

PATENTED MAR 21 1871

Valentine Myers, Waggon-Seat, 112834 Fig.1.

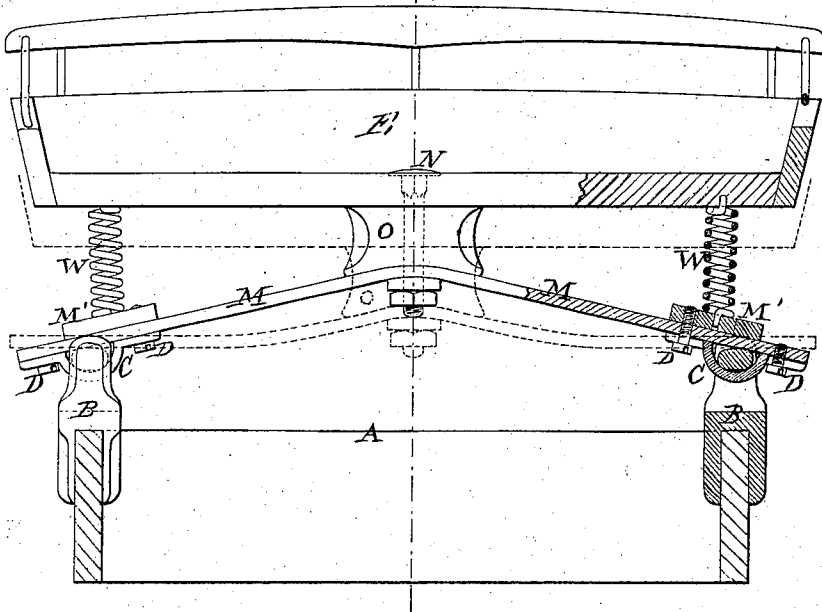


Fig. 3.

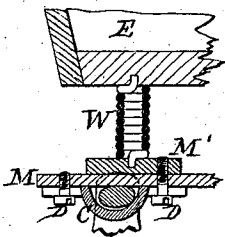


Fig. 2.

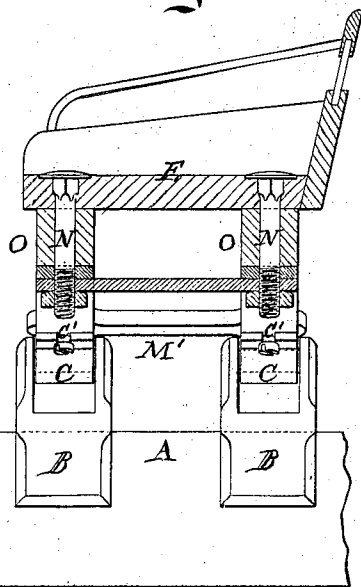
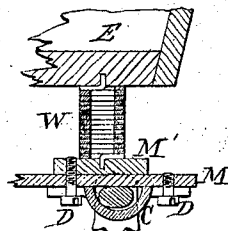


Fig. 4.



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VALENTINE MYERS, OF COGAN STATION, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND JOHN M. PHELPS, OF SAME PLACE.

Letters Patent No. 112,834, dated March 21, 1871.

IMPROVEMENT IN WAGON-SEATS.

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

To all whom it may concern:

Be it known that I, VALENTINE MYERS, of Cogan Station, in the county of Lycoming, in the State of Pennsylvania, have invented certain new and useful Improvements in Wagon-Seats; and I do hereby declare that the following is a full and exact description thereof.

My invention relates to seats in which the action of springs is interposed between the seat proper and the carriage-body.

I will first describe what I consider the best means of carrying out my invention, and will afterward designate the points which I believe to be new.

The accompanying drawing forms a part of this specification.

Figure 1 is a front view, partly in section.

Figure 2 is a transverse section through the middle of the seat.

Figure 3 is a section through auxiliary spring in its most compressed condition, so that it serves as a stop.

Figure 4 shows a modification in the form of the metal which may be employed for such auxiliary spring.

Similar letters of reference indicate like parts in both of the figures.

A represents the upper edge of the body of the wagon.

B B, &c., are four saddles, which fit tightly upon the upper edge of the wagon-body A and receive the action of the springs under the seat E.

There are two sets or kinds of springs employed: one is a wood spring, made of a breadth and thickness sufficient to give the required strength. The strength should be sufficient to nearly support the heaviest weight which is likely to come upon the seat under ordinary conditions.

These springs are marked M M.

They are bolted firmly to the seat, at the center, through the medium of the bolts N and blocks O.

The springs M M are tied together by tie-pieces M', which serve, also, as the bases or feet for the auxiliary springs.

These auxiliary or aiding-springs are spiral, and are marked W W.

They stand under the corners of the seat, and receive the force in the line of their axes.

The saddles B support the weight upon the wagon-body. Their interiors may be lined with raw-hide or other material, but I do not esteem such generally necessary.

They are adapted at their upper ends to be embraced by the straps C, which apply in the opening therein, and are secured by bolts, D, standing in the slots C' in the ends of the strap, as will be readily understood from the drawing.

By slackening the screws or bolts D the straps

may be moved in either direction, outward or inward, from the center, and again secured.

In case of any great differences in the width of the wagons to which my seat is applied, there may be several different holes, allowing screws or bolts D to be exchanged from one set of holes to another, and thus to vary the width to any extent desired.

The springs M M may be of ash or other tough wood.

It should be bent by steaming, or be made from wood naturally bent at the center, so that it will exert no tendency to straighten at that point, but will tend to stand always in the position shown in the strong lines.

When the load comes upon the seat it depresses the seat into the position indicated by the dotted lines, and in this condition the elasticity of the wood springs M M and of the spiral springs W W combine very effectively and harmoniously.

In case of a very great loading, or of a very great jolt when in use, the spiral springs W, after being compressed to their fullest extent, rest with their several coils lying directly one upon another, and the seat can descend no further.

The spiral springs serve, therefore, both as auxiliary springs, and as stops to prevent the wood springs from being overbent and broken.

The several details of my seat and springs may be modified at will within wide limits without defeating entirely the objects of my invention.

I propose, among other slight modifications, to have the brass, steel, or other metal of the auxiliary springs and stops W made of flat rolled material, lying so that the coils when fully compressed together rest upon each other flatwise. But I do not consider this indispensable to success in fulfilling their functions as stops, and prefer, for economy in ordinary work, to use round hard brass, or properly-tempered steel.

I claim—

1. In connection with a wagon-seat, the double inclined wood springs M, and spiral springs W, arranged for joint operation, as specified, so that the coiled springs perform the double functions of auxiliary springs, and of stops, to positively resist a too great descent of the seat, as herein set forth.

2. The wood spring M and metallic springs W, combined and arranged as represented relatively to each other, and to the seat E, when provided with the adjustable straps C and saddles B, or their equivalents, connected as represented, and adapted to serve relatively to wagons of various widths, substantially in the manner and for the purposes herein set forth.

In testimony whereof I have hereunto set my name in presence of two subscribing witnesses.

Witnesses: VALENTINE MYERS.

ROBT. FLEMING,
HENRY W. WATSON.