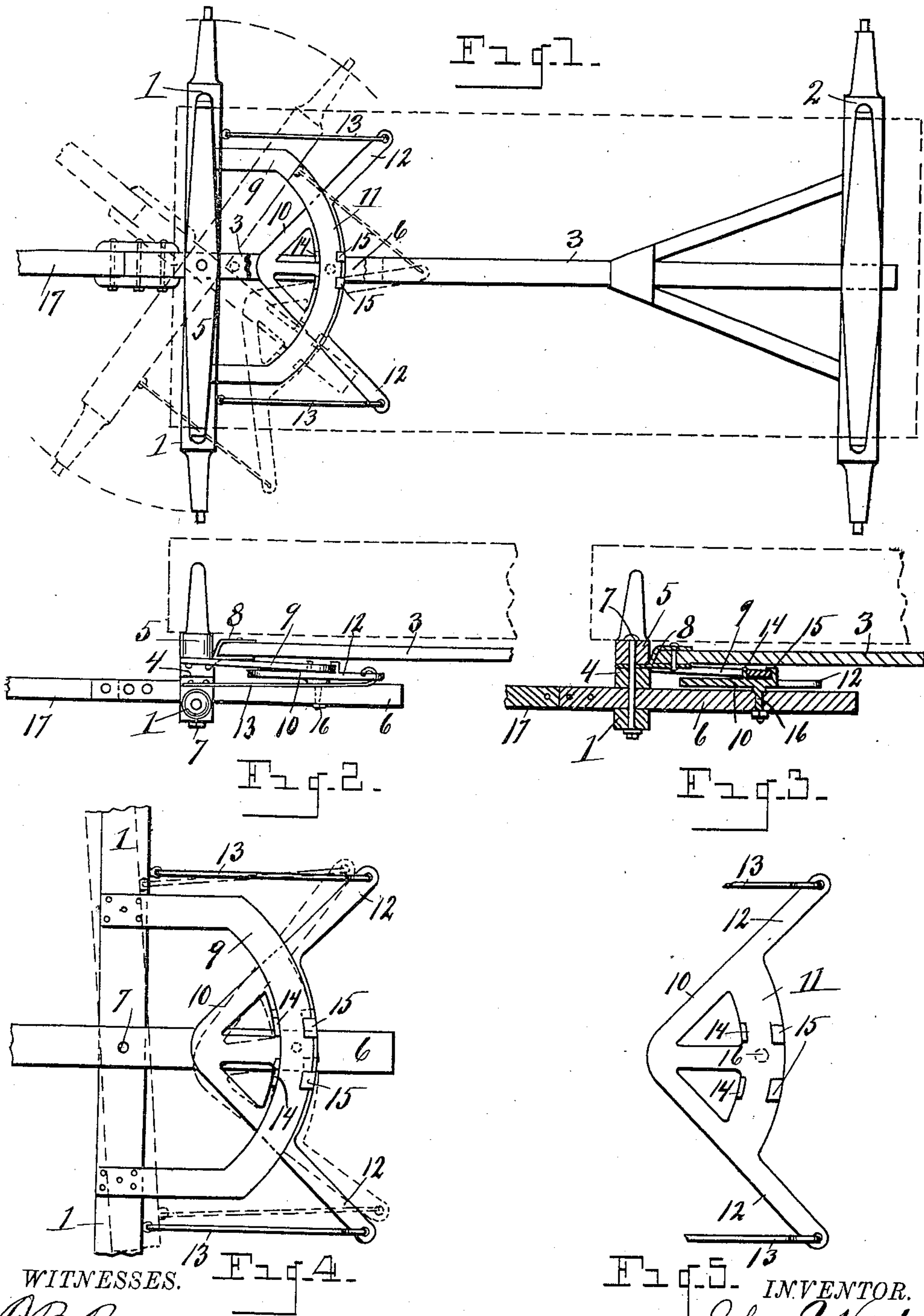


No. 654,251.

Patented July 24, 1900.

J. J. HICKS.
WAGON RUNNING GEAR.
(Application filed Dec. 1, 1899.)

(No Model.)



WITNESSES.

O. B. Baruziger
C. E. Edna Joslin

INVENTOR.

John J. Hicks
By *R. B. Wheeler & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN J. HICKS, OF LITTLE ROCK, ARKANSAS, ASSIGNOR OF ONE-HALF TO
JAMES GARABALDI, OF SAME PLACE.

WAGON RUNNING-GEAR.

SPECIFICATION forming part of Letters Patent No. 654,251, dated July 24, 1900.

Application filed December 1, 1899. Serial No. 738,874. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. HICKS, a citizen of the United States of America, residing at No. 1822 West Seventh street, Little Rock, in the county of Pulaski, State of Arkansas, have invented certain new and useful Improvements in Wagon Running-Gear; 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to wagon running-gear; and it consists in the construction and arrangement of the parts hereinafter fully set forth particularly in the claims.

