(No Model.)

2 Sheets—Sheet 1.

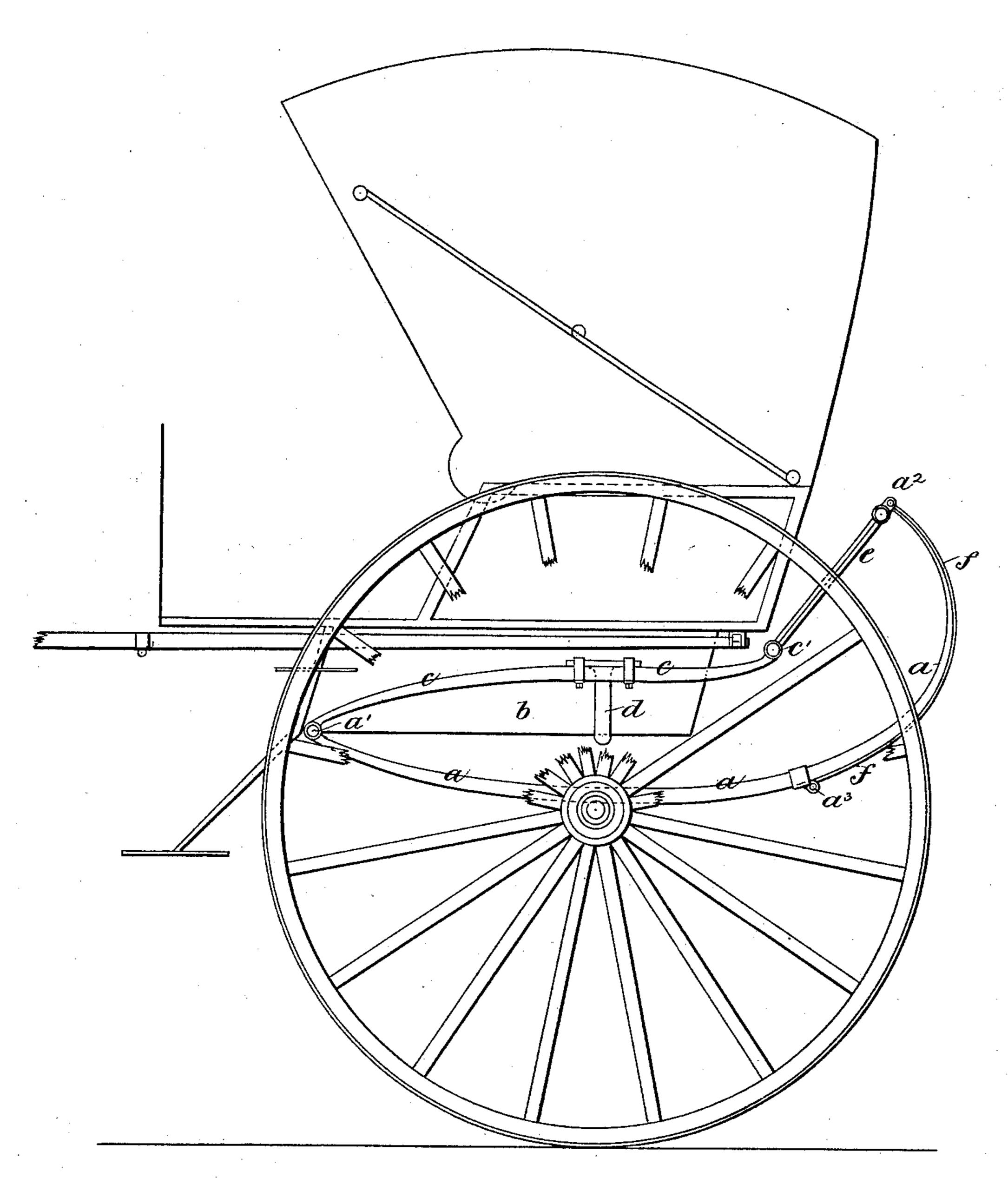
## G. H. MORGAN.

