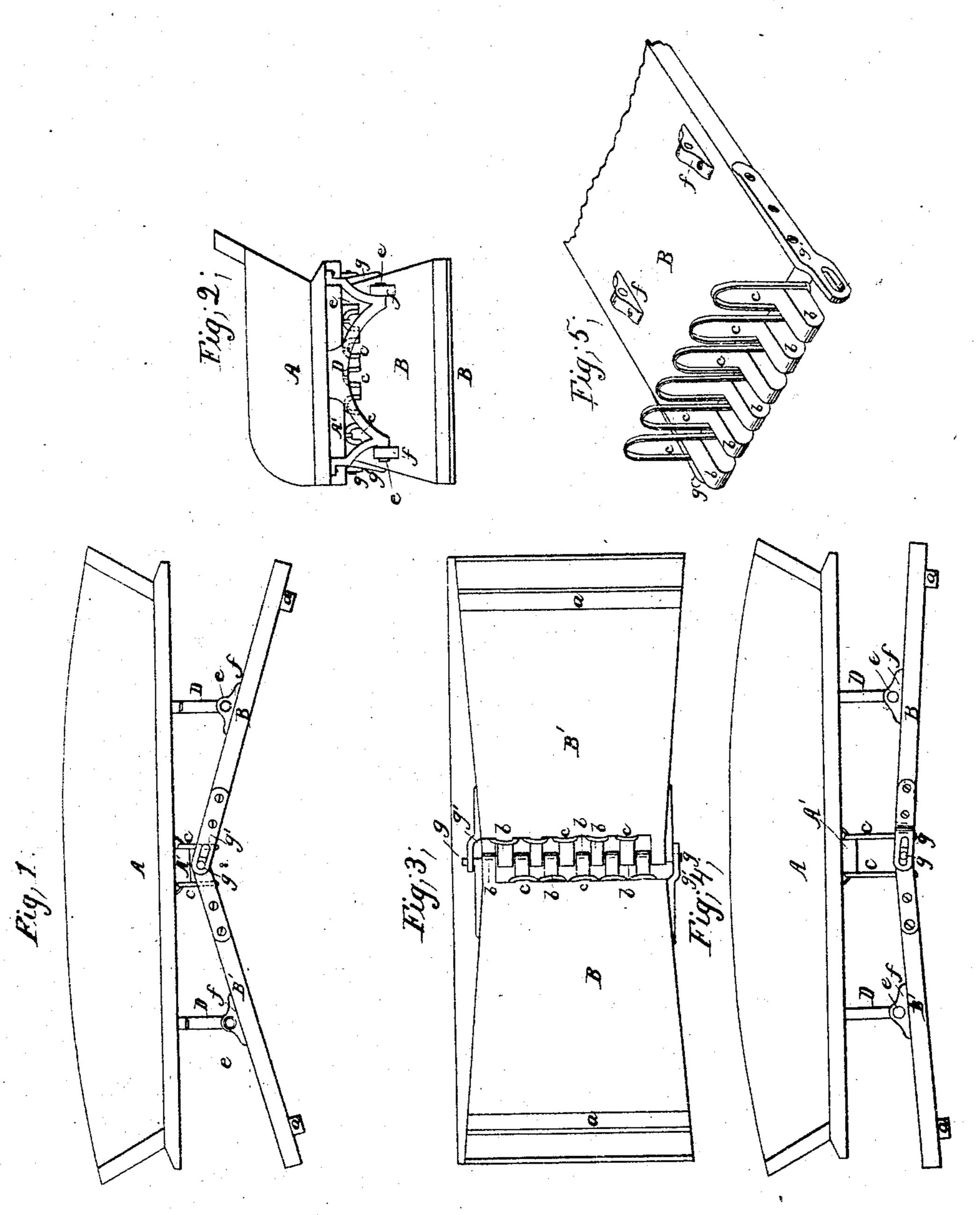
H.M. Mapes, In Carriage Seat. Nº 62,350 Patentea Feb. 26, 1864.



Witnesses; R. J. Cample. Inventor; Heram W. Maker J. Marca Henrich & Sammer.

Anited States Patent Office.

HIRAM W. MAPES. JR., OF RIPON, WISCONSIN.

Letters Patent No. 62,350, dated February 26, 1867.

IMPROVEMENT IN SPRING-SEAT FOR VEHICLES.

The Schedule referred to in these Betters Patent and making part of the same.

· TO ALL WHOM IT MAY CONCERN:

Be it known that I, HIRAM W. MAPES, Jr., of Ripon, in the county of Fond du Lac, and State of Wisconsin, have invented a new and improved Spring-Seat for Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of

Figure 1 is a front view of the spring-seat. Figure 2 is a view of one end of the same

Figure 3 is a bottom view.

Figure 4 is a perspective view of a portion of one of the spring-boards.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement on spring-seats for all varieties of vehicles, and for other purposes where a spring-seat may be required. It consists in mounting the seat upon two inclined boards, which incline from the centre toward the ends of the seat, and which are connected at their upper ends to the bottom of the seat, by means of India-rubber bands, in such manner that any load upon the seat will be supported by said bands and by the inclined boards, thus affording a comfortable spring-seat, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation. In the accompanying drawings, A represents the seat of a wagon, which may be made in the usual manner and of any desired form. BB' are two inclined boards, which may be made as wide as the seat, and which are provided with battens, a a, on their lower sides and near their outer ends, for keeping the seat in place between the sides of a wagon-or other vehicle. The inner ends of the two boards B B' are notched so as to form interlocking tongues, \bar{b} b, which prevent lateral displacement of the inner ends of said boards as these ends vibrate up and down. These tongues also serve for receiving the India-rubber loops e e, which are connected to staples that are driven into the central cross-piece A', of the seat, as shown in figs. 1 and 4. Strong iron brackets, D D, are secured to the bottom of the seat A, transversely across the same and at equal distances from the central piece A', and on the front and rear ends of these brackets gudgeons or pivots, ee, are formed which enter bearing blocks ff, that are secured rigidly to the two boards $\dot{B}B'$, as shown in the drawings. The brackets D D may be made light and strong, and they should be secured firmly to the bottom of the seat. The weight of the seat is supported upon the two boards B B' uniformly, and at points which are between the extremities of said boards. The inner or interlocking ends of the spring-boards B B' are held up against the crosspiece A' when there is no weight upon the seat A, but when there is a weight upon the seat the spring loops c c will stretch more or less, and allow the seat to rise and fall, restrained only by the elasticity of the loops. The upper ends of the spring-boards BB' are connected together by means of pins, g, which are formed on plates that are secured to the front and rear edges of these boards, which pins project through oblong slots that are made through the ends of plates g', as shown in figs. 1, 3, and 4. It will be seen from the above description that the elastic loops c c will all receive the weight of the seat equally, and that any weight upon the ends or in the centre of the seat will act uniformly upon all the springs at one time. The seat will not tilt on one side in consequence of a person sitting on such side, as the seat must rise and fall in a horizontal plane. The force of the springs e may be increased by placing the supporting brackets nearer the outer ends of the springboards BB', and diminished by moving said brackets nearer the inner ends of said boards.

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

1. Supporting a seat upon two inclined boards B B', which are jointed together at their inner ends and connected to the seat by means of springs cc, substantially as described.

2. Connecting the inner ends of the inclined supports B-B', by means of interlocking tongues and sliding joints g g', in combination with spring connections c c, and pivot connections e e, substantially as described.

Witnesses:

HIRAM W. MAPES, JR.

W. W. YALE, Z. T. MERRILL.