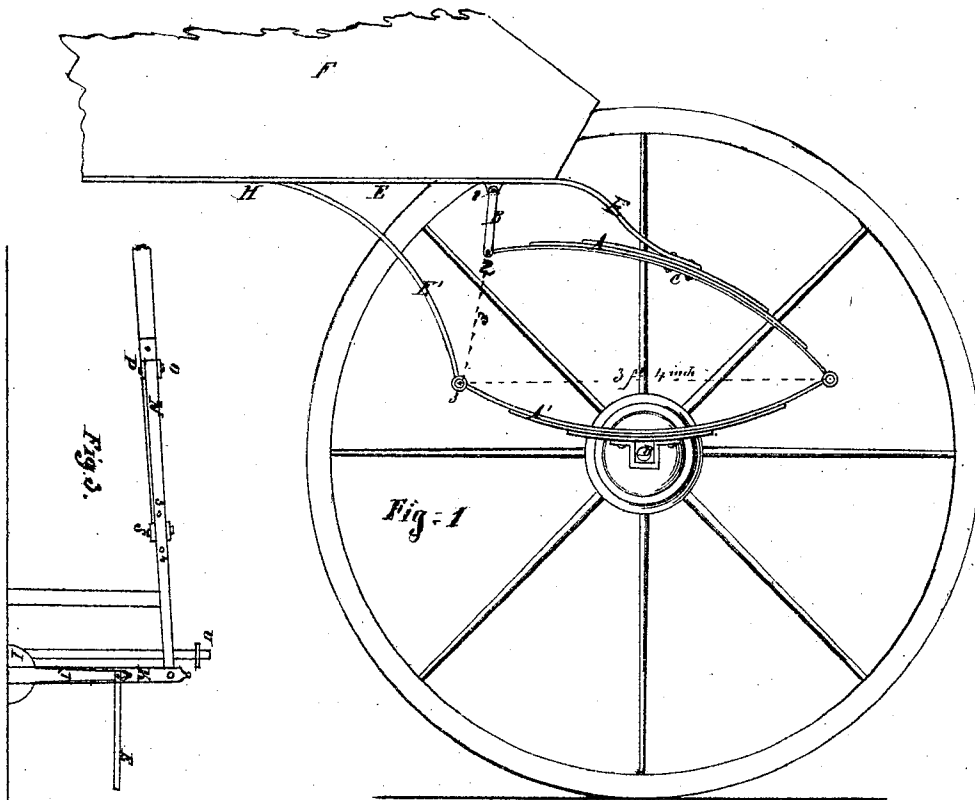
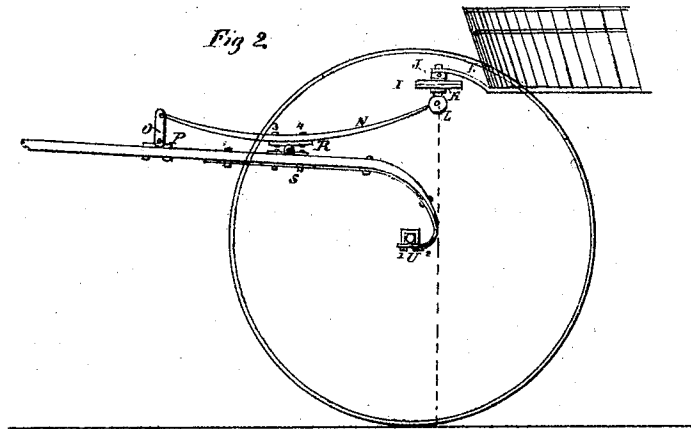


CYRUS W. SALADEE.

Improvement in the Application of Springs to Pleasure Vehicles.

117,819.

Patented August 8, 1871.



Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

CYRUS W. SALADEE, OF ST. CATHARINE'S, CANADA.

IMPROVEMENT IN SPRINGS FOR VEHICLES.

Specification forming part of Letters Patent No. 117,819, dated August 8, 1871.

