

(No Model.)

R. D. SCOTT.
ROAD CART.

No. 423,087.

Patented Mar. 11, 1890.

Fig-1-

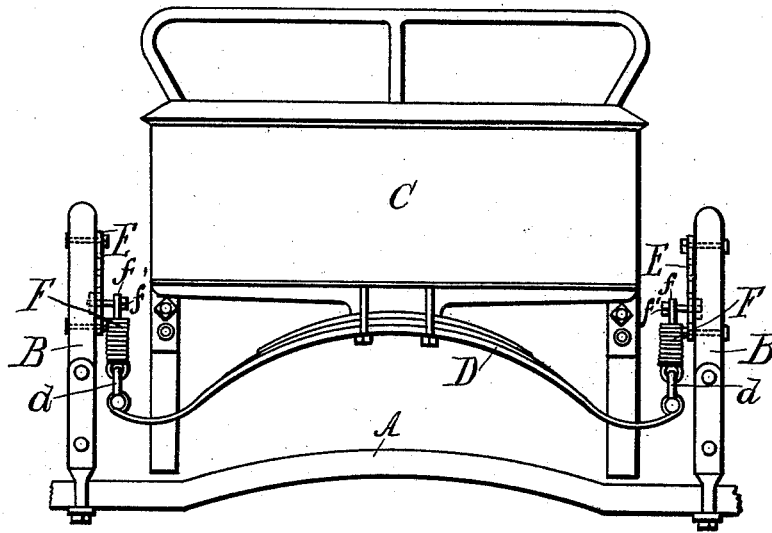
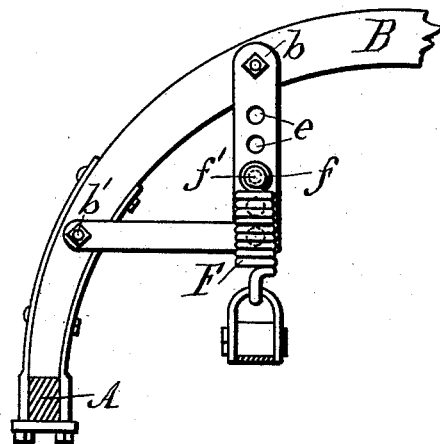


Fig-2.



WITNESSES
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ROAD-CART.

SPECIFICATION forming part of Letters Patent No. 423,087, dated March 11, 1890.

Application filed August 26, 1889. Serial No. 321,993. (No model.)

To all whom it may concern:

Be it known that I, ROBERT D. SCOTT, a citizen of the United States, residing at Pontiac, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Road-Carts; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object to produce a road-cart in which the spring action shall be easy and soft, and in which, when the spring has been used for some time and has lost its resiliency somewhat, this loss may be easily and quickly compensated for.

It consists of a combination of devices and appliances hereinafter described and claimed.

In the drawings, Figure 1 is a rear elevation of my cart. Fig. 2 illustrates parts in detail.

In carrying out my invention, A represents the axle, B the shafts, and C the crate or body, of my cart.

D is a semi-elliptic spring joined at its middle to the crate or body of the cart. The seat-bars of the body or the forward end of the body may be joined to or connected with the shafts in any suitable manner, this forming no part of my invention.

E are suitable hangers rigidly attached to the shafts at the horizontal portion *b*, and, descending, are bent backward to again engage at *b'* with the shafts where they are attached to the axle. These hangers are provided with a series of holes *e*.

F are coil-springs engaged at their lower ends to the ends of the semi-elliptic spring by clevises *d*. The upper end of each coil-spring is turned to form an eye *f*, and this eye engages with an eyebolt *f'*, which in turn passes through an orifice *e* in the hanger, and is secured by a nut. By thus engaging the upper end of the coil-spring to the hanger the spring is held free from contact with the hanger and is allowed to swing freely in any direction without friction. The provision of

the coil-spring on each end of the semi-elliptic spring gives a soft and easy motion to the body, and it prevents any torsional twisting of the semi-elliptic spring due to the depression of the body. This has been a serious objection heretofore, since the semi-elliptic spring, being engaged rigidly to the body, would, when the body was depressed, be inclined to follow the motion of the body and describe a circle. The double connection of the clevis *d* and coil-spring F between the end of the semi-elliptic spring and the hanger allows the ends of the semi-elliptic spring to adjust themselves readily to this twisting tendency, and thus save the wear on the semi-elliptic spring very materially. The provision of two or more of the orifices *e* enables the cart to be adjusted at any time to either a one-man or a two-man cart, and it also permits of the taking-up at any time of slack due to the loss of resiliency on the part of either the semi-elliptic or the coil springs.

It will be observed that at the end of the spring is a loose clevis, and loosely linked therewith is the coiled spring, which latter is in turn loosely engaged with the sustaining-bolt. Thus the leaf-spring is engaged with the bolt by two links, or what I would term a "double-link connection," one part of which is in this case the coiled spring. By thus connecting the semi-elliptic spring with its support by the two links the eyes of which engage each other at right angles, thereby reducing the friction to a minimum, it gives to the construction at the point where the links engage each other greater freedom of action and flexibility than is possible where but a single link or clevis intervenes between the semi-elliptic spring and the bolt or support or where there are employed two hangers which are engaged with each other in such a manner that their sides shall rub together, thus causing friction and preventing free action.

What I claim is—

In a road-cart, the combination, with the crate or body and the shafts, of a semi-elliptic spring engaged at its middle to the crate or body, suitable hangers rigidly engaged to

the shafts and provided with a series of orifices, and coil-springs united at their upper ends to the hangers by bolts, which hold them out of contact with the hangers, and united
5 at their lower ends with the ends of the semi-elliptic spring by suitable clevises, substantially as described.

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

ROBERT D. SCOTT.

Witnesses:

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