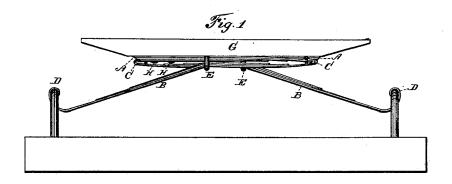
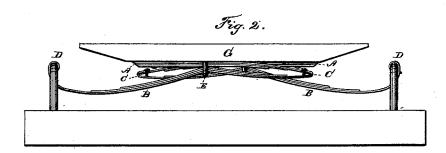
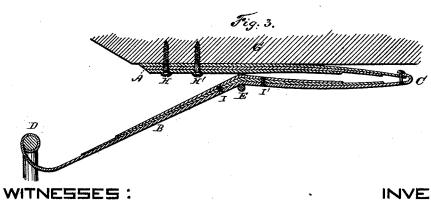
## D. S. BAILEY. Carriage-Spring.

No. 218,419.

Patented Aug. 12, 1879.







Otto Heidemaun.

INVENTOR: DIS Bailey

## UNITED STATES PATENT OFFICE.

DEXTER S. BAILEY, OF DOVER, MAINE.

## IMPROVEMENT IN CARRIAGE-SPRINGS.

Specification forming part of Letters Patent No. 218,419, dated August 12, 1879; application filed July 1, 1879.

To all whom it may concern:

Be it known that I, Dexter S. Balley, of Dover, in the county of Piscataquis and State of Maine, have invented certain new and useful Improvements in Carriage-Springs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 is a side elevation. Fig. 2 is a side elevation, showing the springs depressed by the weight of the wag-on-body and its load. Fig. 3 is a sectional view, showing in detail the construction and application of the springs.

The invention relates to the construction and application of an oscillating lever-spring.

The object of my invention is to provide a carriage-spring that may be used and applied in a limited space, and at the same time produce that free and easy action on or motion of the body of the carriage that is obtained by the use of the long spring.

It is well known that the longer a spring is the more free and easy the action. A short spring has a quick action and imparts a sharp vibrating motion to the body of the carriage, which makes it very tiresome to the persons riding.

The invention consists in the arrangement of the upper and lower springs by means of joints and a fulcrum-bearing in the central part of the springs, whereby angular adjustment is obtained, and by means of the oscillating motion of the lower lever-spring all the action or motion which is obtained on one side of the fulcrum is transmitted to the opposite end of the spring, by which means the desired length of perpendicular motion is obtained

with much less bending of the springs than is the case in the ordinary way of applying springs

The spring-bar G is bolted or otherwise suitably fastened to the body of the carriage. To the spring-bar, and running in opposite directions, are two straight springs, A A, which are bolted to the spring-bar at H H' and at the central part, E, leaving the ends of the springs C C to be joined to the lower leversprings, B B. The oscillating lever-springs B B are joined to the upper springs, A A, at C C, while the opposite ends are engaged with the running-gear at D D, and riveted together at I I'. They are provided with a fulcrumbearing, E E, in the central part of the spring, admitting of angular adjustment as to their relative position between the body and running-gear by means of the oscillating motion of the springs on their central bearing at E E, as shown in Figs. 1 and 2 of the drawings.

If desired, the springs B B may be directly attached to the spring-bar G by joints C C.

What I claim as my invention is—

1. In combination with the body of a vehicle, the springs A A, connected with springs B B by joints C C, and springs B B, resting on fulcrum-bearings E E and secured to the running-gear of a vehicle at D D, substantially as specified.

2. The combination of springs B B, resting on fulcrum-bearings E E, and attached with one end to the running-gear of the vehicle at D D and the other by joints C C directly to the body of a vehicle, or an attachment thereof, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

DEXTER S. BAILEY.

Witnesses: HERM. LAUTEN, JOHN W. CORSON.