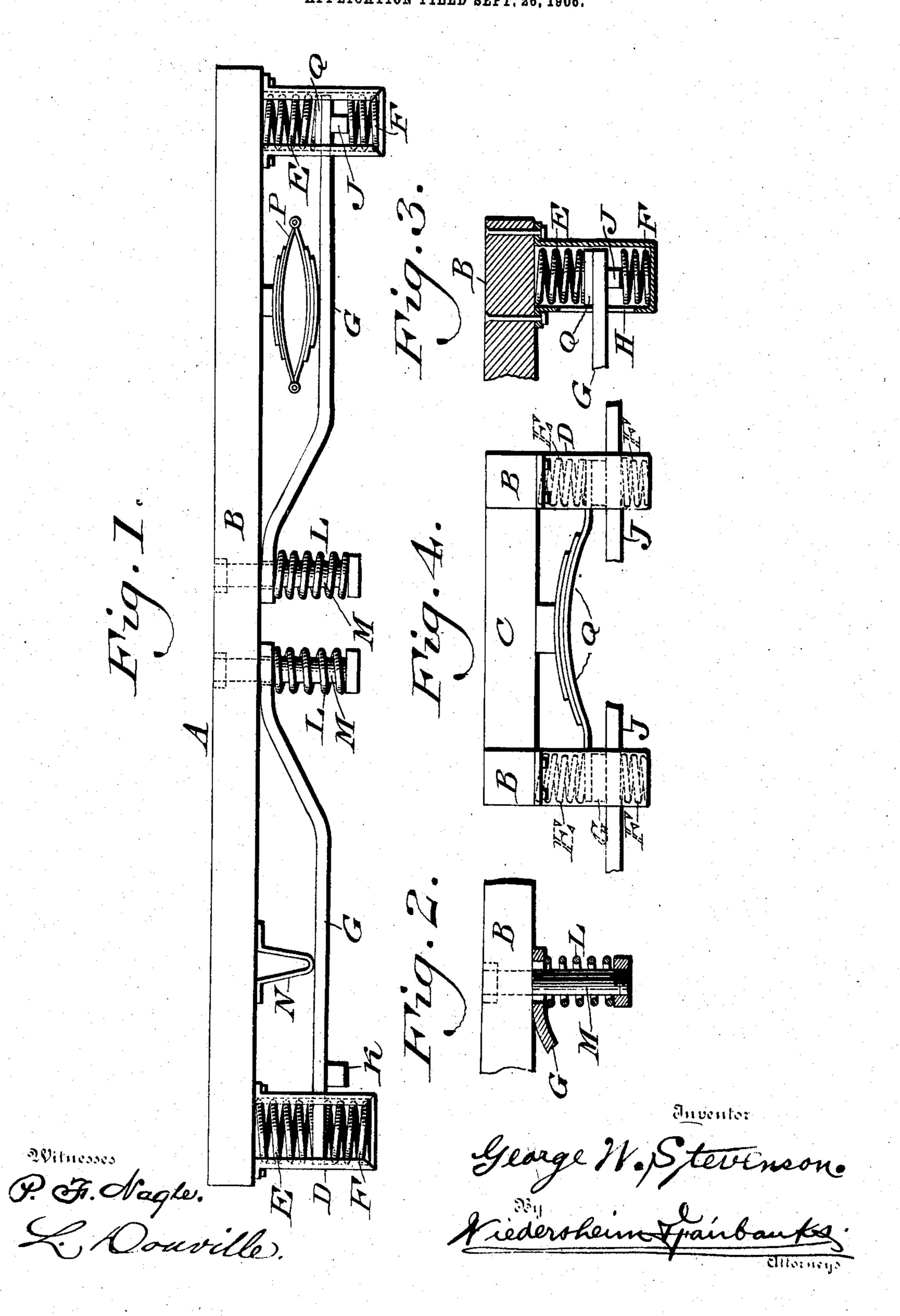
## G. W. STEVENSON. ROCKER BAR GEAR FOR VEHICLES. APPLICATION FILED SEPT. 26, 1906.



## UNITED STATES PATENT OFFICE.

GEORGE W. STEVENSON, OF READING, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO MILTON H. SCHNADER, OF LEBANON, PENNSYLVANIA.

## ROCKER-BAR GEAR FOR VEHICLES.

No. 866,976.

Specification of Letters Patent.

Patented Sept. 24, 1907.

