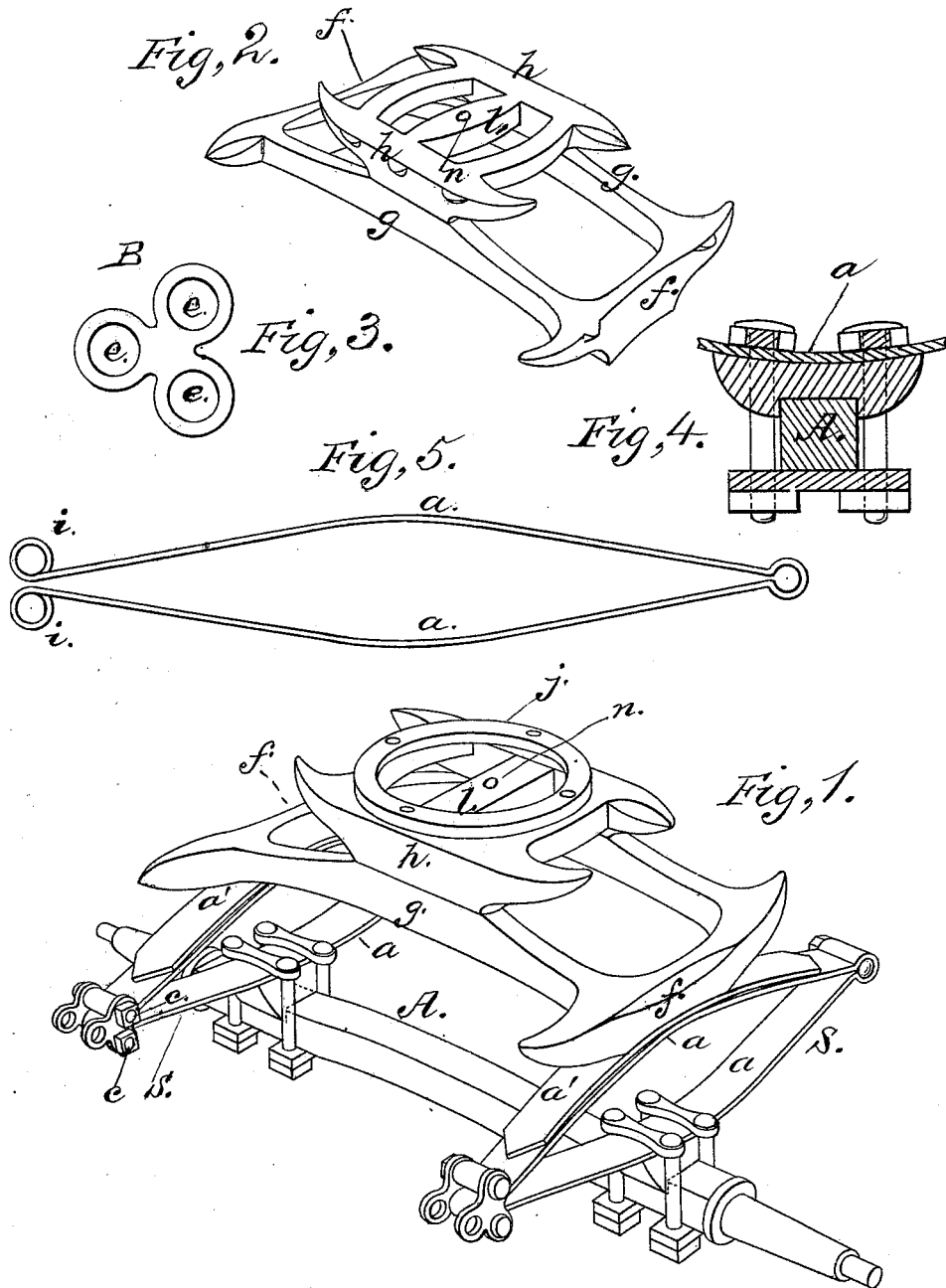


E. H. BOOTH.
Platform-Gear for Vehicles.

No. 220,204.

