No. 646,857.

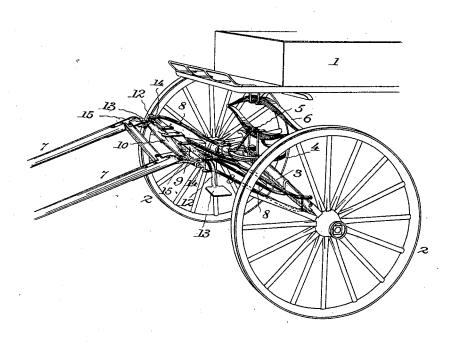
Patented Apr. 3, 1900.

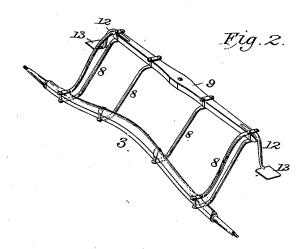
## J. MOCK, Sr. Running Gear for Wagons.

(Application filed Nov. 2, 1899.)

(No Model.)

Fig.I.





Witnesses The Drug P Helengeworth Lo B. Bull. Merby Hock SE, MINTAMANA Altorneys

## UNITED STATES PATENT OFFICE.

JACOB MOCK, SR., OF LOUISVILLE, KENTUCKY.

## RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 646,857, dated April 3, 1900.

Application filed November 2, 1899. Serial No. 735,607. (No model.)

To all whom it may concern:

Be it known that I, JACOB MOCK, Sr., a citizen of the United States of America, residing at 1501 Story avenue, Louisville, in the county 5 of Jefferson and State of Kentucky, have invented a new and useful Improvement in Running-Gear for Wagons, of which the following is a full, clear, and exact description, reference being had to the accompanying to drawings, and to the numerals of reference marked thereon.

My invention relates to an improvement in running-gear, more especially adapted to a light delivery-wagon ordinarily known as a "three-spring" wagon, the driver of which often mounts to and alights from his seat by means of the step, thereby placing his weight upon the horse, the result of which frequently-repeated actions become wearisome 20 and injurious to the animal; and it consists in details and combinations of details of construction, as hereinafter more particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of the front portion of an ordinary three-spring delivery-wagon to which my invention is applied. Fig. 2 is a detail.

In the drawings, 1 represents a part of the o body of the wagon.

2 2 are the front wheels, mounted upon the ordinary front axle 3, which is combined with the fifth-wheel or slide 4 in the usual manner by means of the king-bolt 5.

6 is the front spring. The shafts of the wagon are represented by 7.

88 indicate strong braces of Norway iron, there being two double braces near each end of the axle and two single braces at or near o its center. (See Fig. 2.) The inner ends of the braces 8 are secured removably to the axle by bolts or any other suitable means which will suggest themselves to the skilled wagonmanufacturer. To the outer ends of the braces 8 is similarly attached a stout bar of wood 9, to the center of which is secured an iron to which the singletree 10 is suitably fastened, and projecting from each end of the bar 10 is a support 12, to which is secured an o ordinary step 13. To each end of the bar 9 are fastened clips 14, of any approved construction, to which the thills 15 of the shaft 7 are attached in the usual manner.

The braces 8 are sufficiently rigid to hold the bar 9 in a permanent position and to sus- 55 tain the weight of the driver as he steps to or from his seat, using either of the steps 13, and also to prevent any twisting or tipping of the bar 9 under the weight of the driver. The bar 9, it will therefore be seen, serves the 60. triple purpose of supporting the shafts, the singletree, and the steps.

This invention, it will be seen, takes the place of the ordinary long heel-shaft fastened to the axle by clips, and by its use the weight 65 of the driver is taken from the horse, the shafts being used only as a guide, and when the driver steps on or off the wagon his weight is indirectly transferred to the front axle 3 instead of being placed directly on the back 70 of the horse.

I am aware of prior inventions in which is found the main object here in view-viz., the removal from the horse of the weight of the driver in stepping to and from his seat; but 75 it is believed my invention effects this result in a simpler, cheaper, and more convenient manner than heretofore practiced, and it is evident that it can be readily attached to any ordinary three-spring wagon and that the 80 strain or pull is entirely upon the bar 9.

I am not aware that heretofore an element the equivalent of the bar 9 has been rigidly yet removably attached to the axle and carrying the singletree and the steps.

Having thus described my invention, I

In a wagon of the class described, the combination of the front axle 3, the bar 9 adapted to receive a singletree, double end braces 88 90 attached to the front axle and extending upwardly and forwardly therefrom, intermediate and similarly-arranged braces 8, said series of braces forming a rigid connection between the front axle 3 and the bar 9, a step 95 or steps connected to said bar, a clip or suitable attachment near each end of the bar, and shafts connected to said clips, substantially as set forth.

In testimony whereof I hereunto set my 100 hand and seal.

JACOB MOCK, SR. [L. S.]

Witnesses: JACOB MOCK, Jr., WILLIAM GNAU.