(No Model.)

E. C. TECKTONIUS.

VEHICLE SPRING.

No. 344,221. Patented June 22, 1886.

Fig. 1.

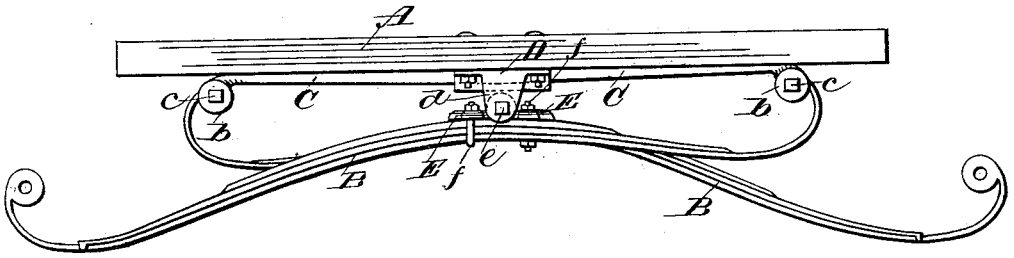
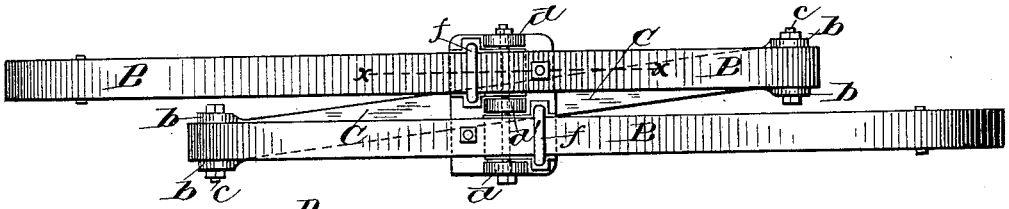


Fig. 2.



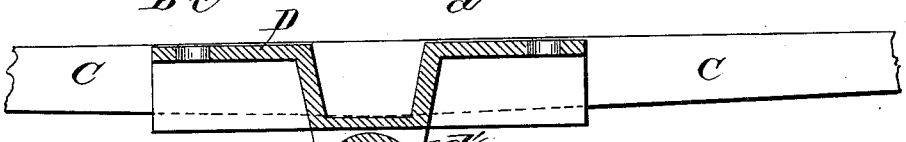


Fig. 3.

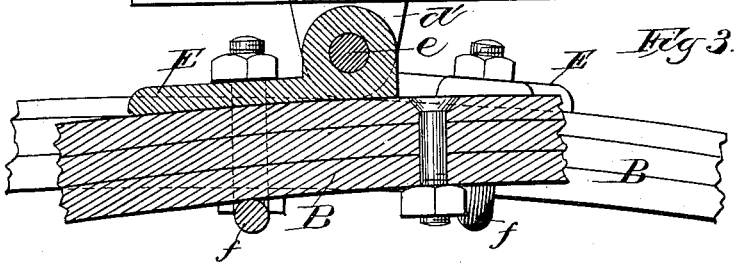


Fig. 5.

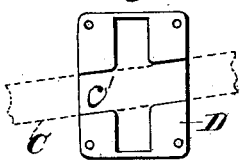
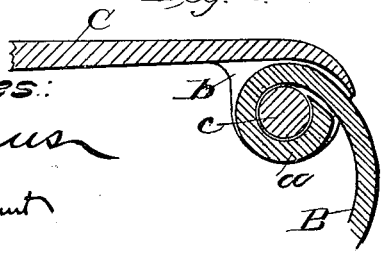


Fig. 4.



Witnesses:
E. J. Annus
N. E. Oliphant

Inventor:
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By Stout & Underwood
Attorneys.

UNITED STATES PATENT OFFICE.

EMIL C. TECKTONIUS, OF RACINE, WISCONSIN, ASSIGNOR OF ONE-HALF TO THE MITCHELL & LEWIS COMPANY, (LIMITED,) OF SAME PLACE.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 344,221, dated June 22, 1886.

Application filed October 10, 1885. Serial No. 179,473. (No model.)

