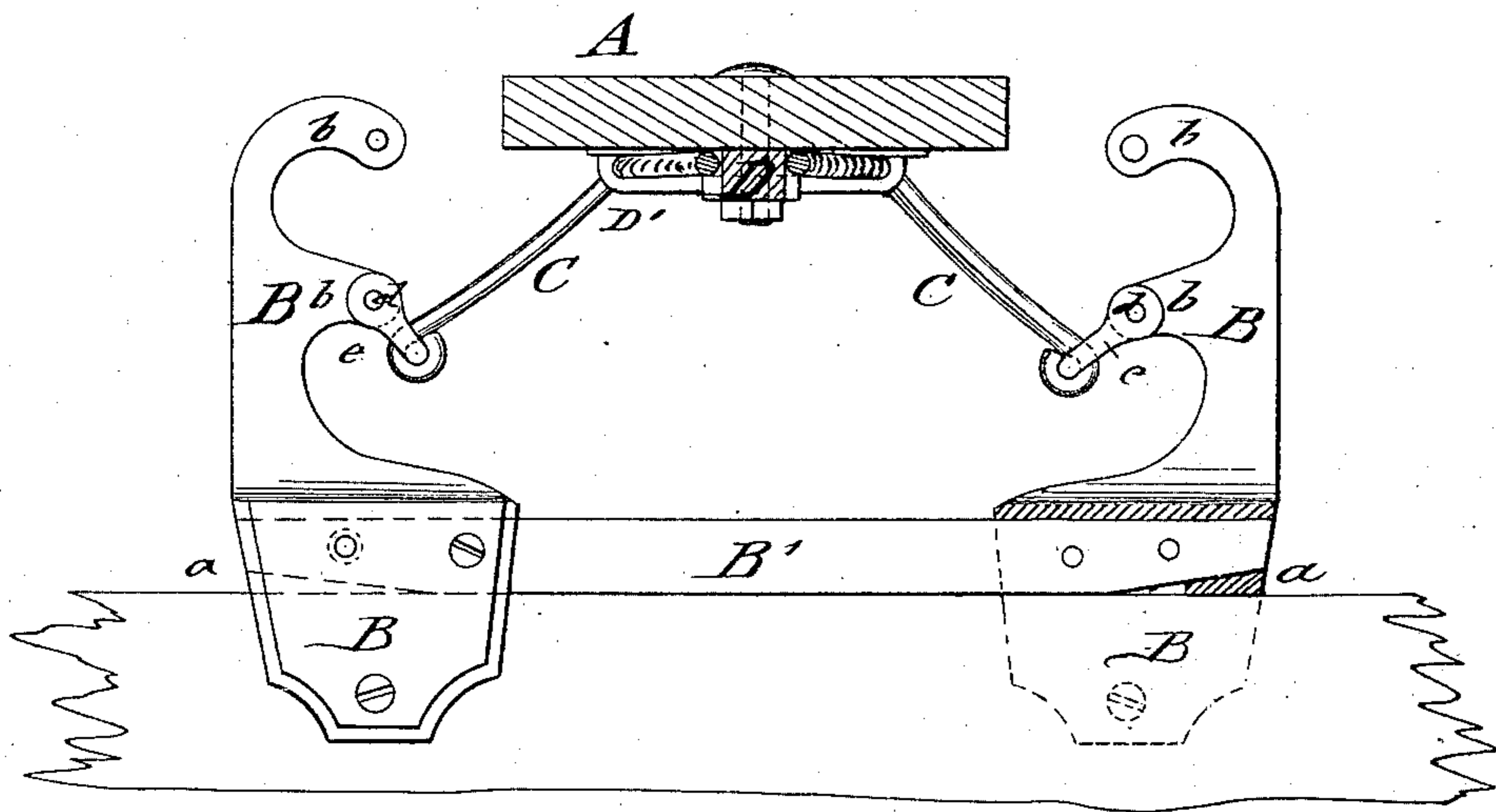


J. GRIFFITH.  
Wagon-Spring Seats.

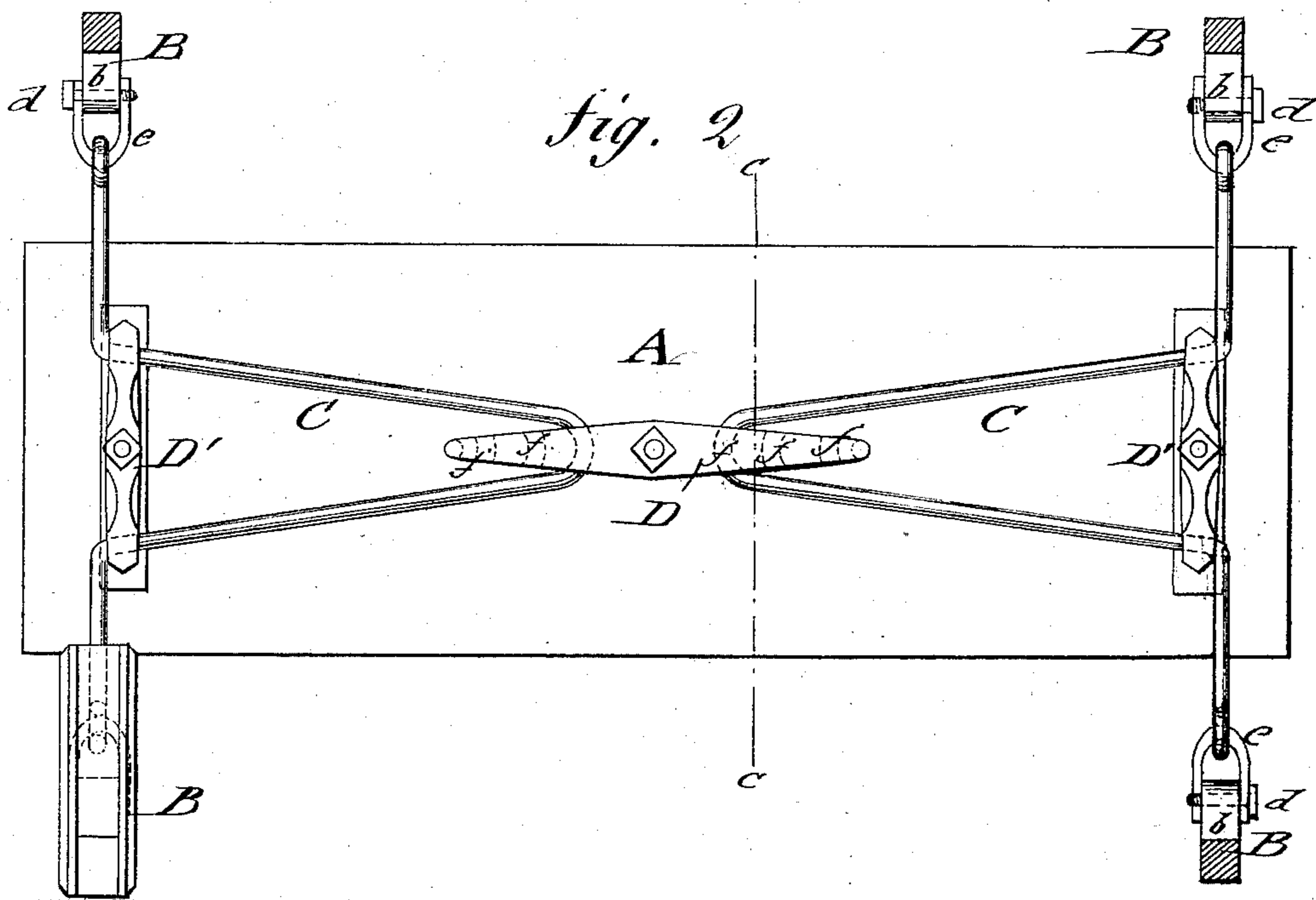
No. 157,813.

Patented Dec. 15, 1874.

*Fig. 1*



*Fig. 2*



WITNESSES:

*C. Neveu*  
*A. F. Terry*

INVENTOR

*J. Griffith*  
BY *Munroe*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN GRIFFITH, OF BELLEFONTE, PENNSYLVANIA.

## IMPROVEMENT IN WAGON SPRING-SEATS.

Specification forming part of Letters Patent No. **157,813**, dated December 15, 1874; application filed September 12, 1874.

*To all whom it may concern:*

Be it known that I, JOHN GRIFFITH, of Bellefonte, in the county of Centre, Pennsylvania, have invented a new and Improved Spring-Seat, of which the following is a specification:

In the drawing, Figure 1 represents a vertical transverse section of my improved spring-seat on the line *c c*, Fig. 2; and Fig. 2 is a bottom view of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved strong and durable spring-seat for wagons; and it consists in the attachment of the strong supporting-standards to the sides of the wagon, and the connection of the standards by a pivoted clip with the torsionally-acting springs that are securely applied to the seat by central and side socket-clamps.

In the drawing, A represents the seat, and B the double seat-supporting standards, which are placed straddling over the sides of the wagon-body, and rigidly secured thereto at uniform distances from each other by a cushioning brace-piece, B', with beveled ends fitting into a lateral shoe-piece or bearing, *a*, of standard A. The brace-piece B' is placed on the top of the wagon-sides, and each standard securely bolted thereto and to the sides, so that the rigid position of the standard is obtained. Each standard B has two or more inside projecting lugs, *b*, which are perforated for the pivot-bolt *d* and clips *e*, to which the seat-carrying springs C are attached, to be hung to higher or lower lugs of the standards, so