

(No Model.)

D. A. ROE.
VEHICLE SPRING.

No. 257,387.

Patented May 2, 1882.

Fig. 1.

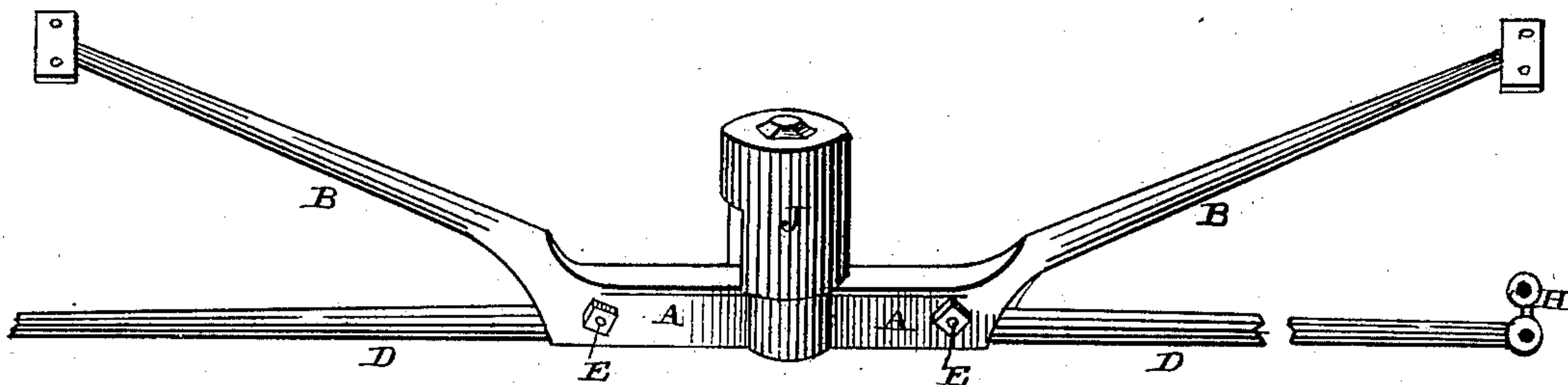
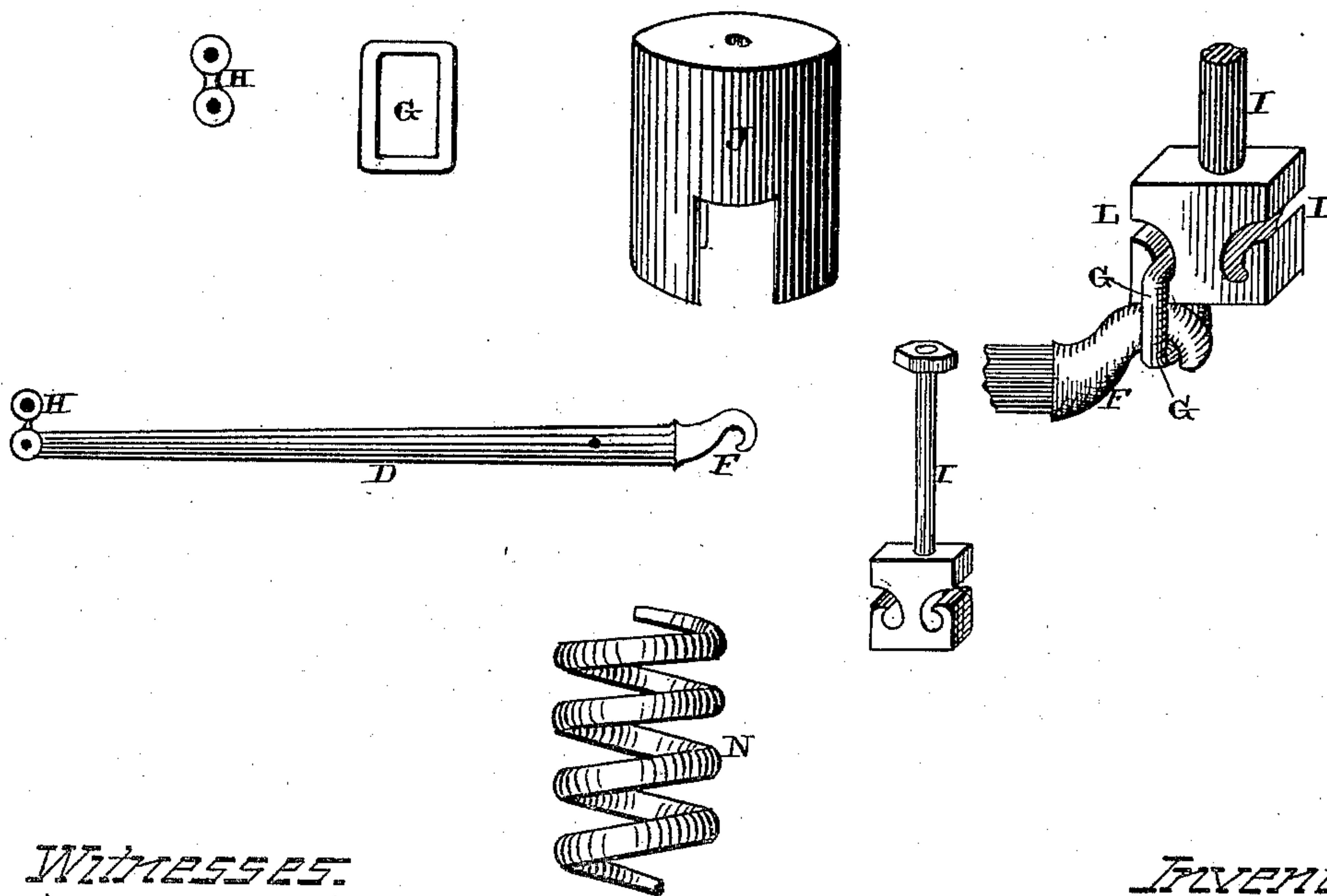


