

D. A. BOYLE.
Springs for Wagons.

No. 143,744.

Patented Oct. 21, 1873.

Fig. 1

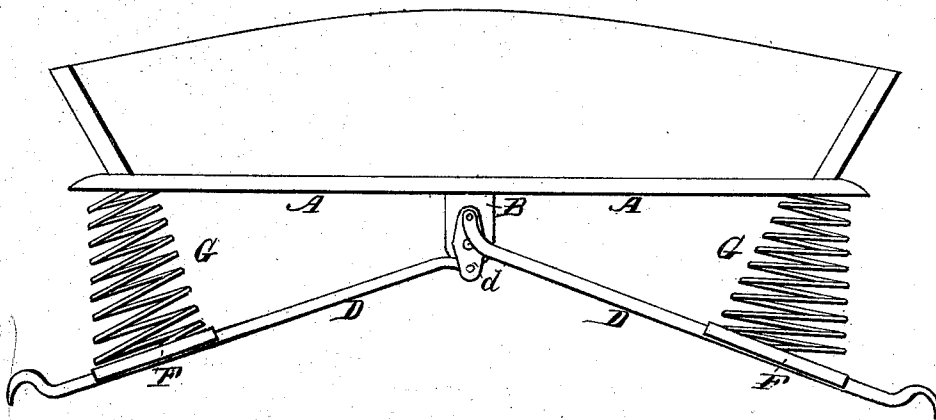
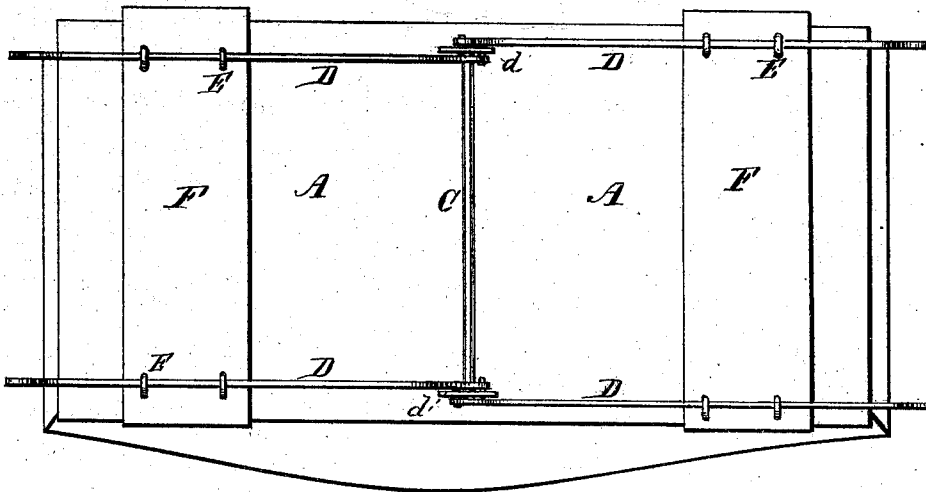


Fig. 2



Witnesses

John Givner
Alexander Pew

Inventor

Daniel A. Boyle

UNITED STATES PATENT OFFICE.

DAVID A. BOYLE, OF ATTICA, OHIO.

IMPROVEMENT IN SPRINGS FOR WAGONS.

Specification forming part of Letters Patent No. **143,744**, dated October 21, 1873; application filed June 18, 1873.

To all whom it may concern:

Be it known that I, DAVID A. BOYLE, of Attica, in the county of Seneca and State of Ohio, have invented a new and Improved Spring-Seat for Wagons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings and the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a spring-seat for wagons, as more fully hereinafter set forth.

Figure 1 represents a front view of my improved seat, and shows the general arrangement of its parts. Fig. 2 is a bottom view of the same.

The seat A may be constructed in any desired form. On the under side, in the center, near the front and back edges, I attach two brackets or eyebolts, B B, either by flanges and screws, or by screwing them directly into the seat A. Through these brackets or eyebolts B B, and having free play therein, is a single rolling rod, C. The ends of rod C pass through and are fastened to the plates *d d*, which latter form the means of compensation in the elevation and the depression of the seat A. Through each end of the plates *d d* and the upper end of the rods D D are drilled holes, for the purpose of fastening them together either by bolts or rivets, as may be desired, and they thus form a common hinge-joint. The other end of the rods D D are bent in the form of a hook, for the purpose of hanging on the edge of the wagon-box, and are firmly fastened to the spring-board F by bolts E E or staples. The spiral springs G G are fastened at each end, respectively, to the seat A and the spring-board F, as shown in Fig. 2.

It will be observed that the construction of the rods D D is such that when the seat A is at the highest elevation it is in position to re-

ceive an impulse from right to left at the top end, and can under no circumstances assume any other position. The length of the plates *d d* varies between three and five inches, which allows sufficient oscillation to permit the seat to fall the required distance without pressing out the sides of the wagon-box.

The operation of this device may be thus described: When the seat is depressed the advance of the right-hand rod in Fig. 1 causes the upper end of plate *d* to pass over from right to left, in which movement the left-hand rod reciprocates until the spiral springs G G close.

The advantage of this seat over others heretofore patented is, that it can have no lateral or end play by reason of the center of seat A being held rigidly in place by the roller-rod C, which must remain at a uniform distance from the hooks resting on the edges of the wagon-box.

I am aware that many spring-seats have been patented having the spiral springs G and spring-board F, and with rods to slide in recesses; also, with compensating links acting independently of each other; and all those devices I expressly disclaim.

What I do claim, and wish to secure by Letters Patent, is—

In combination with the seat A, spiral springs G, and spring-board F, the rods D D, plates *d d*, roller-rod C, and brackets B B, all constructed as described, and for the purpose set forth.

In witness that I claim the foregoing I hereunto set my hand this 13th day of June, A. D. 1873.

DAVID A. BOYLE.

In presence of—

JOHN GWYNN,
ALEXANDER PEW.