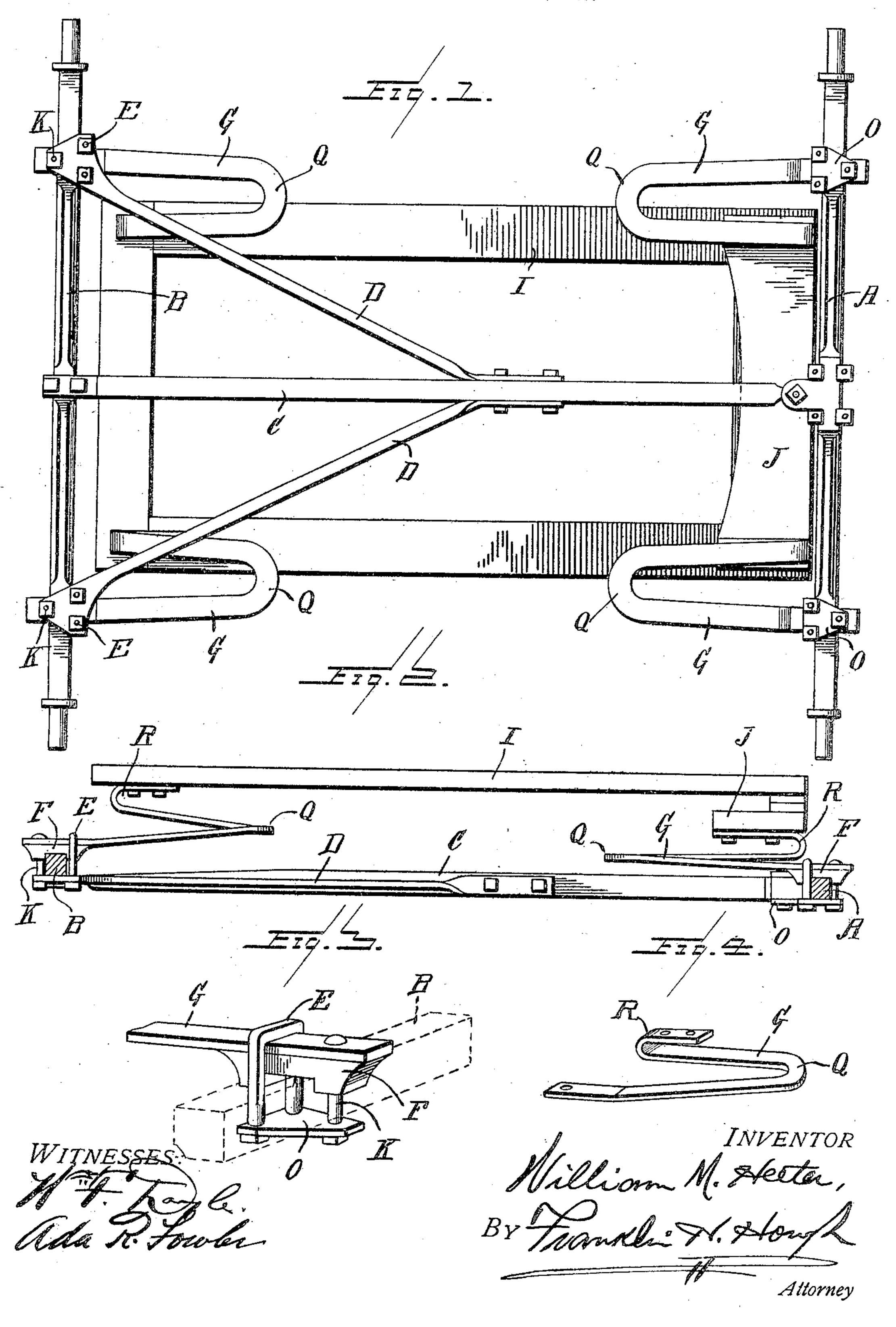
W. M. HEETER.

BUGGY SPRING.

APPLICATION FILED NOV. 23, 1905.



UNITED STATES PATENT OFFICE.

WILLIAM MELVIN HEETER, OF CALLENSBURG, PENNSYLVANIA.

BUGGY-SPRING.

No. 822,738.

Specification of Letters Patent.

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To all whom it may concern:

HEETER, a citizen of the United States, residing at Callensburg, in the county of Clar-5 ion and State of Pennsylvania, have invented certain new and useful Improvements in Buggy-Springs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable ro 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.

