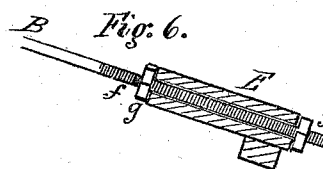
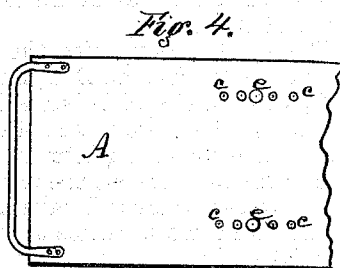
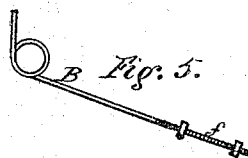
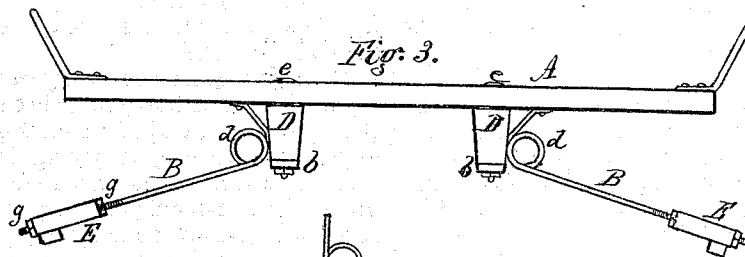
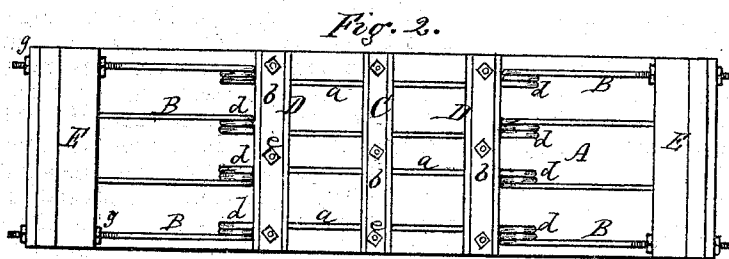
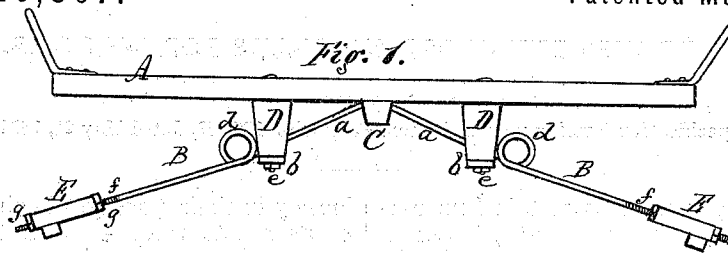


GEORGE W. BENNETT.
 Improvement in Spring-Seats for Wagons.
 No. 126,867. Patented May 21, 1872.



Witnesses.
 Archie Baine
 Chas. H. Hoff

Inventor.
 Geo W. Bennett
 J. B. Burke, Fraser & Osgood
 attys

UNITED STATES PATENT OFFICE.

GEORGE W. BENNETT, OF AVON, NEW YORK.

IMPROVEMENT IN SPRING-SEATS FOR WAGONS.

Specification forming part of Letters Patent No. 126,867, dated May 21, 1872.

Specification describing a certain Improvement in Spring-Seats for Wagons, invented by GEORGE W. BENNETT, of Avon, in the county of Livingston and State of New York.

My invention consists in an arrangement of springs made adjustable in the manner and for the purpose hereinafter specified.

In the drawing, Figure 1 is an elevation; Fig. 2, a bottom view; Fig. 3, an elevation, showing a modified form of the springs; Figs. 4, 5, and 6, detail views.

A represents the seat proper, which may be made of any desired form. B B are the springs, which are made of steel wire of suitable size. Each spring extends from end to end of the seat, so as to give the desired elasticity at each end, and at the same time to be easily attached on the under side. This attachment is made as follows: The central portions *a a* of the springs are made arched or convex, and are secured to the center of the seat by a cross-piece, C, screwed fast in place. On each side of this are bolsters or bearing-blocks D D, through which the springs run loosely, being held thereto by metallic cleats *b b*, which are bolted in place. The bolsters are made adjustable forward or back by means of bolts *e e*, which enter a series of adjusting holes, *c c*, (Fig. 4,) in the seat, or longitudinal slats, which answer the same purpose. Outside the bolsters the springs are bent into coils *d d*, by which additional elasticity is obtained. In some cases I contemplate attaching the ends of the springs directly to the bolsters, as shown in Fig. 3; said ends being bent up vertically, and passing into the bolsters, and held by the cleats before described. The outer ends of the springs, which are straight, pass into corresponding holes in the rail-bearings E E. The two outside springs pass entirely through, and are cut with screw-threads *f f*, on which screw nuts *g g* each side of the rail-bearing, so that the latter may be adjusted forward or back at pleasure. The intermediate or central springs simply rest

loosely in their passages in the rail-bearings, so as not to interfere with the adjustment. By this arrangement it will be seen that a double adjustment is attained: First, by moving the bolsters D D nearer together or further apart a vertical adjustment of the springs is produced, which elevates or depresses the seat. Second, by screwing up or back the nuts *g g* on the outer springs, the rail-bearings are moved toward or from each other, which adapts the same to fit wagon-bodies of different widths. One adjustment is essential to the other, even in the same wagon, since the vertical raising of the seat to insure a greater stiffness to accommodate a greater load will require the letting out of the rail-bearings and the reverse. This arrangement of the springs having the double adjustment described, I believe to originate with myself.

Another feature of novelty consists in making the length of the springs in three divisions, the central one, *a a*, of which is made stiff and unyielding, thereby securing firmness of attachment, while the other arms form the springs proper. The central portion *a b* by being arched, as shown, throws the lengths out of a straight line, and, therefore, prevents any tendency of the springs to roll or twist, which would be the case if they were straight.

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

The combination, with the seat A, of the springs B B, bolsters D D, and rail-bearings E E, when the said bolsters have an adjustment toward and from each other, and the rail-bearings have an adjustment on the springs, as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEO. W. BENNETT.

Witnesses:

R. F. OSGOOD,
ARCHIE BAINE.