

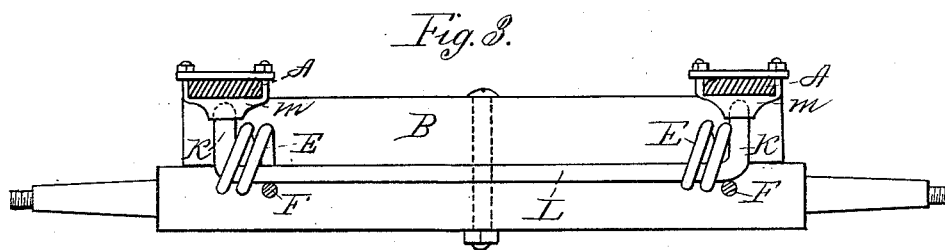
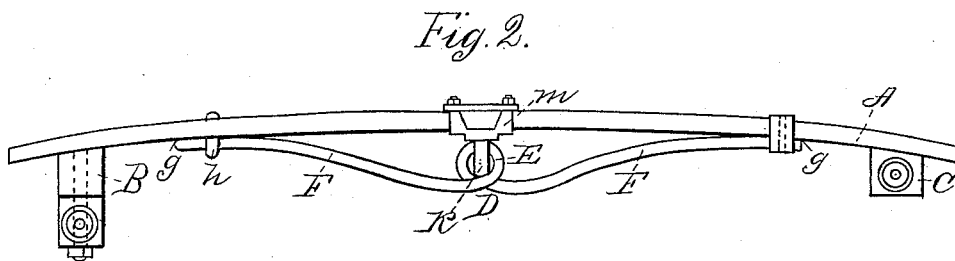
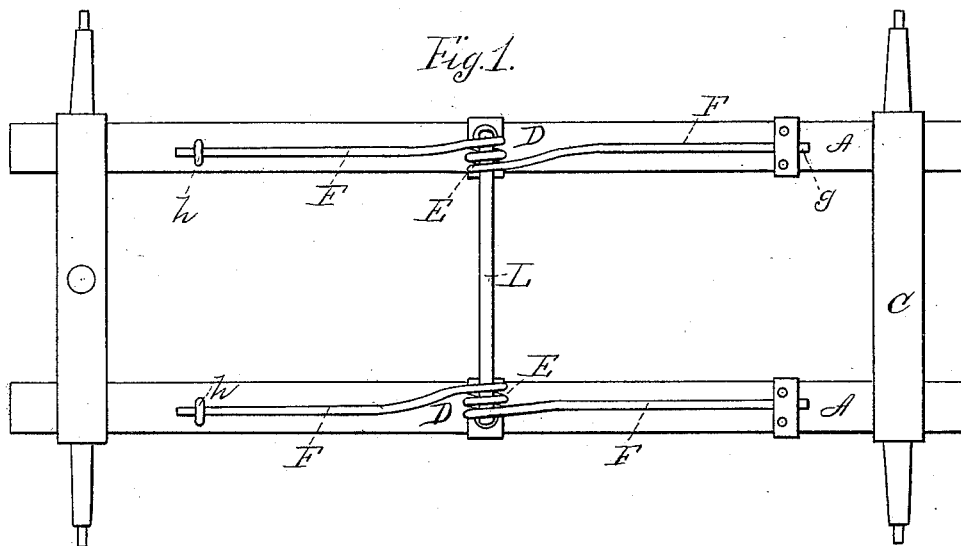
(No Model.)

W. L. RUSSELL.

VEHICLE SPRING.

No. 264,770.

Patented Sept. 19, 1882.



WITNESSES
Amelia L. Meyers
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INVENTOR
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UNITED STATES PATENT OFFICE.

WILLIAM L. RUSSELL, OF CAMBRIDGE, NEW YORK.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 264,770, dated September 19, 1882

Application filed August 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, W. L. RUSSELL, of Cambridge, in the county of Washington and State of New York, have invented a new and valuable Improvement in Vehicle-Springs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a bottom view of my device. Fig. 2 is a side view of the same, and Fig. 3 is a cross-sectional view.

This invention has relation to side-bar or buckboard springs; and it consists in the construction and novel arrangement, in connection with longitudinal wooden spring-bars attached by their ends to the rear axle and front bolster, of the elongated under springs of metal, formed with middle spiral loops, engaging a transverse bar upon which the middle portions of the wooden springs bear, all as hereinafter set forth.

In the accompanying drawings, the letter A designates wooden side-bar springs, extending longitudinally, and secured in front to the bolster B and in rear to the axle C.

D represents a longitudinal under spring, made of steel, and having an upwardly-turned middle spiral loop, E, from which the arms F of said spring extend toward the ends of the wooden spring-bar, the bearing ends g of said arms being connected to the under side of said wooden spring-bar by means of loops or by providing a sliding connection or staple, h, for one end of the metallic spring, and rigidly se-

curing the other end to the wooden bar. Through the loops E of the metal springs extend the ends K of a transverse bar, L, said ends being turned upward to engage socket-bearings m, secured to the under side of the wooden spring-bars. The metal spring is designed to bear on the transverse bar, which in turn bears on the middle portions of the wooden spring-bars, and when the latter are depressed by a load on the vehicle they will be supported by the elastic action of the metallic springs through the medium of the transverse bearing-bar, transferring the strain to a great extent to those portions of the wooden springs to which the ends of the arms F are connected, and which are nearer the front and rear bases of support—the bolster B and the axle C.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

A vehicle-spring consisting of the wooden side-bar or buckboard springs A A, the longitudinal under springs, D, having each a middle spiral loop, E, and being connected to the wooden springs by their ends, and the transverse bearing-bar L, having upturned ends engaging the middle portions of the wooden spring-bars, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM LUTHER RUSSELL.

Witnesses:

HENRY NOBLE,
DENNIS PLUNKETT.