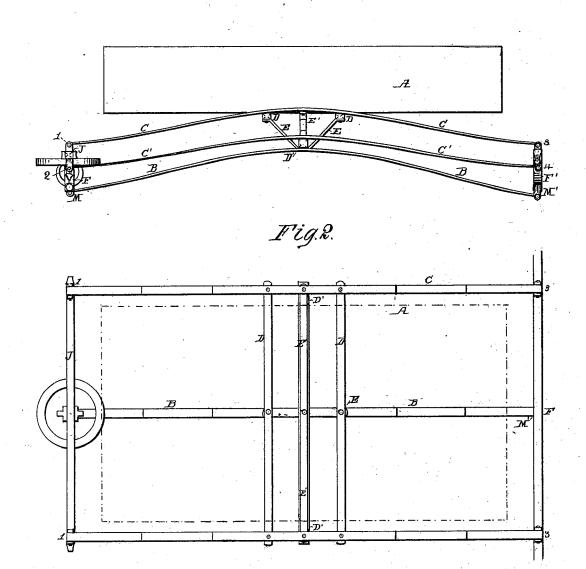
C. W. SALADEE. Road-Wagon.

No. 197,671.

Patented Nov. 27, 1877.

Fig.1.



Attest:

George Thom!

Cyrus W.Saladu Byhis attorney Marles Horles

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN ROAD-WAGONS.

Specification forming part of Letters Patent No. 197,671, dated November 27, 1877; application filed September 1, 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.

My invention consists in the construction of a new and improved road-wagon, in which the main feature is the employment of two or more half-elliptic side springs arranged upon each side of the running-gear, in connection with a lower central spring-perch, and the same constructed and arranged in relation to each other and to the axles, bolster, and body of the vehicle, in such manner as to form a complete, light, strong, and safe spring-platform, and which shall serve as a consolidated "spring-perch," as well as the main supporting springs of the body and load imposed thereon, as also to prevent the rotation of the axle-arms in the wheels, and of throwing the latter out of track when more of the load is carried on one side of the body than on the

In the drawings, Figure 1 is a side elevation of the body, springs, and perch; and Fig.

2 is a plan top view of the same.

The upper side springs C have their front ends hinged to the top of the spring-bolster J, as at No. 1, and their rear ends to the rear axle, as at No. 3, while the lower side springs are hinged to the under side of the bolster and rear axle, as at Nos. 2 and 4.

The cross-central portions of the springs are secured to the bottom of the body by means of the cross-bars D D' and braces E E', or by other equivalent means of making this crosscentral connection between the bottom of the body and the upper and lower springs.

The body and central portion of the springs, being thus connected together, move up and down in unison, and thereby preventing the axle-arms from rotating in their boxes in the wheels, as well as compelling the wheels to keep "in track" when more of the load im-posed upon the springs is carried on one side of the body than on the other.

Another important advantage of placing the lower springs below the bolster and rear axle is that the body can be suspended upon the complete spring-platform lower down than would be the case if both the upper and

lower springs were elevated and hinged above the bolster and rear axle; besides, the springs arranged above and below the bolster and rear axle afford a better support to the fifth-wheel and "king-bolt" through the front axle against the pull or draft of the vehicle than would be the case if all the springs were elevated and hinged to the top of the bolster and rear axle.

The spring-perch B has its opposite ends hinged below the front and rear axles, as clearly shown in the drawings, and substantially in the same manner as shown and described in my Patent No. 193,040, July 10, 1877, and has its cross-center rigidly secured to the lower cross-bar D' of the lower springs C', and is thereby compelled to act in unison with the main supporting-springs of the vehicle.

The central brace E unites the upper and lower cross-bars D and D', as shown in the drawings, while the lateral cross-brace E' is centrally connected to the lower bar D', and its ends extended up to the side sills of the

body, as clearly shown in Fig. 1.

The body, bars, springs, and perch are thus all connected together at their cross-central portions, and compelled to act together in such manner that the one'is a support and stay to the other, and thereby producing a complete and consolidated spring perch and platform between the two axles of the vehicle, as shown and described.

I claim-

1. A road-wagon having on each side of the body two or more semi-elliptic springs, and beneath the body a spring perch, the whole arranged to afford a spring-support for the body and to connect the bolster and front and rear axles, substantially as set forth.

2. The combination, in a road-wagon, of the upper and lower side springs C C' on opposite sides of the body, perch B, cross-bars D D, connecting the springs C C', and brace E,

uniting the bars D D', as set forth.

3. The lateral cross-brace E', combined with the body A, perch B, springs C C', bars D D', and brace E, substantially as and for the purpose set forth.

In testimony that I claim the above as my invention in road-wagons I hereunto set my hand on this the 18th day of July, 1877.

Witnesses: CYRUS W. SALADEE.

GEO. A. REYNOLDS,

HENRY PIERPONT.