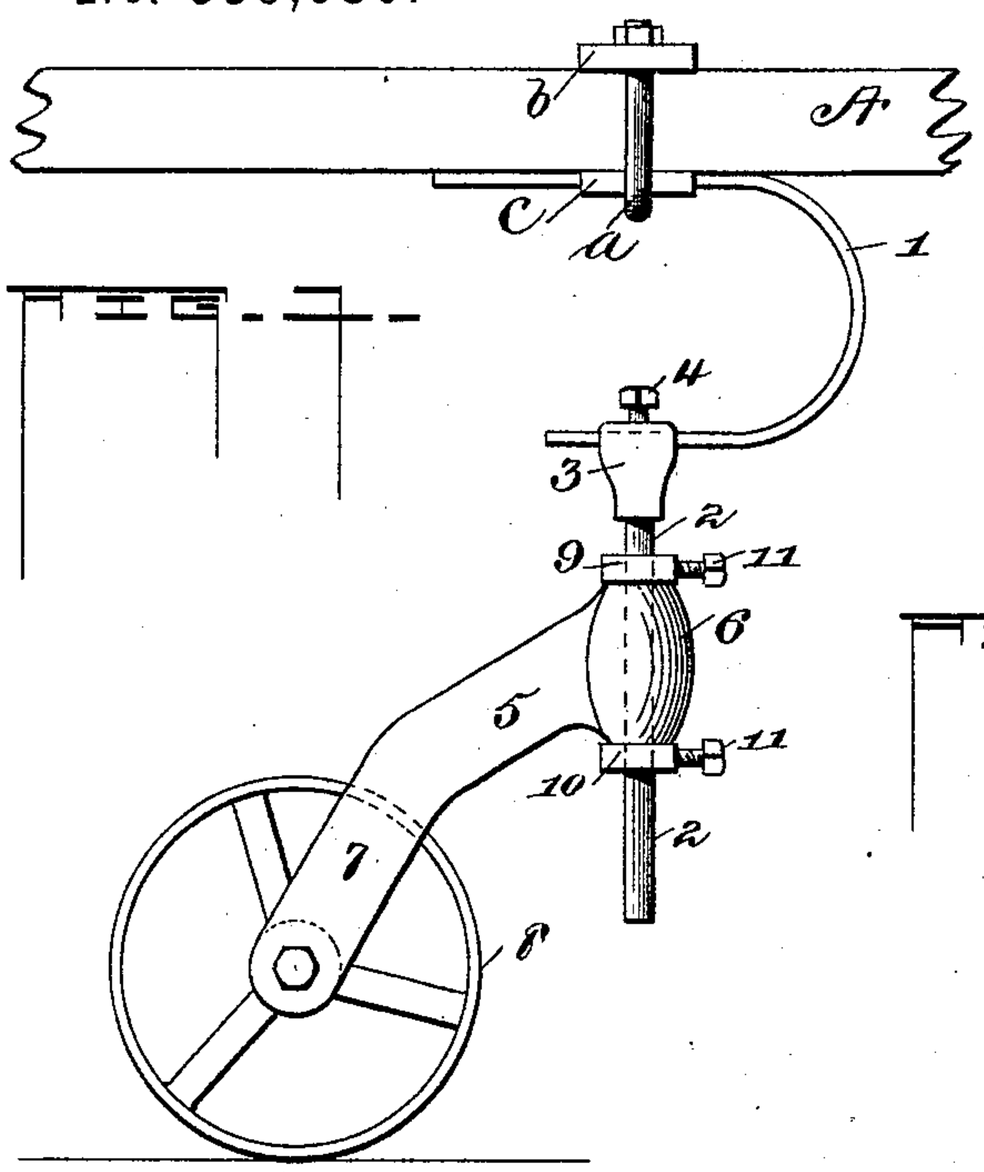
