

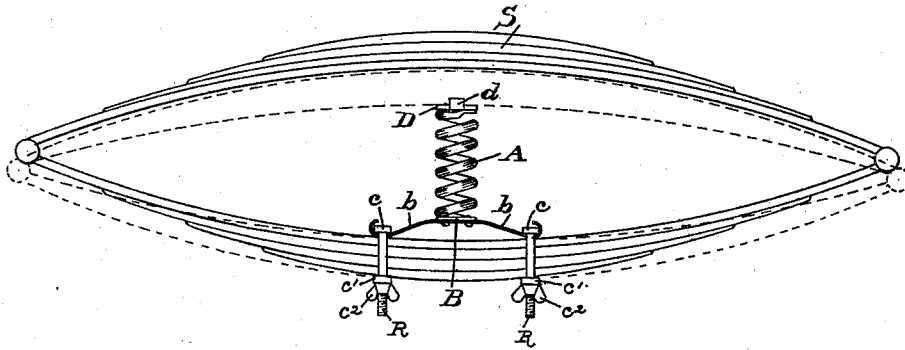
(No Model.)

T. B. MAYELL.  
VEHICLE SPRING SUPPORT.

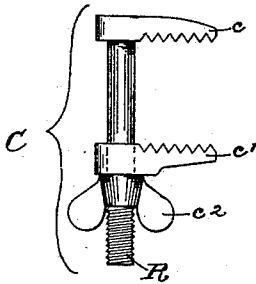
No. 463,293.

Patented Nov. 17, 1891.

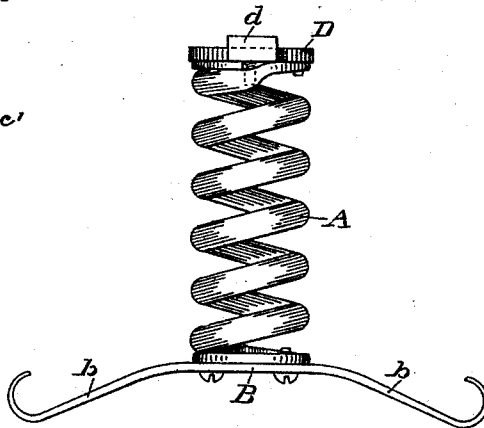
*Fig: 1.*



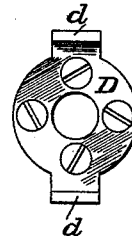
*Fig: 4.*



*Fig: 2.*



*Fig: 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

TENBROECK B. MAYELL, OF ALBANY, NEW YORK, ASSIGNOR OF ONE-HALF  
TO MARTIN A. COMMERFORD, OF SAME PLACE.

## VEHICLE-SPRING SUPPORT.

SPECIFICATION forming part of Letters Patent No. 463,293, dated November 17, 1891.

Application filed August 11, 1891. Serial No. 402,335. (No model.)

*To all whom it may concern:*

Be it known that I, TENBROECK B. MAYELL, of the city and county of Albany, State of New York, have invented a certain new and  
5 useful Improvement in Vehicle-Spring Supports, of which the following is a specification.

My invention relates to that class of devices which are used for the purpose of giving support to and increasing the resisting  
15 power of the ordinary elliptic vehicle-spring; and it consists, as will hereinafter be more fully set forth, of an upright column of a height less than the length of the minor axis of the ellipse formed by a vehicle-spring, composed of some suitable springy material and  
25 provided with a top plate and a base-plate, said base-plate being adjustably secured to the inner face of one of the halves of the vehicle-spring by means of screws or clamps.

Accompanying this specification and forming a part of it is one plate of drawings containing four (4) figures illustrating my invention, in all of which similar letters refer to  
30 corresponding parts.

Figure 1 shows my invention attached to a vehicle-spring. Fig. 2 is a perspective of my improved vehicle-spring support. Fig. 3 shows the top plate of my support, and Fig. 4 is the clamp used to secure the support to the vehicle-spring.

