

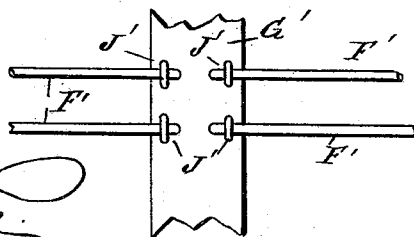
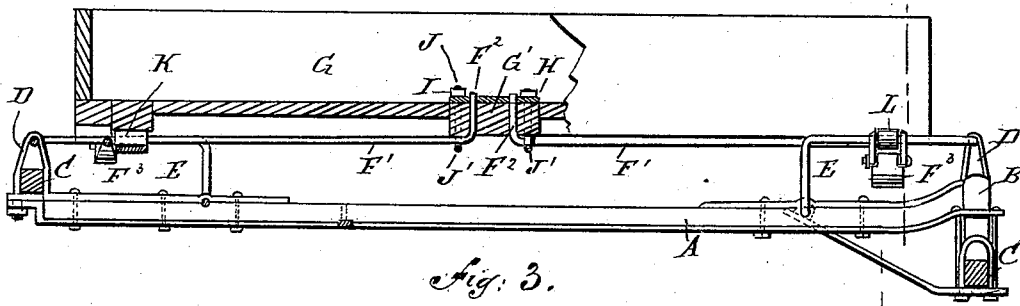
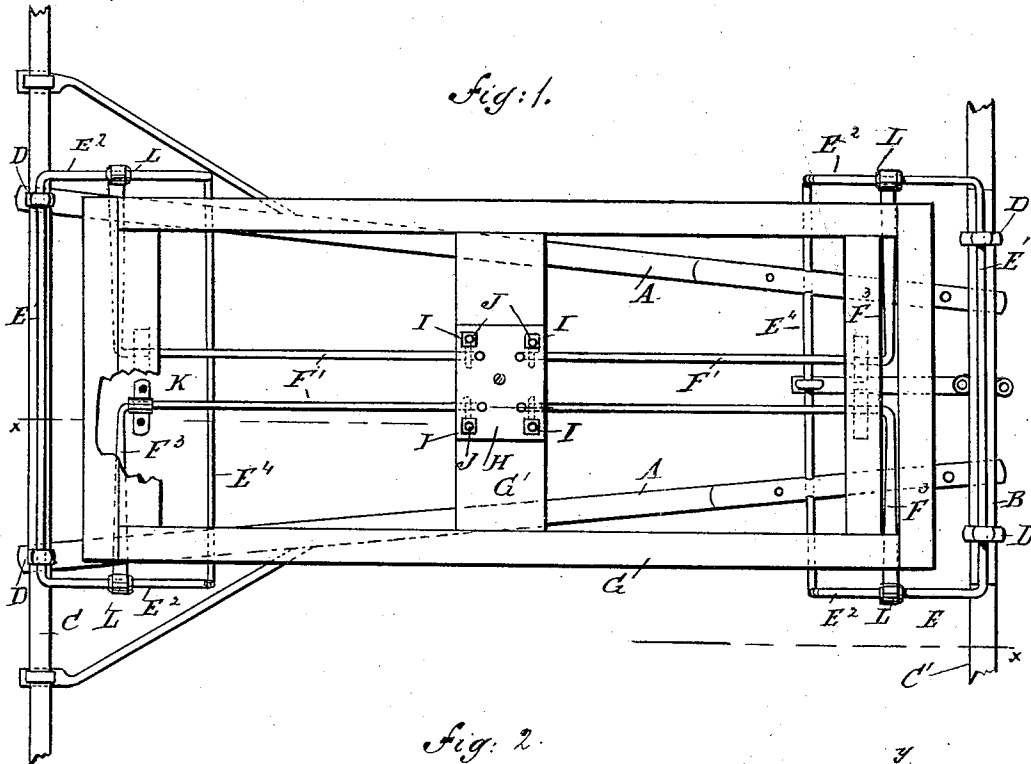
(No Model.)