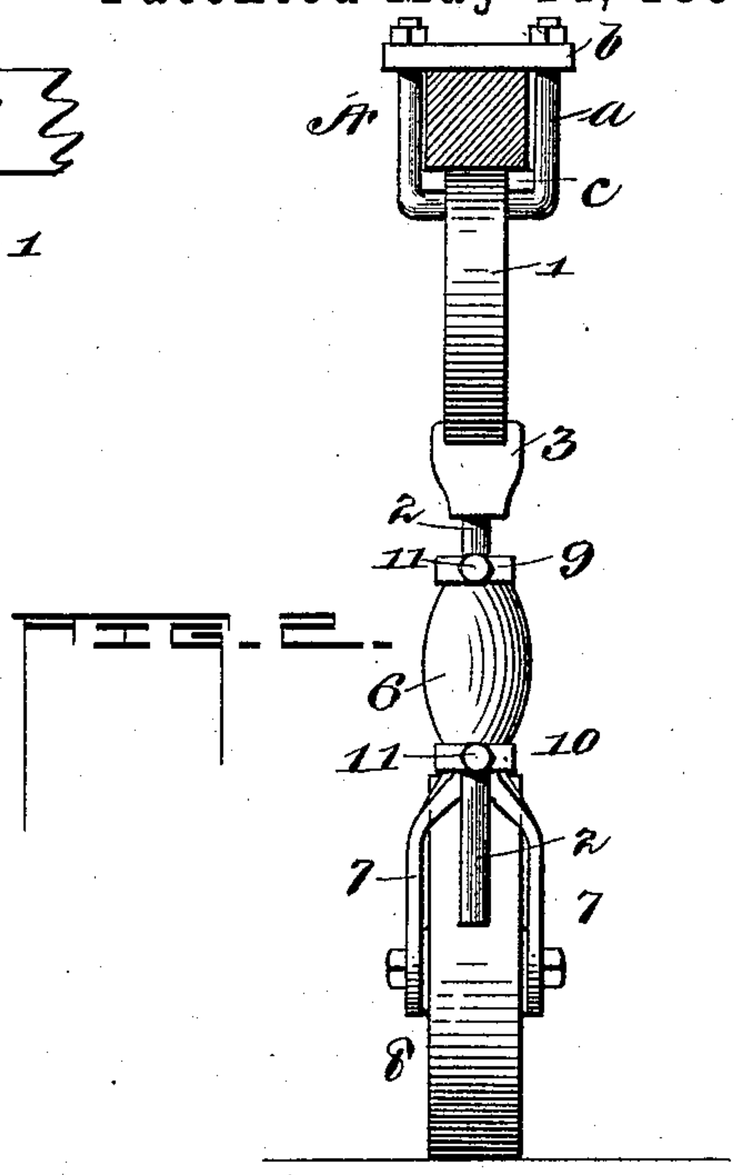
(No Model.)

