

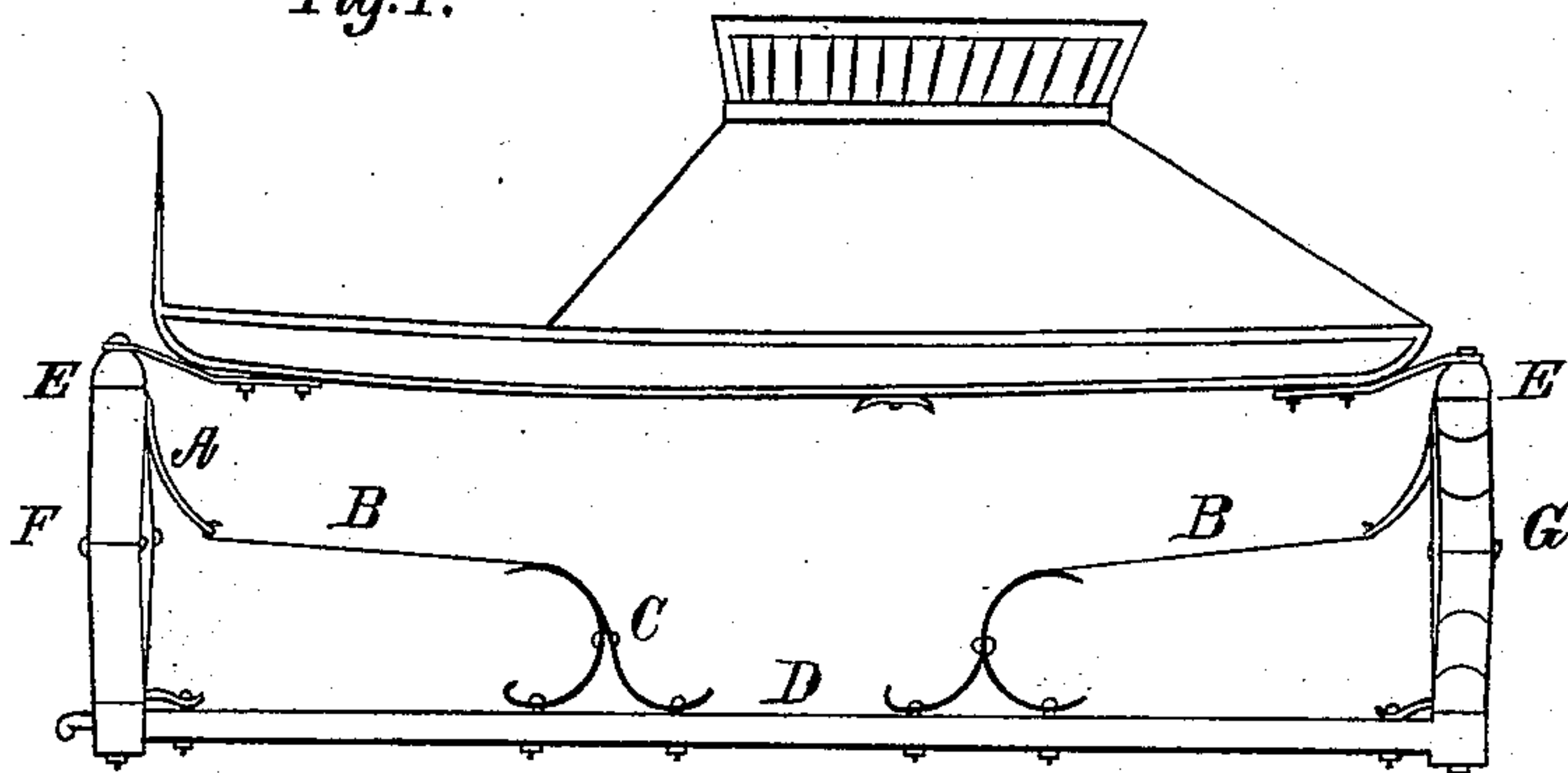
I. D. JOHNSON.

Carriage Spring.

