(No Model.) 2 Sheets—Sheet 1.

T. H. HOLMAN.

VEHICLE PLATFORM GEAR.

No. 342,695. Patented May 25, 1886.

Fig. 1.

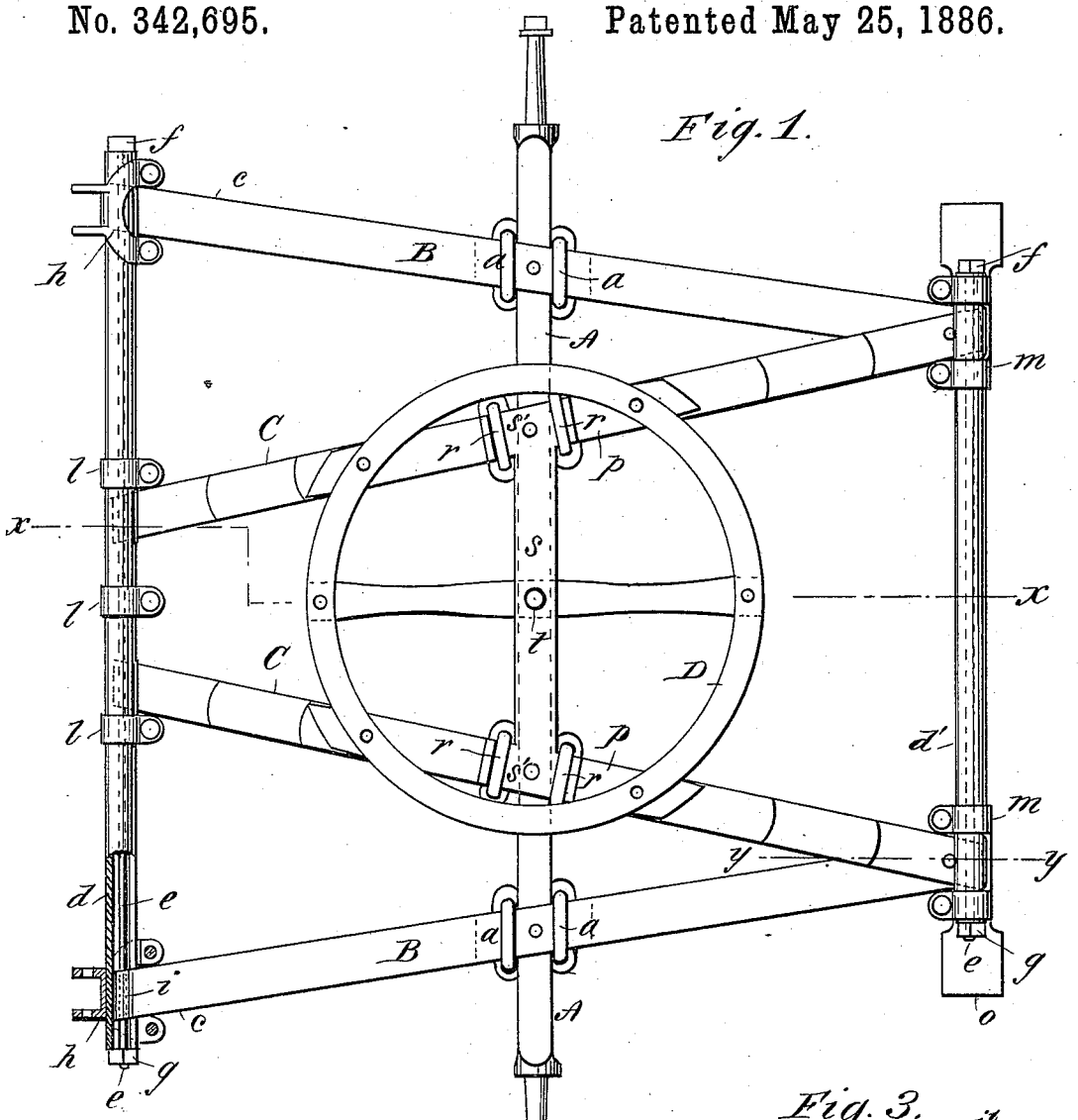


Fig. 2.