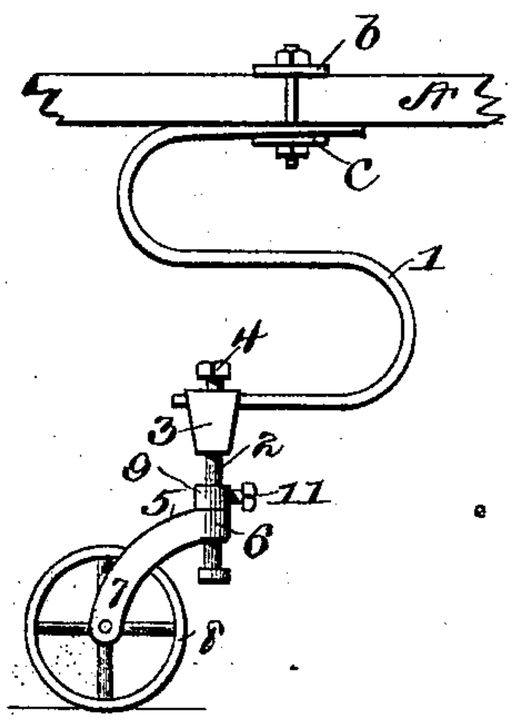
B. F. ORDWAY.

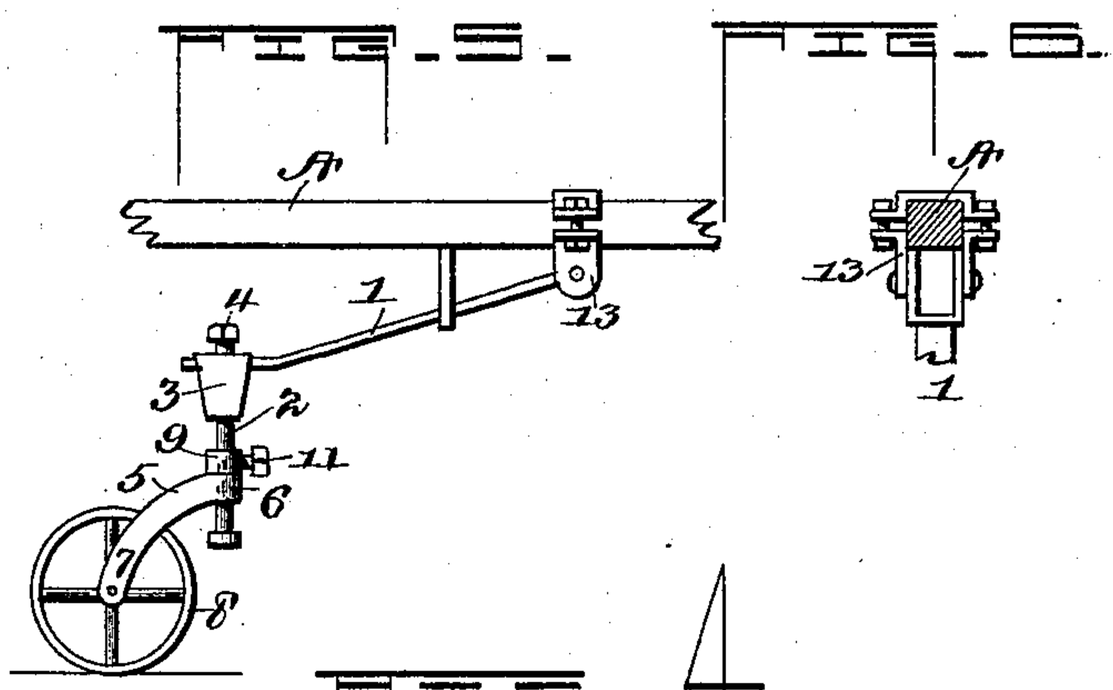
TONGUE SUPPORT.

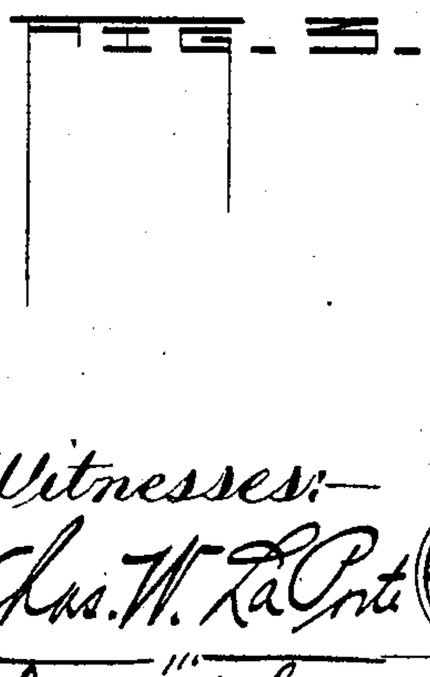
No. 539,080. Patented May 14, 1895.