TWO WHEELED VEHICLE.

No. 360,721.

Patented Apr. 5, 1887.

FIG. 1.



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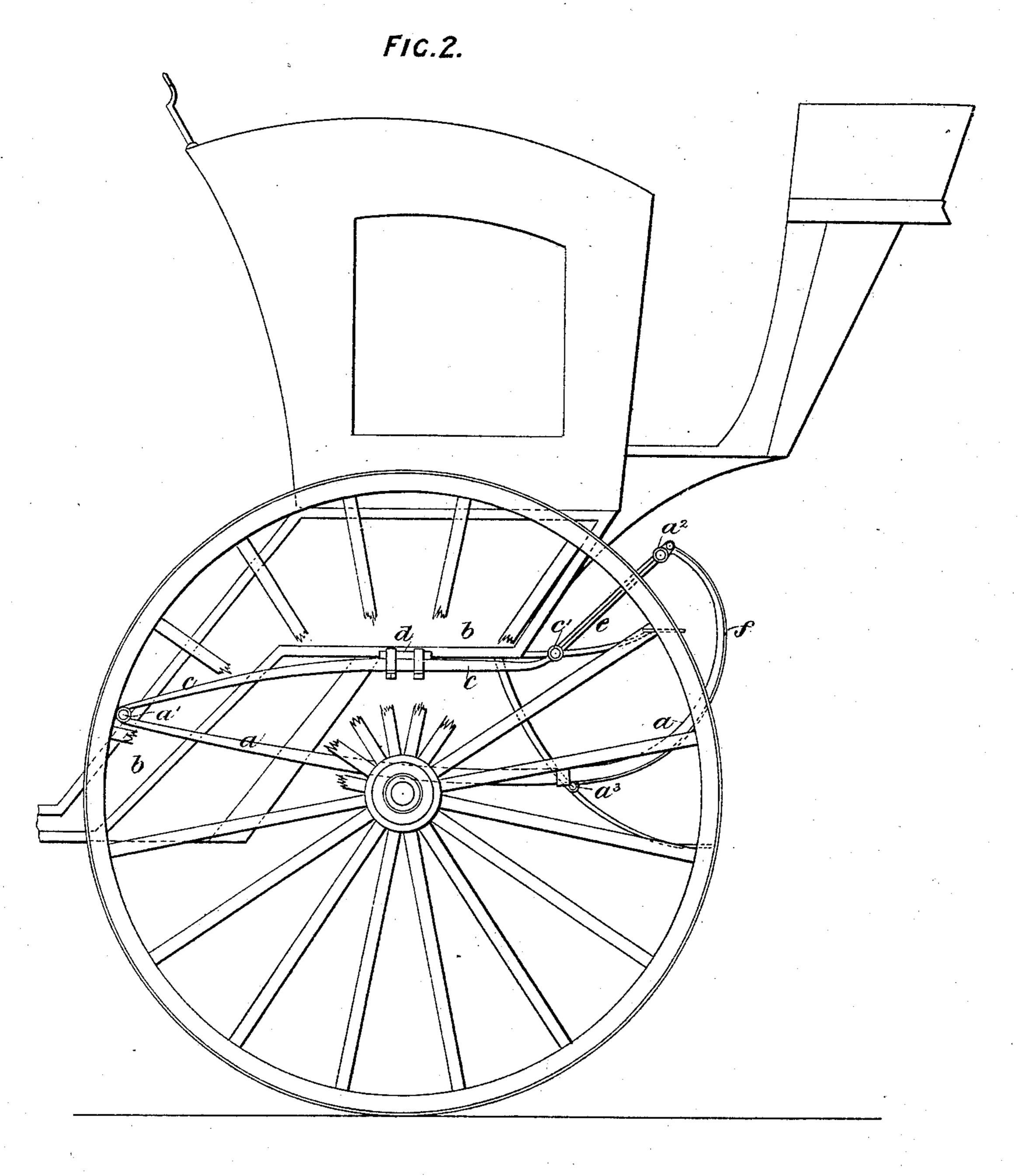
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## United States Patent Office.

