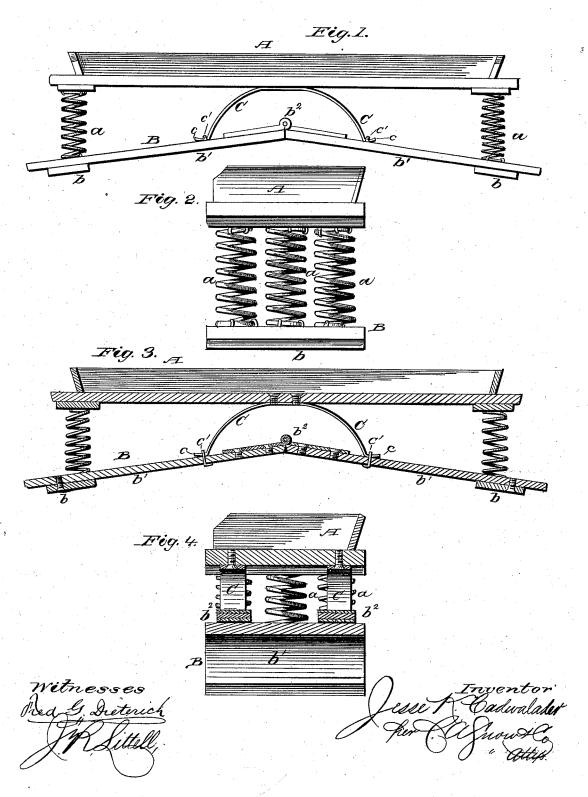
## J. K. CADWALADER. Spring-Seat for Wagons.

No. 217.199.

Patented July 8, 1879.



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

## UNITED STATES PATENT OFFICE.

JESSE K. CADWALADER, OF BERNADOTTE, ILLINOIS.

## IMPROVEMENT IN SPRING-SEATS FOR WAGONS.

Specification forming part of Letters Patent No. 217,199, dated July 8, 1879; application filed December 13, 1878.

To all whom it may concern:

Be it known that I, JESSE K. CADWALA-DER, of Bernadotte, in the county of Fulton and State of Illinois, have invented certain new and useful Improvements in Wagon-Seats; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this speci-

Figure 1 is a side view of my improved vehicle-seat. Fig. 2 is an end view thereof. Fig. 3 is a longitudinal section, and Fig. 4 is a cross-section, of the same.

The same part in the several figures is de-

noted by the same letter.

This invention appertains to certain improvements in seats for vehicles, by which the seat is possessed of a certain amount of resiliency or spring without the endwise-swinging motion attending spring-seats of the common form; and it consists in the employment, in addition to end-supporting springs for the seat, of arched or semi-elliptic springs, fastened at their convex sides about centrally of the under side of the seat, while their ends are connected to the two leaves or sections of a bisected board, which sections or leaves are hinged or pivoted together, substantially as hereinafter more fully set forth.

In the annexed drawings, A refers to a seat for a vehicle supported or mounted at its ends upon the spiral or other springs, a a, fastened to or upon the board B, which rests upon cleats fastened to the inner sides of the vehicle-body. Instead of thus supporting the board B, it may be provided itself with a cleat, b, on its lower side at each end, which cleats b, while the ends of the board rest upon the top edge of the vehicle-body, press against the inner

side of the body.

The board B is bisected transversely about midway its length, with its sections or leaves  $b^1$  binged or pivoted together at  $b^2$  binged as to permit of their yielding vertically with reference to the seat, but not to sink below a horizontal plane. C C are arched or semielliptic springs, made preferably of flat hoopmetal, whose convex sides are fastened to the under side of the seat A, about centrally of its length, while their ends, bent or provided with short arms c c, fit into staples or eyes c' c', fastened to the leaves or sections of the board B, upon each side of their pivotal or hingepoint.

By this construction and arrangement of parts it will be observed that while the seat is possessed of a certain amount of spring or resiliency to render the seat comfortable and easy, it will be free from endwise movement, which is objectionable, as such is disagreeable to the occupant, and risks the breaking or distorting of the end springs. Further, that the leaves or sections of the board B, as the weight of the occupant of the seat presses them down at their meeting or hinged ends and outwardly at their free ends, will thus assist in securing the said board in position upon the vehicle-body. The centrally-arranged springs, besides preventing endwise movement of the seat, will also brace and strengthen the seat.

Having thus fully described my invention, I claim and desire to secure by Letters Patent

of the United States-

The seat A, mounted upon the end springs a a, in combination with the bisected board B, with its leaves or sections hinged or pivoted together, and the semi-elliptic or arched spring or springs C, with its arched or convex surface fastened to the seat, and its ends fitting in staples or eyes fastened to the leaves or sections of the board B upon each side of their hinge or pivotal point, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

presence of two witnesses.

JESSE K. CADWALADER.

Witnesses:

EARL. D. TUTHILL, JESSE B. CRAIG.