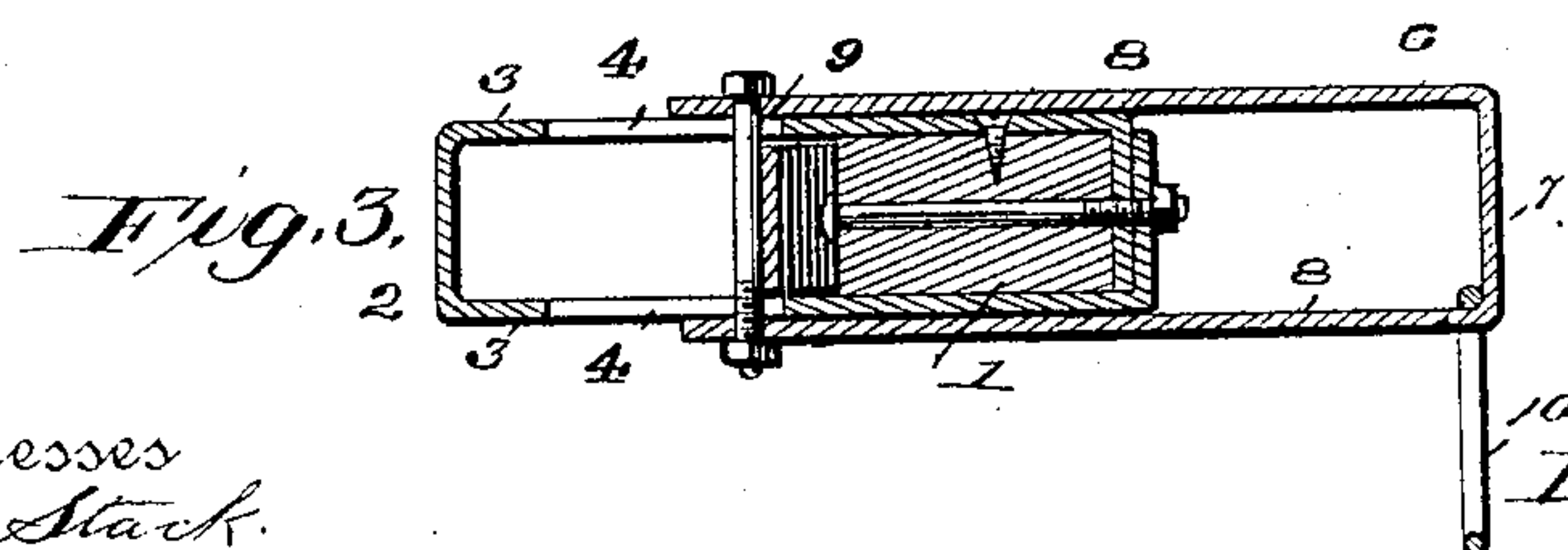
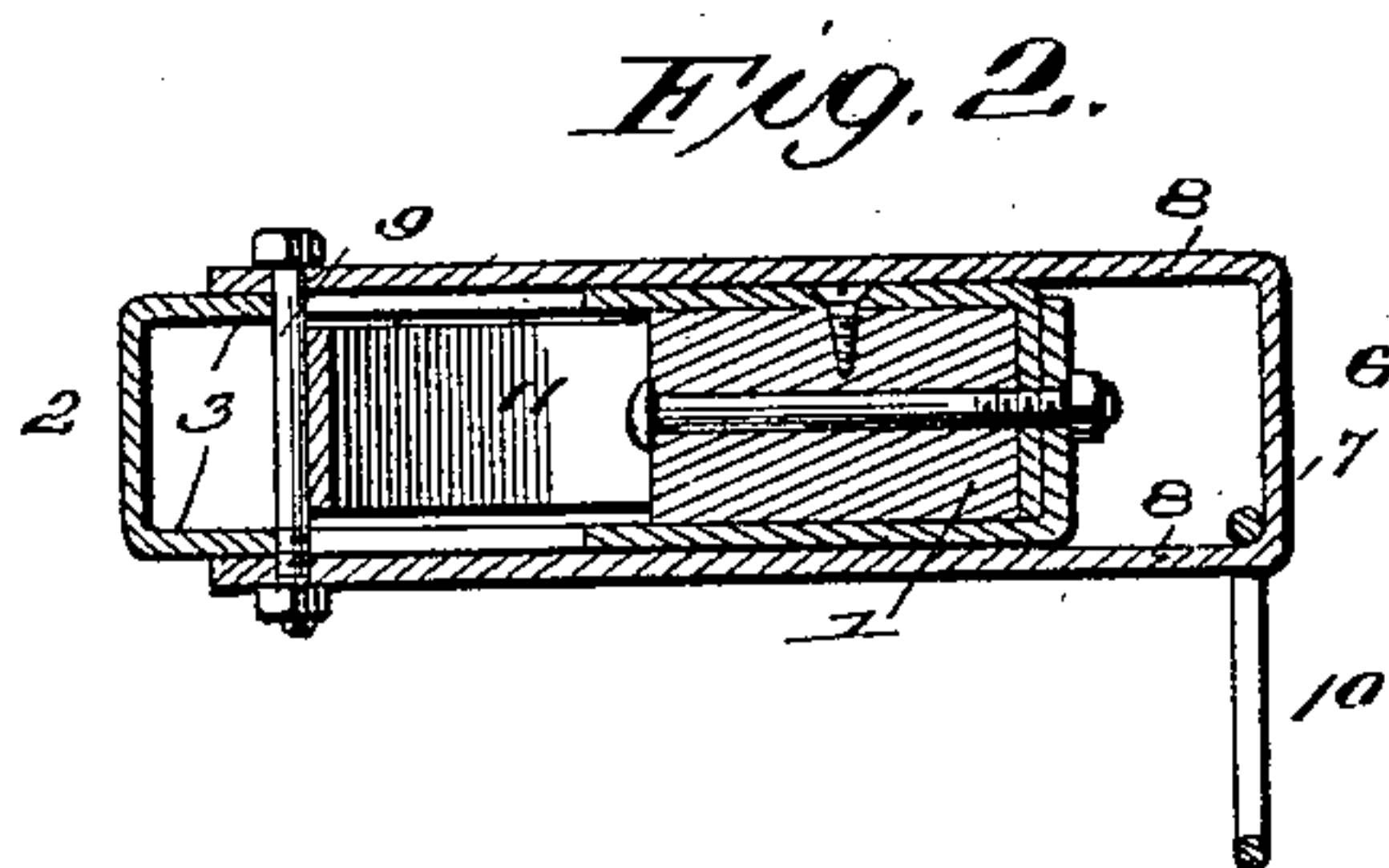
