

E. HUNTSINGER.

VEHICLE-SPRING.

No. 173,297.

Patented Feb. 8, 1876.

Fig. 1

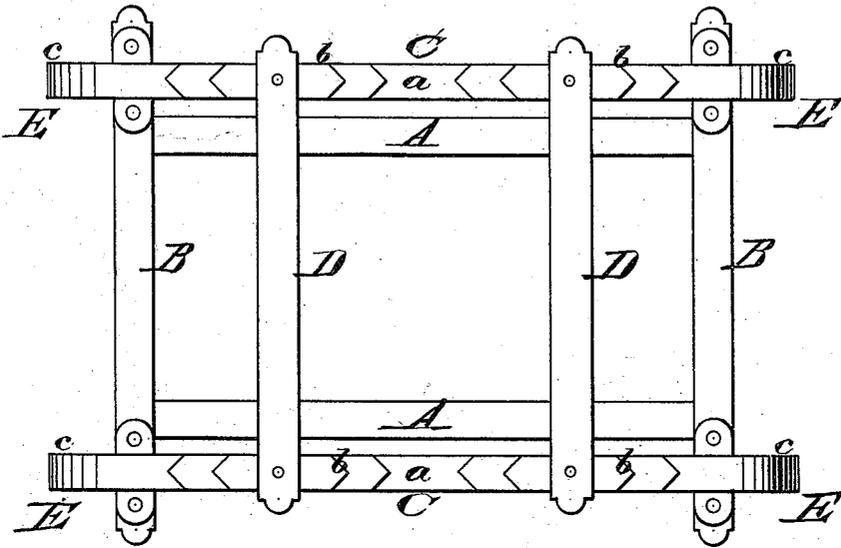
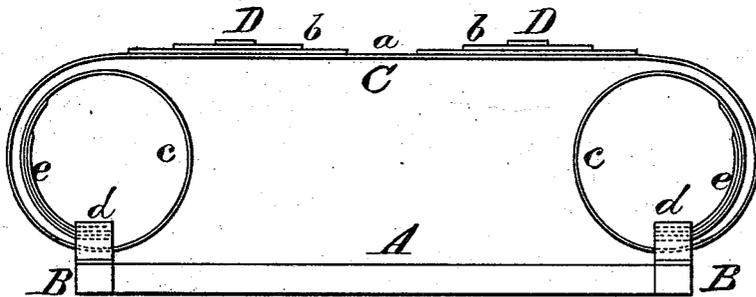


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE,

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IMPROVEMENT IN VEHICLE-SPRINGS.

Specification forming part of Letters Patent No. 173,297, dated February 8, 1876; application filed December 31, 1875.

To all whom it may concern:

Be it known that I, ELI HUNTSINGER, of Sacramento, in the county of Sacramento and State of California, have invented a new and valuable Improvement in Vehicle-Springs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my vehicle-spring, and Fig. 2 is a side elevation thereof.

This invention has relation to springs for vehicles; and the nature of my invention consists in re-enforced bridge-springs, extending longitudinally with respect to the length of the running-gear, and terminating at their ends in convolute springs secured to clips on the axles, whereby in a given space a great length of spring is obtained, which gives a more regular sweep, and is less liable to break than longitudinal or side springs hitherto used, as will be hereinafter explained.

In the annexed drawings, A A designate the perches, and B B the axles, which are rigidly secured together and constitute the bed or running-gear. C C are two side springs, which extend longitudinally from one axle to the other, and which I will divide for description into several parts. The horizontal portions *a a* of these springs are connected together by transverse bars D D, and at the points where

the ends of these bars are sustained leaf-springs *b b* are applied on the springs C C, for the purpose of re-enforcing them and affording long elastic bearings. At the extremities of the portions *a a* of the springs C C are coils or convolute springs *c c*, the extreme ends of which are rigidly secured to staples *d d*, fixed to the axles B B. The front and rear half-coils of the convolute springs are re-enforced by means of leaf-springs *e e*, which stiffen the convolutes and prevent undue collapsing thereof when there is considerable weight on the bars D D.

It will also be observed that the lower external portions of the convolutes are free to play through the staples *d d*, and that when there is an extraordinary weight upon the bars D D the portions *a a* will be brought down upon and sustained by portions of the convolutes *c c*.

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

A vehicle-spring, C, composed of parts *a b c e*, formed as described, and applied to the axles of a vehicle by means of staples *d d*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ELI HUNTSINGER.

Witnesses:

JOHN FEAKINS,
N. M. JACOBS.