

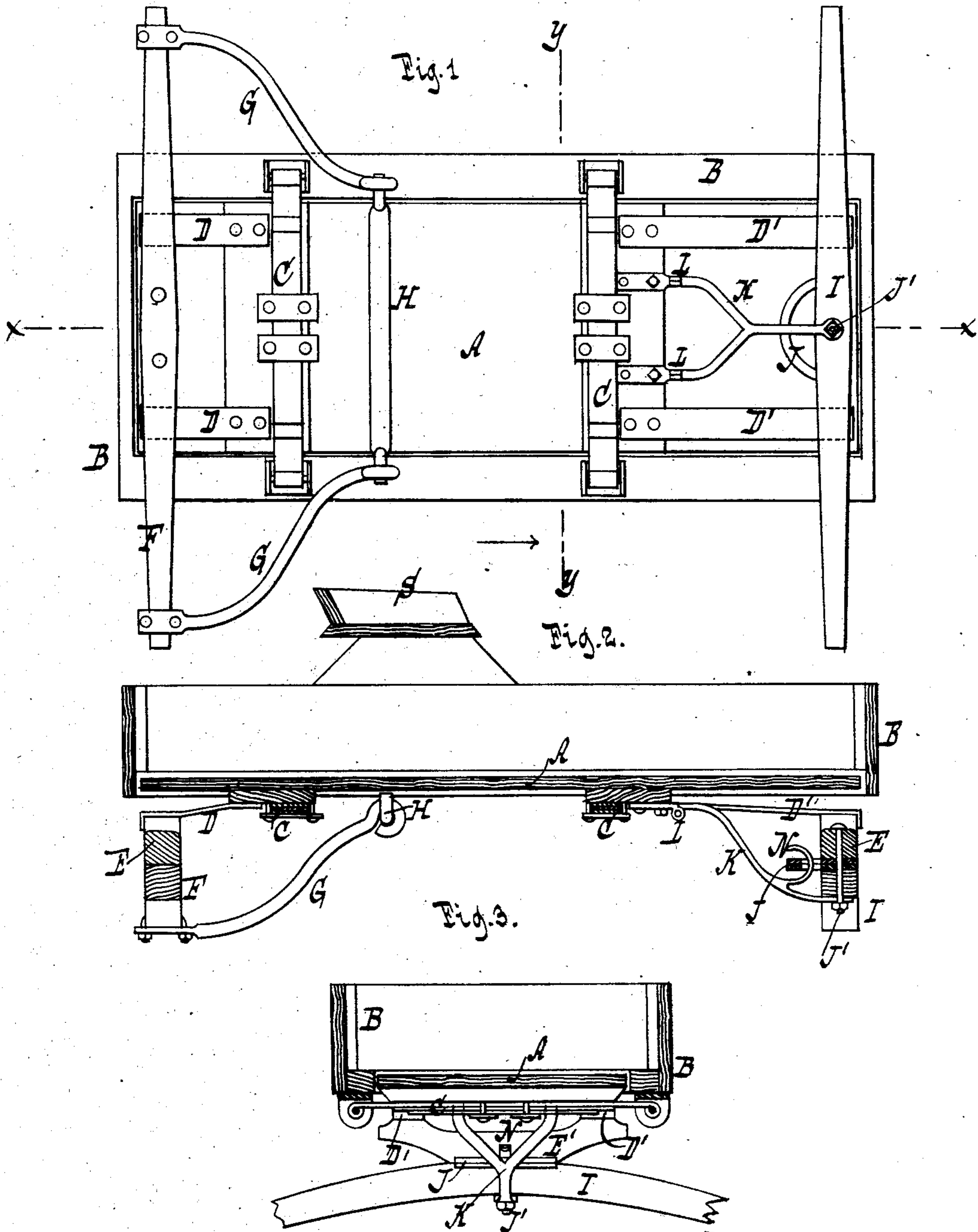
(No Model.)

H. A. & B. G. WALKER.

SPRING VEHICLE.

No. 244,957.

Patented July 26, 1881.