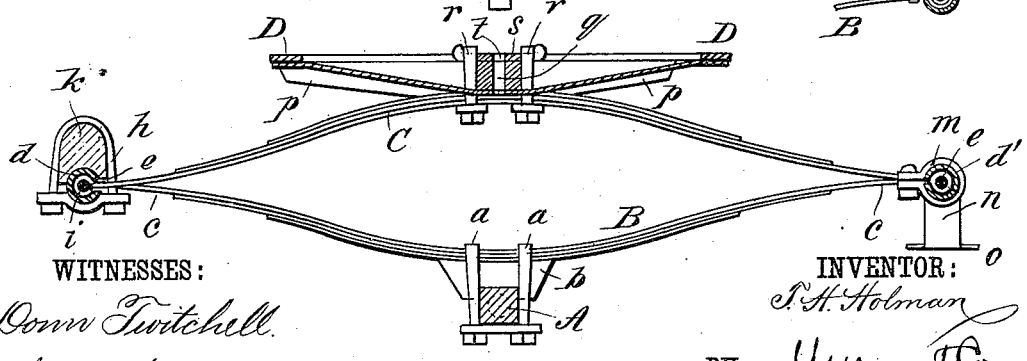
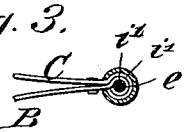


Fig. 3.



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(No Model.) 2 Sheets—Sheet 2.

