

(No Model.)

G. F. THOMPSON.

SPRING WAGON.

No. 305,643.

Patented Sept. 23, 1884.

Fig. 1.

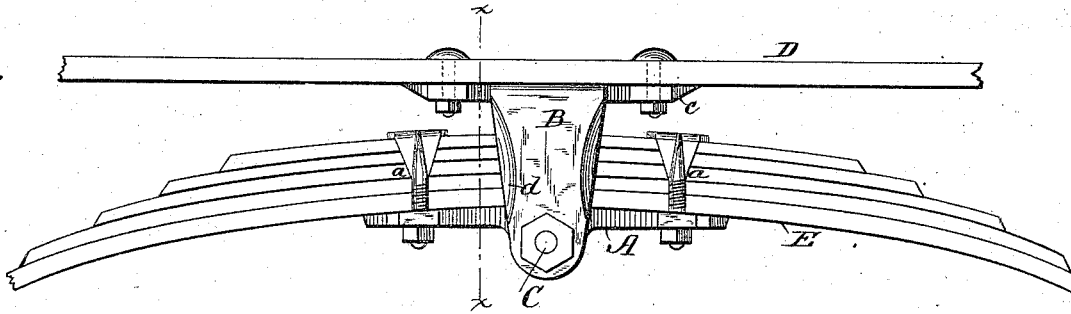


Fig. 2.

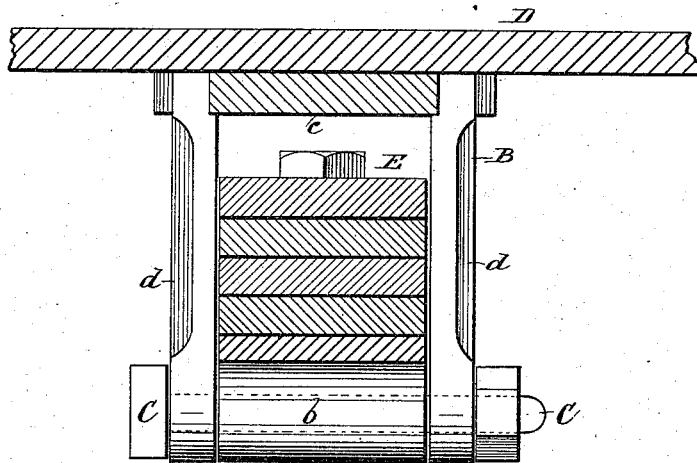
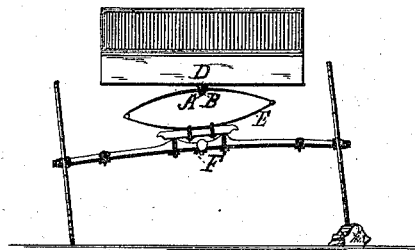


Fig. 3.



WITNESSES:

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GEORGE F. THOMPSON, OF OSHKOSH, WISCONSIN.

SPRING-WAGON.

SPECIFICATION forming part of Letters Patent No. 305,643, dated September 23, 1884.

Application filed February 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. THOMPSON, of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Buggies and Spring-Wagons; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement upon the means heretofore patented—as, for instance, by Brittan in 1839 and by Davis and Davis in 1879—for preserving the bodies of vehicles which employ front transverse elliptical springs from undue lateral oscillation when the wheels pass over irregularities of surface, and thereby avoid torsional strain upon such springs and other parts of the vehicle; and my invention therein lies in the particular means employed by me to make such devices more substantial and durable and more efficient in use, such devices consisting, mainly, in a strong plate firmly secured to the under side of the upper branch of the spring by clips at the ends of the plate, which embrace the spring, said plate having also a dependent lug through which a bolt, passing also through dependent arms of a clip secured to the front of the vehicle or its frame, serves to pivot the front of the vehicle to the spring at a point below its upper branch, all as more fully hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front view showing the coupling arranged as applied in practice. Fig. 2 is a vertical section on line *x x*, Fig. 1. Fig. 3 is a front view of a buggy provided with my improvement, one of the wheels being represented as passing over an obstruction.

The letters A B C indicate the coupling, D the buggy-body, and E the elliptic spring on which the front end of the latter is supported.

The spring is connected, in the usual way, with the front axle, F.

The coupling is formed of two parts—to wit, a plate, A, and a device, B—that may be termed a “clip-bearing.” Said plate A is secured by clips or bolts *a* to the under side of the top portion of the elliptic spring B, and

provided with a central lug, *b*, having a transverse hole to receive the bolt or pin C, that connects the two parts of the coupling.

The clip-bearing B is constructed, Fig. 1, of a plate, *c*, which constitutes its top portion, and two pendent parallel arms, *d d*, which are forged in one piece therewith. It is attached to the under side of the buggy-body D by bolts passing through the part *c*. Said arms *d d* embrace the top portion of the buggy-spring E and sides of plate A, to which latter they are attached by the bolt, as shown. Of the advantages which distinguish a coupling thus constructed from others of its class the following are the most important, and they will be more readily understood by reference to Fig. 3. First, the point of attachment or bearing between the buggy-body and spring being below instead of above the top portion of the latter, or, in other words, it being nearer the axle, the lateral oscillatory movement of the body is correspondingly less when one of the front wheels passes over an elevation or into a depression in the roadway, whereby the front axle is caused to assume an axial inclination different from that of the rear one; second, the torsional strain of the spring and the bolts that secure it to the axle is also less, since the endwise pressure of the buggy-body in one direction or the other exerts less leverage, and hence has less effect than would be the case if the point of connection between it and the spring were above the latter.

It is obvious that these mechanical results or advantages lessen the liability to accident, conduce to durability of the vehicle, and render it more comfortable for the occupants.

I am aware that a bifurcated clip or coupling device has been employed to connect the middle portion of a spring with the body of the vehicle, one end of said spring having a permanent or fixed attachment to the body; and I am also aware that a coupling device has been secured to the top of a spring and pivotally connected with the body of the vehicle, and I do not claim such combination and arrangement of parts; but

What I do claim as new, and desire to secure by Letters Patent, is—

In combination with the body or frame D of a vehicle, an elliptic transverse spring, a plate, A, provided with a dependent lug, b, clips *a a*, which firmly secure said plate to the
5 under side of the upper branch of said spring, a clip, B, firmly secured to the body or frame D, said clip having dependent arms *d d* piv-

oted at their lower ends to the lug *b* by a bolt, C, the several parts constructed and arranged substantially as described and shown.

GEORGE F. THOMPSON.

Witnesses:

F. W. HOUGHTON,
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