2 Sheets—Sheet 1.

L. STOFFER.  
VEHICLE GEAR.

No. 361,790.

Patented Apr. 26, 1887.



WITNESSES:

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Fig. 4.

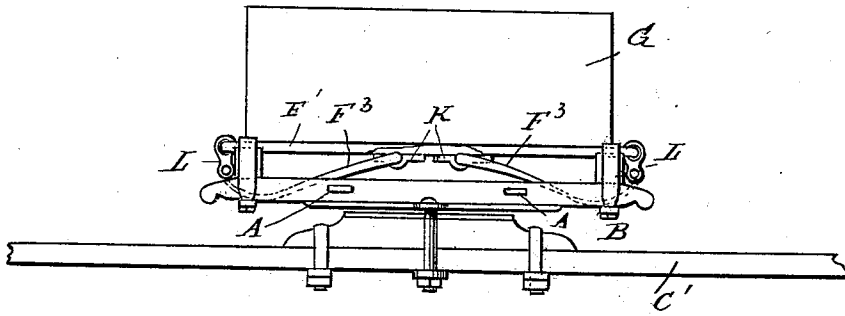


Fig. 5.

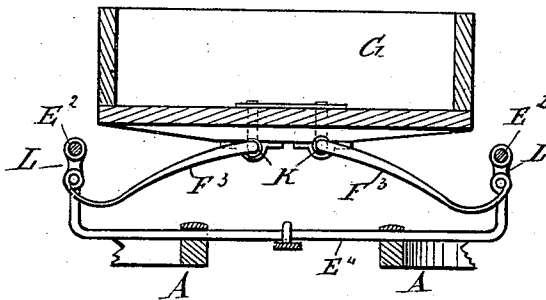
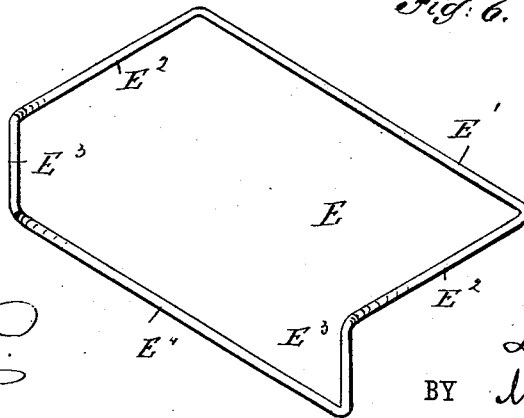


Fig. 6.



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# UNITED STATES PATENT OFFICE.

LUTHER STOUFFER, OF ST. JOSEPH, MISSOURI.

## VEHICLE-GEAR.

SPECIFICATION forming part of Letters Patent No. 361,790, dated April 26, 1887.

Application filed January 19, 1887. Serial No. 224,754. (No model.)

*To all whom it may concern:*

Be it known that I, LUTHER STOUFFER, of St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and Improved Vehicle Gear and Springs, of which the following is a full, clear, and exact description.

My invention relates to improvements in vehicle-gear for which Letters Patent No. 326,692, dated September 22, 1885, were granted to me.

The object of my present invention is to provide a new and improved vehicle-gear which dispenses with side bars and permits of turning the wagon-wheels under the reaches, and admits of the use of cross-braces.

The invention consists of bolster plates or posts secured to the head-block and the rear axle, of perches supported by the said bolster-plates and secured to the reaches, and of springs connected with the said perches and supporting the wagon box or bed.

The invention also consists of various parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improvement with parts broken out. Fig. 2 is a sectional side elevation of the same on the line *xx* of Fig. 1. Fig. 3 is a bottom view of the central cross-beam of the wagon-box, showing the spring-fastenings. Fig. 4 is a front view of my improvement. Fig. 5 is a vertical cross-section of the same on the line *yy* of Fig. 2, and Fig. 6 is a perspective view of one of the perches.