This invention relates to new and useful improvements in buggy-springs; and the object of the invention is to generally improve upon this class of inventions by the production of a simple and efficient leaf-spring 20 which may be attached to a rig with few fixings and at a slight expense and affording means for stiffening and bracing the body of

the gear.

More specifically, my invention comprises 25 an improved spring for buggies, the spring being fastened at one end by suitable clip mechanism to the axle of the gear and having a portion thereof running substantially parallel with the box and spaced apart from the 30 edge of the box, thereby lessening the side tilt or swing of the body, and so arranged that the fifth-wheel will be relieved of strain which comes upon the same where elliptical springs commonly used are employed, the 35 spring being bent substantially V-shaped at its longitudinal center and having one end bent upon itself and adapted to be secured to the under surface of the fifth-wheel at the forward end of the gear and at the rear end 40 to the bottom of the box.

My invention consists, further, in various details of construction and arrangements of parts, which will be hereinafter fully described and then specifically defined in the

45 appended claim.

I illustrate my invention in the accompa-

nying drawings, in which—

Figure 1 is a bottom plan view of a running-gear of a buggy, showing the applica-50 tion of my springs thereto. Fig. 2 is a side elevation. Fig. 3 is a detail perspective view showing the manner of attachment of the spring to the axle, and Fig. 4 is a perspective view of one of the springs.

Reference now being had to the details of the drawings by letter, A designates the tween the box and the spring.

| front axle of a vehicle-gear, and B the rear Be it known that I, William Melvin | axle, connected by a reach C, and D represents brace-bars, the rear ends of which are widened and perforated to receive the thread- 60 ed ends of the staples E, and F designates blocks which are recessed upon their under edges and adapted to fit over the upper edges of the axle.

G G designate leaf-springs which at the 65 rear end of the gear are fastened to the rear axle by means of said staples holding each a spring against the upper surface of one of said recessed blocks and also by means of a bolt K passing through an aperture near the 70 end of the spring and an aperture in the flaring end of the brace D, said staple and bolt being held in place by means of nuts, as shown. The springs at the forward end of the vehicle are fastened in a similar manner 75 as the springs are fastened to the rear axle, excepting that instead of the bolts and staples being secured to the brace D they are fastened to plates O, held against the under edge of the forward axle. It will be ob- 80 served that each of said springs is bent upon itself at a point indicated in the drawings by letter Q, making the spring substantially Vshaped a portion of its length, and one end of each spring is thence bent upon itself, as at 85 R, and parallel with one of the legs of said V-shaped portion, with a space intervening between the same, and the bent ends of the springs at the forward end of the gear are securely fastened to the under face of the fifth- 90 wheel J of the gear, which has swiveled connection with the platform or box I of the wagon. The rear springs are fastened in any suitable manner direct to the under surface of the platform or box, as shown.

Upon reference to the bottom plan view of the drawings it will be observed that the outer legs of each spring run substantially parallel with the opposite longitudinal edges of the platform or box, slightly tapering to- 100 ward the box, but extend each a sufficient distance toward each other, preferably each a quarter of the length of the box, thus affording an easy spring for taking up vibrations, and by reason of the peculiar manner 105 of mounting the springs with a space intervening between the opposite longitudinal edges of the box and the outer legs of the spring the box may be allowed to tilt sidewise or forward without interference with the 110 spring and without any frictional contact beBy the provision of a spring made in accordance with my invention being hung a considerable distance toward the ends of the axle the side tilting or swinging of the gear is prevented, and when the front gear passes over a stone or obstruction there would be no strain upon the fifth-wheel, which otherwise would be the case with side springs where the latter are attached to the center of the body, which gives a chance for the body to rock forward and backward, throwing the strain upon the fastenings of the spring.

What I claim is—

A spring-gear for buggies comprising, in combination with the forward and rear axles, leaf-springs, each being bent substantially V-shaped and having an end bent upon itself

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and adapted to be fastened to the body of the box, blocks recessed on their under edges and fitting over the upper edges of the axles, a 20 staple passing over said spring and block, a plate upon the under edge of the axle through which the ends of said staple pass, nuts mounted upon the threaded end of said staple, a bolt passing through said spring, block 25 and plate, and a nut engaging said bolt, as set forth.

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

WILLIAM MELVIN HEETER.

Witnesses:

E. M. HEETER, John C. Elliott.