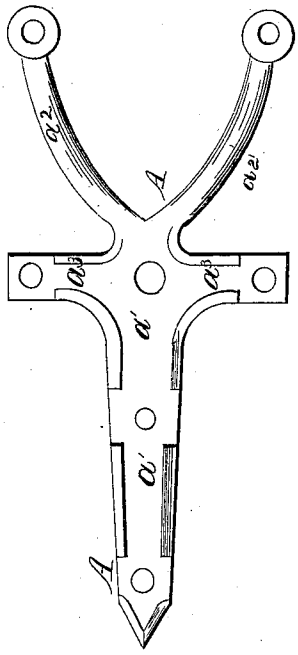
L. C. MILLER.

Carriage Spring.

No. 77,306. Patented April 28, 1868.



Witnesses.

W. C. Aslikettle 3

Theo. Tuschl

Inventor.

L. C. Miller

per Munn & Co

atty

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

L. C. MILLER, OF HUMPHREY, NEW YORK.

Letters Patent No. 77,306, *dated April* 28, 1868.

IMPROVED SPRING-BRACE FOR CARRIAGES, &c.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, L. C. MILLER, of Humphrey, in the county of Cattaraugus, and State of New York, have invented a new and improved Brace for Carriage and other Springs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The figure is a plan view of my improved brace.

My invention has for its object to furnish an improved brace for springs for carriages, railroad-cars, locomotives, spring-seats, and whenever elliptic or half-elliptic springs are used, which shall be so constructed that it will hold the spring always perpendicular to the plane of the wagon, and which will protect the springs from any wrench or twist; and it consists in the construction of the brace, as hereinafter more fully described.

A is the brace, which is made in substantially the form shown in the drawing; that is to say, it consists in a longitudinal bar or stem a^1, having inclined, curved, or crotched arms a^2 projecting from one end, and having two arms a^3 projecting from its opposite sides, at right angles to its length, as shown in the figure. The ends of the crotch-arms a^2 are secured to the upper part of the spring by the two bolts that secure the spring to the cross or spring-bar, upon which the carriage-box rests. The arms a^3 and stem or bar a^1 are secured to the frame of the box, by bolts passing through the holes in the said parts of the brace A, and through the said box-frame.

By this construction, the brace A will hold the springs always perpendicular to the plane of the wagon, whatever the grade of the road may be, and will prevent the springs from being wrenched or twisted, from one or more of the wheels dropping into ruts or holes in the roadway, or passing over obstructions, or from persons getting into the carriage upon one side.

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

An improved brace, A, for carriage and other springs, constructed substantially as herein shown and described, that is to say, consisting of a longitudinal bar or stem, a^1, having two inclined or curved arms or branches a^2 projecting from one end, and having two arms a^3 projecting from its opposite sides, as and for the purpose set forth.

L. C. MILLER.

Witnesses:

H. M. BOZARD,

EZRA MARSH.