

J. B. GORRELL.  
Spring-Seat for Wagons.

No. 208,083.

Patented Sept. 17, 1878.

Fig. 1.

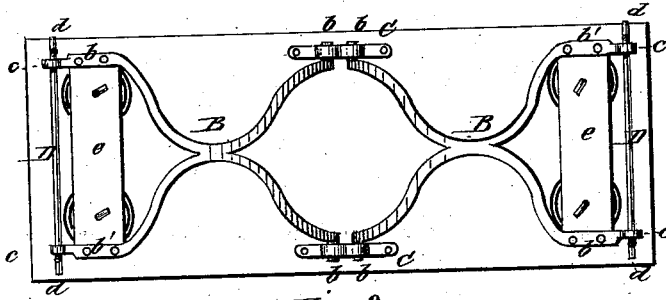


Fig. 2.

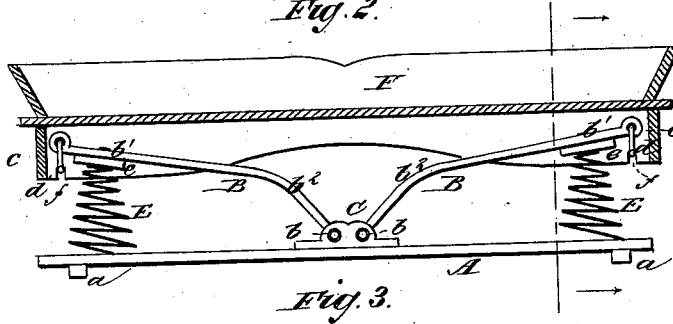
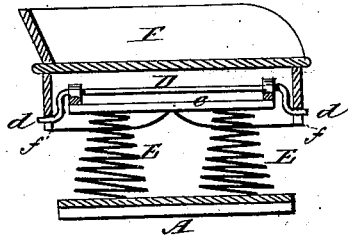


Fig. 3.



WITNESSES:

*Francis McArthur*  
*C. Sedgwick*

INVENTOR:

*J. B. Gorrell*  
BY *Mumford*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN B. GORRELL, OF LA OTTO, INDIANA.

## IMPROVEMENT IN SPRING-SEATS FOR WAGONS.

Specification forming part of Letters Patent No. **208,083**, dated September 17, 1878; application filed August 17, 1878.

*To all whom it may concern:*

Be it known that I, JOHN BRITTON GORRELL, of La Otto, in the county of Noble and State of Indiana, have invented a new and Improved Wagon-Seat, of which the following is a specification:

The object of my invention is to so improve the construction of that class of wagon-seats which are supported upon spiral springs that they shall not be dependent upon the said springs to steady the seat, but the latter may be firmly supported and yet suspended in such a manner as to allow of its free oscillation laterally to counteract the effect of the jolting movements of the wagon.

The invention consists in the construction and combination of the various parts, as will be hereinafter described and claimed.

In the accompanying drawing, Figure 1 is a top view of the mechanism supporting the seat proper, the latter being removed. Fig. 2 is a longitudinal section of the same with the seat in position. Fig. 3 is a cross-section through the line *xx* of Fig. 2.

Similar letters of reference indicate corresponding parts.

A is the bottom board, to which the seat is supported upon the upper edges of the sides of the wagon-body, and is kept in position by the cleats *a* resting against the inner edge of the wagon-sides.

E are the spiral springs, two at each side of the seat, resting with their bases upon the board A, each pair being connected by their upper ends to a board, *e*. The ends of the board *e* are secured to the arms *b*<sup>1</sup> of the outer bifurcated end of the lever B, whose inner bifurcated end is pivoted with its arms *b* to the lugs C on the board A at the side of the center line of the seat.

The outer arms, *b*<sup>1</sup>, are provided with end lugs or eyes *c*, through which is pivoted a rod D, having a crank, *d*, at each end.

The seat proper, F, has a box underneath, in the lower front and back edges of which are eyes *f*, by which the seat F is supported upon the pins of the cranks *d*. The cranks *d* allow of side motion of the seat F and of free swing of the outer ends of the levers B, with the expansion and compression of the springs E.

The two levers B are bent at a steep upward inclination from their pivoting-lines at each side of the center line of the seat to the point *b*<sup>2</sup>, Fig. 2, where they have a sufficient downward bend to bring the boards *e* at their outer ends nearly horizontal when the seat is loaded.

The springs E, being secured with their bases to the board A and their tops to the board *e*, which again is secured to the arms *b*<sup>1</sup> of the lever B, are relieved from all side strain by the jolting of the wagon, and have no side motion whatever, except that due to the slight curve described by the outer ends of the levers B as they turn upon their pivots *b*.

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

The levers B, bifurcated at both ends, pivoted to the central lugs C on the bottom board A, and provided with the eyes *c*, in combination with the crank-rods D, the spiral springs E, secured to the boards *e*, which are fastened to the ends of the levers B and the wagon-seat F, substantially as shown and described.

JOHN B. GORRELL.

Witnesses:

WINFIELD GORRELL,  
WILLIAM GORRELL.