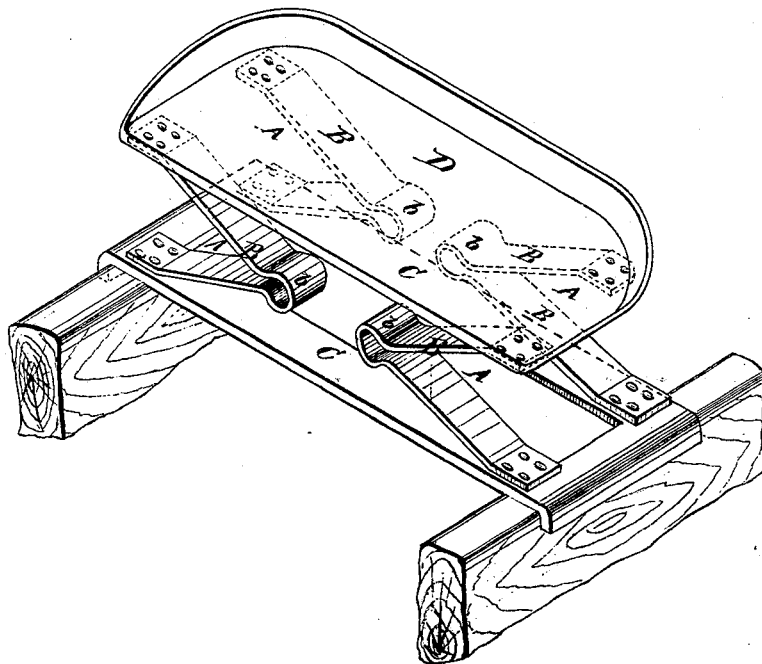


W. P. ELAM.
Wagon Spring-Seat.

No. 112,695.

Patented March 14, 1871.



Witnesses:

William W. Herchel

Robert Burns.

Inventor:

W. P. Elam

United States Patent Office.

WILLOUGHBY P. ELAM, OF PETERSBURG, ILLINOIS.

Letters Patent No. 112,695, dated March 14, 1871.

IMPROVEMENT IN SPRING-SEATS FOR WAGONS.

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, WILLOUGHBY P. ELAM, of Petersburg, in the county of Menard and State of Illinois, have made certain new and useful Improvements in Springs for Wagon-Seats; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of this invention consists in a combination of two or more V-shaped springs, attached to the bottom of a wagon-seat and a frame-board, so that all unequal pressure arising from the jars and concussions of the vehicle moving shall be more equally distributed to all springs, all of which will hereinafter more fully appear.

To enable those herein skilled to make and use my said invention, I will now more fully describe the same, referring to the accompanying drawing as a perspective view of my improved springs adapted to a wagon-seat.

My improved springs A I construct of steel or wrought-iron. Said springs I form V-shaped, consisting of the leaves or bows B, having their vertex at *b* usually curved, and as clearly indicated in the drawing.

Usually a combination of four springs is used, and the same are secured transversely to a frame-

board, C, (usually resting on the panels of the wagon,) and to the bottom of the wagon-seat D, by proper bolt *c*.

By thus constructing the springs A and securing the same to the frame C and seat D, it is apparent that too sudden depressions upon one part or pair of springs (occasioning often the breaking of springs as ordinarily constructed) is prevented by the tension of the other springs.

My principle of construction, it is plain, is equally applicable to form springs for vehicles, such as carriage and wagon-springs, and that the same are simple in construction, economical, and durable.

I am aware that springs have heretofore been made of the form shown in my application, and I do not therefore claim the springs, separately considered.

By having thus described my invention,

What I claim is—

A spring-seat for wagons, consisting of the seat D, the springs A, and cross-bar or bottom C, all constructed and arranged substantially as described.

In testimony of said invention I have hereunto set my hand in presence of

W. P. ELAM.

Witnesses:

WILLIAM W. HERTHEL,
ROBERT BURNS.