As I have said, any suitable springy material can be used in the construction of my improved spring-support; but I use, preferably, a spiral steel spring A. Secured to one end  
35 of A, or, if desired, integral with it, is a spring base-plate B, constructed with the downwardly-bent arms *b b*, the outer ends of said arms being rounded up and back. A clamp C, to secure the support to a vehicle-spring, is  
40 formed of the screw-threaded rod R, having the fixed jaw *c* with its inner face serrated, the jaw *c'* moving on said rod, its inner face also serrated, and the thumb-screw *c*<sup>2</sup>.

D is a plate secured to the upper or free end  
45 of A, and is furnished with the oppositely-placed flanges *d d*, running parallel with the direction of the vehicle-spring.

To use my improved spring-support, the arms *b b* of the base-plate B are secured to  
50 the inner face of one of the halves of the vehicle-spring—ordinarily the lower—by means

of two of the clamps C, the serrated faces of *c* and *c'* holding the leaves of the spring and the arms *b b* of B firmly together by the use of the thumb-screw *c*<sup>2</sup>, the curving outer ends  
55 of the arms serving to prevent the clamp from slipping. The weight of the load compressing the vehicle-spring S, the leaves of the upper half of the said spring are pressed down until they rest on the top plate D, as shown  
60 by the dotted line in Fig. 1, and between the flanges *d d*, which latter serve to hold it securely on D. At this point the resisting power of the spring A, with its springy base-plate B, comes to the aid of S and enables it  
65 to bear in safety a load whose weight would otherwise break or strain it.

It will be seen that no use is made of my improved spring-support, even when attached, until there is need for it, and that the device  
70 can be carried separately and applied readily. It will also be observed that by making the base-plate B in the form of a flat downwardly-bent spring having upwardly and  
75 backwardly curved arms *b b* an auxiliary spring-support is provided, which does not come into use until the resisting power of the vehicle-spring and the upright spiral spring is absorbed or become rigid, at which time it  
80 will yield if the weight of the load is sufficient to require it, and thereby relieve the vehicle-spring of overstrain and prevent its being broken.

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

1. In combination with a vehicle-spring, the upright spring A, having a downwardly-bent spring base-plate B, having upwardly and  
85 backwardly-curved arms *b b*, substantially as and for the purpose described.

2. In combination with a vehicle-spring, the upright spring A interposed between the upper and lower leaves of the vehicle-spring, its  
95 upper end when not depressed lying a short distance below the upper leaves of the vehicle-spring, the plate D, having oppositely-placed flanges *d d* running parallel with the direction of the vehicle-spring, and downwardly-bent  
100 spring base-plate D, having upwardly and backwardly curved arms *b b*, substantially as described.

3. In combination with a vehicle-spring, the upright supporting-spring A interposed between the upper and lower leaves of the vehicle-spring having a downwardly-bent spring base-plate B, which serves as a means of attachment and as an auxiliary spring-support for the vehicle-spring, substantially as described.

4. In combination with a vehicle-spring, the upright supporting-spring A interposed between the upper and lower leaves of the vehicle-spring, its upper end, when the vehicle-spring is not depressed, lying a short distance below the upper leaves of the vehicle-spring, the plate D, having oppositely-placed flanges

*d d* running parallel with the direction of the vehicle-spring, downwardly-bent spring base-plate B, having upwardly and backwardly curved arms *b b*, and the open jaw-clamp, formed of a screw-threaded rod R, having a fixed jaw *c* with its inner face serrated, the jaw *c'*, moving on said rod, its inner face also serrated, and the thumb-screw *c<sup>2</sup>*, substantially as described.

In witness whereof I have hereunto set my hand this 23d day of June, 1891.

TENBROECK B. MAYELL.

In presence of—

GEORGE W. GIBBONS,  
HORACE L. HICKS.