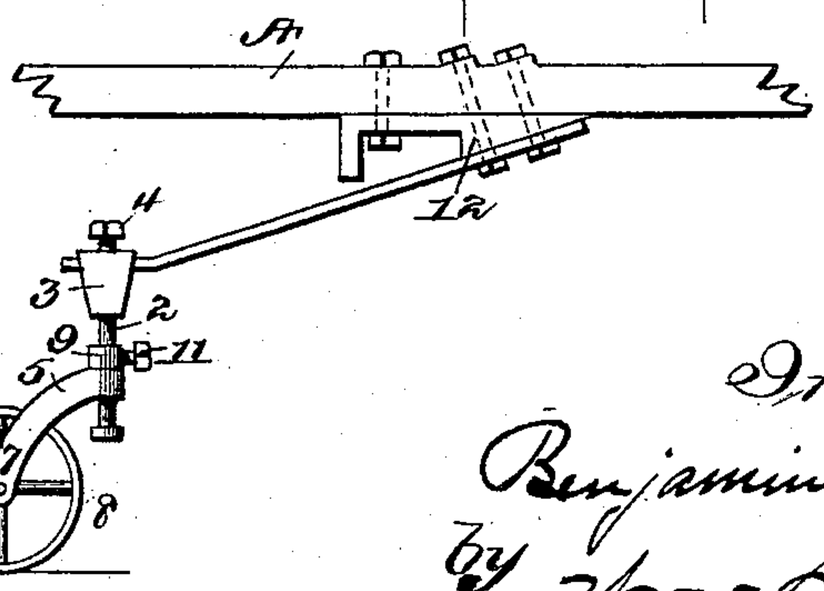












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UNITED STATES PATENT OFFICE.

BENJAMIN F. ORDWAY, OF PEORIA, ILLINOIS.

TONGUE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 539,080, dated May 14, 1895.

Application filed June 28, 1894. Serial No. 515,937. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. ORDWAY, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Tongue-Supports; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in tongue-supports, by means of which a tongue support is provided being simple in construction, durable and cheap in first cost.

More particularly my invention relates to that class of harvesting machine tongues for the purpose of supporting the weight thereof to take it off from the horses' necks, and to prevent side draft, in this manner steadying the tongue and also maintaining the machine in such a manner as to prevent the shifting thereof occasioned by contact with irregular places in the ground being traversed.

My invention consists essentially in the provision of a bar spring attached at points below the tongue, so as to be out of the way, and being suitably connected with a traveling wheel and in adjustable relation with suitable casting attachments therewith, whereby various tensions of spring may be obtained to accommodate the support of greater or less load, and for accommodating different heights of tongue above the ground.

In carrying out my invention, I desire to employ any character of bar spring whether straight or curved as the application of the device may demand, and I desire to connect with the tongue in any suitable manner either to form a reach connection or a pivoted one.

That my invention may be more fully understood reference is had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved tongue-support, showing its adjustment to a tongue. Fig. 2 is a front view of my device. Fig. 3 is a side elevation showing the particular manner in which an **S**-shaped spring is employed, and also showing a convenient means of connection with the tongue. Fig. 4 is a side elevation showing the manner in which a particular bar is used in connection with a particular kind of a casting upon the tongue. Fig. 5 is also a side elevation of one form of my tongue-support, showing the pivotal relation with the tongue or suitable attachment thereto. Fig. 6 is a detailed view showing a support for the bar when said bar is pivoted.

In the several figures of the drawings, I have shown several different ways of applying the general idea and principle of my invention.

By reference to Fig. 1, 1 refers to a bent bar spring, which is suitably clamped to the tongue A by means of the clamp, consisting of the parts *a* and *b*, there being provided in connection with this clamp the plate *c*, suitably grooved in the manner shown for the carrying through of the said bar or the end thereof that bears against the under side of the tongue, which enables the said bar to be slipped out or in through the said groove in the plate *c*, when the clamp is loosened and to be tightened up and held in the proper position desired. 2 is a depending bar, provided with the head 3 having a slot cut therethrough and through which the one end of the spring 1 is designed to be carried in the manner shown in the drawings. This bar may be used in connection with this head and secured therein by means of the set screw 4 as shown, or the said bar may be slipped therein far enough, so that as it is forced up against the groove of the said bar, it will be firmly impinged and the end of the bar may be battered down against the rear face of the head 3. 5 is a bar provided with the head 6, having a vertical central opening therein through which the bar 2 is designed to be carried, the said bar 5 being furcated, the pivoted parts being represented by 7. 8 is a wheel journaled upon a pin as an axle carried through perforations in the lower end of the furcated parts of bar 5 and suitably secured therein, the said wheel having a wide face as shown. 9 and 10 are adjustable collars carried upon the bar 2, one above the head 6 and the other below, and each of said collars is provided with a set screw as 11, this set screw being purposed to secure the collars in the desired position and upon the bar 2, and to facilitate in the adjustment of the head 6 of bar 5.

