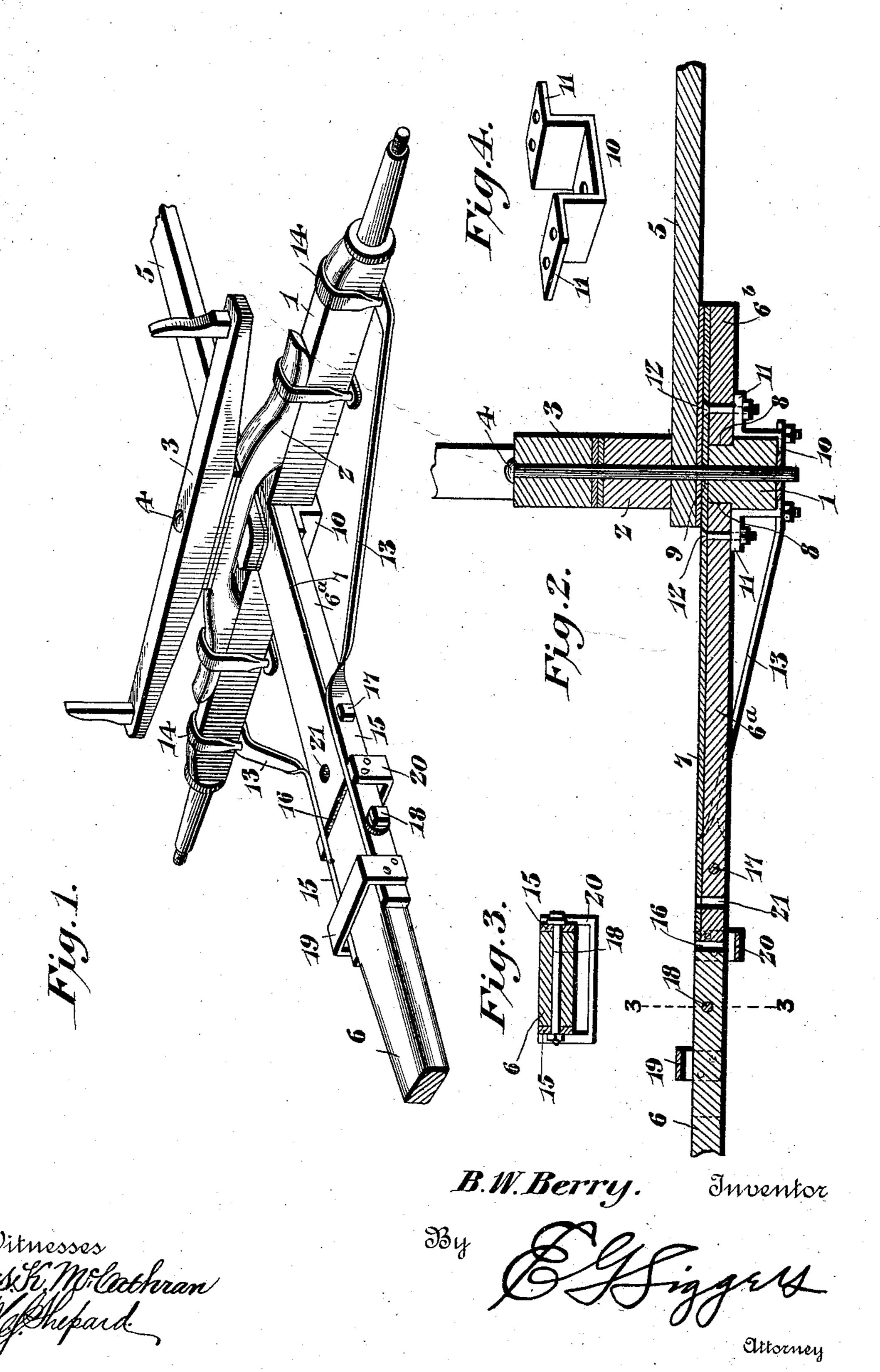
## B. W. BERRY. VEHICLE POLE.

(No Model.)

(Application filed June 12, 1902.,



## United States Patent Office.

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## VEHICLE-POLE.