Witnesses

Otto Shufeldt  
William Miller

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# UNITED STATES PATENT OFFICE.

HENRY A. WALKER AND BENJAMIN G. WALKER, OF KINGSTON, N. Y.

## SPRING-VEHICLE.

SPECIFICATION forming part of Letters Patent No. 244,957, dated July 26, 1881.

Application filed May 11, 1881. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY A. WALKER and BENJAMIN G. WALKER, both citizens of the United States, residing at Kingston, in the county of Ulster and State of New York, have invented new and useful Improvements in Spring-Vehicles, of which the following is a specification.

This invention relates to an improvement in that class of vehicles in which a frame or box is combined with a loose platform or bottom, the seat or seats being secured to the box.

In our wagon the seat-supporting frame or box and the platform or bottom are connected by cross-springs, while the platform or bottom rests upon the bolsters by end springs, and is steadied in its position by back-stays extending from the rear axle. The king-bolt stay is connected to the platform or bottom by a hinge-joint, and is provided with a safety-hook adapted to engage the fifth-wheel.

This invention is illustrated in the accompanying drawings, in which Figure 1 is an inverted plan. Fig. 2 is a longitudinal section in the plane  $x x$ , Fig. 1. Fig. 3 is a transverse section in the plane  $y y$ , Fig. 1.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates the platform or bottom of our wagon, and B the box or frame which supports the seat S.

The bottom A and the seat-supporting box or frame B are connected by cross-springs C C, which are fastened to the bottom A at the middle, and to the box or frame B at their opposite ends, as shown in Figs. 1 and 3. The bottom A rests upon end springs, D D', two at each end, the inner ends of said end springs being firmly secured to the bottom, while their outer ends are fastened respectively to the bolster E and to the head-block E'. By this arrangement the weight of the persons occupying the seat S is supported by the cross-springs C C, and through them by the end springs, D D, and bolsters E E', while the load distributed over the bottom A is supported only by the end springs, D D, thus giving to the occupants of the seat the benefit of a double set of springs, while at the same

time the springs are distributed in such a manner that the wagon is not liable to tilt over to one side, even if the load should not be quite evenly distributed.

The bolster E rests upon the hind axle, F, and from this axle extend back-stays G G to the ends of a transverse bar, H, which is firmly secured to the platform or bottom A. By the action of these back-stays the bottom is steadied in its position.

The bolster or head-block E' rests upon the front axle, I, and it is connected to the platform or bottom A by the end springs, D', as previously stated. Through said head-block and the fifth-wheel J, situated between the head-block and the axle, extends the king-bolt J', on which the front axle turns.

K is the king-bolt stay, which is connected to the bottom A by a hinge-joint, L, at one end, its other end being connected to the king-bolt, and which is provided with a hook, N, passing through and within the rim of the fifth-wheel, as shown. The joint L allows the stay K to be made rigid, while the hook N engages the fifth-wheel J in case the king-bolt breaks, thus preserving, to an extent, the connection between the axle and the head-block.

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

1. In a spring-vehicle, the longitudinal springs, having their ends connected respectively with the ends of the platform or bottom and the front and rear bolsters, in combination with the frame or box sustained by transverse springs connected with the platform or bottom, substantially as described.

2. The combination, with the independent frame or box and platform or bottom, of longitudinal end springs having their ends connected respectively with the ends of the platform or bottom and the front and rear bolsters, substantially as described.

3. In a spring-vehicle, the combination of the frame or box and the platform or bottom, the transverse springs connecting them together, and the longitudinal springs having their ends connected respectively with the ends of the platform or bottom and the front and rear bolsters, with the curved back-stays

attached to the axle and connected with the platform or bottom, substantially as described.

4. The combination, with the bottom or platform A, the end springs, D', the head-block  
5 E', the fifth-wheel J, and the king-bolt J', of a king-bolt stay, K, provided with the safety-hook N, substantially as described.

In testimony whereof we have hereunto set

our hands and seals in the presence of two subscribing witnesses.

HENRY A. WALKER. [L. S.]  
BENJAMIN G. WALKER. [L. S.]

Witnesses:

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