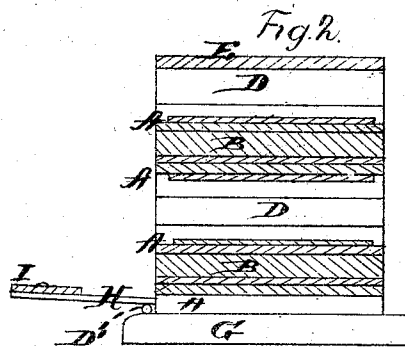
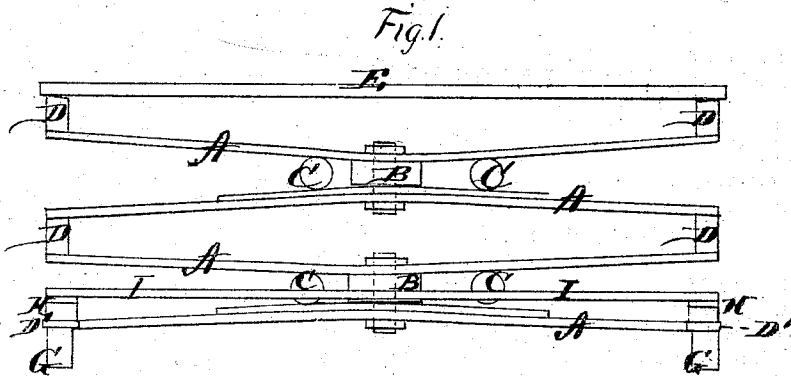


AMBROSE S. NEWMAN.
Spring Seat for Wagons.

No. 118,385.

Patented Aug. 22, 1871.



Witnesses
Jas. O. Hutchinson
C. L. Everett.

Inventor
Ambrose S. Newman
per
Alexander Murray

Atty.

UNITED STATES PATENT OFFICE.

AMBROSE S. NEWMAN, OF PLYMOUTH, ILLINOIS.

IMPROVEMENT IN SPRING-SEATS FOR WAGONS.

Specification forming part of Letters Patent No. 118,385, dated August 22, 1871.

To all whom it may concern:

Be it known that I, AMBROSE S. NEWMAN, of Plymouth, in the county of Hancock and in the State of Illinois, have invented certain new and useful Improvements in Spring-Seats for Wagons, &c.; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a spring-seat and spring foot-board for railroad cars and vehicles of any description, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a front view, and Fig. 2 a transverse vertical section.

A A represent two boards of proper thickness securely fastened in the center, either with or without a bar, B, between them. On each side of the center is then forced in a round bar, C, forming an adjustable fulcrum, which completes one set of springs with only one leaf. It is, of course, evident that, if desired or necessary, two or more leaves of different lengths may just as well be used. Another set of similarly-constructed springs may be fastened onto the first set by means of cross-bars D D at the ends, as shown, and, so on, as many sets as may be desired can be added. In fact, they can be multiplied so as to form a combined spring that an ounce-weight would set in motion. On top of the upper set of springs is placed an extra board, E, which forms the seat proper. The lower spring is attached at its ends to cross-bars G G, which project a short

distance in front, as seen in Fig. 2, and on top of the lower spring at each end is fastened a spring-bar, H, between which and the cross-bar G is inserted a movable fulcrum, D'. The front ends of the bars H H are connected by a foot-board, I. The wagon-seat thus constructed may rest on the bottom of the box inside the side boards, or it may be made with only two or three boards and rest on the top of the box or on spring-bars on the inside of the box. For car-seats, a back can readily be supplied. The top-board E, as well as the foot-board I, will warp down more or less by usage; but this is remedied by turning them over when necessary. The others will never change but a trifle, for the manner in which they are bent causes the pressure to act directly opposite to the weight when in use.

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

1. One or more sets of springs, each composed of two boards, A A, connected in the center, with or without the cross-bar B between them, and provided with movable fulcrums C C, substantially as and for the purposes herein set forth.

2. The spring-bars H H, foot-bar I, and fulcrums D' D', constructed and arranged substantially as and for the purposes herein set forth.

3. A wagon or car-seat, composed of boards A A, fulcrums C C, top board E, spring foot-board H I, and fulcrums D' D', all constructed, combined, and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 27th day of May, 1871.

AMBROSE S. NEWMAN. [L. S.]

Witnesses:

LEWIS GRAHAM,
C. L. EVERT.