To all whom it may concern:

Be it known that I, EMIL C. TECKTONIUS, of Racine, in the county of Racine, and in the State of Wisconsin, have invented certain new and useful Improvements in Vehicle-Springs; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to vehicle-springs, and is designed as an improvement on the vehicle-spring described in Letters Patent No. 321,663, dated July 7, 1885; and it consists in certain peculiarities of construction, as will be hereinafter described.

In the drawings, Figure 1 represents a front elevation of my improved spring, attached to the under side of a vehicle-body; Fig. 2, a plan view of the spring in an inverted position; Fig. 3, an enlarged sectional view of a portion of the spring, taken on line *x x*, Fig. 2; Fig. 4, a detail view of the spring-section and brace-connection, and Fig. 5 a plan view of the bracket.

A is the floor of a vehicle, and B B two semi-elliptic spring-sections, each of the latter having its inner end turned over to form an eye, *a*, adapted to fit between depending ears *b* at the ends of a horizontal brace-piece, C, pivotal connection being established between the said parts by means of bolts *c*, which latter pass through the ears *b* of the horizontal brace-piece, and the eyes *a*, at the inner ends of the spring-sections. I may use either light or heavy spring-sections, and they may consist of but one leaf or any number. The spring-sections B B cross each other and extend in opposite directions beyond the sides of the vehicle-body to be clipped to side bars.

D is a bracket, adapted to be secured to the under side of the vehicle-body at or near its center. This bracket has depending therefrom three lugs, *d d' d*, and between the lug *d'* and each lug *d d* is pivoted a leaf, E, on a bolt, *e*. These leaves extend in opposite directions, and to each of them is clipped, as at *f*, one of the spring-sections B, so that the weight of the body will be transmitted to the spring at the point where its sections cross each other, and cause said sections to yield without thrusting on the side bars, to which they may be attached, this construction of the lower portion of the bracket being similar to and for the purposes set forth in the patent above named.

In my present form of bracket I extend the head, or that portion which comes against the bottom of the vehicle-body, so as to permit of an oblique central recess, C', being formed therein to receive the horizontal brace-piece C, which latter unites the spring-sections B B.

By having the inner ends of the spring-sections united to the horizontal brace-piece and to bracket D, adapted to receive said brace-piece, the parts can be readily secured to the vehicle-body at one operation without the employment of other fastenings than those required for said bracket, and at the same time connection is established at a point where the strain is the least.

By the above-described construction of the spring and the manner of connecting it to the vehicle-body I not only secure a pivotal connection between the spring-sections at their crossing-points and the center of the vehicle-bottom, but also unite their inner ends, so as to give them a pivotal bearing independent of direct attachment to said vehicle body, thus insuring a perfect working of the spring regardless of any sudden wrenching or unequal loading of the vehicle, and at the same time secure a more equal action than is the case where the inner ends of the spring-sections are directly clipped to the bottom of the vehicle.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A vehicle-spring consisting of two semi-elliptic sections crossing one another, and a horizontal brace-piece pivotally secured to the inner ends of said spring-sections, in combination with a bracket recessed in its upper portion or head to receive the horizontal brace-piece, substantially as and for the purpose set forth.

2. A vehicle-spring consisting of two semi-elliptic sections crossing one another, and a horizontal brace-piece pivotally secured to the inner ends of said spring-sections, in combination with a bracket having a recessed head to receive the said brace-piece, and pivotal leaves adapted to be secured to the spring-sections, substantially as and for the purpose set forth.

3. A vehicle-spring consisting of two crossed

semi-elliptic sections pivotally connected at their inner ends to a horizontal brace-piece, and having their outer ends extended in opposite directions beyond said brace-piece, in combination with a bracket having a recessed head to receive the horizontal brace-piece of the spring, and provided with leaves pivoted on a bolt passing through the leaves and depending lugs on said bracket, said leaves extending in opposite directions and each clipped to one of the spring-sections, substantially as and for the purpose set forth.

4. The combination, with a vehicle-body, of a spring consisting of two semi-elliptic sections pivotally connected at their inner ends to a horizontal brace-piece, a bracket having a recessed head to receive the horizontal brace-piece, and oppositely-extended leaves pivotally connected to this bracket, and each leaf clipped to one of the spring-sections on opposite sides of the center of said bracket, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

EMIL C. TECKTONIUS.

Witnesses:
H. G. UNDERWOOD,
N. E. OLIPHANT.