SPECIFICATION forming part of Letters Patent No. 711,613, dated October 21,1902.

Application filed June 12, 1902. Serial No. 111,345. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN W. BERRY, a citizen of the United States, residing at Monticello, in the county of Jefferson and State of Florida, have invented a new and useful Vehicle-Pole, of which the following is a

specification.

This invention relates to vehicle poles or tongues, and has for its object to provide an improved rigid connection between the rear end of the tongue or pole and the front axle of a vehicle and to facilitate the application and removal of the pole. It is also designed to permit of a vertical swinging movement of the outer end portion of the pole, so as to obviate strain upon the draft-animals when the vehicle is passing over uneven ground or obstructions, and also to limit this movement, so as to obviate undue looseness of the tongue.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the

advantages of the invention.

In the drawings, Figure 1 is a perspective view showing the present form of tongue or pole connected to an axle. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a detail cross-sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail perspective view of the connecting-bracket between the rear end of the pole and the axle.

Like characters of reference designate corresponding parts in all the figures of the draw-

ings.

Referring to the accompanying drawings, 1 designates an ordinary front axle, upon which is supported the usual sand-bolster 2 and the body-bolster, through all three of which passes an ordinary king-bolt 4. The forward end of the reach 5 is inserted between the top of the axle and the bottom of the sand-bolster and is connected to these parts by means of the king-bolt. These parts are common and well known, and there-

fore may have any preferred form, as they have been shown to more adequately illustrate the construction and application of the 55 present device.

In carrying out the present invention the tongue or pole is formed in a comparatively long front member 6 and a short member 6<sup>a</sup>, of which the outer member is free to swing 60 vertically and the rear member is rigidly con-

nected to the axle.

As best illustrated in Fig. 2, the tongue member 6a comprises a front long section and a rear smaller section 6b, which sections are 65 rigidly connected by means of a metallic plate or strap 7 applied to the top of these sections and extending throughout the entire length thereof. The tongue-sections 6a and 6b are spaced at an interval, so as to lie at opposite 70 sides of the axle, and the front and rear sides of the latter are provided with notches or seats 8 for the snug reception of the respective ends of these sections, the plate or strap 7 being provided with an opening 9, located 75 midway between the tongue-sections and designed for the reception of the king-bolt. A substantially U-shaped bracket 10 embraces the lower side of the axle and has its opposite ends provided with outwardly-directed 80 ears 11, and bolts or other fastenings 12 pierce the strap 7, the respective pole-sections, and the ears 11, thereby rigidly connecting these parts in a simple and durable manner. The forward end of the tongue or pole member 6a 85 is connected to the opposite ends of the axle by means of inclined braces 13, which have their rear ends passed beneath the axle and connected thereto by clips 14. These braces are preferably formed by flat straps or bars 90 of metal, with their forward ends twisted so as to lie in vertical edgewise position and extended forwardly in parallel relation, as indicated at 15, so as to lie at opposite sides of the pole or tongue and overlap the joint 16, 95 between the members thereof. The pole-section 6a is rigidly connected to the braces by means of a transverse bolt 17 piercing the same, and the rear end of the member 6 is pivotally connected to the braces by means roo of a pivot-bolt 18, whereby the pole member 6 is capable of a vertical movement upon the bolt 18 as a pivotal support.

To limit the vertical swinging movement

of the pole member 6, there has been provided the oppositely-disposed substantially U-shaped metallic clips 19 and 20, which are riveted or otherwise rigidly secured to the 5 parallel portions of the braces and are arranged to lie one above and the other below the pole, with the clip 20 disposed so as to overlap the joint between the pole members, and each clip projected beyond the pole, so 10 as to permit of a swinging movement of the latter upon its pivotal support and at the same time to limit said movement.

In order that a draw-bar may be connected to the pole, the pole member 6a is provided 15 with a vertical opening 21, preferably located between the fastening 17 and the forward end of the pole member, so as to receive the

pivot-bolt of said draw-bar.