GEORGE HENRY MORGAN, OF LONG ACRE, COUNTY OF MIDDLESEX, ENGLAND.

## TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 360,721, dated April 5, 1887.

Application filed September 4, 1886. Serial No. 212,737. (No model.) Patented in England February 28, 1884, No. 4,100.

To all whom it may concern:

Be it known that I, GEORGE HENRY MOR-GAN, a subject of the Queen of Great Britain, residing at Long Acre, in the county of Mid-5 dlesex, England, carriage-builder, have invented certain new and useful Improvements in Two-Wheeled Vehicles or Carriages, (for which I have obtained Letters Patentin Great Britain, No. 4,100, dated February 28, 1884,) to of which the following is a specification.

The invention has for its object a novel construction and method of mounting the springs, whereby the shocks communicated from the wheels to the springs are prevented from be-15 ing communicated to the front part of the body of the vehicle, and thereby producing an

unpleasant jerky action to such part.

In two-wheeled vehicles as heretofore constructed the C-springs have been connected 20 by a stud or fulcrum at their front ends to the front part of the body of the vehicle. They have also been connected at their center to the axle-tree, and have thence been carried back in a C curve to the top part of the spring, 25 and the leather brace has been connected to the axle-block, and thence carried along the under side and back of the spring to the top part thereof, over which it has passed, and thence descended to the loop fixed to the hind

30 part of the carriage-body.

According to my present invention, I employ a spring of similar shape to the above; but in lieu of connecting it at the front end to the front part of the carriage-body, I there 35 connect it to a second or top half of a double spring, of which the C-spring before described forms the lower half, and I connect such top half of the spring at or a little to the rear of the center thereof to a flap fixed to the bottom 40 part of the carriage-body. Such top half of the spring at its rear end is provided with an open head or with links, to which the leather brace is connected, such leather brace being also fixed to an open head or to links at the 45 top end of the C-spring. A second leather brace is also attached to such top end of the C-spring, and is carried down around the back of the C to a suitable fixing on the under side thereof.

In order that my said invention may be 50 more clearly understood and readily carried into effect, I will proceed, aided by the accompanying drawings, more fully to describe the same.

In the drawings, Figure 1 represents a side 55 view of a hooded gig or buggy, and Fig. 2 a side view of a hansom-cab with my invention applied thereto.

In both figures like parts are marked with

similar letters of reference.

According to my present invention, I employ a C-spring, a, fixed to the axle-block; but instead of, as heretofore, fixing the front end, a', of such spring to the front part of the carriage body b, I there connect it to a second 65 spring, c, forming the top half of a doublespring, of which the C-spring a forms the lower half, and I connect such top half, c, of the double-spring at or a little to the rear of the center thereof to a flap, d, fixed to the 70 bottom part of the carriage-body b. The top half, c, of the double-spring is, at its rear end, c', provided with an open head, or with links, to which the leather brace e is connected, such leather brace e being also fixed to an open 75 head or to links at the top end,  $a^2$ , of the Cspring a. A second leather brace, f, is also attached to such top end,  $a^2$ , of the C-spring a, and is carried down around the back of the C to a suitable fixing,  $a^3$ , on the under side 80 thereof.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In a vehicle, the combination, with a Cspring attached to the axle of the vehicle, of a spring attached to the body of the vehicle and to the front end of the C-spring, a strap connecting the rear free ends of the two 90 springs, and a brace attached to the rear end of the C spring and passed under the same and secured, substantially as set forth.

GEORGE HENRY MORGAN.

Witnesses:

B. J. B. MILLS, C. M. WHITE,

Both of 23 Southampton Buildings, London.