T. H. HOLMAN.

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Fig. 4.

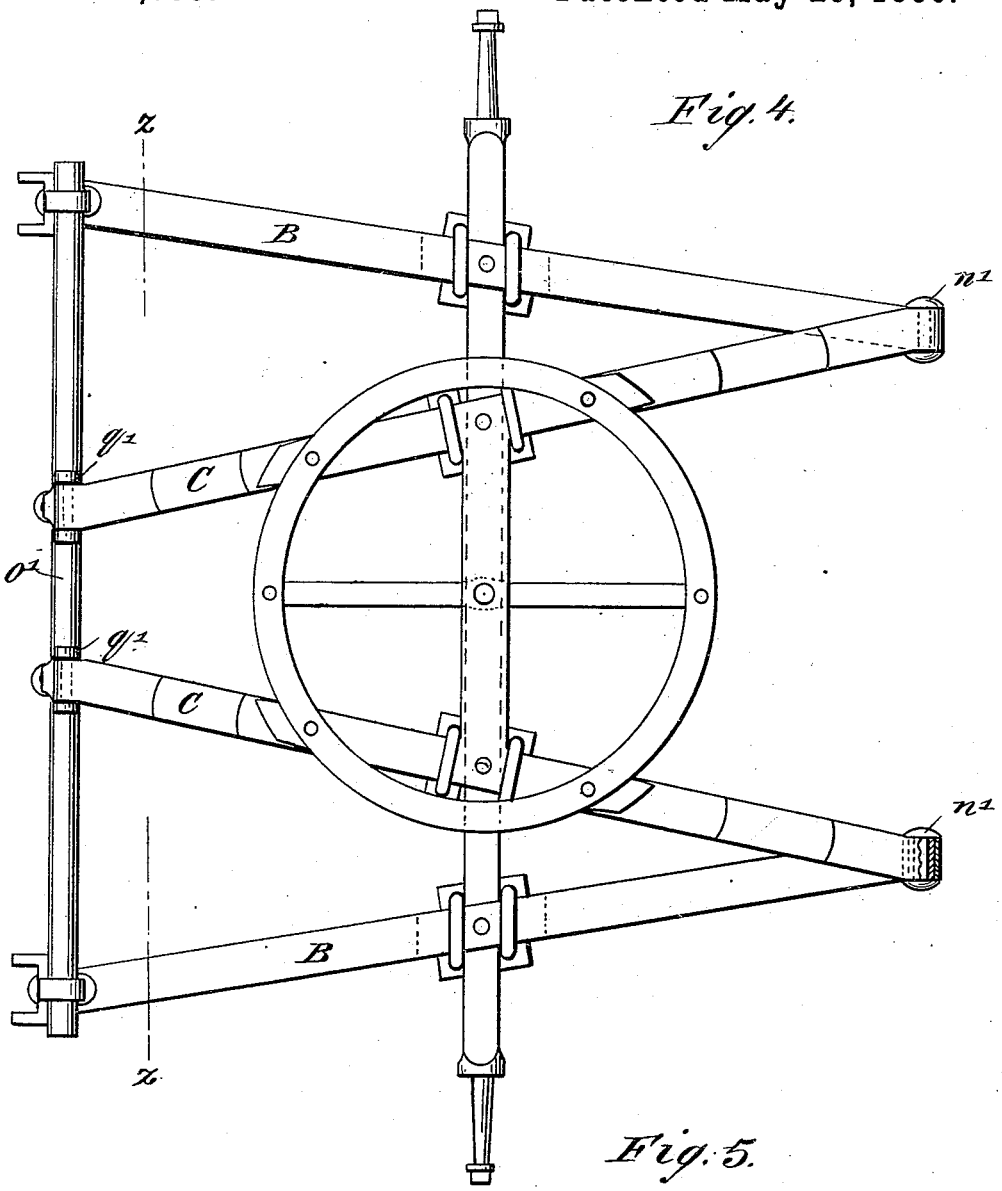
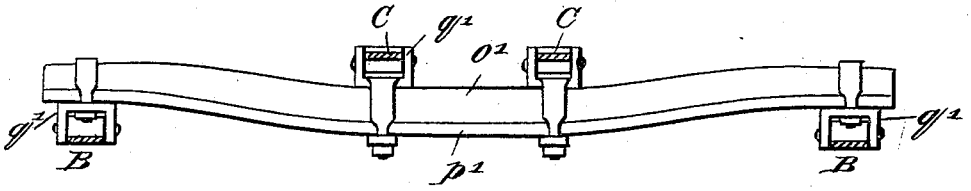


