

(No Model.)

W. L. BAY.
VEHICLE SPRING.

No. 313,800.

Patented Mar. 10, 1885.

Fig. 1.

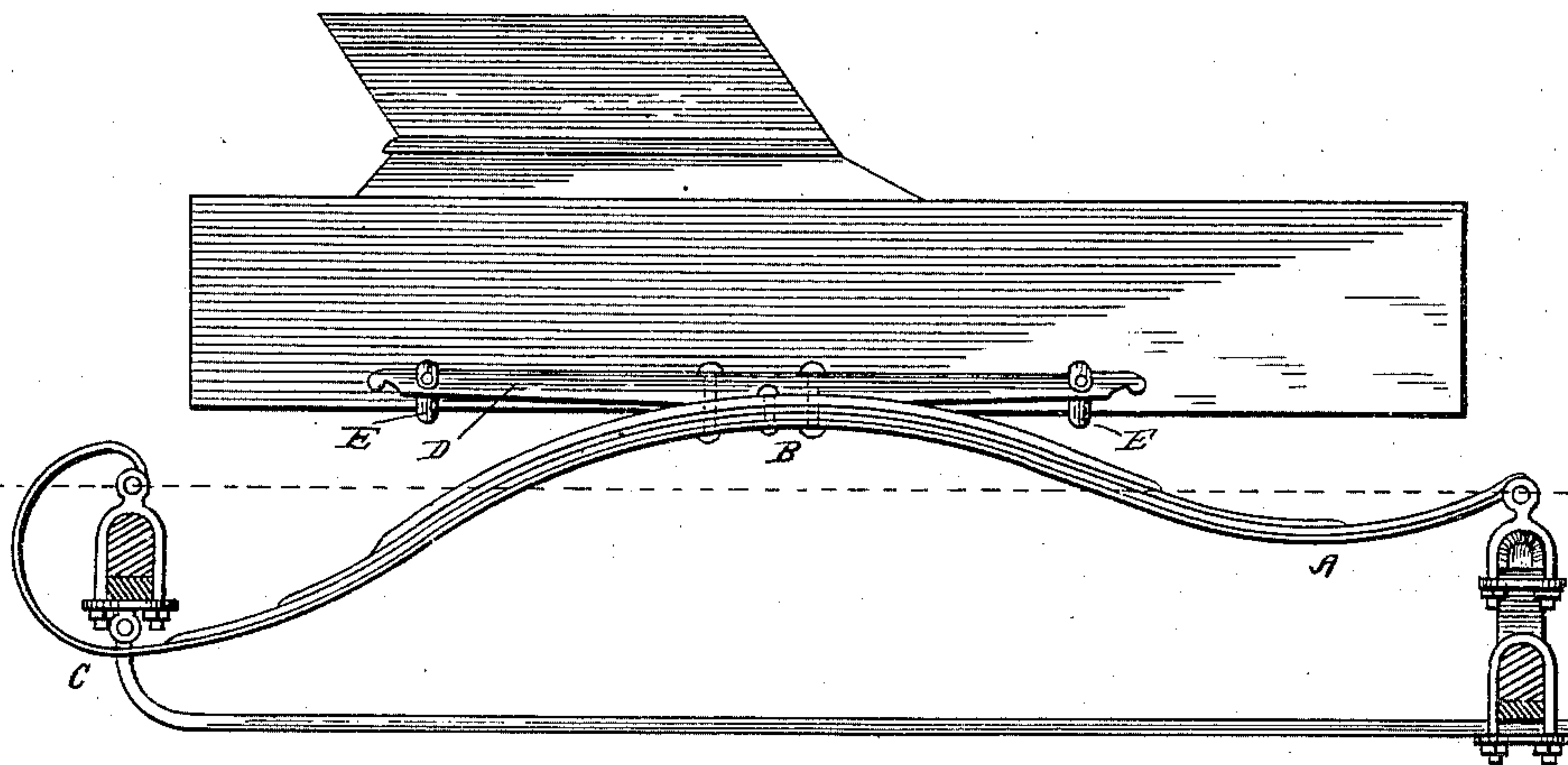
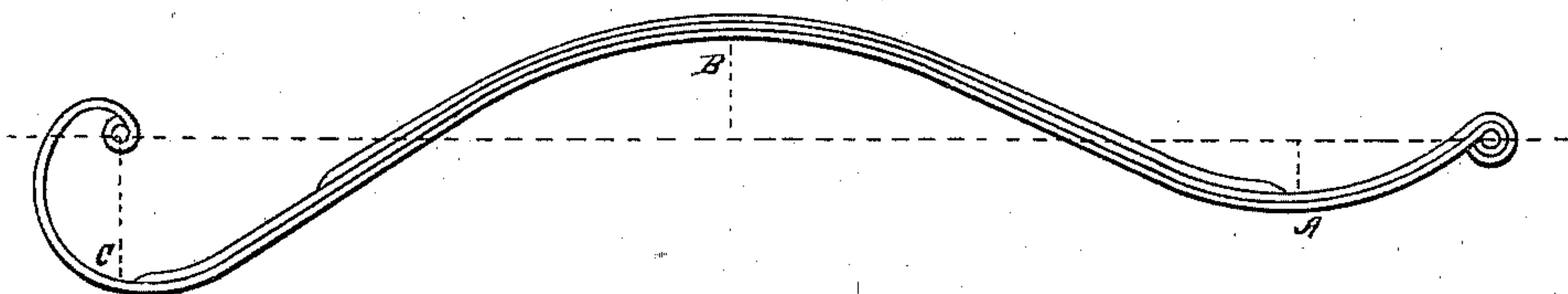