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To all whom it may concern:

Be it known that I, George W. Stevenson, a citizen of the United States, residing at Reading, in the county of Berks, State of Pennsylvania, have invented 5 a new and useful Rocker-Bar Gear for an Auto or other Vehicle, of which the following is a specification.

My invention consists of an improvement in a rocker bar gear for an auto or other vehicle, the construction of the same being hereinafter described, and the novel features pointed out in the claims.

Figure 1 represents a side elevation of a rocker bar gear for an auto or other vehicle embodying my invention. Figs. 2 and 3 represent partial side elevations and partial vertical sections of detached portions 15 thereof. Fig. 4 represents an end view thereof.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings: A designates a portion of the frame of an auto vehicle composed of the longitudi-20 nally-extending side beams B and transversely extending beams C. Depending from the ends of said frame are tubes or casings D in each of which is contained the springs E and F.

G designates longitudinally-extending rocking bars, 25 the outer ends of which enter the casings D through the walls H on the inner sides thereof and are disposed on the axles J and K of the vehicle, the axle J passing through the open side of the relative casing. The axle K is removed from the adjacent casing without, how-30 ever, producing different results from the axle J, it being noticed that the springs E are seated on the ends of the bars G and the springs F are seated on the bases of the casings D below the bolsters J, K, of the axles respectively, and the ends of the bars G and relative por-35 tions of the axles J, K, are interposed between each set of springs E, F.

The inner ends of the bars G are freely sustained on the springs L, the latter being carried on pins M which depend from the side beams B and are firmly secured thereto. Interposed between the bars G and the side beams B are the fulcra N, P, the fulcrum N in the present case being rigid and the fulcrum P being resilient.

It will be seen that when the vehicle is loaded and in operation, the frame A and the parts of the vehicle in-45 terposed thereon are permitted to rise and fall on the bolsters, the springs E and F furnishing cushions above and below the ends of the bars G and the corresponding portions of the bolsters, so that the descent and ascent of said frame and parts are without shock or abruptness, but on the contrary are easy and gentle in their nature, owing to the resiliency of the cushions as formed. The motions of the frame also cause the bar G to rock,

while being supported by the cushions provided, it being also further subjected to the springs L, furnishing cushions for their inner ends and thus the cush- 55 ioning device between the frame A and the axle imparts great resiliency to said frame, the effect of which is evident.

In order to increase the resilient action, I employ a suitable spring Q which extends under the frame A at 60 an end, or one may be at each end, the ends of said spring entering the casings D and resting on the adjacent portions of the rocking bar G, so as to subject said bars to the additional resilient action of said spring Q, the effect of which is evident.

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

1. In a vehicle, a resilient support for the frame of the body thereof consisting of a rocking bar which is interposed between said frame and the axle of the vehicle and 70 resting upon the latter and endwise compressible springs bearing against the opposite ends of said bars in reverse direction.

2. In a vehicle, a resilient support for the frame of the body thereof consisting of a rocking bar which is inter- 75 posed between said frame and an axle of the vehicle, springs bearing against the opposite ends of said bars in reverse direction and an additional spring seated below said axle and bearing upwardly against the same.

3. In a vehicle, a frame, a casing suspended therefrom, 80 a plurality of springs in said casing, a rocking bar having an end adapted to enter said casing and rest on the axle of the vehicle and be subjected to the action of the upper spring, the other spring being below said axle and adapted to bear against the same.

4. In a vehicle, a rocking bar fulcrumed on the frame thereof, one end of said bar resting on the axle of the vehicle and mounted for bodily vertical movement and reversely acting springs bearing against the opposite ends of said bar.

5. In a vehicle, a casing depending from the frame thereof, a rocking bar mounted on said frame below the same, one end of said bar entering said casing, resting on the axle of the vehicle and a spring connected with said frame and having an end entering said casing and 95 resting on the adjacent portion of said bar.

6. In a vehicle, a casing depending from the frame thereof, a rocking bar mounted on said frame below the same, one end of said bar entering said casing, it being adapted to rest on the axle of the vehicle, a spring con- 100 nected with said frame and having an end adapted to enter said casing and rest on the adjacent portion of said bar and an auxiliary spring seated in said casing below said axle and bearing upwardly against the latter.

7. In a vehicle, a frame, a rocking bar interposed be- 105 tween the frame and an axle of the vehicle, means for subjecting the ends of said bar to resiliency each independently of the other, and a resilient fulcrum on said frame intermediate its ends for said bar.

GEORGE W. STEVENSON.

Witnesses:

WILLIAM O. CORNMAN, CHARLES H. M. CORNMAN.