

R. H. GUYER.  
Vehicle-Spring.

No. 206,438.

Patented July 30, 1878.

Fig. 1.

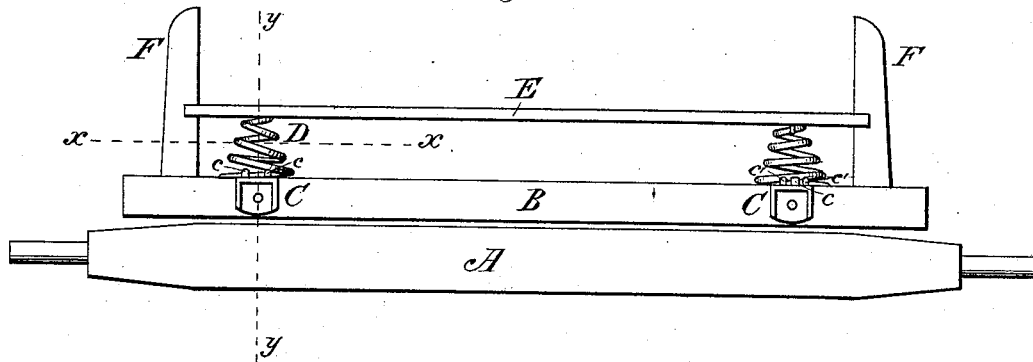


Fig. 2.

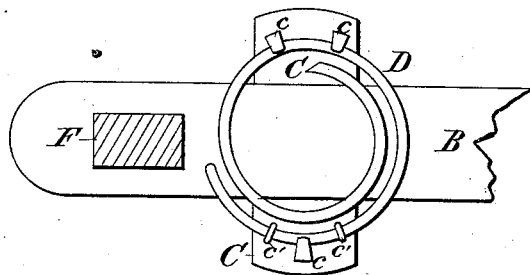
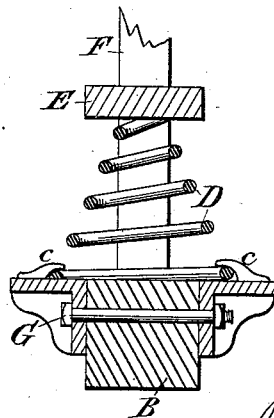


Fig. 3.



Attest:

F. H. Schitt.

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Inventor:

Richard H. Guyer,  
per C. Bradford

Attorney:

# UNITED STATES PATENT OFFICE.

RICHARD H. GUYER, OF LA FAYETTE, INDIANA.

## IMPROVEMENT IN VEHICLE-SPRINGS.

Specification forming part of Letters Patent No. **206,438**, dated July 30, 1878; application filed April 6, 1878.

*To all whom it may concern:*

Be it known that I, RICHARD H. GUYER, of the city of La Fayette, county of Tippecanoe, and State of Indiana, have invented certain new and useful Improvements in Vehicle-Springs, of which the following is a specification:

Reference being had to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of the rear axle and bolster of a wagon having my improved springs applied thereto. Fig. 2 is a horizontal section on the broken line *x x*. Fig. 3 is a transverse vertical section on the broken line *y y*.

In said drawings, the portion marked A is the axle-tree. B is the bolster. C C are brackets attached to the bolster, to which to fasten the springs. D D are the springs, which are spiral, and which I make in a conical form, so as to give a greater degree of elasticity, and so that in case of too great load being placed upon light springs they will fold down entirely flat upon the bolster, without having one coil rest upon or against another, to be thus pressed out of shape and have their utility destroyed.

E is a board or bar placed above and upon the springs, and upon which the load or the body of the wagon rests. F F are the ordinary standards, which serve also in this instance to keep the bar E in place.

The brackets C C are provided with either the ears *c c* or the wire fastenings *c' c'*, or both,

by which the springs are securely attached thereto. These wire fastenings are passed down through holes drilled in the brackets, and either riveted or clinched on their under sides.

If the brackets should be cast malleable, slender projections might be cast thereon, which could be bent over the springs, thus taking the place of the wire fastenings *c' c'*. The end of the rod of which the spring is made might also be pointed and turned down, so as to be driven into the bolster, and thus aid in holding the device in place.

The brackets are connected to the bolster and to each other by the bolt G, which passes through them.

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

The combination, with the spiral wagon-spring D, of the two brackets C C, each suitably connected to the bolster opposite to the other, to form a bearing for the broad base of the spring, and each provided with suitable fastening devices, by which the spring is connected thereto, all substantially as herein shown and specified.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 1st day of April, A. D. 1878.

RICHARD H. GUYER. [L. S.]

In presence of—

C. BRADFORD,  
JOS. A. SAWYER.