C. W. SALADEE.

ROAD-WAGON

No. 193,068. Patented July 10, 1877.

Fig. 1.

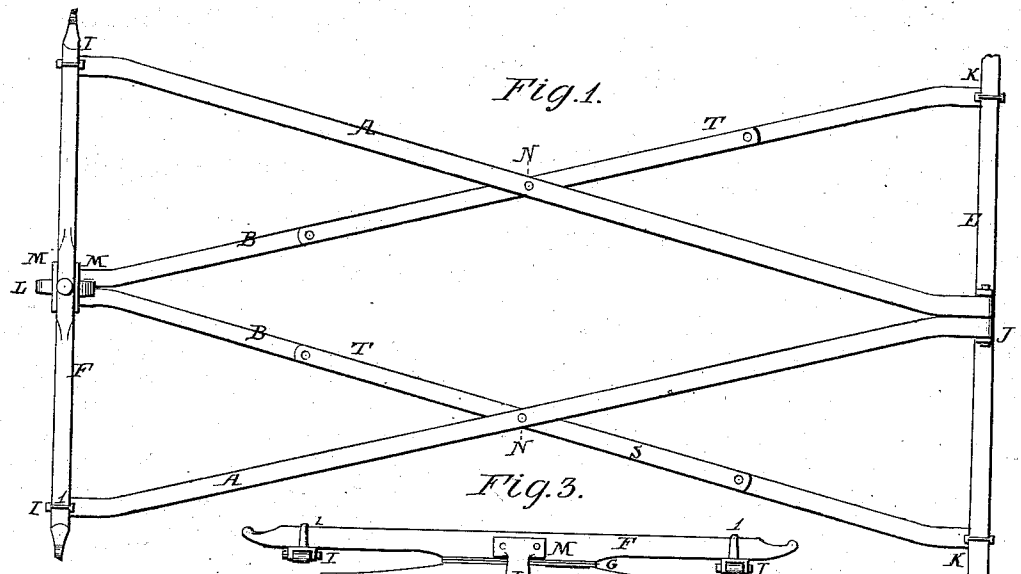


Fig. 3.

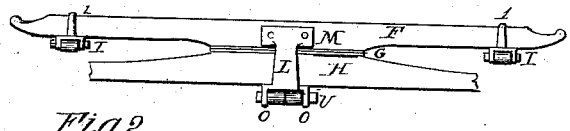


Fig. 2.

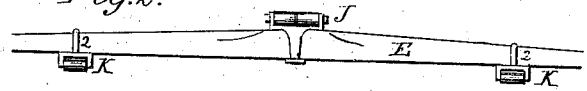


Fig. 5.

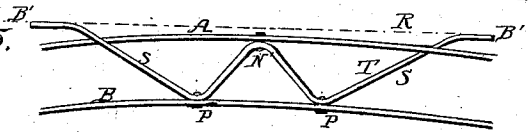
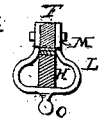


Fig. 4.



Attest:

Edward Dewey

Fred Benjamin

Inventor:

Cyrus W. Saladee

By his attorney

Charles Hunter

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

UNITED STATES PATENT OFFICE.

CYRUS W. SALADEE, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN ROAD-WAGONS.

Specification forming part of Letters Patent No. **193,068**, dated July 10, 1877; application filed May 24, 1877.

To all whom it may concern:

Be it known that I, CYRUS W. SALADEE, of Washington city, in the District of Columbia, have invented certain Improvements in Road-Wagons, of which the following is a specification, embodying my said invention.

To enable others skilled in the art to make and use my invention, I herewith submit the following general description.

The object of my invention is a road-wagon in which two sets of springs are arranged and connected together, and to the rear axle, and above and below the front axle, as fully described hereinafter, so as to form a spring-support for the body, every portion of which will act in unison with the others, so as to prevent any single part from being subjected to undue strains or from yielding without the others, and tilting the body or destroying the parallelism of the bolster and rear axle.

Figure 1 is a plan view, showing one mode of embodying my invention; Fig. 2, a rear view; Fig. 3, a front view; Fig. 4, a section; Fig. 5, a view showing the brace connecting the upper and lower springs.

One arrangement for carrying my improvement into effect is shown in Figs. 1 to 4, in which E is the rear and H the front axle, and F the bolster connected to the front axle by the king-bolt. Between the axles is arranged the spring-platform, consisting essentially of semi-elliptic or curved springs extending from the upper edge of the rear axle to the bolster, and two similar springs extending from the under side of the rear axle to a point beneath the bolster.

As shown in Fig. 1, the upper springs A A extend rearward from the ends of the bolster to a central point, J, on the rear axle, and two lower springs, which supplement the perch, extend from a central point below the front axle to separate points K below the rear axle, the upper and lower springs crossing each other, as shown, and being connected adjacent to the crossings by W-braces S, interposed between the upper and lower springs, and having ends extended to form supports for the body R, which may be bolted thereto.

It will be apparent that the result of this construction is to compel a unity of action between all the parts comprising the platform, and that when one side is depressed the rear axle and bolster are forced to move in opposite directions in their relative positions parallel to each other, thereby compelling the springs on the opposite side to assume the like depressed and flattened position, or nearly so, thus preventing side motion of the body or rotation of either axle. While each spring is thus a brace between the axles, and all act in unison, it is impossible to throw the wheels out of track, as would be the case if one or both pairs of springs were not crossed.

It will be seen that the W-brace S is a most effective means of uniting all the springs and of supporting the body, and that it further effects this union while maintaining the planes of the upper and lower springs nearly parallel to each other, a matter of importance, for if the springs were of widely-different curvatures, and consequently on different planes, their simultaneous depression would tend to turn the axle and bolster. It will be apparent, however, that braces of other forms and constructions may be employed to unite the parts.

The springs may be connected to the axle and bolster, and below the latter, in any suitable manner, as, for instance, to an arm extending from the bolster to a point below the axle.

I do not claim the yoke L, shown in the drawing, as it forms the subject of a separate application.

Without limiting myself to the precise construction and arrangement of parts shown, I claim—

1. The combination, in a vehicle, of the upper and lower springs, arranged to cross each other, and connected together at the crossing-point, as described.

2. The brace or braces S, connecting and bracing the upper and lower springs, and extended at the ends to support the body, as set forth.

In testimony that I claim the above as my invention I hereunto set my hand on this the 13th day of February, 1877.

CYRUS W. SALADEE.

Witnesses:
E. F. WESTON,
J. F. CALHOUN.