The reaches A are secured in the usual manner at the rear to the rear axle, C, and at the front to the head-block B, turning in the usual manner on the front axle, C'. The head-block B and the rear axle, C, are each provided with two bolster posts or plates, D, forming, in connection with the reaches A, supports for the perches E, each provided with a cross-bar, E', held on the said bolster-plates D, and being formed into right-angle side bars, E<sup>2</sup>, which continue into the vertical arms E<sup>3</sup>, connected with each other at their lower ends by the

cross-bar E', suitably fastened to the said reaches A.

The L-shaped springs F, which support the wagon bed or box G, have their arms F' provided with the upwardly-projecting ends F<sup>2</sup>, which pass through the central cross-beam, G', of the said box G, and through the top plate, H, secured on the said cross-beam G' by means of nuts I, screwing on the bolts J, passing through the cross-beam G', and provided on their lower ends with eyes J', through which pass the arms F' of the springs F. Each of the arms F' is also supported at its outer end by a bushing, K, held by suitable means on the under side of the wagon-box G. The arm F' is continued into the bent spring-arm F<sup>3</sup>, extending at right angles from the said arm F' toward the sides of the wagon-bed, and the outer end of each arm F<sup>3</sup> is secured to a clip, L, shrunk on or otherwise secured on the horizontal arm E<sup>2</sup> of the perch E.

It will be seen that when the bed or box G is loaded it will always have a gradual and easy motion on account of riding on the springs F, secured to the perches E, which are supported by the bolster-plates D and the reaches A, thus forming a substantial support for the wagon bed or box G.

It will also be seen that when the front wheels of the wagon are turned in under the wagon-bed they do not come in contact with the end bars or with the wagon-bed, even when the latter is loaded.

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

1. In a vehicle, the combination, with the reaches, the head-block, the rear axle, and the wagon bed or box, of bolster-plates secured to the said head-block and the rear axle, a perch resting on the said bolster-plates and secured to the reaches, and an L-shaped spring secured by one arm to the said perch and by its other arm to the under side of the wagon bed or box, substantially as shown and described.

2. In a vehicle, the combination, with a wagon box or bed, of an L-shaped spring secured by one arm to the under side of the said box, a perch supporting the said spring, and a bolster-plate supporting, with the reaches, the said perch, substantially as shown and described.

3. In a vehicle, the combination, with the head-block B, the rear axle, C, and the reaches A, of the bolster-plates D, secured to the head-block and the rear axle, and the perch E, supported by the said bolster-plates D, and secured by its cross-bar E' to the said reaches A, substantially as shown and described.

4. In a vehicle, the combination, with the bolster-plates D and the reaches A, of a perch E, consisting of a cross-bar, E', supported by the said bolster-plates D, the side arms, E<sup>2</sup>, the vertical bars E<sup>3</sup>, and the cross-bar E<sup>4</sup>, secured to the said reaches A, substantially as shown and described.

5. In a vehicle, a perch consisting of the cross-bar E', the side arms, E<sup>2</sup>, the vertical bars E<sup>3</sup>, and the cross-bar E<sup>4</sup>, substantially as shown and described.

6. In a vehicle, the reaches A, the head-block B, the rear axle, C, and the wagon box or bed G, in combination with the bolster-plates D, secured to the said head-block B and the rear axle, C, the perch E, consisting of

the arms or bars E', E<sup>2</sup>, E<sup>3</sup>, and E<sup>4</sup>, of which the cross-bar E' is secured on the said bolster-plates D and the bar E<sup>4</sup> is secured to the said reaches A, the clip L, secured to the said arm E<sup>2</sup> of the perch E, and the L-shaped spring F, secured by its arm F' to the under side of the wagon box or bed G and by its other end to the said clip L, substantially as shown and described.

7. In a vehicle, the perch E and the wagon box or bed G, in combination with the springs F, each provided with the arm F', having the upwardly-projecting end F<sup>2</sup>, and the bent spring-arm F<sup>3</sup>, held by its outer end on a clip secured to the said perch E, and the bushing K, held on the under side of the wagon-box G, the eyebolts J, and the nuts I, screwing on the said bolts, substantially as shown and described.

LUTHER STOUFFER.

Witnesses:

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