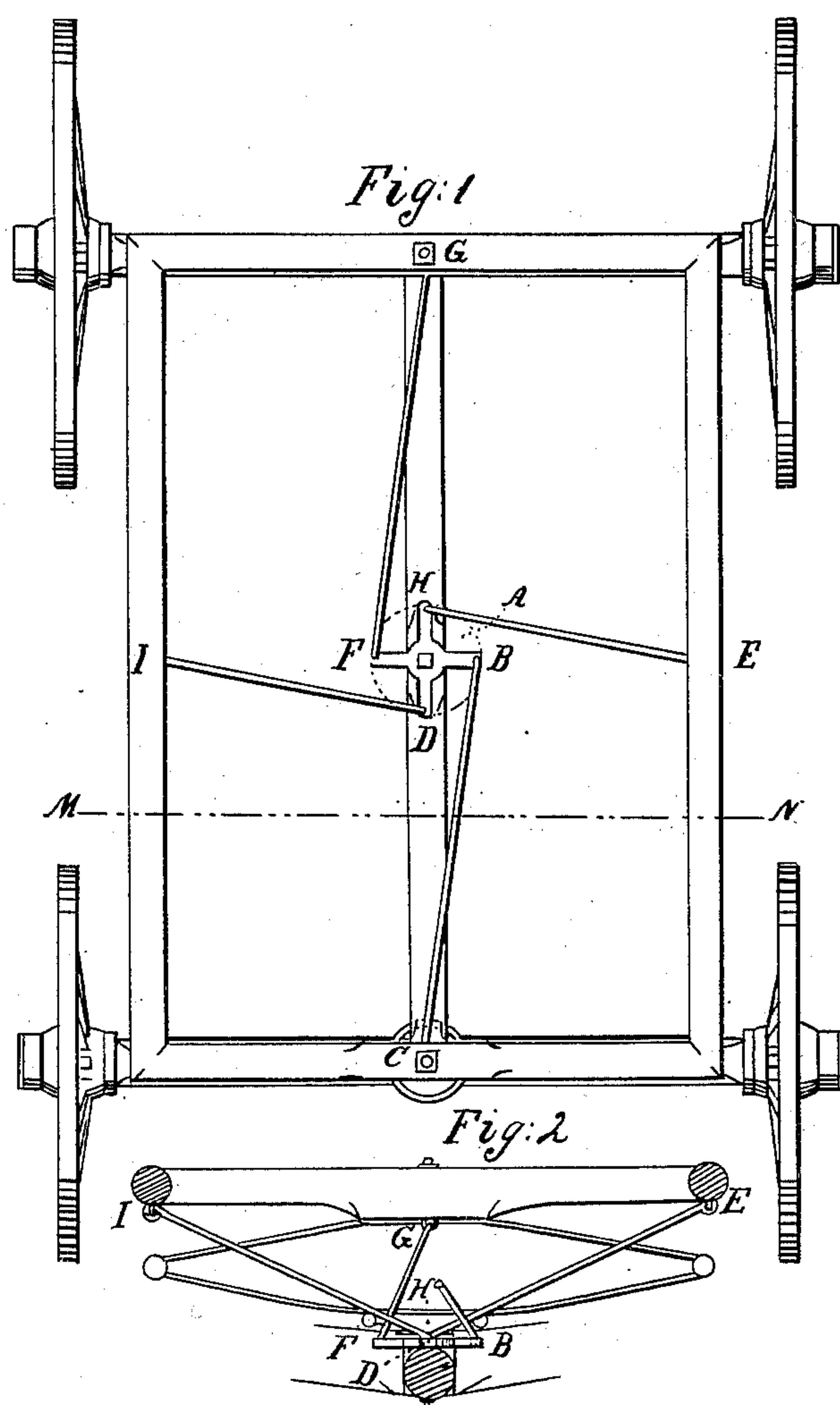


I. JACKSON.  
BRACE FOR SPRING VEHICLES.

No. 6,213.

Patented Mar. 20, 1849.



# UNITED STATES PATENT OFFICE.

ISRAEL JACKSON, OF WEST GROVE, PENNSYLVANIA.

## HANGING CARRIAGE-BODIES.

Specification of Letters Patent No. 6,213, dated March 20, 1849.

*To all whom it may concern:*

Be it known that I, ISRAEL JACKSON, of West Grove, in the county of Chester and State of Pennsylvania, have invented a new and useful Brace for Spring Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

My invention consists in placing on the center of the perch of the carriage a metallic cross or disk working on a pivot or bolt passing through its center, as seen at A, Figure 1 of the accompanying drawing, and having near the extremities of the cross or periphery of the disk, stiff metallic or other rods, so connected therewith as to allow a rotary motion about their points of junction. The ends of these rods, not connected with the cross, are joined to the body of the carriage at such points, that when the part of the carriage body to which any one of said rods is united becomes depressed, the thrust of such rod tends to cause the cross or disk to revolve about its pivot in one definite direction, while the tension of another rod attached to the opposite side of the cross or circle, and to the opposite side of the carriage, would, by the elevation of that side, tend to counteract the motion of the cross which the first rod would otherwise produce. In this manner my spring carriage brace prevents or limits the oscillations of the body of the carriage, whether longitudinal or transverse.

When the body of the carriage merely rises or descends vertically all the rods attached to the different parts of the body and to the appropriate points on the cross or disk, will, by their simultaneous actions, tend to cause, and will actually produce a

limited extent of rotation of the cross about its pivot. Fig. 2 is a section through Fig. 1 at the line MN.

Though in the drawing which accompanies and makes a part of this specification I have represented only four rods connected with the cross A, yet I do not limit myself to that or any other specific number. The rods are so attached to the carriage body and the cross, that the forces which they severally exert when brought into action, do not pass through the center of motion of the cross. This is seen to be the case by inspection of Fig. 1, where, from B to C, D to I, F to G and H to E, rods proceed, connecting those points respectively together. The cross or disk, may, if necessary, be placed in a vertical position, though the horizontal one is generally preferable.

What I claim as my invention and desire to secure by Letters Patent is—

1. The above described arrangement of a cross, or disk, attached by a pivot to the perch, of a spring vehicle, combined with inflexible rods or braces, attached to the body of the carriage and so disposed on the extremities of the cross, or periphery of the disk, that the oblique action which they produce on one side shall counteract that which they produce on the other, in the manner and for the purposes herein set forth.

2. And I claim the application of this my invention as well to railroad cars and trucks, as to vehicles running on common roads.

ISRAEL JACKSON.

Witnesses:

WALTER R. JOHNSON,  
L. WILLIAMS.