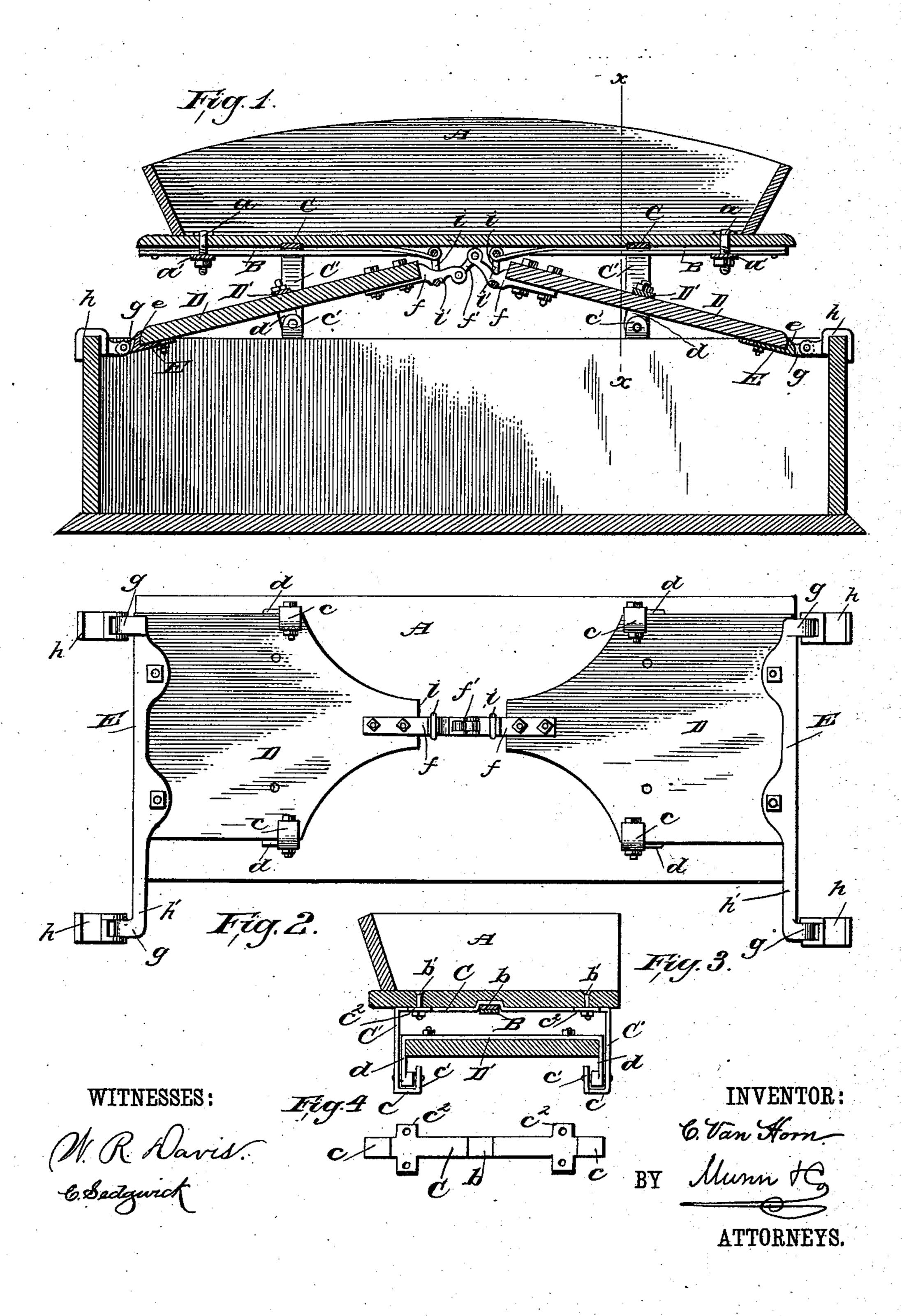
## C. VAN HORN.

WAGON SEAT.

No. 377,540.

Patented Feb. 7, 1888.



# United States Patent Office.

## CHARLES VAN HORN, OF BETHLEHEM, PENNSYLVANIA.

### WAGON-SEAT.

SPECIFICATION forming part of Letters Patent No. 377,540, dated February 7, 1888.

Application filed June 17, 1887. Serial No. 241,625. (No model.)

To all whom it may concern:

Be it known that I, Charles Van Horn, of Bethlehem, in the county of Northampton and State of Pennsylvania, have invented a new and Improved Spring-Seat for Vehicles, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, to in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation showing my improved spring-seat applied to a wagon-box. Fig. 2 is a plan view of the under side of the seat. Fig. 3 is a transverse sectional elevation taken on the line x x of Fig. 1; and Fig. 4 shows one of the supporting-irons.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

The seat A is provided at the bottom with the two opposite springs, B B, and with the supporting-irons C C. The springs B B are centrally placed with respect to the width of the 25 seat and are held thereto by the bolts a and clips a'. The supporting-irons Care each formed in the center with a recess, b, to form a clearance for the spring and are held to the seat by bolts or rivets b'. The hangers C' of each of the 30 supporting-irons are bent inward at the lower ends, as shown at c, and then upward, as shown at c', to form bearing supports or keepers for the knuckles d d of the cross pieces or plates D', to which the spring-boards D D are secured. 35 The supporting-irons C are also formed with the side extensions,  $c^2 c^2$ , which act as braces against the bottom of the seat and prevent lateral turning of the irons and avoid excessive strain upon the bolts b'. The boards D D are 40 pivoted at the knuckles d in the hangers C',

B by the links *i i*, as shown clearly in Fig. 1.

The outer edges of the boards D D are provided with a plate or frame, E, having arms *g g* at the ends, to which the box-clips *h h* are pivoted. The clips *h* rest upon the edge of the wagon-box, as shown in Fig. 1, to support the

and are connected to each other at the center

by the arms f f and the link f'. The arms f f

are connected to the inner ends of the springs

seat. The plates E are of greater length than 50 the width of the boards D and project at the back of the seat, as shown at h', Fig. 2, so that the seat cannot tip backward upon the box.

The arms f are each formed with a recess or depression, i', in the lower surface to receive 55 and hold the ring or link i, as shown in Fig. 1, and the irons E are formed with the angle e to receive the edge of the boards D, as shown in Fig. 1, so as to protect the same and prevent the said boards from splitting. The hang 60 ers C' C' project below the under surface of the boards D D, through which bolts or rivets pass, so that when weight is on the seat A and the boards DD are depressed by the weight the slight endwise movement of the boards D 65 D is accommodated at the pivots, and thus any motion at the outer ends of the boards D D is: prevented, and the knuckle joints in the middle or center of the boards D D prevent the seat from having either back, side, or forward 70 motion, so that the seat will only have a level up-and-down motion.

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

1. The seat A, provided with the springs B B, secured to the longitudinal center of the seat A, in combination with the pivoted boards D D, provided at the center with the arms f, linked together and to the springs B, 80 substantially as described.

2. The seat A, provided with the supporting-irons C, formed in the center with the depressions b, in combination with the springs B, secured to the bottom of the seat, substan-85 tially as described.

3. The supporting-irons C, formed with the arms C', and with the side extensions,  $c^2$ , substantially as and for the purposes set forth.

4. The irons E, secured to the board D, and 90 extended to the rear of the board and provided with the pivoted clip h, substantially as described.

#### CHARLES VAN HORN.

Witnesses:

T. F. FRITCHMAN, L. W. SNYDER.