that the seat may be raised or lowered as required. Clips *e* are pivoted to the bolts *d*, and pass through the eye-shaped ends of the springs C, which are supported thereon. Two symmetrically-arranged springs, C, are applied to the seat by means of their U-shaped parts, which are fastened by central and side clamps D D' to the under side of the seat, be-

ing connected by rectangularly-bent and downward-extending arms to the clips *e*, producing, by the torsional-spring action of the arms, the elastic support for the seat. The fastening-clamps D D' are firmly bolted to the seat, and grooved for the springs, the middle clamp, D, being provided with several grooves for the purpose of adjusting the springs to wagon-bodies of different widths.

A wagon-seat with durable springs and standard-supports is thereby furnished, which is cheap, strong, and effective in use.

I am aware that V and U shaped vehicle-springs are not new, and that it has been proposed to form such springs of two rods or sections, so as to avoid the opposite wrenching of the rod during the torsional action of the spring.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

1. The double seat-supporting standards B, having shoe-pieces *a*, combined with beveled brace-piece B', applied to the sides of the wagon-body, to support the seat, substantially as specified.

2. The combination of seat A, U-shaped springs C, having bent extension-arms, and double standards B, for producing spring action by torsional resistance, substantially as specified.

3. The standards B, having one or more perforated lugs, *a*, and perforated clips *e*, in combination with the torsional seat-supporting springs C, as and for the purpose described.

4. In combination with the seat and springs C, the side clamps D' and central clamp D, provided with grooves *f*, for fitting the seat to wagon-boxes varying in width, as specified.

JOHN GRIFFITH.

Witnesses:

SIMON LOCK,  
J. G. LARIMER.