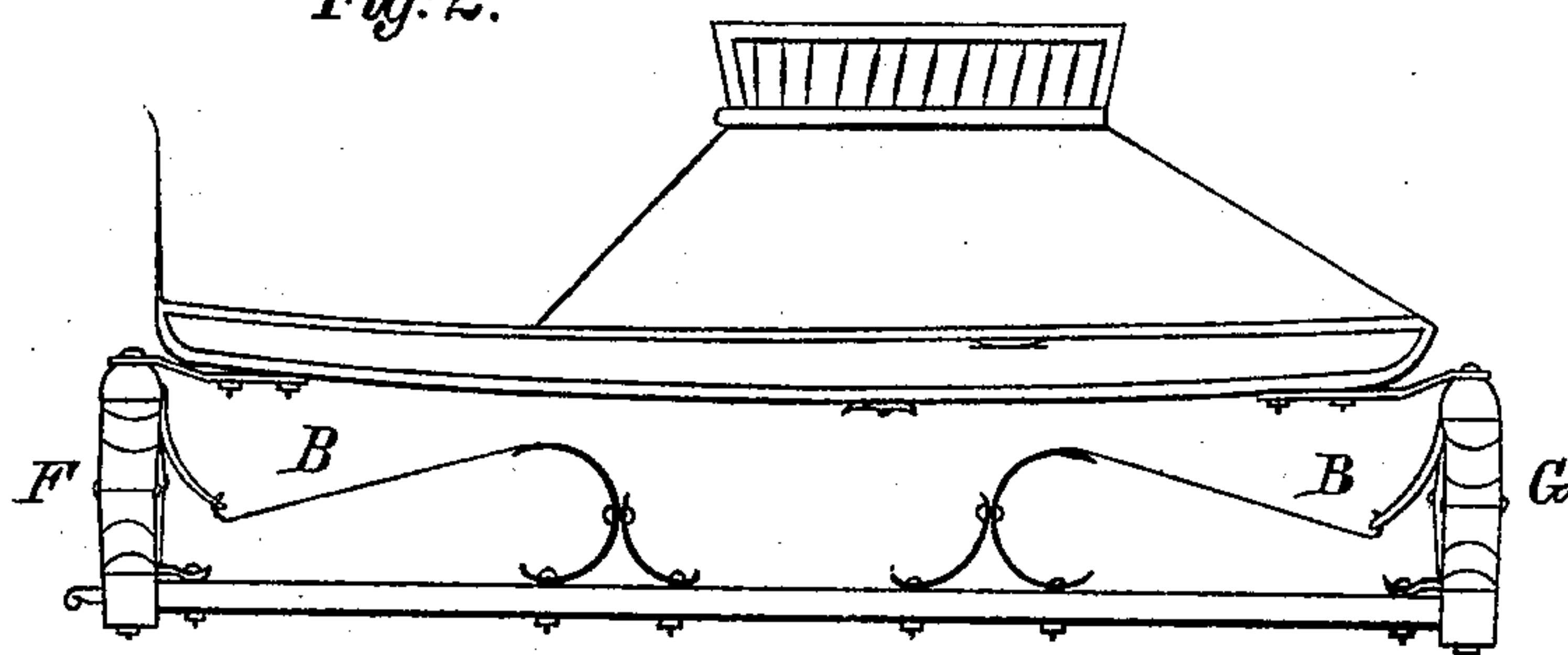
No. 77,196.

Patented April 28, 1868.

*Fig: 1.*



*Fig: 2.*



*Witnesses:*  
*L. R. Way,*  
*Thos S Worrally*

*Inventor:*  
*I. D. Johnson, M.D.*

# United States Patent Office.

ISAAC D. JOHNSON, M. D., OF KENNETT SQUARE, PENNSYLVANIA.

*Letters Patent No. 77,196, dated April 28, 1868.*

## CHECK-BRACE FOR CARRIAGES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, ISAAC D. JOHNSON, M. D., of Kennett Square, in the county of Chester, and State of Pennsylvania, have invented a new and useful Improvement in Carriages, called a "Check-Brace;" and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the annexed drawings, forming part of this specification, in which—

Figure 1 represents a side view of the under parts of a carriage, showing the position the braces B B are in when the springs F and G are elevated.

Figure 2 represents a similar view, and the position of the braces B B, when the springs F and G are depressed.

A represents a stiff brace, constructed of iron or other suitable material, and attached to the upper half of the spring or spring-bar E, the lower end being made to stand down half the width of the spring.

C represents a semicircular brace, also made of iron or other suitable material, and secured to the perch-pole D. Attached to this brace, and passing over it, is a thin plate of iron or steel, B, which connects with the lower end of A by a loop-joint, the three pieces, A, B, and C, forming the front brace. Now, when the spring F is elevated or depressed, a corresponding motion is given to the brace A, and the flexible plate B passing over C, the tension is so adjusted as to admit of no jostling of the spring forward.

Attached to the back spring G is another brace, B, constructed in precisely the same manner as the one in front, and the two, acting in harmony with each other, permit the springs F and G to play up and down with the greatest freedom, while they preclude the possibility of any motion in a horizontal direction. Hence, the breaking of springs and bolts, and the liability to accidents consequent thereof, is in a great measure prevented.

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

The combination of the two braces B B, their attachment to the upper half of the springs or spring-bars E E, the braces A and C, and the flexible plate B, all constructed, arranged, and employed in the manner and for the purpose herein shown and described.

Witnesses:

C. R. WAY,

THOS. S. WORRALL.

ISAAC D. JOHNSON, M. D.