The above described construction is the one I prefer to employ, but I have shown still other forms which represent modifications thereof, which I will proceed to describe.

In Fig. 3, I employ substantially the same character of spring, except that it is **S**-shaped, or has a double curve which carries it lower down and permits of an adjustment in connection with the tongue that is carried high and also provides for greater elasticity of spring, and in this figure I employ practically the same spring as that shown in Fig. 1, except that a head is shown on the lower end of the bar 2 instead of a collar.

In Fig. 4, I employ simply a bar spring having only the necessary slight angle to accommodate its being carried through the head 3 and different only in construction from that shown in Fig. 3 in the form of a spring and the manner of its being connected with the tongue.

It will be seen that the block 12 is used suitably clamped to the tongue presenting an incline for a bearing for the said bar to give it a rearward decline, and also presenting a lug or foot projecting downwardly at the rear end of the said block to provide for a bearing for the central portion of the said spring, which acts as a stop or prevents the excessive bending of said bar at the forward end thereof.

In Fig. 5, I present substantially the same construction as that in Fig. 4 except that I pivot the bar instead of fixing it in a definite position, and I swing the said bar in the clevis or support 13, which presents a central bearing for the said bar.

In operation for the purpose designed, the spring is fixed upon the tongue of the machine, which it is designed to support in the manner shown in the several figures of the drawings, the manner of attaching preferred being that shown in Fig. 1, such attachment being shown in detail in Fig. 2, the other end of the said spring being secured in the head 3 of Fig. 1, and upon the depending bar 2 the furcated bar 5 is carried by the bar 12 depending through the opening in head 6, this said bar 5 being adjusted upon the bar 2 by means of the collars 9, 10 by means of the set screws 11 in the proper position to accommodate the proper supporting of the tongue, this adjustment being necessary, as all tongues of the different machines are not carried the same height from the ground and by slipping the head 6 of the furcated bar 5 in an opening and fixing it in position, this difference in height may be readily accommodated.

It will be seen that when the tongue support, (as shown in Fig. 1) is adjusted in the manner shown in the said figure, and that as the machine bears forwardly, should any obstructions be met, as rises and depressions in the ground, the spring 1 will readily accommodate such differences in the surface of the ground, and instead of the tongue being thrown upwardly or downwardly, when such differences in the surface are met, the spring will take the jar and will readily yield or extend so that the tongue will always be held steady and in the proper position, relieving both the weight and jar, side draft and violent jerking of the tongue from the horses' necks; and by means of the furcated bar 5 being pivoted upon the bar 2 as shown, it will turn from side to side and accommodate itself to the turning of the machine, with the tongue of which it is connected, and will facilitate greatly in the ease of such turning, it providing always a support for the tongue which will insure its steady carrying.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a tongue support, the spring 1, suitably clamped upon the tongue in combination with a suitable traveling wheel connected therewith by means of the furcated bar 5, pivoted upon bar 2 by means of the collars 9, 10, the said bar being connected with spring 1, through the head 3 thereof, all substantially as described and shown.

2. A tongue support, formed of the spring 1, suitably connected with the tongue A, the bar 2 provided with the slotted head 3 through which one end of the bar 1 is carried or secured, the furcated bar 5 provided with the head 6 having transverse perforations therethrough and carried over and pivotally and adjustably supported upon the said bar by means of the collars 9, 10, provided with set screws 11 and provided on its lower extremity with the wheel 8, suitably carried in connection therewith, all substantially as described and shown.

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

BENJAMIN F. ORDWAY.

Witnesses:
W. V. TEFFT,
AMOS DIXON.