Fig. 2.



WITNESSES

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WILLIAM L. BAY, OF COLUMBUS, OHIO.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 313,800, dated March 10, 1885.

Application filed September 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. BAY, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Vehicle-Springs, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to improvements in vehicle-springs, and is designed, objectively, to produce a device that shall obviate the unpleasant "rocking" common to vehicles of the class to which the said springs are applicable.
15 Further, the improvements allow the hanging of the body as low as in any "side-bar" buggy. A special advantage possessed is that when a person gets in on one side the other side of the body will fall correspondingly, the
20 said body thereby always being level, even when only one person may be riding and on one side.

In describing the device reference is had to the annexed drawings, in which—

25 Figure 1 designates a side elevation of the spring with a body attached, and Fig. 2 a side view of one of the springs.

The spring is in form a double curve, the points of pivoting being equidistant from the
30 ground when properly attached to suitable running-gear. From the front pivot the spring bends downward for a short distance, as shown at A, then upward above the plane of the pivotal points till at slightly to the
35 rear of the center it is twice as far above the said plane as it is below at A. This point is shown at B. Thence bending downward the spring reaches a point at C directly under the rear pivot three times as far below the said
40 plane as the front of the spring is at A. From C the spring takes an upward C-shaped curve to the rear pivotal point, first passing above the plane before mentioned and then descending to the said pivot.

45 A short side bar, D, is secured to each of the springs at a point slightly to the rear of the central point between the front and rear pivots of the springs, or, in other words, at the highest part of the said springs.

50 At each end of these side bars is secured a body-loop, E, passing from one to the other.

On these loops rests the body, and to them the said body is secured.

When a weight is brought to bear on one side of the body, the highest part of the spring
55 is depressed, the part A somewhat shortened, and the rear, C, lengthened.

By placing the body and side bars between the two springs the rocking of the vehicle is
60 entirely obviated.

By constructing the springs with the curves proportioned as described and the rear end curved into a C, the full benefit of the springs—that is, to the rear of the center—is utilized, as actual experiment has proven.
65

When, as before stated, a weight is brought to bear on one side of the body, the rear of the corresponding spring is lengthened horizontally, while by the body turning or "slewing" around a little the other is so affected as
70 to keep the body perfectly level.

Having described the device, what I claim is—

1. A spring having its front and rear pivotal points in the same plane, then being
75 curved downward from the front pivotal point, then upward till the highest point reached is twice the distance above the plane as the first curve is below it, then curved downward till it reaches a point three times as far below the
80 plane as is the said first curve, and finally ending in a C-curve which passes back of and above the rear pivotal point before reaching it, the said spring having rigid connection to a vehicle-body, substantially as and for the
85 purpose specified.

2. A spring having its pivotal points in the same plane and curved from front to rear, first downward, then upward, and then downward in the respective proportions of one, two, and
90 three relative to said plane, and finally ending in a C-curve, one leaf at least of the spring extending the entire length from one pivotal point to the other, substantially as and for the purpose specified.
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In testimony whereof I affix my signature in presence of two witnesses.

W. L. BAY.

Witnesses:

CHAS. D. DAVIS,
N. P. CALLAN.