

S. N. BEECHER.
VEHICLE SPRING.

No. 185,884.

Patented Jan. 2, 1877.

fig. 1

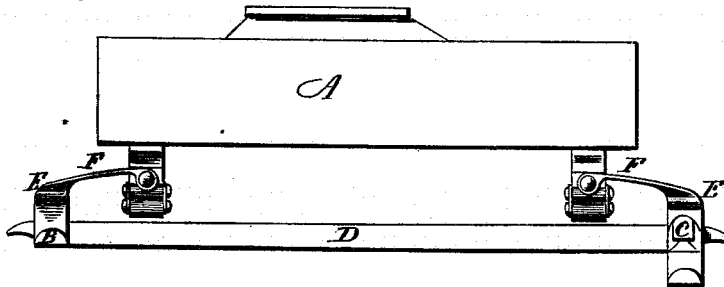


fig. 2

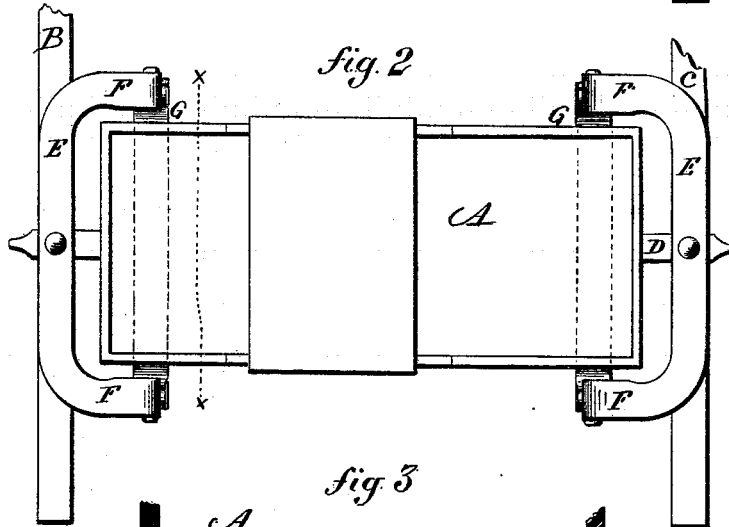
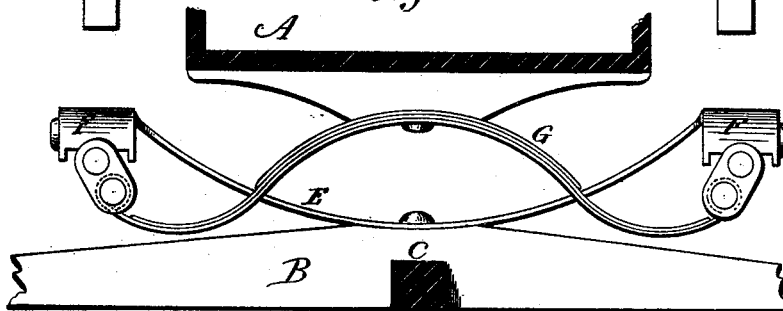


fig. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

SAMUEL N. BEECHER, OF MILFORD, CONNECTICUT.

IMPROVEMENT IN VEHICLE-SPRINGS.

Specification forming part of Letters Patent No. 185,884, dated January 2, 1877; application filed November 22, 1876.

To all whom it may concern:

Be it known that I, SAMUEL N. BEECHER, of Milford, in the county of New Haven and State of Connecticut, have invented a new Improvement in Hanging Carriage-Bodies; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a top view; and in Fig. 3, an enlarged section on line *x x*, looking to the rear.

This invention relates to an improvement in the method of hanging light wagons, the object being to attain the advantages of what are known as side bars without the unpleasant jar and stiffness which is experienced in the use of side bars.

The invention consists in the arrangement of a spring or bar parallel with the axle, and outside the body, the ends of the spring or bar turned inward, combined with a transverse spring hung to the ends of the said bar, and attached to the body, as more fully hereinafter described.

A represents the body; B, the rear axle; C, the forward rocker, the two connected by the perch D. The body is shorter than the distance between the rear and forward axles. Onto the rear axle and the forward bar C a spring or spring-bar, E, is arranged and firmly secured at its center. These spring-bars are, preferably, a little longer than the width of the body, with their ends F turned inward,

but, preferably, outside the body, so that the body may work down within or between the ends F. To the body a transverse spring, G, is secured, both fore and aft, and substantially in line with the ends F of the spring-bars, and hung to the said ends by links, or otherwise, and substantially as seen in Fig. 3.

This construction gives a free action to the springs, to which is added the elasticity of the spring-bars E, the action of the latter being similar to side bars, but without the rigidity or jarring sensation which always accompanies side bars, and it enables the hanging of the body in substantially the same relative position as may be done with side bars, and, therefore, possesses all the advantages of side bars without any of the disadvantages.

The distance to which the ends of the spring-bars extend inward may be varied to suit the trade, it only being essential that the transverse springs be hung to the ends of the spring-bars.

These spring-bars are, preferably, made from steel, and in substantially the usual way of making carriage-springs.

I claim—

The herein-described improvement in hanging carriage bodies, consisting of the spring-bar with its projecting ends, combined with the transverse springs hung to the said projecting ends, substantially as described.

SAMUEL N. BEECHER.

Witnesses:

JOHN E. EARLE,
CLARA BROUGHTON.