Fig. 5.



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UNITED STATES PATENT OFFICE.

THOMAS H. HOLMAN, OF NEWARK, OHIO.

VEHICLE-PLATFORM GEAR.

SPECIFICATION forming part of Letters Patent No. 342,695, dated May 25, 1886.

Application filed March 30, 1886. Serial No. 197,131. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. HOLMAN, of Newark, in the county of Licking and State of Ohio, have invented a new and Improved Vehicle-Platform Gear, of which the following is a full, clear, and exact description.

My invention relates to the construction of platform-gears for spring-vehicles, the object of the invention being to do away with the rear cross-springs, and to provide a safe, durable, and effective fastening for the ends of the springs; and to this end the invention consists of certain novel constructions and arrangements of the parts to be hereinafter explained, and specifically 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 improved platform-gear, a portion of the front bar being cut away to disclose the construction of the parts. Fig. 2 is a sectional side view of the same, taken on line *x x* of Fig. 1. Fig. 3 is a sectional view taken on line *y y* of Fig. 1. Fig. 4 is a plan view of a modified construction, and Fig. 5 is a sectional view taken on line *z z* of Fig. 4.

Referring now to the construction illustrated in Figs. 1, 2, and 3 of the drawings, A represents the axle, to which the two side springs, B B, are secured in the ordinary manner by the axle-clips *a a*, the springs being first attached to the pillow-blocks *b b*. The ends of the main leaves *c* of the springs B B are formed with eyes *i i'*, which rest within hollow tubes *d d'*, that are longitudinally slotted to permit the springs to enter them, said springs being slid in from the ends of the tubes, as will be readily understood from an inspection of the drawings. The central springs, C C, are also formed with eyes *i*, which fit snugly within the forward tube, *d*, the ends of the springs being placed toward the center of the bar, as shown in Fig. 1, while the eyes *i' i'*, at the rear of the springs C C, are large enough to be slipped over the rear eyes of the springs B B, and in this case the tube *d'* is slipped over the rear eyes of both sets of springs. After the springs B B and C C and the tubes *d d'* have been placed in the positions indicated, truss-rods *e e* are passed through the centers of the tubes, and thence through the spring-eyes, thus affording an additional support for the springs, besides strengthening the tubes *d d'*, which constitute the front and rear bars of the platform. The truss-rods *e e* are held in place by the bolt-heads *f f*, which they carry at one end, and the nuts *g g*, with which their other ends are threaded to engage. The shaft or pole clips *h h* are secured directly upon the tube *d*, as shown in Fig. 1; or, if desired, a wooden bolster, *k*, may be placed above the front bar, as shown in Fig. 2. The clips *h h* clamp the edges of the tube together and hold the springs B B in place, the spring C C being held by clips *l l*, as shown. The rear ends of the spring are clamped in place by clips *m m*, which may be formed with a downwardly-projecting arm, *n*, which carries a step, *o*. A frame consisting of two spring-bars, *p p*, and a head-block, *q*, is secured to the central springs by clips *r r*, a wear-plate, *s*, formed of the spring-bar plates *s' s'* and their connecting-web, which rests on the top of the head-block, being preferably placed beneath the clips. This frame constitutes the bed for the fifth-wheel D, the king-bolt passing through the aperture *t*, formed in the center of the wear-plate.

In Figs. 4 and 5 I have illustrated a construction wherein the rear bar or tube, *d'*, is entirely dispensed with, the overlapping ends of the springs B B and C C being united by bolts *n'*, and a further change has been made in the construction referred to by omitting the forward tube, *d*, and substituting therefor a wooden bar, *o'*, that is curved downward toward the center and supported by an iron truss, *p'*, the forward ends of the springs being held by shackles *q'*, and this construction I find particularly well adapted for all except very heavy wagons.

Platforms constructed in accordance with the terms of my invention do away with the rear cross-spring, which has always been a source of very great annoyance.

The construction illustrated in Figs. 4 and 5 is particularly well adapted for use as a rear platform-spring, there being no cross-bar, and when so used it will of course be understood that the fifth-wheel would be dispensed with

and a cross-bar substituted therefor, and it will also be understood that when used as a rear platform-spring the forward cross-bar could be dispensed with, in which case the forward ends of the springs would be attached directly to shackles carried by the sills of the wagon-body, which arrangement produces a neat substantial rear platform-spring. The peculiar W formation of the platform prevents the platform from getting out of square, as each spring serves as a brace for the others.

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

1. A platform-spring wherein the outer springs slope inward to the rear and the inner springs slope outward to engage with the rear ends of the outer springs, the forward ends of each set of springs being carried by a cross-bar common to both sets.

2. The combination, with an axle, of springs B B and C C carried thereby, the forward ends of said springs being supported by a cross-bar common to each set, while the rear ends of the springs C overlap the rear ends of the springs B, substantially as described.

3. A spring-platform wherein the forward ends of the springs are formed with eyes and held within a hollow slotted tube, substantially as described.

4. A spring-platform wherein the forward ends of the springs are formed with eyes that rest within a slotted tube, a truss-rod being passed through the tube and the spring-eyes, substantially as described.

5. In a spring platform, the combination, with the axle, of the springs B B, tubes *d d'*, and rods *e e*, springs C C, and fifth-wheel frame, substantially as described.

6. In a spring-platform, the combination of the following elements: axle, springs B B and C C, tubes *d d'*, bars *e e*, and clips, as described, and a fifth-wheel supporting-frame, substantially as described.

7. A spring-platform wherein the forward ends of the side and central springs are formed with eyes which rest within a slotted tube, through which and the eyes there is passed a bar, *e*, and wherein the rear ends of the central springs are formed with eyes which fit over the rear eyes of the side springs, the eyes of both springs being held by a rod, as *e*, substantially as described.

THOMAS H. HOLMAN.

Witnesses:
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A. M. STEWART.