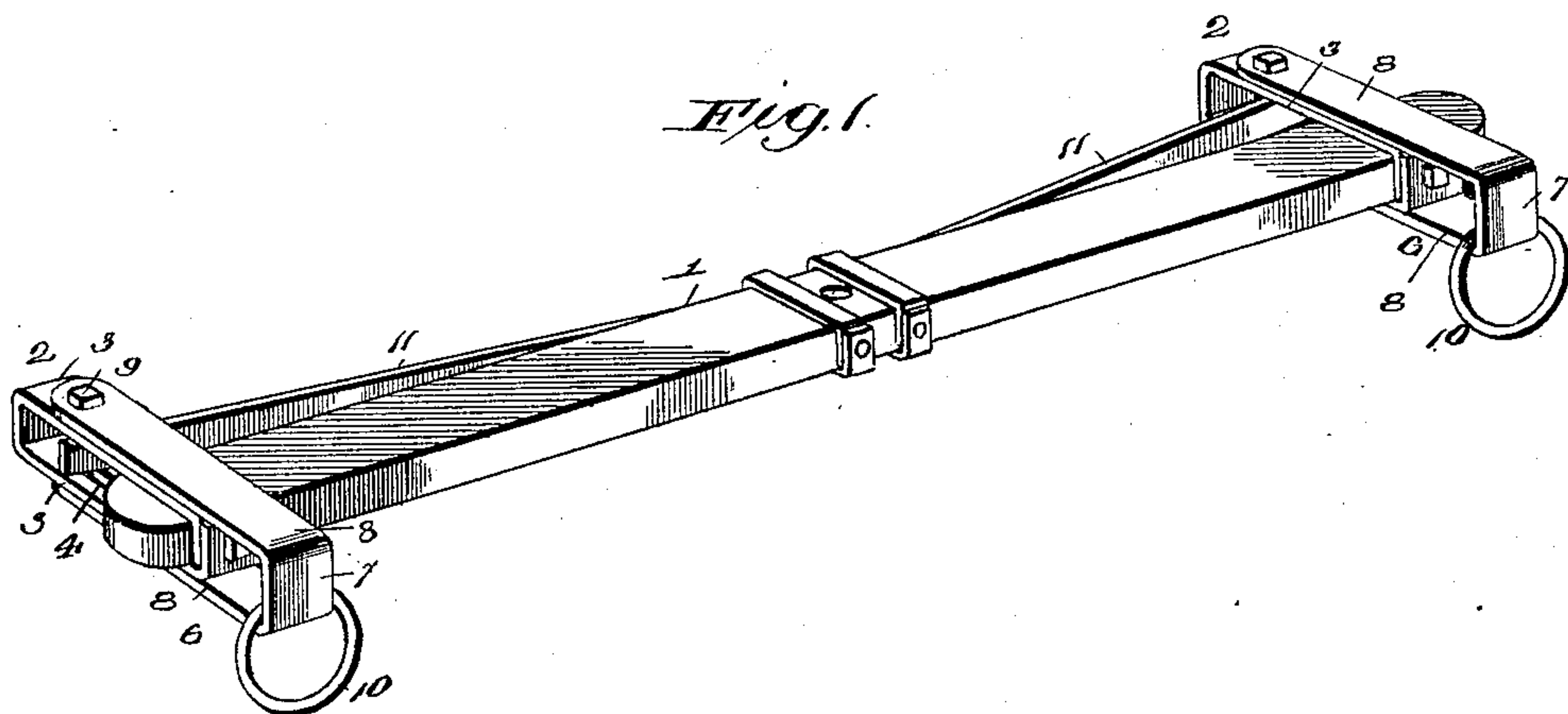