To all whom it may concern:

Be it known that I, CYRUS W. SALADEE, of St. Catharine's, in the Dominion of Canada, have invented certain new and useful Improvements in the Application of Springs to Pleasure Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates in its application to that class of wheeled vehicles whose bodies are suspended upon the running-gear without perch, and to what is known as platform-springs.

Figure 1 in the drawing represents the hind end, and Figs. 2 and 3 the front part of an ordinary buggy with my arrangement of springs attached. The drawing, Figs. 1 and 2, is a side elevation, and Fig. 3 a top view of Fig. 2, and shows clearly the application and arrangement of my invention without the use of any other view.

A and A' is an ordinary elliptic spring with one joint disconnected and drawn apart until each half takes the position shown. The lower half of this elliptic A' is clipped to the axle D by two bolts, as shown, and the upper half A is raised up in front to the desired height, and is connected to the stirrup B by the bolt 2, while the upper end of this stirrup B is connected to an eye which is formed solid with the body-loop E and E' by means of the bolt 1; and the body-loop E extends to the center of the upper half of the spring, and is rigidly bolted thereto at C. The lower front end of the spring is pivoted to the brace E' by the bolt 3. The upper end of this brace, as shown, is formed solid with the body-loop—in fact, is a branch of the body-loop proper, though it may, if preferred, be attached to the under side of the body-loop at H with bolts. The hind ends of the springs remain connected, as seen at 5.

This brace E' may, if desired, take the position of the dotted line 3, Fig. 1, the upper end of which can be hinged to the end of the upper half of the spring at 2, and operate in combination with the stirrup B. Also, the upper end of the stirrup B may be jointed to the end or under side of a cross-bar attached to the bottom of the body for that purpose. So, also, at C there may be a cross-bar secured to the spring, and the body-loop E bolted thereupon in place of the spring, as now seen in the drawing.

I will here state that this arrangement of platform-spring is equally applicable to the front axle, with a slight modification in the brace E' and the stirrup B.

I will further state that where springs are manufactured expressly to be used in the manner here shown there might be adopted a different form or shape to suit the fancy of the manufacturer, and the upper half of the spring might be made of a solid piece of iron as a substitute for the spring, if desirable.

Fig. 2 is a side elevation of the front end of a buggy, and clearly showing the manner of securing and operating upon each side of the shafts or thills the single or half-elliptic springs. The spring N is hinged to the shaft or thill at S, at or near the center of the spring. The outer end of the spring is secured to the stirrup O and to the thill at P. The inner end of the spring is hinged to the cross-bar K (see Fig. 3) at L. On the top of the cross-bar K I place the fifth-wheel I, and on top of this the spring-bar J, (see Fig. 3,) and to which latter the front end of the body is secured. The rear ends of the thills are rigidly secured to the axle, as shown at U, Fig. 2, and the up-and-down movement of the thills is secured by means of the joint at L.

I will here state that the stirrup B, seen in Fig. 1, may also be used to advantage in connection with the closed ends of elliptic springs, and that I so intend using it in all cases where I use elliptic springs with both ends joined as in the ordinary way.

I claim as new, of my invention, and which I desire to secure by Letters Patent—

1. Elliptic springs, when applied to vehicles and so arranged and operating as to leave the one end jointed together and the other end unjointed, and the said dislocated ends operating independently of each other, substantially as shown and described.

2. The upper half of the spring A or its equivalent, in combination with the body-loop E (or bottom of the body F) and stirrup B, substantially as and for the purpose shown and described.

3. In combination with the devices in the second claim, the main brace E', as and for the purpose set forth.

4. The stirrup B, in combination with the end

of elliptic springs and the body F, substantially as and for the purpose set forth.

5. Broadly securing and operating the front springs of vehicles to the thills or pole of the same, in the manner and for the purpose substantially as shown and described.

In testimony that I claim the above-described

improvements in the application of springs to pleasure vehicles I have hereunto signed my name this 10th day of June, 1871.

CYRUS W. SALADEE.

Witnesses:

P. L. HOOKER,

ROBT. MORRISON.