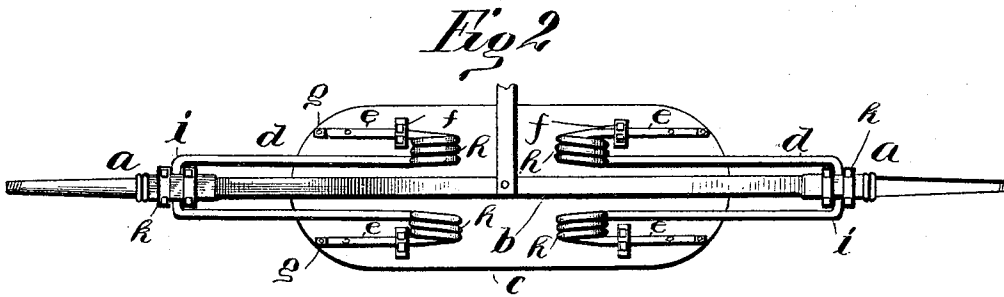
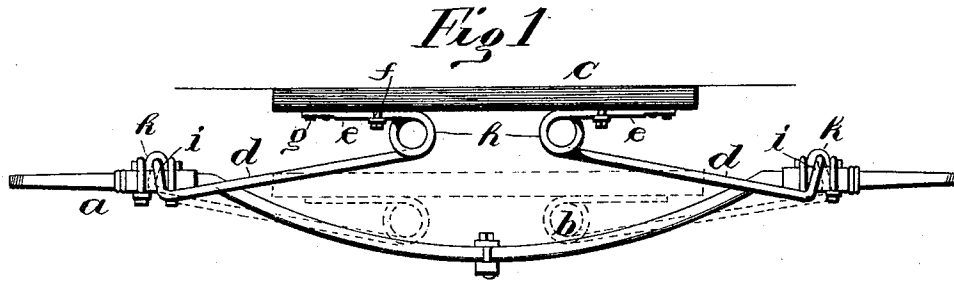


(No Model.)

D. C. HAMLIN.
VEHICLE SPRING.

No. 481,303.

Patented Aug. 23, 1892.



Witnesses
C. C. Burdine
J. B. Owens.

Inventor
Dewitt C. Hamlin
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his Attorneys

UNITED STATES PATENT OFFICE.

DEWITT C. HAMLIN, OF GREAT BEND, PENNSYLVANIA.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 481,303, dated August 23, 1892.

Application filed November 9, 1891. Serial No. 411,307. (No model.)

To all whom it may concern:

Be it known that I, DEWITT C. HAMLIN, a citizen of the United States, residing at Great Bend, in the county of Susquehanna and State of Pennsylvania, have invented certain new and useful Improvements in Vehicle-Springs; and I do declare the following to be a full, clear, and exact description of the invention, such as 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.

My invention relates to that class of vehicles in which the body is supported by resilient bars extending laterally astride the axle with their outer ends secured thereto and their inner ends to the under side of the central portion of the body.

The object sought to be accomplished is to provide more easily-constructed, strong, durable, and otherwise desirable means for supporting the body than has hitherto been accomplished; and to this end my invention consists in the peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claim.

In the accompanying drawings, Figure 1 represents a side elevation of my invention; Fig. 2, a bottom view.

The reference-letter *a* represents an axle provided with a downward curvature *b* to permit the vehicle-body *c* to descend as low as possible, and at the same time to permit its being located nearer to the ground. The body *c* is supported on the axle by means of wire springs *d*—in the present instance two springs being shown as applied to the rear end of the vehicle. Each one of these springs is formed of a round resilient bar of metal, the upper ends of which are bent outwardly and form a horizontal arm *e*, which is fastened to the under side of a vehicle-body by means of a clip *f* and a bolt *g*. At the inner ends of the horizontal arms *e* are formed a pair of

coils *h*, and from thence the bar forming the spring is bent downwardly and outwardly in the form of the letter *U*, and its outer extremity, which would be the top of the *U*, is bent upwardly to form a yoke *i*, which passes astride the axle *a* near the spindle, and is held thereon by means of a clip *k*. By thus constructing the springs and arranging them so that their outer *U*-shaped ends extend away from each other with the downwardly-extending bars astride the axle and parallel therewith it will be seen that all downward pressure on the vehicle-body will depress the springs without bringing them into contact with the axle, and that the body portion of the vehicle will be permitted to extend below the plane of the spindle portion of the axle, thereby permitting the body to be held near the ground and more easy of access. The yokes *i* have a free pivotal movement on the top of the axle, thereby allowing the downwardly-extending straight portions of the springs to have free endwise movement.

The advantages of my arrangement are those of simplicity, cheapness, strength, durability, and that of enabling the vehicle-body to be located in close proximity to the ground.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a vehicle, a spring having substantially horizontal upper arms attachable to the under side of the vehicle-body, said arms extending outwardly, in combination with coils and downwardly and upwardly extending portions adapted to pass astride the axle, said upwardly-extending portions forming a yoke pivoted on the top of the axle, in the manner and for the purpose substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DEWITT C. HAMLIN.

Witnesses:

W. E. BARNES,
J. G. MCCREARY.