(No Model.)

D. L. MILLER.
DOUBLETREE.

No. 594,263.

Patented Nov. 23, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID L. MILLER, OF WILSON, KANSAS.

DOUBLETREE.

SPECIFICATION forming part of Letters Patent No. 594,263, dated November 23, 1897.

Application filed March 1, 1897. Serial No. 625,434. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. MILLER, a citizen of the United States, and a resident of Wilson, in the county of Ellsworth and State of Kansas, have invented certain new and useful Improvements in Doubletrees; and I do hereby 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 improvements in doubletrees; and the object of the same is to so form the tree that the sudden jar in starting heavy loads or when the wagon starts up a rise after passing down an incline is obviated.

The invention consists in the novel features of construction hereinafter fully described, claimed, and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a vertical section through the end of the doubletree, showing the parts in normal position. Fig. 3 is a similar view showing the position of the parts when the springs have been compressed by the forward movement of the arms to which the singletrees are pivoted.

Referring to the accompanying drawings, 1 designates the doubletree, which is pivoted at its center to the wagon, and secured to the ends of this bar are the transversely-extending frames or arms 2, which extend rearwardly from the doubletree. These frames are composed of the upper and lower arms 3, which are slotted at 4, and the frames 6 are composed of the end walls 7 and the upper and lower arms 8. These arms 8 are adapted to work on the upper and lower sides of the frames 2, the pins 9 connecting the arms and extending through the slots in the frames 2, said frames extending forwardly from the doubletree. In the ends of these frames 6 are the rings 10, to which the singletrees may be attached.

Secured to the rear side of the bar 1 are the leaf-springs 11, which extend between the

arms 3 of the frames 2 and press against the pins 9. These springs serve to normally hold the frames 8 rearward, with their connecting-pins bearing against the rear end walls of the slots 4, as will be understood.

By means of the construction set forth the jar of starting a wagon heavily loaded is obviated, as the pull is gradual through the medium of the springs; also, when the bottom of a hill is reached and the wagon starts up an incline the jar thus occasioned will be obviated by the construction set forth.

It will be understood that my invention may be applied to a singletree or a doubletree, as desired, the same being adapted for either construction.

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

1. The combination of a pivoted bar, rearwardly-extending arms secured to its ends, said arms being slotted, forwardly-extending arms movable upon said rearwardly-extending arms, pins connecting said arms, said pins movable in the slots of the rearwardly-extending arms, and springs secured at one end to the pivoted bar and at their opposite ends adapted to extend between the rearwardly-extending arms and engage the pins of the movable arms, substantially as described.

2. The combination of the doubletree, of rearwardly-extending slotted frames, forwardly-extending clevises having pins which extend through the slots of the frames, where by the clevises are movable thereon, and leaf-springs secured at their inner ends to the doubletree and at their outer ends projecting in the frames and bearing upon the pins of the clevises, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

DAVID L. MILLER.

Witnesses:

M. L. MEEK,
J. S. DELLINGER.