The object of the invention is to provide simple and efficient means, in connection with the running-gear of a wagon, whereby the wagon-tongue is locked from swinging laterally against the horses when either of the wheels of the front axle drop into a depression or strike an obstruction, the arrangement being such, however, that the tongue has control over the movement of the front axle, so that the direction of the course of the vehicle may be changed by the swinging of the tongue, as commonly practiced.

The above object is attained by the construction and association of the parts illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the running-gear of a wagon involving my invention. Fig. 2 is a side elevation of the forward end of the running-gear. Fig. 3 is a central longitudinal section of Fig. 2. Fig. 4 is an enlarged plan view in detail of a portion of the forward end of the running-gear with the bolster removed, showing the axle-locking mechanism. Fig. 5 is a plan view of the locking-plate.

Referring to the characters of reference, 1 and 2 designate the front and rear axles, respectively. 3 designates the coupling-pole which unites said axles. Resting upon the front axle is a false bolster 4, which is made fast thereto. Upon the false bolster is the

pivoted bolster 5, which supports the forward end of the wagon-bed. Passing between the axle and the false bolster is an inwardly-extending tongue-section 6, which is pivoted in place by the pin 7, passing through the bolsters 5 and 4 and through the axle 1. The forward end of the coupling-pole 3 is provided with a socket-plate 8, which receives said pole and which is provided with a projecting end that lies between the bolsters 4 and 5 and through which the pin 7 also passes. The purpose of the false bolster 4 and the socket-plate 8 is to raise the forward end of the pole 3, so as to afford sufficient space between said pole and the tongue-section 6 for the other working parts.

A curved or circular bar 9 is attached at its opposite ends to the under face of the bolster 5. Said bar may be semicircular or it may describe the segment of a circle, as shown in the drawings. This bar being attached to the bolster at its forward ends has little or no movement. Lying upon the rearwardly-extending end of the tongue-section 6 is a locking-plate 10, having a portion 11, curved concentric with the curved bar 9 and with the axis of oscillation of the tongue-section 6. The locking-plate 10 is provided with the diverging arms 12, to the outer ends of which are attached the rear ends of the coupling-rods 13, the forward ends of said rods being secured to the axle. The circular portion of the bar 9 lies upon the curved portion 11 of the locking-plate, which is provided with the opposed lugs 14 and 15, projecting from opposite edges thereof and adapted to engage the margins of the curved portion of the bar 9. Projecting from the under face of the locking-plate 10 is a bolt 16, which passes through the tongue-section 6 and pivotally unites said section to the locking-plate. Attached to the outer end of the tongue-section 6 is the tongue proper, 17, which is united to said tongue-section in any suitable manner.

By means of the arrangement above described it will be seen that upon the swinging of the tongue 17 from side to side the tongue-section 6 will be moved upon its pivot 7 and the locking-plate 10, attached to the inner end thereof, will be caused to slide upon the curved portion of the bar 9, permitting the

front axle to be turned with the swinging of the tongue, as clearly shown by dotted lines in Fig. 1. Should either of the front wheels of the wagon encounter an obstruction of any character, the tendency of said axle to turn upon the pin 7 will push upon one of the rods 13 and pull upon the other, thereby turning the locking-plate 10 slightly upon the pin 16 and cramping the curved portion of the bar 9 between the lugs on said locking-plate, whereby said plate is held from moving upon the curved portion of said bar 9, and the forward axle is locked against movement upon the pivot-pin 7, thereby preventing such movement of the axle from swinging the tongue with violence against the horses. The operation of cramping the locking-plate upon the circle-bar 9 is shown by dotted lines in Fig. 4. It will therefore be seen that the tongue has perfect control over the axle in turning the wagon in either direction, but that the axle cannot move independent of the movement of the tongue.

The operation of this device is the same whether backing up or going ahead and enables the wagon to be operated as freely in every respect as in any ordinary construction.

Having thus fully set forth my invention, what I claim is—

1. The combination with the running-gear of a wagon, of a tongue-section attached to the forward axle and having an inwardly-extending end carrying a locking-plate, a bolster mounted upon the axle and having a circle-bar attached thereto, means for permit-

ting said locking-plate to slide upon said circle-bar by the movement of the tongue and means for locking said plate to said circle-bar to prevent a movement of the axle independent of the tongue.

2. The combination with the running-gear of a wagon, of a tongue-section extending rearwardly from the front axle and adapted to swing with the movement of the axle, a bolster mounted upon the forward axle, a circle-bar attached to said bolster, a locking-plate carried on the inner end of said tongue-section, having means of engagement with said circle-bar and adapted to slide thereon and rods attached to the axle and to the outer ends of said locking-plate.

3. The combination with the running-gear of a wagon, the tongue-section pivoted on the forward axle and having a slight movement independent thereof, the inner end of said tongue-section carrying a locking-plate pivoted thereon and adapted to move therewith, a bolster upon the axle, a circle-bar attached to the bolster and lying upon said locking-plate, projections on said locking-plate engaging said circle-bar and connecting-rods uniting the extending ends of said locking-plate with the axle.

In testimony whereof I sign this specification in the presence of two witnesses.

JOHN J. HICKS.

Witnesses:

J. B. CROSSWELL,

T. D. JOHNSON.