It will here be noted that the vehicle-pole 20 is made up of front and rear members, of which the member 6 is the front member, while the rear member is made up of the sections 6a and 6b, and said rear member is rigidly secured to the axle and also forms a sup-25 port for a draw-bar, whereby the latter is not affected by the pivotal movement of the front member.

From the foregoing description it is apparent that while the present form of pole or 30 tongue has a rigid connection with the front axle, so as to effectually control the same, it is also capable of a slight vertical swinging movement, so that the pole may give or yield when the vehicle is passing over uneven 35 ground, and thereby prevent strains upon the draft-animals. Moreover, the connection between the pole and the axle is such as to apply the draft directly to the axle and relieve the same from the king-bolt.

What I claim is— 40

1. The combination with an axle, of a tongue or pole formed in sections which lie in engagement with opposite sides of the axle, a plate or strap applied to corresponding sides of 45 the sections and connecting the same, and a bracket embracing the axle and connected to

the opposite pole-sections.

2. The combination with an axle having a king-bolt opening, of a tongue or pole having 50 opposite sections lying in engagement with the respective front and rear sides of the axle and in line with the king-bolt opening thereof, a plate or strap applied to the upper sides of the pole-sections and the axle and connect-55 ing said sections, the strap being provided with an opening registering with the kingbolt opening of the axle, and a bracket embracing the lower side of the axle and provided with upper terminal ears lying against 60 the under sides of the respective pole-sections, and fastenings piercing the connectingplate, the respective pole-sections and the ears of the bracket.

3. The combination with an axle, of a pole 65 or tongue formed in sections which lie in engagement with the opposite sides of the axle, a plate or strap passing across the axle and l

connecting the opposite pole-sections, a bracket embracing the opposite side of the axle and connected to the pole-sections, and 70 inclined braces extending between opposite ends of the axle and the forward end portion of the front pole-section.

4. A vehicle pole or tongue formed in front and rear members, of which the rear member 75 has a rigid connection with an axle and also forms a support for a draw-bar, and the front member has a vertically-swinging pivotal con-

nection with said rear member.

5. A vehicle tongue or pole formed in front 80 and rear members, of which the rear member has a rigid connection with an axle and also forms a support for a draw-bar, and the front member has a vertically-swinging pivotal connection with the rear member, and a stop car- 85 ried by one of these members for engagement with the other member to limit the vertical swinging movement of the front member.

6. A vehicle tongue or pole formed in front and rear members, of which the rear member 90 has a rigid connection with an axle and also forms a support for a draw-bar, and the front member has a vertically-swinging pivotal connection with the rear member, and a stop carried by the rigid member for engagement by 95 the swinging member to limit the movement thereof.

7. A vehicle pole or tongue formed in front and rear members, of which the rear member has a rigid connection with an axle, and the 100 other member has a vertically-swinging pivotal connection with the rear member, opposite braces carried by the rear member and overlapping the front member and a stop, carried by said braces and lying in the path of 105 the front tongue member to limit the movement thereof.

8. A vehicle pole or tongue formed in front and rear members, of which the rear member has a rigid connection with an axle, opposite 110 braces carried by the rear member and overlapping the front member, a pivotal connection between the front member and the braces, and a stop carried by the braces and lying in the path of the pivotal member.

9. A vehicle tongue or pole formed in front and rear members, opposite braces carried by the rear member and overlapping the front member, substantially U-shaped stop-clips carried by the braces and spanning opposite 120 sides of the front member, and a pivotal connection between the front member and the braces and lying between the clips.

10. The combination with an axle, of a tongue or pole formed in front and rear mem- 125 bers, of which the rear member is rigidly connected to the axle, braces extending from the axle to the front end portion of the rear pole member and provided with forward extensions embracing opposite sides of the front 130 pole member, a substantially U-shaped clip

carried by the brace extensions and overlapping the under side of the joint between the pole members, another inverted substantially

U-shaped clip carried by the outer end portions of the brace extensions and overlapping the front side of the outer pole member, and a pivotal connection between said outer pole member and the brace extensions and located between the clips.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in the presence of two witnesses.

BENJAMIN W. BERRY.

Witnesses:

T. M. Puleston,

R. C. PATCHIN.