Fig. 2.



WITNESSES:

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DAVID A. ROE, OF COLUMBUS JUNCTION, IOWA, ASSIGNOR TO WALTER F. HALL, OF SAME PLACE.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 257,387, dated May 2, 1882.

Application filed February 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, D. A. ROE, of Columbus Junction, in the county of Louisa and State of Iowa, have invented certain new and useful
5 Improvements in Springs for Side-Bar Vehicles; and I do hereby 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 pertains to make and
10 use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in springs for side-bar vehicles; and it consists
15 in the combination of a suitable supporting-frame, the two pivoted rods which are supported in the frame, and which have their inner ends connected to the hanger which passes down through the spring, and the inclosing-cylinder, as will be more fully described hereinafter.

The object of my invention is to provide a cheap, simple, and effective spring for vehicles, and which is not liable to become broken,
25 and which, if it should happen to get out of order or be broken, can be readily and easily repaired.

Figure 1 is a perspective of my invention complete. Fig. 2 shows the different parts in
30 detail.

A represents a suitable metallic supporting-frame, which has its two outer ends formed into the arms B, and which are secured in any suitable manner to the under side of the bed,
35 or to any other suitable part of the vehicle. Through the central part of this frame A is made a suitable opening, down through which the lower end of the hanger projects, and the under side of the central part of the frame is
40 grooved or hollowed out, so as to form a receptacle to receive the inner ends of the rods D. These rods are pivoted upon the bolts E, which pass through the frame, and have their inner ends formed into the hooks F, so as to
45 catch in the links G, which hang downward from the lower end of the hanger. To the outer ends of these rods D are secured suitable coupling-links, H, by means of which they may be connected to the side bars, or any other suitable
50 part of the vehicle.

The hanger I consists of a straight threaded rod or bolt, which has its upper end screwed into the top of the cylinder J, and which has the notched head L formed on its lower end,

and which head projects down through the
55 opening in the center of the frame and has the links hung upon it. Around this rod or hanger I is placed the coiled spring N, the upper end of which bears against the inner side of the cylinder J, while the bottom rests upon the
60 top of the frame A.

The weight of the body bearing downward upon the frame A will be transferred to the rods through the pivotal bolts, and this weight will be brought to bear upon the coiled spring.
65 Any jolting movement of the wheels or vehicle will be brought to bear upon the spring, and the movement will be imparted to the body only through the elasticity of the spring, in the usual manner.

The great advantage of a construction such as is here shown consists in the cheapness of construction and the little liability of the parts to become broken or get out of order. Should
70 any one of the parts become broken, it can be readily repaired or replaced by another part. The amount of the elasticity given to the body can of course be regulated by the strength of the spring. As the cylinder J plays freely back
75 and forth by means of the slots cut in opposite sides over the top of the frame, the spring has sufficient play to adapt it to the very roughest of roads.

However rough the road may be, the body cannot rock or roll, and there is no rebound,
85 as must necessarily be the case where the common elliptic springs are used.

Having thus described my invention, I claim—

1. In a side-bar buggy, the combination of
90 a frame, A, which is to be attached to the under side of the end of the buggy, the rods D, pivoted therein, the hanger I, and the spring that is placed upon the top of the frame, substantially as shown.

2. In a spring for side-bar buggies, the combination of the frame A, which is to be attached to the under side of the end of the body, the rods D, pivoted at their inner ends in this frame, the hooks G, hanger I, having notches
95 or recesses in its lower end, and the cap or cover J, having openings in its lower edges, substantially as set forth.

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

Witnesses: DAVID A. ROE.
ARTHUR SPRINGER,
E. R. LACEY.