

C. HOTZ.
Vehicle-Springs.

No. 163,072.

Patented May 11, 1875.

FIG. I.

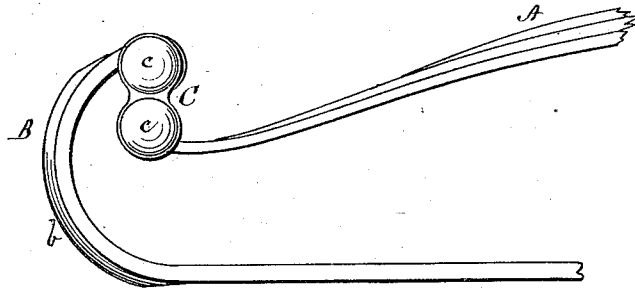


FIG. II.

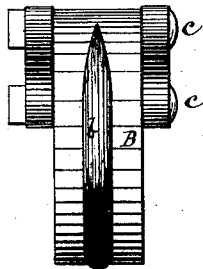
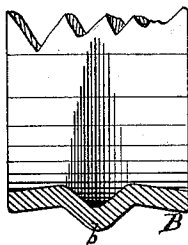


FIG. III.



INVENTOR.

WITNESSES.

F. B. Townsend.
Will. H. Moxon

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UNITED STATES PATENT OFFICE.

CHRISTOPH HOTZ, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN VEHICLE-SPRINGS.

Specification forming part of Letters Patent No. **163,072**, dated May 11, 1875; application filed March 9, 1875.

To all whom it may concern:

Be it known that I, CHRISTOPH HOTZ, citizen of Chicago, county of Cook and State of Illinois, have invented certain Improvements in Scroll-Springs; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a side elevation of a scroll-spring having my improvement. Fig. 2 is an end view of same. Fig. 3 is a cross-section of the scroll portion or supporter having my improvement.

The object of my invention is to strengthen the scroll or supporter of a scroll or half spring; and it consist in providing said scroll or supporter with one or more corrugations gradually declining toward the end of the bent part of the scroll. Said corrugations may be applied at option on the convex or concave side of said bent part of the scroll or supporter.

In order that those skilled in the art may make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing, A is an elevation of a portion of a spring, and B is an elevation of a scroll or supporter, their ends being coupled, as usual, by the toggle C and bolts *c c*. In the bent portion of the scroll I insert or strike up the corrugation *b*, which greatly strengthens that portion, decreasing the liability of its bending, and without increase of metal.

I am aware that corrugations have heretofore been made in elliptic springs; and hence I do not claim, broadly, a corrugated spring. I am also aware that curved springs have heretofore been combined with leaf-springs; but

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

The combined laminated and C spring, having corrugation *b* on the concave or convex side of the bent portion of the scroll, as and for the purpose set forth.

CHRISTOPH HOTZ.

Witnesses:

FRED. W. WOLF,
PETER SCHUTTLER.