Patented Sept. 30, 1879.



WITNESSES
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UNITED STATES PATENT OFFICE.

EBENEZER H. BOOTH, OF WEST COLESVILLE, NEW YORK.

IMPROVEMENT IN PLATFORM-GEARS FOR VEHICLES.

Specification forming part of Letters Patent No. **220,204**, dated September 30, 1879; application filed August 21, 1879.

To all whom it may concern:

Be it known that I, EBENEZER H. BOOTH, of West Colesville, in the county of Broome and State of New York, have invented a new and valuable Improvement in Running-Gear for Wagons; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my invention. Fig. 2 is a like view of the platform detached, and Figs. 3, 4, and 5 are details.

The nature of the invention consists in the construction and novel arrangement of parts, as hereinafter shown and described.

In the annexed drawings, the letter A designates the front axle of a four-wheel vehicle, having clipped thereto as near the wheels as may be expedient the springs S. These are of the form of the usual elliptic springs, and are secured together at their rear ends in the usual or any feasible way. They are composed of any desired number of leaves, *a a'*, the former being the bed-leaves, and being provided on their front ends with eyes *i*, formed by bending the ends of said leaves in opposite directions, as shown in Fig. 5.

B designates a shackle-plate, the general shape of which is that of a triangle, or of the letter T, having at each angle of the triangle, or at the end of each leg of the T, an eye, *e*. Usually, as shown in Fig. 3, in fine work the edges of the shackle-plate are rounded off concentrically with the eyes *e* in order to preserve a neat appearance. Two of these shackle-plates are used in connection with each spring, one at each side, and the front ends of these springs are connected together by means of bolts *c*, extending through two of the eyes of the shackle-plates and the eyes *i* on the front ends of the bed-leaves of springs S, the said bolts *c* being secured by ordinary nuts applied on the ends of the said bolts.

It will be seen by observing Fig. 1 that the shackle-plates have each a remaining eye, to which are secured by couplings the ends of the shafts or tongue in double harness.

The front ends of the springs S being connected together, but not directly, have considerable play, and have comparative freedom independent of each other, that, while it secures

an easy spring-action of the springs, yet preserves all necessary rigidity.

Being close to the wheels, springs S are sufficiently far apart to prevent all undue rolling motion of the vehicle.

In line with the springs, and securely clamped thereto, are the spring bars or heads *f*, connected together by the arched parallel bars *g*, the heads and bars forming a strong rectangular frame in plan view, but, looked at in front and rear, showing a pronounced arch, the highest point of which is horizontal, and forms a bearing and point of attachment for a rectangular frame, *h*, supporting the lower ring, *j*, of the fifth-wheel attachment, and provided with a diametrical bar, *l*, having at the center of ring *j* a hole, *n*, for the reception of the king-bolt.

The arching of the bars *g* and their rigid connection to the spring-bars *f* renders the supporting-frame practically incapable of settling or sagging, and the said bars *g*, being braced by the frame *h*, are incapable of relative displacement. The platform thus constructed, while very strong, is not inelastic, and is capable of sustaining very severe shocks without injury to its constituent parts.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a vehicle, the combination, with the springs connected together at their rear ends and having eyes at their front ends, of the shackle-plate described, having eyes arranged one at each of the angles of a triangle, and bolts passing through two of the eyes of the shackle-plates and those of springs S, leaving two other eyes of said plates as an attachment for the hills or tongue, substantially as specified.

2. The vehicle-platform consisting of the spring-bars *f*, the arched parallel bars *g* secured thereto at each end, and the rectangular frame *h*, carrying the lower ring of the fifth-wheel, bracing the supporting-frame *f g*, and having the bar *l*, provided with a bearing, *n*, for the king-bolt, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EBENEZER H. BOOTH.

Witnesses:

JOHN W. BOOTH,
CHARLES BLATCHLEY.