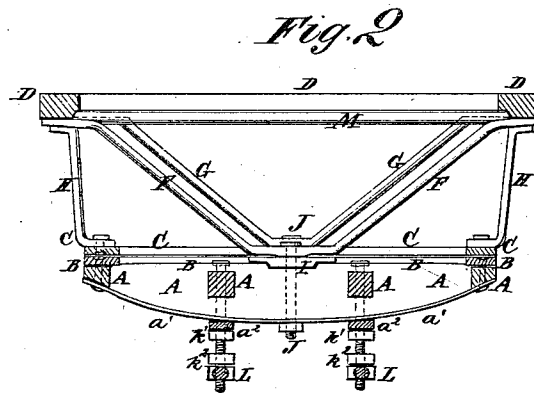
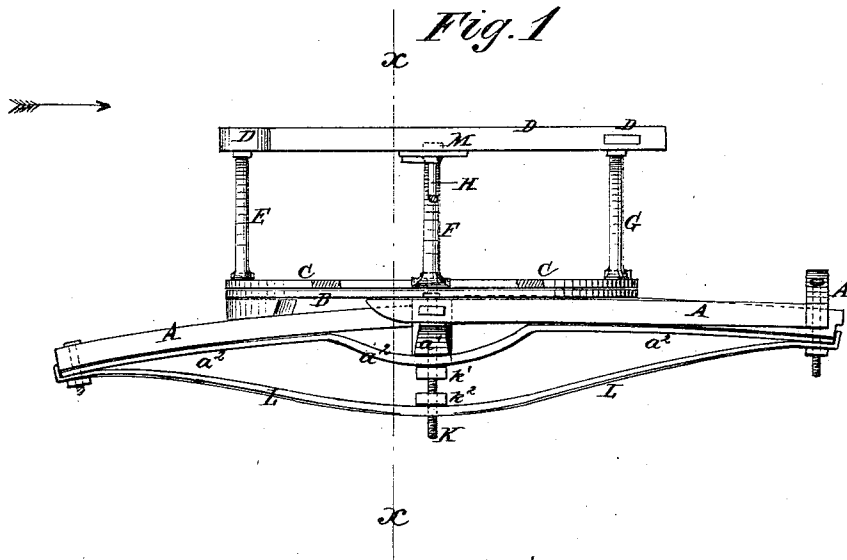


M. FEIGEL.
Wagon-Spring.

No. 167,443.

Patented Sept. 7, 1875.



WITNESSES:
A. W. Almquist
A. F. Terry

INVENTOR:
Michael Feigel
BY *Munn Ho*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

MICHAEL FEIGEL, OF NEW UTRECHT, NEW YORK.

IMPROVEMENT IN WAGON-SPRINGS.

Specification forming part of Letters Patent No. **167,443**, dated September 7, 1875; application filed August 6, 1875.

To all whom it may concern:

Be it known that I, MICHAEL FEIGEL, of New Utrecht, in the county of Kings and State of New York, have invented a new and useful Improvement in Platform Spring-Wagons and other vehicles, of which the following is a specification:

Figure 1 is a side view of a portion of the running-gear of a platform-wagon, to which my improvement has been applied, part being broken away to show the construction. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to strengthen the forward part of the running gearing of platform-wagons and other vehicles, to prevent the platform from sagging in the middle, and thus throwing the weight upon the fifth-wheel, instead of keeping it around the king-bolt, thus enabling the vehicle to be much more easily guided by the team.

The invention consists in the combination of the V-rod and its tie-rod with the body, the platform, and the king-bolt of the vehicle; and in the combination of the tie-rods with the platform, the bars or plates, and the bolts and nuts, as hereinafter fully described.

A represents the platform of the wagon, which is connected with the forward axle by springs in the usual way, and with the forward ends of the long bars of which the tongue is connected. B is the lower circle of the fifth-wheel, which is attached to the platform A, and C is the upper circle of the fifth-wheel, with which the body D of the wagon is connected by the V-bars E F G and the posts H. The ends of the V-bars E F G are attached to the body D, and the said bars are flattened at their angles. The flattened angles of the front and rear bars E G rest upon the front and rear parts of the upper circle C, and are secured to them by bolts or rivets. The central V-bar F is made a little longer than the front and rear bars E G, and its flattened angle rests upon a metal plate, I, attached to the center of the cross-beam of

the platform A. The upper ends of the posts H are attached to the side bars of the body D, and their lower ends are attached to the side parts of the upper circle C.

J is the king-bolt, which passes down through the flattened angle of the middle V-bar F, through the metal plate I, and through the cross-beam of the platform A, to pivot said platform and the wagon-body to each other. By this construction the weight is thrown upon the center of the platform A.

The cross-beam of the platform A is strengthened by a metallic bar or plate, *a*¹, attached to its lower side, and the long bars of said platform are strengthened by the metallic bars or plates *a*² attached to their lower sides, and the middle parts of which have a downward curve formed in them, to pass below the middle cross-beam of said platform, with which they are connected by the bolts K and nuts *k*¹.

The tendency of the platform A to sink in its center is resisted by the tie or truss rods L. The ends of the tie-rods L are welded, riveted, or bolted to the ends of the bars *a*², and their ends may be bent upward or flanged for the ends of the bars *a*¹ and the long bars of the platform to rest against. The tie-bars L incline downward from their ends toward their centers, and have holes formed through said centers to receive the bolts K. The centers of the tie-rods L rest against the nuts *k*², placed upon the said bolts K, so that the tension of the said bars L may be regulated as described by turning the said nuts *k*² up or down.

The center V-bar F is kept from spreading, and thus allowing the weight to come upon the circles B C of the fifth-wheel by a tie-rod, M, the ends of which are welded, riveted, or bolted to the ends of the said V-bar F.

This construction prevents the sinking of the platform in the center, and the consequent difficulty in guiding and turning caused by the weight coming upon the fifth-wheel, and thus increasing the friction.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

1. The combination of the V-rod F and tie-rod M, with the body D, the platform A, and the king-bolt J, substantially as herein shown and described.

2. The combination of the tie-rods L with

the platform A, the bars or plates a^2 , the bolts K, and the nuts k^2 , substantially as herein shown and described.

MICHAEL FEIGEL.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.